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GEF-8 PROGRAMMING DIRECTIONS

(PREPARED BY THE GEF SECRETARIAT)

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PREAMBLE TO THE GEF/R.08/29 PROGRAMMING DIRECTIONS

This final GEF-8 Programming Directions document has been revised and updated following the Third Replenishment Meeting as well as the Interim Replenishment Meeting held in March 2022, taking into consideration all verbal and written comments received from replenishment participants. This preamble note is intended to help the reader by identifying and highlighting key changes and additions made to the overall strategic direction.

1. **COP26 Outcomes**: The Climate Change Mitigation Focal Area strategy now includes consideration of guidance provided to the GEF at UNFCCC COP26, including guidance from the COP serving as the meeting of the Parties to the Paris Agreement. In addition, the document also highlight links to the key outcomes, such as the Glasgow Leaders Declaration on Forests and Land Use.
2. **Integrated Programs (IPs)**: The revised Programming Directions document now includes all 11 Integrated Programs (IPs). The 11 are framed within the overall logic of the GEF-8 strategy, including the overall Theory of Change (ToC), and will support robust programming to address the major environmental needs of the planet for which the GEF has a mandate. Furthermore, the Net-Zero Nature-Positive Integrated Program has been reformulated and resized in response to comments from participants.
3. **Small Grants Program (SGP)**: This section of the Programming Directions document has been revised to strengthen the overall context and strategy of SGP (SGP 2.0) for GEF-8. This includes further clarification of the new model and approach for SGP, refinement of the principles and criteria, and approaches to strengthening the role of CSOs and micro, small, and medium enterprises, along with a proposal to allow additional GEF Agencies to access SGP resources.
4. **Country Engagement Strategy (CES)**: This section of the Programming Directions document has been revised to provide a stronger context for the approaches proposed, which includes the Country Support Program (CSP). This version frames the CES around five pillars focused on empowering countries for maximum impact, an implementation strategy with three interrelated components including the CSP, and further clarification of the CSP's critical role in line with GEF Management Response to OPS-7 recommendations.
5. **Innovations Window**: This has been added as a new section following recommendations by the OPS-7 evaluations and redesigned to focus on risk and innovation as requested by participants in the Third Replenishment Meeting. The section describes the rationale, principles, and criteria for investment, including the role of STAP.
6. **All other participants' comments have been addressed and edits are reflected in this document.**

LIST OF ACRONYMS

4IR: Forth Industrial Revolution
ABNJ: Areas Beyond National Jurisdiction
ABS: Access and Benefit Sharing
ACTO: Amazon Cooperation Treaty Organization
ADB: Asian Development Bank
AFD: Agence Française de Développement
AfDB: African Development Bank
AFOLU: Agriculture, Forestry and Other Land Use
AGFE: Advisory Group of Financial Experts
AIS: Indian Ocean and South China Seas
AOSIS: Alliance of Small Island States
ASEAN: Association of Southeast Asian Nations
ASGM: Artisanal and Small-scale Gold Mining
ASL: Amazon Sustainable Landscape Impact Program
B2B: Business to Business
BD: Biodiversity
BfN: Business for Nature
BIOFIN: Biodiversity Finance Initiative
BTR: Biennial Transparency Report
C40: Cities Climate Leadership Group
CAFI: Central Africa Forest Initiative
CARICOM: Caribbean Community
CBCA: City-Business Climate Alliance
CBD: Convention on Biological Diversity
CBFP: Congo Basin Forest Partnership
CBIT: Capacity-building Initiative for Transparency
CBO: Community-Based Organization
CC: Climate Change
CCAD: Central American Commission for Environment and Development
CCRI: Coalition for Climate-Resilient Investment
CDP: Carbon Disclosure Project
CEFDHAC: Conference on Dense and Moist Forest Ecosystems of Central Africa
CEM: Clean Energy Ministerial
CEPF: Critical Ecosystem Partnership Fund
CGIAR: Consultative Group on International Agricultural Research
CH4: Methane
CIF: Climate Investment Fund
CIFOR: Center for International Forestry Research
CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMA: Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CMS: Convention on Migratory Species
CO2: Carbon Dioxide
CO2e: Carbon Dioxide Equivalent
CODES: Coalition for Digital Environmental Sustainability
COMIFAC: Central African Forests Commission
COP: Conference of the Parties
COP-MOP: Conference of the Parties serving as the Meeting of the Parties
CPB: Cartagena Protocol on Biosafety
CPF: Collaborative Partnership on Forests
CPI: Climate Policy Initiative
CPIC: Coalition for Private Investment in Conservation
CSA: Climate-Smart Agriculture
CSO: Civil Society Organization
CSP: Country Support Program
CTF: Conservation Trust Funds
CW: Chemicals and Waste
CWR: Crop Wild Relatives
D2ED: Digital to Environmental Dividend
DDPi: Deep Decarbonization Pathways Initiative
DDPLAC: Deep Decarbonization Pathways in Latin America and the Caribbean
DLDD: Desertification, Land Degradation and Drought
DRM: Domestic Resource Mobilization
DSL: Dryland Sustainable Landscapes
D-SLM: Drought-Smart Land Management
EBRD: European Bank for Reconstruction and Development
EBSAs: Ecologically or Biologically Significant Marine Areas
ECCAS: Economic Community of Central African States
ECW: Expanded Constituency Workshop
EDGE: Excellence in Design for Greater Efficiencies
EE: Energy Efficiency
EEZ: Exclusive Economic Zone
ESG: Environmental, Social, and Governance
ETS: Emissions Trading System
EV: Electric Vehicle
E-waste: Electrical and Electronic Waste

FAO: Food and Agriculture Organization of the United Nations

FCPF: Forest Carbon Partnership Facility

FEBA: Friends of Ecosystem Based Adaptation

FFVP: Fire-Free Village program

FOLUR: Food Systems, Land Use and Restoration Impact Program

GAA-EL: Global Agribusiness Action on Equitable Livelihoods Project

GBF: Global Biodiversity Framework

GCF: Green Climate Fund

GCO II: Global Chemicals Outlook II

GDP: Gross Domestic Product

GEBs: Global Environmental Benefits

GEF: Global Environment Facility

GEF-4: Global Environment Facility Fourth Replenishment Period

GEF-5: Global Environment Facility Fifth Replenishment Period

GEF-6: Global Environment Facility Sixth Replenishment Period

GEF-7: Global Environment Facility Seventh Replenishment Period

GEF-8: Global Environment Facility Eight Replenishment Period

GEF-9: Global Environment Facility Ninth Replenishment Period

GFDRR: Global Facility for Disaster Reduction and Recovery

GGWI: Great Green Wall Initiative

GHG: Greenhouse Gas

GIZ: German Agency for International Cooperation

GLF: Global Landscapes Forum

Global ABC: Global Alliance for Buildings and Construction

GOLD: GEF's program 'Global Opportunities for Long-term Development of artisanal and small-scale gold mining ASGM Sector'

GPA: Global Programme of Action for the Protection of the Marine Environment from Land-based Activities

GPAP: Global Plastic Action Partnership

GPFLR: Global Partnership on Forest Landscape Restoration

GRI: Green Recovery Initiative

GtC: Gigatons of Carbon

GW²I: Global Wastewater Initiative

GWP: Global Wildlife Program

HCFC: Hydrochlorofluorocarbons

HFC: Hydrofluorocarbon

HHPs: Highly Hazardous Pesticides

IADB: Inter-American Development Bank

IAP: Integrated Approach Pilot

IAS: Invasive Alien Species

ICCM: International Conference on Chemicals Management

ICCWC: International Consortium on Combating Wildlife Crime

ICE: Internal Combustion Engine

ICI: Inclusive Conservation Initiative

ICLEI: Local Governments for Sustainability

ICRAF: World Agroforestry

ICT: Information and Communications Technology

IDB: Inter-American Development Bank

IDDRI: Institute for Sustainable Development and International Relations

IDH: The Sustainable Trade Initiative

IEA: International Energy Agency

IEO: Independent Evaluation Office of the Global Environment Facility

IETA: International Emissions Trading Association

IFC: International Finance Corporation

IFI: International Financial Institution

IFL: Intact Forest Landscape

IKI: International Climate Initiative

IMO: International Maritime Organization

INDC: Intended nationally determined contribution

INTERPOL: International Criminal Police Organization

IOT: Internet of Things

IP: Integrated Program

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPCC: Intergovernmental Panel on Climate Change

IPLCs: Indigenous Peoples and Local Communities

IRENA: International Renewable Energy Agency

IRRI: International Rice Research Institute

ISLANDS: GEF's program 'Implementing Sustainable Low and Non-Chemical Development in SIDS'

ITF: International Transport Forum

IUCN: International Union for Conservation of Nature

IUU: Illegal, Unreported, Unregulated

IW: International Waters

IWA: International Water Association

IWECO: GEF's program 'Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States'

IWLEARN: GEF funded cross-agency and multi-actor platform of knowledge exchange and capacity building

IWRM: Integrated Water Resources Management

IWT: Illegal Wildlife Trade

KBA: Key Biodiversity Area

LD: Land Degradation

LDC: Least Developed Country

LDCF: Least Developed Countries Fund

LDFA: Land Degradation Focal Area

LDN TPP: Land Degradation Neutrality Transformative Projects and Programmes

LDN: Land Degradation Neutrality

LMEs: Large Marine Ecosystems

LTS: Long-Term Strategy

LTV: Long-Term Vision

M&E: Monitoring and Evaluation

MAT: Mutually Agreed Terms

MDB: Multilateral Development Bank

MEA: Multilateral Environmental Agreement

MFA: Multi-focal Area

MFI: Microfinance Institution

MOPAN: Multilateral Organisation Performance Assessment Network

MPAs: Marine Protected Areas

MSMEs: Micro-, Small and Medium-sized Enterprises

MSP: Marine Spatial Planning

MSPs: Medium Sized Projects

MtC: Million Tons of Carbon

N2O: Nitrous Oxide

NAP: National Action Program

NBF: National Biosafety Framework

NbS: Nature-based Solutions

NBSAP: National Biodiversity Strategy and Action Plan

NC: National Communication

NCA: Natural Capital Accounting

NCAA: Natural Capital Assessment and Accounting

NDC: Nationally Determined Contribution

NGI: Non-grant Instrument

NGO: Non-government Organization

NZNP: Net-Zero Nature-Positive

ODA: Official Development Assistance

OECD: Organization for Economic Co-operation and Development

OECMs: Other Effective Area-Based Conservation Measures

OECS: Organisation of Eastern Caribbean States

OFP: Operational Focal Point

OP2B: One Planet for Business and Biodiversity

OPS6: Sixth Comprehensive Evaluation of the GEF

OPS7: Seventh Comprehensive Evaluation of the GEF

ORRAA: Ocean Risk and Resilience Action Alliance

PBDE: Polybrominated Diphenyl Ethers

PCB: Polychlorinated Biphenyl

PES: Payment for Ecosystem Services

PFHxS: Perfluorohexane Sulfonate

PFOS/PFOA: Perfluorooctane Sulfonate and Perfluorooctanoic Acid

PFP: Political Focal Point

PIC: Prior Informed Consent

PMI: Partnership for Market Implementation

POPs: Persistent Organic Pollutants

PPPs: Public-Private Partnerships

PSAG: Private Sector Advisory Group

PSES: Private Sector Engagement Strategy

PSMA: Port State Measures Agreement

PVC: Polyvinyl Chloride

QII: Quality Infrastructure Investment

RAF: Resource Allocation Framework

REDD+: Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

REPALEAC: Local Communities for the Sustainable Management of Forest Ecosystems in Central Africa

RFMO: Regional Fisheries Management Organization

RMI: Rocky Mountain Institute

RSPO: Roundtable for Sustainable Palm Oil

SAICM: Strategic Approach to International Chemicals Management

SAMOA: Small Island Developing States Accelerated Modalities of Action

SAP: Strategic Action Plan/Program

SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus 2

SAWAP: Sahel and West Africa Program in Support of the Great Green Wall Initiative

SBI: Subsidiary Body on Implementation
SBSTA: Subsidiary Body for Scientific and Technological Advice
SBTi: Science Based Targets Initiative
SBTN: Science-Based Targets Network
SCCF: Special Climate Change Fund
SCCPs: Short-Chain Chlorinated Paraffins
SDG: Sustainable Development Goal
SEEA: System of Environmental-Economic Accounting
SEforALL: Sustainable Energy for All
SESs: Stakeholder Engagement Series
SFM: Sustainable Forest Management
SGP: Small Grants Programme
SIDS: Small Island Developing States
SIDS-GBN: SIDS Global Business Network
SIP: Sustainable Infrastructure Partnership
SLM: Sustainable Land Management
SMEs: Small and Medium-sized Enterprises
SPC: The Pacific Community
SPREP: Secretariat of the Pacific Regional Environment Programme
SSF: Small-Scale Fisheries
STAP: Scientific and Technical Advisory Panel of the Global Environment Facility
STAR: System for Transparent Allocation of Resources
TCFD: Task Force on Climate Related Financial Disclosures
tCO2e: Ton Carbon Dioxide Equivalent
TDA: Transboundary Diagnostic Analyses
TNA: Technology Needs Assessment
TNC: The Nature Conservancy
TNFD: Taskforce on Nature-related Financial Disclosures
TOD: Transit-Oriented Development
TOR: Terms of Reference
TRI: The Restoration Initiative
TSVCM: Taskforce on Scaling Voluntary Carbon Markets
UCLG: United Cities and Local Governments
UN: United Nations
UNCBD: United Nations Convention on Biological Diversity
UNCCD: United Nations Convention to Combat Desertification
UNDP: United Nations Development Programme
UNECE: United Nations Economic Commission for Europe
UNEP: United Nations Environment Programme
UNFCCC: United Nations Framework Convention on Climate Change
UNFF: United Nations Forum on Forests
UNFSS: United Nations Food Systems Summit
UNIDO: United Nations Industrial Development Organization
UNODC: United Nations Office on Drugs and Crime
uPOPs: Unintentionally Produced Persistent Organic Pollutants
V2G: Vehicle-to-Grid
VCMI: Voluntary Carbon Markets Integrity Initiative
WB: World Bank
WBCSD: World Business Council for Sustainable Development
WCD IP: Wildlife Conservation for Development Integrated Program
WCO: World Customs Organization
WCS: Wildlife Conservation Society
WEF: World Economic Forum
WHO: World Health Organization
WorldGBC: World Green Building Council
WRAP: Waste and Resources Action Programme
WRI: World Resource Institute
WWF: World Wildlife Fund
ZDHC: Zero Discharge of Harmful Chemicals
ZSL: Zoological Society of London

GEF-8 PROGRAMMING DIRECTIONS

INTRODUCTION

1. The Global Environment Facility (GEF) is the largest and most experienced multilateral fund dedicated to addressing environmental threats to the planet. The GEF's role is to support developing countries to prioritize environmental action that delivers global environmental benefits. The GEF is the only entity whose mandate embraces all facets of a healthy environment, from biodiversity, to climate change, to land degradation, to international waters, and including chemicals and waste.[1] Established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems, the GEF's core mission is to help ensure the protection and sustainable use nature, upon which all life depends.

2. The GEF is mandated with investing in Global Environmental Benefits (GEBs) that respond to national and international commitments made within the realm of the Multilateral Environmental Agreements (MEAs) and their associated protocols. This is accomplished through dedicated focal area windows that ensure targeted investments in response to guidance from the MEAs, while at the same time anchoring integrated approaches that deliver impactful outcomes for the people and planet. While the GEF is not the financial mechanism of the Sustainable Development Goals (SDGs), ensuring that these GEBs serve as the basis for achieving several of the fundamental (SDGs) that underpin the health of the biosphere and on which most other SDGs depend on, is crucial.

3. One of the GEF's defining characteristics (and its comparative advantage) lies in the fact that it is the financial mechanism for the three Rio Conventions (CBD, UNFCCC, and UNCCD) and two Chemical Conventions (Stockholm and Minamata), along with acting in other global environmental areas such as International Waters and Forests. Through the focal area windows, the GEF has played a critical role in supporting developing countries to meet their obligations and commitments under these conventions. The GEF also acts in other global environmental areas related to International Waters (marine and freshwater systems) and Forests and has contributed significantly in safeguarding these ecosystems throughout the developing world.

4. According to the latest IPCC Report it is now unequivocal that human-caused emissions, from burning fossil fuels and deforestation are responsible for the observed warming of the Earth's atmosphere, oceans and land.[2] In the face of the scale and urgency of the threats facing the planet, and the emerging opportunities and needs to accelerate and scale up the transformation of key

[1] Early findings from the IEO's ongoing evaluation on "The GEF's comparative advantage in supporting a greener future" show strong evidence of the GEF's strategic role in this space. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

[2] IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.

economic systems to deliver positive impacts for the global environment, the GEF cannot afford to stand still.[3] Within the context of all of the Multilateral Environmental Agreements, for which the GEF serves as a financial mechanism, major international commitments have been made and signed on by countries for delivering significant global environmental benefits in the next decade (to 2030). It is imperative that the GEF continue to ramp up its programming both in scale and also impact. A key highlight in this regard is the GEF support to the Great Green Wall Initiative (GGWI), which has now generated considerable global interest and commitment for scaling-up investments in during GEF-8 (see Box 1).

Box 1. Investing in a Resilient and Sustainable Sahel through the Great Green Wall Initiative

The Great Green Wall Initiative (GGWI) is a country-driven platform that engages diverse partners for advancing integrated responses to the effects of climate change, biodiversity loss, desertification and land degradation, in the context of promoting landscape restoration and socio-economic development and resilience across the Sahel. The GEF has a long history of supporting the GGWI through key catalytic interventions starting in GEF-5, which were continued in GEF-6 and GEF-7. Most recently, the GEF has funded the project Harnessing the Great Green Wall Initiative for a Sustainable and Resilient Sahel (implemented by UNEP) which engages with GGWI partners to foster meaningful dialogue with countries and lay out a longer-term vision for the region promoting systems transformation for sustainable and climate resilient growth.

The Great Green Wall Multi-actor Accelerator, announced by the President of France Emmanuel Macron and other world leaders at the One Planet Summit on January 11th, 2021, seeks to facilitate the coordination and collaboration of donors and stakeholders involved in the GGWI. With the recent pledge of over $19 billion in funding from a coalition of the Green Climate Fund (GCF), international development banks, and governments, the GGWI platform is poised to profoundly scale-up and accelerate efforts to sustain livelihoods, conserve biodiversity, and combat desertification and climate change.

The renewed initiative that emerged from recent discussions between donors and GGWI countries has set the goals of this African-led initiative to restore 100 million hectares of degraded land, sequester 250 million tonnes of carbon and create 10 million green jobs in rural areas. To support these goals, the countries under the leadership of the African Union have established the political and technical governance framework including at regional level the Panafrican Agency of the Great Green Wall steered by Heads of States Summit of 11 countries and at national level the Great Green Wall National Agencies. The GEF experience and achievements with SLM offers an appropriate anchor for countries to harness this opportunity in a holistic and coherent manner, which will be critical for building back better and green recovery.

Based on country demand, the GEF-8 strategy will consider a dedicated Sahel regional program that is responsive to demands from the GGWI countries and consistent with focal areas priorities. This will enable countries to program their STAR allocation based on specific needs and opportunities to achieve impactful outcomes while generating multiple global environmental benefits. The program will include a diversified portfolio of country investments across all GEF focal areas to promote innovations for nature-positive, low carbon, and pollution-reduced development pathways. It will also help to promote best practices, ensure multi-stakeholder involvement, and establish a comprehensive approach to knowledge management and capacity building, all geared towards leveraging and upscaling impactful investments of GEF and its long-standing partners such as IFAD, the World Bank, FAO, UNEP, GCF, including through cooperation with the LDCF.

[3] Also see, GEF/R.8/07 GEF-8 Strategic Positioning Framework

5. Science, environmental practice, and economic information are indicating that the integration of environmental actions towards addressing common drivers of degradation is a necessary condition to restoring the health of the environment and ensuring equitable and prosperous sustainable development. Since its inception, the GEF has promoted integrated programming as a key strategy for harnessing synergies across focal areas (see Box 2). The Integrated Approach Pilot (IAP) programs and other larger-scale systemic investments introduced during the GEF-6 cycle were the first to focus explicitly on tackling major drivers of environmental degradation. In GEF-7, the Impact Programs were launched to promote large, integrated, and impactful programs across more sectors and address multiple drivers of environmental change.

6. Much learning is emerging from these programs that can be used to ensure the most effective and efficient use of GEF resources for delivering longer-term and more durable global environmental outcomes. Also, emerging findings from the OPS7 study on Innovation support the integrated approach as being more conducive to the incorporation of innovation in multiple sectors as part of GEF's business model.[4]

7. Findings of the GEF-6 and GEF-7 programming cycles indicate that programs addressing the drivers of environmental degradation using an integrated framework result in more impact per unit of investment than comparable GEF investments, as well as creates the conditions for transitions towards lasting systems transformation. This outcome was also underscored in the recent MOPAN Assessment of the GEF which highlighted the need for the GEF to continue to use its limited resources in the pursuit of transformational change and assessed integrated programming to be more relevant to the type and complexity of global environmental challenges.[5]

Box 2. Evolution of Integrated Programming in the GEF

GEF invests in projects designed by countries to address specific focal area objectives, which are developed in accordance with guidance from the relevant conventions that the GEF serves as financial mechanism. Depending on country-specific needs reflected in the design of projects and programs, the use of GEF grants has evolved over the years from multi-focal area to integrated approaches. The evolution largely reflects the increasing need for GEF resources to harness better integration and opportunities for generating multiple global environmental benefits (GEBs).

Multi-focal Area (MFA) Programming

Multi-focal area (MFA) programming involves the use of GEF financing from more than one GEF focal area to address a combination of GEF objectives and outcomes under each of the focal area involved. MFA projects have increased over the years, accounting for 13% of GEF funding GEF-4 and 28% in GEF-5. MFA programming presents a myriad of opportunities for countries to harness GEF financing based on their own needs and priorities for generating GEBs. MFA programming was also key to advancing the SFM program, which was designed to incentivize countries toward harnessing cross-focal area synergies for safeguarding globally important forest landscapes. A major limitation of MFA programming is the inherent expectation that GEBs from projects will be proportional to the amount of focal area resources invested. This is not only difficult to establish, but also undermines the potential for harnessing synergies and avoiding negative tradeoffs.

[4] GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

[5] MOPAN 2017-18 Assessments, Global Environment Facility, http://www.mopanonline.org/assessments/gef2017-18/

Integrated Approach Programs

The "integrated approach" was formally launched as a programming option during GEF-6 with three pilot programs that were structured around major emerging drivers of global environmental challenges: two were global programs on urbanization (Sustainable Cities) and commodity-driven deforestation (Commodities), and the third on sustainability and resilience for food security in the drylands of Sub-Saharan Africa. GEF financing for the programs was not "siloed" by focal area, but rather invested in a coherent manner to promote the sustained flow of multiple GEBs, while ensuring that progress in any dimension of the global environment does not negatively affect other related objectives. The integration therefore creates opportunities for projects to harness synergies and avoid negative tradeoffs. Because of the direct link with sectoral priorities underpinning economic growth and development in the countries, the prospect for multi-stakeholder engagement was greatly enhanced by the programs.

Impact Programs

Building on the GEF-6 experiences, a set of impact programs were introduced in GEF-7 to promote transformational shift in key economic systems that in turn meet multiple convention goals and form an integral component of each focal area strategy. GEF financing closely matched key objectives and guidance received from the conventions and are complemented by priorities that can best be delivered as separate investments under each of the focal areas. This is consistent with the Leaders' Pledge for Nature which calls for better integration across the multi-lateral agreements. Through impact programs the GEF is helping countries pursue holistic and integrated approaches that deliver impactful outcomes, and in line with their national development priorities. The focused set of country-driven priorities enhances integration among GEF investments and creates opportunity to crowd-in private sector financing.

Integrated Programs

With growing urgency to turn the tide on pressures and threats facing the planet, integrated programming will be further harnessed as a means to scale up investments for global environmental benefits during GEF-8 and beyond. In GEF-8, integrated programs are being proposed to promote blue and green recovery from the COVID-19 pandemic. The programs are also responsive to global aspirations for development pathways that nature-positive, carbon-neutral and pollution-reduced pathways, including commitments by multi-lateral environmental agreements to address interdependencies between human well-being and a healthy planet. The GEF-8 programming architecture specifically addresses the critical need for ensuring that GEF investments are targeted toward tackling the breakdown in food, energy, urban, health, and natural systems that underpin human development.

8. As a general rule, GEF investments should be designed to produce lasting and transformative impacts. Several guiding principles have been identified and articulated with the support of STAP:[6]

Integration across sectors, thematic areas and drivers:

a) *Address ecological, economic and social drivers and outcomes.* This includes consideration of factors such as cultural norms, consumption patterns, economic demand and incentives, as well as the distribution of costs and benefits from investment activities. For example, how well do investments in fisheries management also address associated livelihood improvements, or the incentives driving illegal fishing?

b) *Avoid leakage* (displacing negative impacts elsewhere). This includes displacement of destructive production practices as well as flows of toxins and waste. For example, are efforts to halt deforestation in one region diverting this pressure to other intact forest landscapes?

[6] https://www.stapgef.org/resources/advisory-documents/making-gef-investments-resilient

c) *Work across sectors and scales*. This includes the linkages between biodiversity conservation, habitat protection and restoration, food systems, transportation, energy production, chemical pollution, and supply chains. For example, how well does urban planning integrate wastewater treatment, biodiversity conservation, green infrastructure, and green energy for sustainable cities development? Working across scales may involve integrating the local objective (better agricultural yields), with the project objective (improved soil fertility), with focal area objective (reduce land degradation), and finally with the integrated program objective (restore degrade ecosystems).

Transformative Investments:

d) *Credibly address one or more transformation levers* identified in GEF strategy. For GEF-8, these levers are provisionally identified as governance and policy, financial leverage, innovation and multi-stakeholder dialogue.

e) *Take purposeful programmatic risk to achieve impact at scale*. This recognizes that transformational change requires novel approaches in the domains of policy and finance, technology and management practices, and social change. For example, how are motivations (e.g. social norms, attitudes, beliefs) being addressed?

Durable Investment:

f) *Design for resilience in the face of multiple, plausible future scenarios*. This includes explicit consideration of climate risk along with other dimensions of environmental change.

g) *Build institutional and financial mechanisms to sustain impact*. This recognizes that the greatest opportunities to scale impact typically come after the period of GEF investment. For example, what kinds of twinning arrangements or other capacity strengthening measures will enable effective transboundary management of Large Marine Ecosystems (LMEs)?

GEF-8 Programming Architecture

9. The GEF-8 programming architecture builds on the successful approach in GEF-7 of investing in integrated programming and focal area actions to maximize potential for more impactful outcomes to ultimately support Convention needs and expectations. In GEF-8, we intend to encourage countries to move more of their programming through eleven (11) Integrated Programs that address the major environmental needs of the planet for which the GEF has a mandate. The IPs were identified through a consultative process involving experts from the GEF Partnership, who also reinforced their critical importance for transforming key economic systems. This will be complemented with more targeted GEF-8 investments along focal area specific entry points to ensure that all Convention commitments are also addressed (Figure 1).

10. At core of the overall GEF-8 architecture is the *Healthy Planet, Healthy People* framework,[7] inspired by the explicit recognition of the interdependency between human well-being and a healthy environment (Figure 2). This interdependency is key to ensuring that GEF investments are targeted toward tackling the breakdown in food, energy, urban, health, and natural systems that underpin human development. Hence GEF investment through the integrated programs will not only generate global environmental benefits, but also create innovative pathways for transforming these systems toward durability and resilience.[8]

11. The proposed integrated programs collectively address major drivers of environmental degradation and/or deliver multiple benefits across the many thematic dimensions the GEF is mandated to deliver. The thematic scope and geographical coverage of the programs are consistent with global aspirations for development pathways that are nature-positive, climate-neutral and pollution free towards living in harmony with nature. They are also intended to accommodate the diverse range of country needs for investing in a blue and green post-COVID-19 recovery. Many of the priorities are also making use of increasingly more relevant global or regional platforms that are attracting a multitude of stakeholders and resources in response to political commitments. Integrated programs also allow the GEF to better crowd-in other stakeholders, including the private sector, enhance knowledge sharing and learning, and ensure a more effective use of GEF resources.

12. While the integrated programs will deliver substantial global benefits across the different focal areas of the GEF (Figure 1), many elements of guidance from conventions can be best dealt with through distinct focal area complementary investments directed at objectives not fully reflected within the set of proposed integrated programs. These investments are presented in detail within the individual Focal Area Investment Frameworks for Biodiversity, Climate Change, Land Degradation, International Waters, and Chemicals and Waste.

[7] See GEF's Strategic Positioning Framework document GEF/R.8/28

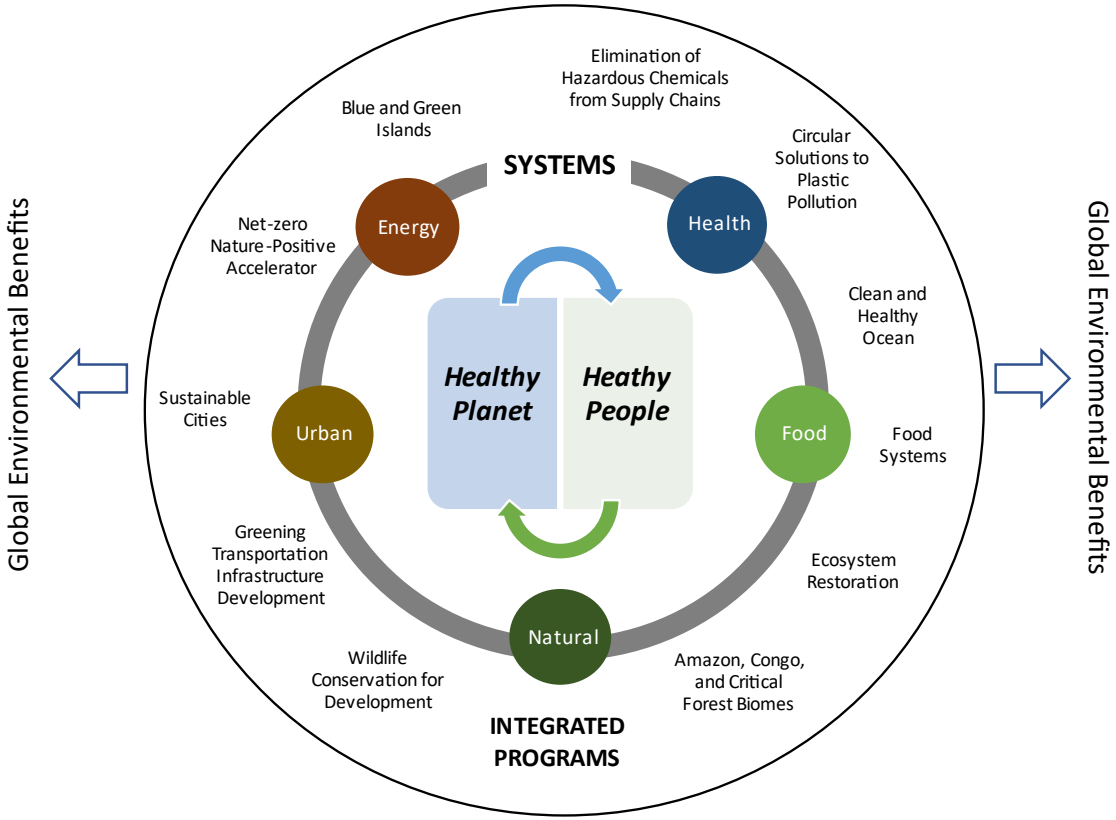
[8] https://www.stapgef.org/resources/advisory-documents/making-gef-investments-resilient

Figure 1. GEF-8 Programming Architecture and the Contribution of Integrated Programs to GEBs

Focal Areas	Biodiversity	Climate Change	Land Degradation	International Waters	Chemicals and Waste
CROSS-CUTTING THEMES	Circular Economy; Nature -based Solutions; Transboundary and Freshwater Environmental security; Gender Responsive Approaches; Beh avior Change; Resilience; Private sector Engagement				
GLOBAL PROGRAMS	Mobilizing the Financial Sector for Environmental Goals through Blended Finance Community Action for Global Transformation - Small Grants Program and Beyond				
INTEGRATED PROGRAMMING	Tackling drivers and advancing the integrated approach to transform systems and generate global environmental benefits across multiple focal areas				
Food Systems					
Sustainable Cities					
Amazon, Congo, and Critical Forest Biomes					
Wildlife Conservation for Development					
Net-zero Nature- Positive Accelerator					
Greening Transportation Infrastructure Development					
Ecosystem Restoration					
Clean and Healthy Ocean					
Circular Solutions to Plastic Pollution					
Blue and Green Islands					
Elimination of Hazardous Chemicals from Supply Chains					
GEBs AND INDICATORS	**Biodiversity Conserved (Landscapes and Seascapes)** • *Area protected in landscapes / seascapes (hectares)* • *Protected area under effective management in landscapes / seascapes (hectares)*	**Greenhouse Gas Mitigation** • *Emissions avoided or reduced (Tons of CO2e)* • *Forest C stocks conserved (Tons of CO2e)* • *Land-based C sequestered (Tons of CO2e)*	**Sustainable Land Management / LDN** • *Area under sustainable land management (hectares)* • *Area restored (hectares)* • *Area with deforestation reduced (hectares)*	**Healthy Oceans / Globally over - exploited fisheries restored** • *Proportion of Fisheries Managed Sustainably (%)* • *Freshwater Resources Managed Sustainably (%)* • *Basins with Enhanced Water Food-energy Ecosystem Security (#, ha)*	**Chemicals, POPs, and Mercury reduced / eliminated** • *Quantity of POPs, mercury, Waste Reduced or Eliminated (Tons)*

Color shading indicates degree of contribution of the IPs to Focal Areas — *Major* | *Moderate* | *Minor*

Figure 2. Integrated Programs for Systems Transformation and Global Environmental Benefits



INTEGRATED PROGRAMS

Food Systems Integrated Program

Introduction

Environmental Impacts of the Global Food System

13. Agricultural systems are essential for the health, food security and nutrition, and economic well-being of people around the globe. While there are many forms of agriculture that support healthy people and a healthy planet, food systems globally are also a key contributor to environmental degradation. Agriculture occupies about 37% of the world's total land area,[9] and unsustainable agricultural expansion has resulted in significant loss of forests and biodiversity, land and soil degradation, and considerable greenhouse gas (GHG) emissions. Cropland accounts for an estimated 1.87 billion hectares (Figure 3), which is a major contribution to current global land use. Further, a rising global population and changes in consumption patterns towards higher protein diets will result in more carbon-intensive agriculture that will further strain global land-use systems. The many drivers of agricultural land use reinforce the need for a holistic and integrated supply chain approach in transforming food systems.

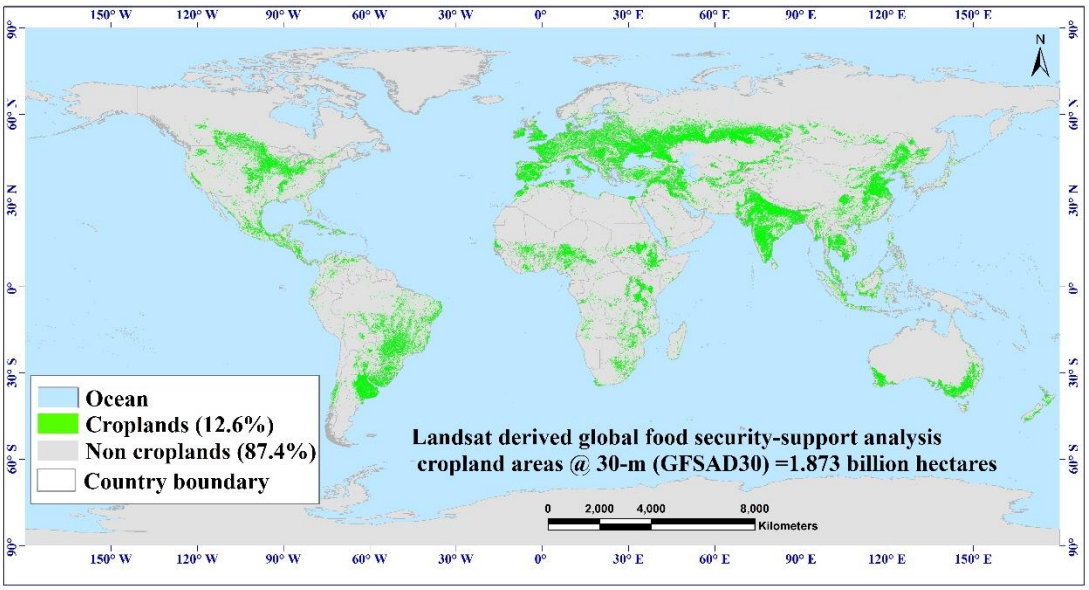
14. Agriculture accounts for 70% of global freshwater withdrawals[10] and is responsible for up to 80% of global deforestation. Drivers linked to food production cause 70% of terrestrial and 50% of freshwater biodiversity loss.[11] While agricultural landscapes can safeguard ecosystem services and biodiversity, the valuation of these services provided by their natural capital is generally not considered in land management decisions.[12] The uniformity of monocultures and industrial scale livestock rearing can leave these systems vulnerable to economic, climate-induced and natural disaster shocks that result in significant economic losses and large-scale suffering of rural communities.

15. The IPCC estimates that 23% of global anthropogenic emissions came from agriculture and land use between 2007 and 2016.[13] While agriculture is a significant driver of climate change, climate change itself further stresses land systems, worsening existing risks of land degradation and biodiversity loss.[14] Between 25–30% of total food produced is then wasted or discarded as a result of post-harvest losses. Combined, food loss and waste caused between 8-10% of GHG

[9] Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5. Montreal.
[10] AQUASTAT, FAO 2020, Water Use Overview http://www.fao.org/aquastat/en/overview/methodology/water-use
[11] Ibid.
[12] Christian, et al. 2017. An economic perspective on land use decisions in agricultural landscapes: Insights from the TEEB Germany Study, Ecosystem Services, Volume 25.
[13] IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019).
[14] WWF (2020) Living Planet Report 2020 - Bending the curve of biodiversity loss. Almond, R.E.A., Grooten M. and Petersen, T. (Eds). WWF, Gland, Switzerland.

emissions from 2010-2016 and cost about $1 trillion a year. If food loss and waste were a country, it would be the third-largest GHG emitter on the planet. Food loss and waste consumes about one-quarter of all water used by agriculture each year and requires an area of agricultural land greater than the size of China.[15]

Figure 3. Extent of Global Cropland[16]



16. The consequences of unsustainable food production extend into aquatic systems. Fish provide 17% of animal protein consumed globally,[17] and an even higher percentage in some countries of the south. Agriculture is the largest source of water pollution, which then runs off into aquatic ecosystems and coastal areas. Nonpoint–source pollution from agriculture, including nutrients from fertilizers, animal waste, pesticides and herbicides, mercury and other hazardous substances can have profound impacts on both people and biodiversity.[18]

17. So called 'Blue Foods' (e.g. edible aquatic organisms including fish, shellfish and aquatic plants) are situated within the food system and have negative externalities like any other major

[15] Searchinger, T. et al. (2019). Creating a Sustainable Food Future—A Menu of Solutions to Feed Nearly 10 Billion People by 2050. World Resources Institute.
[16] Source: USGS GFSAD30 project –Global cropland product at 30-meter spatial resolution for the year 2015
[17] Michigan State University. "Scientists to global policymakers: Treat fish as food to help solve world hunger: Sustainable seafood central to strengthening food security if viewed as more than just a natural resource." ScienceDaily. ScienceDaily, 19 January 2021. www.sciencedaily.com/releases/2021/01/210119122051.htm
[18] Tickner, D. et al., Bending the Curve of Global Freshwater Biodiversity Loss: An Emergency Recovery Plan, BioScience, Volume 70, Issue 4, April 2020, Pages 330–342, https://doi.org/10.1093/biosci/biaa002

commodities, but nonetheless are largely missing from key food policy dialogues. For example, SDG 2 (Zero Hunger) includes a focus on production systems but targets do not mention fisheries.

Food Systems and Global Health Risks

18. The inappropriate use of pesticides and the pervasive risk of food contamination are among the major health risks in food systems globally.[19] Agricultural encroachment into natural habitats can bring humans and livestock into closer proximity to wildlife, contributing to conditions where zoonotic spillovers can result.[20]

19. The livestock sector is an important contributor to poverty reduction, food security and agricultural development—supporting the livelihoods and food and nutrition security of almost 1.3 billion people.[21] However, intensive systems that see the confinement of a large numbers of animals in small spaces and narrowed genetic diversity can increase the probability of outbreaks of high-impact animal diseases.[22]

20. Clearing land for cattle raising was also responsible for 16% of global total tree cover loss from 2001-2015, and deforestation by this and other commercial commodities, such as oil palm (10.5 million hectares), soy (nearly 8 million hectares) cocoa and coffee (2 million hectares each), thins forest fringes and increases the likelihood of wildlife interaction with human settlements,[23] while also contributing to climate change and biodiversity loss.

21. For these reasons, there are growing calls for better management of livestock in many developing countries in order to mitigate their global environmental impacts as animal-based foods have been shown to have large ecological and carbon footprints.[24] This included aspirations (particularly in Northern countries) to reduce the ecological footprint of diets as an important input to sustainable food systems, including through moderating consumption of animal products.

GEF-8 Integrated Program

22. The COVID-19 pandemic laid bare the vulnerabilities of global food systems to shocks of this nature. Food supply challenges in Latin America, Africa, and Asia resulting from disrupted global supply chains seriously affected small and medium-sized enterprises (SMEs). COVID-19 restrictions and supply chain impacts exacerbated existing food insecurity and created food

[19] Jones, et. al., 2013. Zoonosis emergence linked to agricultural intensification and environmental change. PNAS
[20] Ibid
[21] World Bank Blog, 2020. Moving towards sustainability: The Livestock Sector and the World Bank. https://bit.ly/3rlxMSC
[22] COVID-19 and the crisis in food systems: Symptoms, causes, and potential solutions, Communiqué by IPES-Food, April 2020.
[23] WRI 2021.
[24] Rosi, A., *et al.* Environmental impact of omnivorous, ovo-lacto-vegetarian, and vegan diet. *Sci Rep* **7,** 6105 (2017). https://doi.org/10.1038/s41598-017-06466-8

insecurity among groups who were previously food secure. The FAO estimated that 161 million more people in the world faced hunger in 2020 than in 2019 and that nearly 2.37 billion people did not have access to adequate food in 2020 – an increase of 320 million people from the previous year.[25]

23. Clear actions are required that target the most affected: poor producers—including many women and indigenous peoples—and consumers without social safety nets whose food security is potentially at risk. Minimizing distortions and disruptions in international markets and supply chains, including through such as means as shortening supply chains, diversified sourcing and increasing strategic reserves,[26] remains critical for global food security and nutrition. Strengthening resilience in domestic and regional markets can enhance access to fresh food, ensure greater value goes to the farmer, and reduce vulnerability that led to increased food insecurity.[27]

24. The GEF addresses the role of diets, nutrition and hunger as drivers of food system impact by promoting engagement with relevant stakeholders from across the supply chain, and aligning its mandate with other diverse platforms and programs focused on dietary shifts, and nutrition and hunger. This approach enables the GEF to crowd-in expertise and financing (public and private) that is focused specifically on health and nutrition dimensions of food systems.

25. The GEF-8 Food Systems Integrated Program will advance approaches that drive greater sustainability in both food production and global demand in order to reduce agriculture's environmental footprint.[28] The Program will support the movement from frameworks to action by contributing in concrete ways to the transformation of food systems. With a specific focus on "green" and "blue" recovery, the IP will generate significant GEBs, including: sequestering greenhouse gases, conserving and sustainably managing forests and biodiversity, restoring productive lands, and ensuring access to clean water supplies for agricultural production. Policy options will be harnessed to improve enabling conditions and generate incentives necessary to maximize outcomes and enhance durability of results.

26. The IP will learn from and build on experiences of the GEF's integrated approach programs from GEF-6 (Food Security in Africa and Taking Deforestation out of Commodity Supply Chains) and GEF-7 (Food Systems, Land Use and Restoration Impact Program), building on the lessons learned thus far generated, many of which have been documented by the IEO.[29] The IP will also

[25] FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome, FAO. https://doi.org/10.4060/cb4474en

[26] Davis, K.F., et al., Towards food supply chain resilience to environmental shocks. Nat Food 2, 54–65 (2021). https://doi.org/10.1038/s43016-020-00196-3

[27] Communiqué by IPES-Food, April 2020.

[28] Implementation of the FS IP will be in accordance with the Cartagena Protocol on Biosafety in those countries that are Parties to the Protocol.

[29] GEF/E/C.60/04, Formative Evaluation of the GEF integrated Approach to Address the Drivers of Environmental Degradation, GEF IEO, 2021. https://bit.ly/3iDiLZz

serve as a timely opportunity for countries to harness the momentum being created by the UN Food Systems Summit, which is focused on transforming the global food system toward sustainability and resilience and was held in September, 2021.

27. Efforts will be targeted at farm-level and smallholder farmers, but, as with previous GEF integrated approach programs, also toward demand and financing actors across the global supply chain and including intermediaries to markets. This is because land use decisions related to agriculture are increasingly driven by factors external to the landscape, including corporations involved in trade and retailing,[30] financiers bankrolling production and shifts in dietary and nutritional demands.[31] These global drivers are difficult to address with approaches at the national or local levels that are solely targeted at the producer or supply-side of agricultural commodities.[32]

28. Today, approximately 30% of farms worldwide (160 million plus) are practicing some form of sustainable intensification[33] on more than 450 million hectares of agricultural land.[34] While the environmental risks of some aquaculture practices should not be understated, much inland-water fish farming is also considered sustainable. Building upon practices of sustainable farming is the concept of regenerative food systems, which calls for production of food in ways that actively restore habitat, reduce GHG emissions, increase soil carbon and protect biodiversity.[35] Regenerative agriculture in the context of this IP involves the specific focus of moving agriculture from being "non-degrading" to being "nature-positive" and "climate-efficient." [36,37]

29. In order to transform food systems, sustainable practice must move from boutique to taking place at scale. Sustainable and regenerative approaches require a shift from a narrow focus on production landscapes to entire food systems. These practices should build around a principle of enhancing crop diversity and integration, while linking across spatial (landscapes) and vertical (demand) dimensions for the food system.[38]

30. A critical component of this will be supporting national and subnational governments to fully engage across public agencies to incorporate nature-positive production systems into their national development plans and strategies for climate, biodiversity, and land degradation. This will

[30] Lambin E.F. et al., Effectiveness and synergies of policy instruments for land use governance in tropical regions. Global Environmental Change 28 (2014)

[31] It is important to take into account all actors that affect the food systems, including those that might not be addressed in specific projects. Please refer to STAP's Theory of Change for assistance on how to priortize actors: www.stapgef.org/resources/advisory-documents/theory-change-primer

[32] Henders, S. et al, Do national strategies under the UN biodiversity and climate conventions address agricultural commodity consumption as deforestation driver?, Land Use Policy, 2018.

[33] Sustainable intensification is defined (https://doi.org/10.1093/aob/mcu205) as a process where agricultural yields are increased without adverse environmental impact or conversion of additional non-agricultural land.

[34] Secretariat of the Convention on Biological Diversity (2020).

[35] TNC Blog (2020). Beyond Sustainability: A Food System to Restore the Planet.

[36] Burgess PJ., et al, (2019). Regenerative Agriculture: Identifying the Impact; Enabling the Potential. Report for SYSTEMIQ. 17 May 2019. Bedfordshire, UK: Cranfield University.

[37] Giller et al. (2021). Regenerative Agriculture: An agronomic perspective. Outlook on Agriculture, 1-13.

[38] Jeffries, N. (2019). Regenerative agriculture: how it works on the ground. Circulate (Ellen MacArthur Foundation)

require strengthening multi-stakeholder partnerships to overcome sectoral silos and support integrated action across multiple scales. In parallel, policy changes should better assess, account and value the natural capital, and shift financial flows away from perverse subsidies and nature-degrading investments toward nature positive investments, including landscape level payment for ecosystem services (PES) and other forms of financial compensation for good practice.

31. Aquaculture will play a key role in future food security needs. Emerging literature supports the positive 'regenerative' or 'restorative' roles of bivalve shellfish and seaweed aquaculture as practiced in many parts of the world.[39] Sustainable intensification of yields from aquaculture, while simultaneously sparing and restoring natural habitat, offers potential for people to meet escalating food demand with the least harm to other species.[40] By focusing explicitly on environmentally and socially responsible land-based aquaculture, this IP will complement the IW focal area, and as a result create opportunity for engagement by countries where aquaculture development is crucial for achieving sustainability in the food system.

32. Given the impact of the current pandemic and the threat of novel zoonotic disease spread, transforming food systems will need to be tackled in the context of the *Healthy Planet, Healthy People* approach. Working across sectors is necessary to mitigate the risk of disease emergence, as is recognizing the inherent links between people and animals and their shared environment.

33. More sustainable food systems require a focus on the vital role women, youth, and Indigenous Peoples play in the global food system. Women are responsible for some 60% to 80% of food production in developing countries,[41] particularly through rearing small livestock and growing food crops. Women also have a critical economic stake and role in demand and investment, controlling 64% of consumer spending, and their global earnings are in the trillions of dollars.[42] Youth is an important demographic as they are on the front lines of dealing with the effects of environmental and climate change, which are likely to accelerate and intensify during their lifetimes and those of their children.[43] By unleashing the power of women and youth as full participants and shareholders, the agriculture sector can catalyze greater productivity and sustainability and hence greater financial flows.[44] Indigenous Peoples' food systems are also subject to effects of globalization, trade, markets, monetization, regulations and mass media.

[39] Alleway et. al. The Ecosystem Services of Marine Aquaculture: Valuing Benefits to People and Nature, BioScience, Volume 69, Issue 1, January 2019, Pages 59–68, https://doi.org/10.1093/biosci/biy137

[40] Phalan B. et al., Green R.E. (2011) - Reconciling Food Production and Biodiversity Conservation: Land Sharing and Land Sparing Compared. Science 333, 1289; DOI: 10.1126/science.1208742.

[41] IADB Blog. What Is the Role of Women in Food Security? https://blogs.iadb.org/sostenibilidad/en/cual-es-el-rol-de-la-mujer-en-la-seguridad-alimentaria-2/

[42] GGP Knowledge Product. (2019). How can gender mainstreaming in global agricultural supply chains accelerate good growth? What works and for whom? UNDP https://bit.ly/3caD38l

[43] Glover D. et al. (2020) Youth and Food Systems. Transformation Frontiers in Sustainable Food Systems. Vol. 4

[44] Ibid

Changes within these food systems have accelerated significantly in recent years.[45] The implications of these changes and the role of Indigenous Peoples in the food system will be factors considered in the Program.

Objectives, Key Interventions, and Selection Criteria

34. The overall objective of the proposed Food Systems Integrated Program is to catalyze the transformation to *sustainable food systems that are nature positive, resilient, and pollution-reduced*. The IP will seek to reduce environmental degradation and negative externalities in food production systems (food crops, commercial commodities, livestock, and aquaculture) and on the demand side across supply chains. This will generate Global Environmental Benefits for climate change mitigation, biodiversity conservation, land degradation and water resources, and also contribute to food security, livelihood and climate resilience, and better health and nutrition.

35. The need for transformation in food systems has been the focus of extensive research and synthesis[46] and a focus of new agreements made during COP26 in Glasgow,[47] all of which highlights the urgency to shift production and supply chain practices toward nature-positive, low emission and hazardous chemical-free pathways. While the GEF has a critical role to play in advancing this transformation, such efforts cannot be made in isolation of other food system priorities, including health, diets, and nutrition. Hence the GEF approach is to mobilize and engage diverse stakeholders involved in supporting different dimensions of food systems in order to create synergies and minimize negative tradeoffs from actions and investments.

36. To maximize potential for transformative change, the program will operate at two levels—global and national—and take into consideration the proposed "levers" for advancing systems transformation (governance and policies, financial leverage, multi-stakeholder dialogues, and innovation and learning). Globally, the program will establish links with relevant platforms and initiatives that foster multi-stakeholder dialogue and collective action to transform food systems. Key interventions at global level will include:

- Leveraging Private and Financial Sectors: The program will encourage concrete actions on both the production and demand sides by actors from smallholders and SMEs to global corporates– e.g., traders, manufacturers, commodity buyers and retailers – toward use and expansion of sustainability standards and commitments to environmental and socially responsible sourcing. The program will also engage a spectrum of financiers to shift

[45] FAO and Alliance of Bioversity International and CIAT. 2021. Indigenous Peoples' food systems: Insights on sustainability and resilience in the front line of climate change. Rome. https://doi.org/10.4060/cb5131en

[46] Lilliana S. et. al., Food System Outcomes: An Overview and the Contribution to Food Systems Transformation, Frontiers in Sustainable Food Systems, volume 4, 2020. www.frontiersin.org/article/10.3389/fsufs.2020.546167

[47] For example the Policy Action Agenda for the Transition to Sustainable Agriculture, Global Action Agenda for Innovation in Agriculture, Forest, Agriculture and Commodity Trade Dialogue, and the Koronivia joint work on agriculture

investment screening practices toward environmental sustainability. Efforts will be made to mobilize additional and larger scale financing, including through blended finance mechanisms, in order to maximize country outcomes and increase the program's impact and contribution to transformational change.

- Cross-scale support: This will catalyze access to knowledge, technical expertise and capacity development on issues that represent common challenges across multiple countries or specific geographical regions. The IP will support efforts to influence public policy and private actions toward sustainable food systems, shifting production and landscape management practices, building effective multi-stakeholder dialogue, and promoting multi-country or regional planning and coordination to improve implementation.
- Scaling impact: While individual countries will deliver substantial benefits through their nationally focused projects, the potential for global transformation will require that such impacts are amplified beyond national boundaries. This will be achieved by catalyzing new opportunities across spatial (landscapes) or vertical (supply chain) dimensions to help maximize potential for impact. Fostering decision making across scales is likely to induce effective adaptation to social and ecological change as feedback loops relay information between levels and foster improved decision-making.[48]

37. At country level, the program will draw on the proposed global framework to develop innovative projects that demonstrate a holistic and systemic approach to food systems, including commitment to addressing the "levers" for transformation, integrating cross-cutting priorities including private sector engagement, Nature-based Solutions, gender responsiveness, and livelihood and climate resilience. Specific interventions suitable for GEF support include the following:

- Sustainable and Regenerative agriculture: Creating an enabling environment for countries and industries to shift agricultural food production towards sustainability through a diversity of approaches including but not limited to: agroecology, regenerative farming, avoiding deforestation including from commercial commodities, rehabilitating and restoring food production landscapes – including through agroforestry – to improve flow of ecosystem benefits, diversifying cropping, increasing productivity, improving watershed management, and promoting sustainable land and soil management. The primary crops of focus will include commercial commodities causing significant deforestation in the tropics (soy, palm, coffee beef, and cocoa) as well as globally important food crops (rice, wheat and maize), whose production results in a range of negative environmental externalities (e.g., GHG emissions, nutrient runoff, sediment flows, biodiversity loss, etc). Additional scope will be allowed for the inclusion of other crops as

[48] van Bers, C. et al. Advancing the research agenda on food systems governance and transformation. Current Opinion in Environmental Sustainability 39 (2019): 94-102.

entry points into the program if a compelling case can be made on how such inclusion can contribute to systems transformation through nature positive, carbon neutral and hazardous chemical-free production and help shift away from intensive monocultures to more diversified systems.

- Livestock Management: Reducing industrial livestock production's impact on the environment, particularly from deforestation, ecosystem degradation and methane emissions, could come through such means as improving productivity on existing pastureland, increasing genetic diversity, supporting integrated crop-livestock systems, restoration of degraded and extensive pastures into richer, more productive environments with trees and shrubs interspersed with grasses, fodder crops, and improving manure management. Identifying, introducing and supporting incentives and policies required to encourage ranchers to adopt better practices[49] will be key, as will improving disease prevention and control in animal production systems is also critical in reducing the likelihood of exposure of domesticated animals to/from wild populations and the possibility of zoonotic spillover events. Finally, finding ways to support more diversified and environmentally friendly diets,[50] including through moderating consumption of animal products – while also considering local context and potential impacts on local food security – and increasing production of alternative protein sources.

- Sustainable Aquaculture: The program will position nature at the core of the sector's delivery of affordable and low-footprint fish protein and human health improvements. This will be achieved by expanding investment in environmentally sustainable aquaculture management that is explicitly linked to land-based practices impacting freshwater and coastal marine ecosystems. Blue foods have an important role to play in the transition to healthy and more sustainable diets and can serve as an alternative to more destructive protein production.[51] Blue food interventions supported could include farming of freshwater and marine fish, cultivation of aquatic plants (e.g., seaweed and algae), and shellfish culturing.

Selection Criteria

38. The Food Systems Integrated Program will consider all recipient countries seeking to catalyze systemic change by delivering integrated solutions that lead to multiple benefits at

[49] Cerri, C. et al. Reducing Amazon Deforestation through Agricultural Intensification in the Cerrado for Advancing Food Security and Mitigating Climate Change. Sustainability 2018, 10, 989. https://doi.org/10.3390/su10040989
[50] Drivers of diet change. Nat Sustain 2, 645 (2019). https://doi.org/10.1038/s41893-019-0366-3
[51] Leap, J. et. al., The Vital Roles of Blue Foods in the Global Food System. Food Systems Summit Brief (2021).

national, subnational and global scales. The GEF will prioritize countries that demonstrate potential for achieving transformational change based on the following criteria:[52]

- The country strategy should be underpinned by science with clear long-term pathways for how the country's food systems will meet national development needs, generate high impact global environmental benefits at landscape and country level, and contribute globally to Food Systems transformation;
- The enabling policy and regulatory environment are conducive to generating positive results through implementation of the program, including clear opportunities to engender cross-ministerial support (e.g. environment, agriculture, finance, economy, trade, etc.) necessary to address challenges through a 'whole of government' means. This will create opportunities to foster coherence and cross-institutional integration in formulating "enabling" policies and ensure that environmental priorities are mainstreamed at all levels;
- Private sector entities with the ability to have on-the-ground impact are interested and willing partners, including companies and SMEs involved in various stages of the supply chain (producers, aggregators, processors). Partnerships should also be sought on the demand side with multi-national companies, including traders, manufacturers and consumer facing companies, as well as those financing food production;
- Promotion of sustainable and effective agricultural production can be shown to better support women farmers and their rights to the land they cultivate, and strengthen the voice of women at all levels of the food system, including through the backing of women smallholder and women farmers organizations, business networks, workers unions, and consumer organizations;
- Results from smallholder, farm and landscape can be reasonably sustained and converted into larger scale impact at subnational and national levels. Such scaling is necessary so that positive results generated by an on-ground intervention do not simply lead to poor practice shifting to a different landscape or region, thus generating negative environmental impact (e.g. deforestation, increased GHG emissions, ecosystem degradation, etc) 'leakage' from one place to another. This is key to both generating significant global environmental benefits and ensuring net contribution to global food systems transformation;
- Strong safeguards are in place or can be developed to ensure that the techniques applied do not increase likelihood of negative environmental impacts, or leakage;
- Ability to adopt food systems value chain approaches that recognize the risks of environmental impacts and zoonotic pathogen transmission, including potentially from livestock production, in order to mitigate and manage *Healthy Planet, Healthy People* risks and reduce environmental impacts;

[52] Please refer to STAP's transformation brief (https://stapgef.org/sites/default/files/2021-06/Achieving transformation through GEF investments - FINAL_0.pdf)

- Willingness to factor crop and systems resilience and prevention, reduction, and reuse of food waste along the length of the food systems value chain, including the potential for scaling-up innovations that will increase efficiency from farm to fork.

Existing Platforms and Potential Partners

39. Strong engagement with platforms engaging governments, financial institutions, food companies and agribusiness, and key local and national stakeholders is necessary to create opportunities for scaling-up best practices and resilient options across entire food value chains. Among the coalitions and initiatives with which to engage include but are not limited to the following:

- Global Agribusiness Action on Equitable Livelihoods Project (GAA-EL), a private sector platform of agricultural supply-side companies tackling environmental, social and sustainability challenges to improve the well-being of farmers across the world.
- Tropical Forest Alliance, a partnership dedicated to achieving zero deforestation supply chains for palm oil, beef, soy, and timber.
- Cocoa & Forests Initiative, which has generated commitment by world's top cocoa and chocolate producers to achieve zero deforestation in cocoa supply.
- The Sustainable Rice Platform, a multi-stakeholder platform made up of a mix of research (IRRI), Development (UNEP, FAO, GIZ), and private sector actors (Olam and others) working with governments to promote sustainability in the global rice sector.
- The Global Aquaculture Alliance, which engages stakeholders worldwide who are dedicated to advancing environmentally and socially responsible aquaculture practices and is the leading standards-setting organization for aquaculture seafood.
- Initiatives of the Consultative Group on International Agricultural Research (CGIAR) for ongoing scientific work on crop diversification, assessment of ecosystem services (e.g. land and soil health, agrobiodiversity), GHG mitigation in crop and livestock systems; and the Global Crop Diversity Trust and the International Treaty on Plant Genetic Resources for aspects related to crop and genetic resources management;
- EAT Forum, which is a global, non-profit startup dedicated to transforming our global food system through sound science, impatient disruption and novel partnerships.
- Act4Food Act4Change, which is a global youth-led movement campaigning for action to combat hunger, improve health and heal the planet.
- Coalition on Indigenous Peoples´ Food Systems, which was recognized at the UN Food Systems Summit and will be led by indigenous peoples' and supported by UNFSS member states and other stakeholders who join the coalition.

- Global Health Security Agenda, a multilateral, multisectoral initiative that addresses emerging infectious disease risks, including from zoonotic spillover, and the UN system's "Tripartite+" (WHO-FAO-OIE-UNEP).

Contributions of this Program to MEAs and Related Global Environmental Benefits

40. The improved landscape management and sustainable practices resulting from the Food Systems IP will help to maximize the generation of GEBs, as is already being seen with current GEF integrated approach programs. The GEF-6 Good Growth Partnership,[53] for example, has improved the enabling environment for producers to adopt sustainable practices in Indonesia, Paraguay, and Liberia that has led to better land management and generated more than 5.8 million hectares that benefit biodiversity, and still has nearly a year left in the program. The GEF's $344m investment in the FOLUR program[54] has garnered commitments of nearly $2.7bln in co-financing, which will amplify the capture of BD, LD and CC GEBs. Many of the global environmental conventions and agreements explicitly refer to sustainable agriculture and forestry, and the improved landscape and seascape management sought through the Food Systems IP will contribute to meeting climate goals under the Paris Agreement, is essential for meeting several of the Aichi Biodiversity Targets as well as the proposed Global Biodiversity Framework targets under the UN Convention on Biological Diversity (CBD), and Land Degradation Neutrality targets under the UNCCD.[55] The IP will also contribute to Chemical and Waste GEBs by eliminating, avoiding, or disposing of Highly Hazardous Pesticides (HHP). It will help in meeting SDG 6 on improving water quality and to conserving and enhancing water-related ecosystems,[56,57] and will deliver to targets of the GEF International Waters Focal Area, including GEBs from aquaculture activities that will be measured via nutrient pollution reduction, marine habitat under improved practices to benefit biodiversity, and land restored.

Role of the Private Sector in Supporting this Program

41. Private sector engagement will be critical to attuning policies and practices necessary to achieve the innovation and transformational change in land use sought by the Food Systems Integrated Program. GEF financing will contribute to levelling the playing field for progressive companies and investors through changes to national policies and regulations, promoting certification standards and traceability that can help lead to sustainable food production, and encouraging the use of new technologies to help transform agriculture.

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[53] https://www.thegef.org/projects-operations/projects/9617

[54] https://www.thegef.org/sites/default/files/web-documents/10201_IP_FOLUR_PFD.pdf

[55] Contributing to LD FA and LDN and aligned with STAP guidelines on LDN; https://www.stapgef.org/sites/default/files/publications/LDN Technical Report_web version.pdf

[56] All references to the Global Biodiversity Framework in the Programming Directions refer to the First Draft of the Post-2020 Global Biodiversity Framework (CBD/WG2020/3/3). The Programming Directions document will be updated to reflect changes in the GBF as needed.

[57] OECD 2020.

42. The 2021 GEF IEO review[58] into private sector engagement with MSMEs showed that capacities and access to resources are lower among small and micro enterprises. Investing in smallholder capacity building, including supporting national extension and other support services targeting smallholders and SMEs, will help to scale improved sustainability of these critical actors in the supply chain.

43. Promoting innovative financial mechanisms (including micro-finance for SMEs) and blended finance for investments will be critical to scale nature-positive production and achieve landscape regeneration. Agricultural PES approaches that value natural capital and reward ecosystem service delivery through activities of farmers and compensates them accordingly[59] is one such mechanism. PES projects in agriculture may fall under several ecosystem services including water regulation; maintenance of soil fertility and health; carbon sequestration; maintenance of natural genetic diversity; and the conservation of natural habitat.[60]

44. Efforts will be made to incentivize actions by national and subnational governments to promote private sector investment, such as through policy options for scaling-up existing technologies and good practices that reduce negative externalities along food value chains.

[58] GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

[59] Rodríguez-Ortega T. et al. A novel management-based system of payments for ecosystem services for targeted agri-environmental policy, Ecosystem Services, Volume 34, Part A, 2018,

[60] Chen, Y. et al. Analyzing Farmers' Perceptions of Ecosystem Services and PES Schemes within Agricultural Landscapes in Mengyin County, China: Transforming Trade-Offs into Synergies. Sustainability 2017, 9, 1459.

Ecosystem Restoration Integrated Program

Introduction

45. There has never been a more urgent need to restore and heal ecosystems than now. The healthier our ecosystems are, the healthier the planet – and its people.[61] Restoration is a key nature-based solution and contributes to green and blue recovery as it stimulates investments and creates jobs primarily in rural areas and helps to secure livelihoods of local communities. The United Nations General Assembly proclaimed 2021–2030 to be the United Nations Decade on Ecosystem Restoration, with the primary vision that *the relationship between humans and nature has been restored, where the area of healthy ecosystems is increasing, and where ecosystem loss, fragmentation and degradation has been ended.*[62]

46. Ecosystem restoration makes economic sense and generates a huge variety of benefits.[63] These include ecological benefits such as safeguarding ecosystem services- soil protection, pollination, nutrient cycling and soil water-holding capacity, which are crucial for both short- and long-term agricultural productivity,[64] biodiversity benefits such as avoided species extinctions,[65] and climate change mitigation benefits through carbon sequestration.[66] Measures to restore land and improve its management contribute to food and water security, improved livelihoods, jobs, and avoided conflicts and migration.[67]

47. The strong value proposition of restoration has resulted in commitments by countries across the international conventions on climate change, biodiversity and desertification as well as voluntary initiatives, such as the Bonn Challenge. A total of 115 countries have committed to restore between 765 million and 1 billion hectares, and approximately half of the world's restoration potential is now tied directly to the UNCCD's LDN national voluntary targets (approximately 450 million hectares). In addition, in the NDCs communicated under the Paris agreement, about 250 million hectares are committed.[68] To reach the 2050 Vision for the Post-2020 Global Biodiversity Framework, it is necessary to ensure that at least 20% of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems. A viable pathway towards this outcome requires that net gain, or at minimum no net loss, be achieved by 2030.[69]

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[61] UN Decade on Restoration https://www.decadeonrestoration.org/

[62] Strategy for the UN Decade on Restoration, 2020

[63] See for example Ding, H. et al. (2017): Roots of Prosperity: The Economics and Finance of Restoring Land.

[64] Tripathi V et.al 2017. Biotechnological Advances for Restoring Degraded Land for Sustainable Development.

[65] Strassburg B et.al 2019. Strategic approaches to restoring ecosystems can triple conservation gains and halve costs.

[66] Cook-Patton S et al. 2020. Mapping carbon accumulation potential from global natural forest regrowth.

[67] http://www.fao.org/3/i7896e/i7896e.pdf

[68] Sewell et.al, PBL Netherlands Environmental Assessment Agency 2020, Goals and Commitments for the Restoration Decade

[69] Post-2020 Global Biodiversity Framework: Scientific and Technical Information to Support the Review of the Updated Goals and Targets and Related Indicators and Baselines, SBSTTA, 2021

48. Inadequate land use and soil management practices are negatively impacting ecosystems, biodiversity, land productivity and carbon stocks. Degradation affects agricultural systems, urban areas, forests, rangelands, and wetlands.[70] Climate change exacerbates land degradation by affecting water availability and land degradation increases vulnerability to climate change.[71] An estimated area of 2 billion ha of agricultural land, pasture, forest and woodland are degraded globally,[72] with negative impacts on food systems, ecosystem services, and habitats for wildlife.

49. Degradation of landscapes weakens governance and institutional frameworks and exacerbates income inequality and human migration and negative impacts fall disproportionately on vulnerable people depending on the land for their livelihoods, including women, IPLCs, and lower income groups.[73] This can trigger competition for scarce resources, resulting in local and regional conflicts.

50. Integrating gender considerations into restoration efforts is desirable from a gender equality perspective and promotes the efficiency and effectiveness of restoration work. Recent evidence points to the importance of women as landowners[74] for secure access to land and decision-making power on how land is used and restored. Restoration has the potential to improve gender equality, equitable benefits sharing, and sustainability of the interventions in the long-term.[75]

GEF-8 Integrated Program

51. The Integrated Program aligns with the vision of the UN Decade on Ecosystem Restoration and supports the global commitments towards restoration under the MEAs by mobilizing a diverse coalition of stakeholders from all relevant sectors, catalyzing finance, and fostering global cooperation. It responds to strong demand by countries for financial, technical, and policy support as well as the need to meaningfully involve local actors and stakeholders in restoration solutions to meet national restoration targets while ensuring multiple global environmental benefits.

52. The Program draws on a decade of GEF experience on restoration, through regional programs such as The Restoration Initiative (TRI) in support of the Bonn Challenge, the Sahel and West Africa Program (SAWAP) in support of the Great Green Wall Initiative (GGWI), and the Dryland Sustainable Landscapes (DSL) Impact Program. The Program will build on the lessons learned and make use of GEF's comparative advantage with proven practices and multi-stakeholder engagement, i.e. as a global partner of the UN Decade for Ecosystem Restoration to further advance global, national, and local restoration efforts and bring impactful investments to scale.

[70] IPBES Assessment Report on Land Degradation and Restoration, 2018
[71] https://www.ipcc.ch/srccl/chapter/chapter-4/
[72] Gibbs and Salmon, 2015, Mapping the world's degraded lands
[73] Ibid
[74] https://climate-xchange.org/2020/07/21/to-solve-the-climate-crisis-women-must-own-more-of-the-worlds-land/
[75] Siquiera et al., 2021: Gender inclusion in ecological restoration.

53. Restoration is forward-looking and dynamic, focusing on strengthening the resilience of landscapes and creating future options to adjust and further optimize ecosystem goods and services as societal needs change or new challenges arise.[76] Ecosystem restoration is defined as the process of assisting the recovery of landscapes that have been degraded, damaged, or destroyed.[77] Ecosystem restoration encompasses a wide continuum of activities that contribute to protecting intact ecosystems and repairing degraded ecosystems.[78] In this sense, restoration can range from rehabilitating and improving systems that are under human use and management towards restoring disturbed natural ecosystems to their natural state and ensure their conservation.

54. Conventional planning and policy decisions for natural resource management at landscape level are still siloed in different ministries and discussed with different stakeholders.[79] The Program will apply comprehensive integrated land use planning, including spatial land use planning where pertinent, and promote cross-sectoral coordination between environment, agriculture, forestry, water, energy, tourism, transport, mining, finance sectors, including the harmonization of policies and financing streams. It will address the interactions, competition and trade-offs between different land uses and thereby avoiding further degradation of land and ecosystems. Restoration planning at landscape level will fit within a land management strategy that applies the LDN hierarchy: avoid, reduce, reverse.[80]

55. Access to finance is still a key constraint to achieve restoration at scale. The Program will create the enabling conditions to catalyze and leverage adequate investments. To enhance impact, the Program will work with the existing global platforms to promote cooperation and engagement with policy partners and funding opportunities. In this context, linkages to relevant work under the CBD and other biodiversity related conventions, work under the UNCCD and the LDN fund, the REDD+ Framework, and locally to Payment for Environmental Services (PES) and other relevant schemes such as watershed funds will be sought. The program will also ensure that national and jurisdictional financing mechanisms are strengthened to support restoration.

56. Bundling GEF interventions on ecosystem restoration through a programmatic approach at either regional, transboundary, or subnational level will allow integration across multiple sectors

[76] See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: See Global Partnership of Forest and Landscape Restoroation (GPFLR) principles: See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration

[77] Gann et al. 2019. International principles and standards for the practice of ecological restoration. Second edition. Restoration Ecology DOI:10.1111/rec.13035. See https://www.ser.org/page/SERStandards/International-Standards-for-the-Practice-of-Ecological-Restoration.

[78] https://www.decadeonrestoration.org/what-ecosystem-restoration https://www.decadeonrestoration.org/what-ecosystem-restorationibid

[79] International Resource Panel (2019): Land Restoration for Achieving the Sustainable Development Goals.

[80] Cowie, A. et al. 2018. Land in balance: The scientific conceptual framework for Land Degradation Neutrality

and will complement other GEF Integrated Programs on Food Systems, Amazon, Congo, and Critical Forest Biomes, Sustainable Cities, and Blue and Green Islands.

Objectives, Key Interventions, and Selection Criteria

57. The main objective of the Program is to generate multiple environmental and socio-economic benefits by applying integrated approaches for restoration of degraded ecosystems. It contributes to GEF's overarching goal to achieve healthy and resilient ecosystems and promotes green recovery and secure livelihoods within the *Healthy Planet, Healthy People* framework.

58. The programmatic approach will complement biophysical and technical interventions with instruments focused on national policies, governance, institutional, financial, and local social structures to bring all relevant stakeholders together for transformational impact on reversing environmental degradation globally. Support will be provided in the following areas:

- Promoting policy coherence and providing advisory support for sectoral integration at national and sub-national level, including the elimination of harmful subsidies in the agricultural sector;
- Integrating spatial land use planning into the existing planning frameworks (e.g. NBSAP, NAP, NDC, etc.) and participatory land-use planning over a range of governance models to meaningfully involve local governments, IPLCs, and women into the restoration work;
- Community mobilization and CSO involvement, promoting a meaningful stakeholder involvement (including vulnerable groups, women, youth, IPLCs) in all aspects of program implementation from the planning stage to implementation and monitoring;
- Building capacity to restore and maintain functional landscapes and avoid degradation and promoting decision support tools such as environmental and economic valuation systems. Capacity building will include promoting ecosystem restoration through actionable knowledge as well as building institutional/community capacity to effect beneficial changes in behavior as a way to ensure projects are durable and transformative;
- Developing monitoring and information systems including baselines, and targeted research on impacts, trade-offs, and costs-benefit analysis of restoration;
- Resolving land tenure and resource use rights issues that are barriers to achieve restoration objectives and promoting good governance in view of land rights and access to natural resources, ecological connectivity, gender equality, and securing livelihoods of smallholders;
- Implementing restoration activities and solutions on the ground by active involvement of local stakeholders, in particular local actors, smallholders and IPLCs through gender responsive community based approaches;

- Scaling up PES initiatives and setting up effective systems and mechanisms ensuring the smooth flow of financial resources between and among the PES actors. This will also include strengthening of local innovative financing mechanisms such as watershed funds and microcredit schemes to facilitate resource mobilization for ecosystem restoration.

59. The Program will focus on restoration of ecosystem types with a high potential to generate multiple benefits,[81] such as:

- Converted or degraded ecosystem types and habitats, such as wetlands, peatlands, headwaters and watersheds, estuaries, riverine forests, mangroves, coastal areas, including near-shore coral reefs and seagrass ecosystems, native woodlands, shrub and grasslands, ecological networks and corridors, and steppingstone habitats, using best practices for ecological restoration;[82]

- Degraded natural forest landscapes, drylands, grasslands and pastures, applying a range of best practices and cost-effective interventions such as natural regeneration and assisted natural regeneration to restore ecosystem functions and services; and

- Degraded agro-ecosystems in mosaic landscapes with a high potential for multiple environmental benefits, through investments in sustainable land management, including agro-silvo-pastoral models and agro-ecological diversification, and rangeland restoration.

60. The contribution to generating multiple GEBs and the desired outcomes for ecosystems, species and genetic diversity, as well as cost-effectiveness, can be enhanced by evidence-based prioritization of the areas to be restored. Strassburg at al. have recently proposed an optimization approach based on various criteria that can be applied for this purpose.[83]

61. Selection criteria for targeted ecosystems will further consider drivers of degradation, the potential and scale of restoration, including soil properties, landscape features, habitat and species connectivity, and climate stressors and risks. It will thus consider the prospects for multiple benefits in biodiversity, sustainable land management, climate change mitigation and adaptation to support sustainable development and secure livelihoods.

62. Investments under the program will be based on existing restoration targets set by countries under the MEAs and will require strong baselines for success such as established relevant multi-stakeholder platforms and partnerships, potential leverage of public and private sector funding,

[81] The focus on multiple objectives under the CBD, UNCCD, and UNFCCC distinguishes the Program from the more narrow objective 2 of the LDFA: "Reverse land degradation through landscape restoration", which focuses on bringing degraded agricultural lands back into production to contribute to LDN and to create socio-economic benefits and improve livelihoods.

[82] SER 2019. International Principles and Standards for the Practice of Ecological Restoration, 2nd edition.

[83] Strassburg et al. 2020. Global Priority Areas for Ecosystem Restoration. *Nature* 586, 724–729.

engagement opportunities with the private sector, involvement of local actors and IPLCs, gender equality and women's empowerment, and potential for scaling up.

63. Restoration activities to be implemented on the ground will vary across a landscape, with different approaches and solutions for different ecosystems, depending on specific objectives and socio-economic needs, and socio-cultural context. Along the restorative continuum, it can range from activities repairing ecosystem functions, including other effective area based conservation measures in mosaic landscapes, to fully restoring native ecosystems. Coupling the concept of the restorative continuum with the LDN response hierarchy will ensure the appropriate selection of restoration activities within socio-ecological landscapes.

Existing Platforms and Potential Partners

64. GEF is a global partner of the UN Decade on Ecosystem Restoration (2021 – 2030)[84] and will work closely with this platform and all involved partners to ensure better integration between the Rio conventions and implementation of ecosystem restoration towards achieving the SDGs. In order to achieve the program's objective, working with and through existing platforms is paramount to create the global cooperation and synergies needed for transformational change and scaling.[85]

65. The UN Decade on Ecosystem Restoration is an umbrella platform led by UNEP and FAO. It consults closely with the Rio conventions and presently includes 62 partner institutions,[86] including seven GEF implementing agencies. The platform serves as a hub for task forces on best practices, finance, monitoring, science, and youth, and a strong communications strategy. The UN Decade incorporates many other platforms and commitments, among them the Bonn Challenge, the African Forest Landscape Restoration Initiative (AFR100), Initiative 20×20 in Latin America, and the Europe, Caucasus, and Central Asia Initiative (ECCA 30). Examples of other partners are the Global Partnership on Forest Landscape Restoration (GPFLR), a worldwide network of restoration practitioners, scientists, policymakers and key supporters from government, international and non-governmental organizations and businesses, the World Economic Forum (WEF) to promote public-private cooperation, and the Global Landscapes Forum (GLF), which has become one of the most important outreach and communication platforms for landscape restoration, promoting knowledge and information exchange globally.

66. The 15 international organizations of the Collaborative Partnership on Forests (CPF) are providing significant support to implement the 2017 – 2030 UN Strategic Plan for Forests and are helping implement restoration commitments through policy support, research, technical and financial assistance. CPF's recent contributions include a special study on forest degradation, and

[84] https://undocs.org/A/RES/73/284

[85] A Theory of Change and approach for scaling the program's impacts will be developed in partnership with existing platforms and potential partners during detailed program design.

[86] https://www.decadeonrestoration.org/partners

outreach activities and information exchange through the Global Landscapes Forum (GLF), which has become one of the most important outreach and communication platform in this context.

Contributions of this Program to MEAs and Related Global Environmental Benefits

67. The Integrated Program provides a vehicle to meet the many of the restoration targets that countries have incorporated within their MEAs and other international commitments.

68. Under the UNCCD, 127 countries set voluntary LDN targets, of which 90 countries have set approximately 450 million hectares of restoration targets. The Restoration Program will thus contribute to the commitments of countries under the Convention and the UNCCD Strategy (2018-2030), by helping to avoid and reduce desertification and land degradation and restoring the productivity of degraded land to achieve LDN.

69. Restoration of ecosystems is vital for protection of global biodiversity. The Program will contribute to the objectives of the CBD relevant action targets of the Post-2020 Global Biodiversity Framework on restoration[87] and the implementation of the NBSAPs assisting countries to meet the goal to increase area, connectivity and integrity of natural ecosystems supporting healthy and resilient populations of all species and thus will contribute significantly to implementing the mandates of CBD and other biodiversity-related agreements.[88]

70. With NDCs communicated under the Paris Agreement reflecting the intention to restore about 250 million hectares, the program can contribute to mitigation actions under the agriculture, forestry and other land use (AFOLU) sector in coordination with the NDC partnership. The Program also contributes to Article 5 of the Paris Agreement on carbon sinks and REDD+[89] and Article 7.1 on climate adaptation.[90]

71. Furthermore, the Program could support parties to the Minamata Convention whose ASGM National Action Plan implementation is advancing sustainable and formalized small-scale mining practices as they work to correct past ecosystem degradation, supporting or leveraging the CW Focal Area objective 3 work on "Capacity-building for the development of strategies for

[87] "Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems"

[88] This includes the partnership agreement between the CBD and the International Tropical Timber Organization (ITTO), which is to "help facilitate collaboration with, and access to, bilateral and multilateral funding sources such as the Global Environment Facility and the Green Climate Fund on emerging issues related to biodiversity conservation, climate-change mitigation and adaptation, and sustainable development". https://www.cbd.int/doc/press/2021/pr-2021-02-05-ITTO-CBD-en.pdf

[89] Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases' and 'reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.'

[90] 'Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with the view to contributing to sustainable development and ensuring adequate adaptation response in the context of the temperature goal.'

identifying and assessing sites contaminated by mercury or mercury compounds" and, as appropriate, the remediation of those sites.

72. The benefits of restoration of land, ecosystems and forests extend well beyond an increase in vegetation cover, or the mere number of hectares accomplished. Through the application of an integrated approach, restoration will contribute significantly to the achievement of all 17 SDGs.[91]

Role of the Private Sector in Supporting this Program

73. The Program will specifically focus on the business case for restoration in order to enable private sector involvement. Given the enormous investments needed to implement global targets on restoration, a concerted effort of the public and private sector is necessary, including viable financing models, including public sector finance serving to de-risk investment from the private sector. This will link with GEF's Blended Finance Program and include private sector initiatives such as the Sustainable Banking Initiative, the Sustainable Trade Initiative (IDH), and "smart finance" innovations that include national banks and innovate through PPPs working at the interface of the public and private sector across farmer support, finance, development planning, policy reform, and implementation.

74. The integrated approach to restoration offers a wide suite of entry points for the private sector, and for landscape actors with interests in natural resources, certain extractive industries, infrastructure development, tourism and water resources management. Regionally appropriate incentive mechanisms will be designed or strengthened for these stakeholders and landowners to invest in restoration. These entry points will be explored through regional multi-stakeholder dialogues to determine alignment with the overall goals of the program and opportunity to extend the delivery of GEBs.

75. The Program will specifically address engagement of the private sector at all scales, taking onboard the recommendations of the GEF IEO Evaluation of MSMEs.[92] It is noted from the evaluation that successful MSME partnerships engage at least three types or scales of private sector actors and that value chain and landscape level approaches offer opportunities to link MSMEs with other actors beyond the physical project boundaries or national level context. Specific consideration is made for MSME support to create backward and forward linkages within supply chains noting the key role that mid-value chain actors (processors, traders) can play in market linkage, including standards for market access for sustainable products that increases the likelihood of market development. Such approaches can also include new financial products and instruments including crediting approaches, offsets and PES.

[91] https://www.resourcepanel.org/reports/land-restoration-achieving-sustainable-development-goals
[92] The GEF IEO Evaluation on GEF's Engagement with Micro, Small and Medium Enterprises https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_05_MSME_evaluation.pdf

76. In line with the GEF PSES modalities of engagement beyond finance, the following themes will be explored for private sector engagement:

- technical assistance and capacity building, e.g. through farmer field schools, seed banks, nursery development, and sustainable forest management training, including the management of restored ecosystems. Support can include expert staff, South-South knowledge exchange, extension providers, knowledge resources and access to IOT technical equipment such as drones, sensors and monitoring stations.

- value chain development for various products arising from restoration (e.g. bamboo, phytopharmaceuticals, honey, livestock products, wood products, and bio-energy);

- Supporting national public-private schemes for establishing multi-level financing mechanisms linking global finance (e.g. climate finance) with national incentive mechanisms and smallholders, communities and cooperatives

- helping smallholders and communities to access carbon finance (voluntary and compliance markets) including domestic carbon markets and certification schemes;

- the use of digital technology for data collection, optimization on where to prioritize investments, to monitor and track the progress of restoration investments, and to capture and repackage knowledge that is generated by the projects. This element links to the broader GEF private sector "digital to environmental dividend" approach.

77. These private sector capabilities can be deployed in support of many other private sector goals, including those of biodiversity conservation, carbon sequestration, NbS and the support of equitable livelihoods, giving the Program a wide scope of possible entry points and partnerships with the private sector at all scales.

Sustainable Cities Integrated Program

Introduction

78. The speed and scale of urbanization in recent decades have brought several challenges for the environment and human well-being. While cities are key drivers of economic growth with contribution to nearly 80% of global GDP, unplanned urbanization and unsustainable resource consumption in cities have led to nearly 70% of global greenhouse gas emissions[93] and could lead to loss of 290,000 sq. km. of natural habitat by 2030.[94] Expansion of urban land is outpacing population growth by 50%,[95] leading to unsustainable urban sprawl that causes degradation of land, loss of biodiversity, unsustainable food systems, toxic waste generation, pollution and increased vulnerability to impacts of climate change such as flooding and heat waves. Cities also consume 80% of global food production which is likely to expand further with rapid urbanization and could result in 38% of total urban GHG emissions by 2050.[96] The UN International Resource Panel further estimates that material consumption in cities will more than double by 2050 from 2010 level with severe implications on natural resources. Lastly, cities are heavily impacted by the global COVID-19 pandemic, which has led to social, economic and health crises on top of the environmental challenges.

79. This decade is critical for transformative action to achieve global ambitions including Paris Climate Goals, SDGs and ecosystem restoration goals by 2030. Cities are at the center of the movement towards net zero emissions and climate resilience with integrated solutions backed up by ambitious policies and urban planning.[97] They are also integrating nature in the urban growth agenda by adopting Nature-based Solutions (NbS)[98] and enhancing urban biodiversity.[99] Cities are increasingly taking an integrated planning approach to tackle multiple urban challenges and deliver greater sustainability.[100] It is critical to build on this global momentum led by cities and various stakeholders, leverage them as engines of innovation, and build multi-stakeholder partnerships to catalyze transformative action to tackle environmental degradation challenges and contribute to human well-being. By building back better and greener with focus on nature, climate and people, cities present a unique opportunity to shape a green and inclusive global economic recovery from the COVID-19 pandemic.

[93] World Bank, 2020, Urban Development Overview
[94]TNC, 2018 Nature in the Urban Century
[95] World Bank, 2020, Urban Development Overview
[96] https://eatforum.org/initiatives/cities/
[97] https://www.weforum.org/agenda/2021/02/cities-are-at-the-heart-of-our-journey-to-net-zero/
[98] ICLEI, How Cities are Using Nature Based Solutions for Sustainable Urban Development, https://cbc.iclei.org/cities-using-nature-based-solutions-sustainable-urban-development/
[99] World Economic Forum, BiodiverCities by 2030, https://www.weforum.org/communities/biodivercities-by-2030
[100] "Mehrotra, Shagun; et al. 2020. Greater Than Parts : A Metropolitan Opportunity. World Bank, Washington, DC.

GEF-8 Integrated Program

80. The GEF-8 Sustainable Cities IP will advance the GEF's integrated approach to enable cities in tackling key drivers of environmental degradation and aims to deliver multiple global environmental benefits including climate change mitigation and adaptation, biodiversity conservation, reduced land degradation and reduction of chemicals and waste. The program will place a strong emphasis on integrated land use planning both within cities as well as surrounding ecosystems, support institutional coordination at multiple levels, and catalyze integrated approaches to scale up innovative sustainability solutions. It will adopt a people centric approach with integration of gender, health, and inclusion which are critical to ensure sustainability and equitable distribution of environmental benefits. It will also focus on urban priorities including the reduction of plastic and air pollution as key co-benefits.

81. The program will work with urban, sub-national and national governments, and other actors with specific importance given to upstream systemic interventions related to policy development, planning, financing, and capacity building to complement downstream support to cities such as project preparation facilities, capital investments and implementation. Integration will be advanced across key sectors which have high potential to deliver environmental benefits including energy, buildings, transport, waste, water, nature and urban food systems. The program will also factor-in the political economy perspective of urban sustainability, acknowledging the complex interaction between institutions, economic system, environment and the society.

82. The IP will adopt a two-fold approach with global and country level investments in selected cities. It will build on the implementation structure of the GEF-6 and GEF-7 phases, and incorporate the OPS7 recommendations of the IEO to catalyze value addition of the programmatic approach by further strengthening the governance and reporting mechanisms. The lessons and experience of GEF-6 and GEF-7 Sustainable Cities programs has served as the key basis of the GEF-8 strategy and will inform the design of projects and selection of cities.

83. The added value from the past experience is from the following four key aspects: First, it will help raise cities' ambition level towards net zero, climate resilient and nature positive cities, aligned with global 2030 goals. Second, the program will expand the integration approach to include nature and circularity principles to deliver multiple environmental benefits related to climate, biodiversity, and chemicals and waste. Third, it will aim to support global green recovery driven by cities and focus on developing solutions and partnerships that enable flow of public finance, stimulus funding and private investment for sustainability benefits. This will also make the program solutions-based, going beyond planning to support financing and implementation of sustainability solutions. Finally, the program will take a human-centric approach to integrate gender, health, and inclusion in the urban sustainability framework.

Objectives, Key Interventions, and Selection Criteria

84. The Sustainable Cities IP will expand the GEF's partnership to foster collaboration with a diverse set of actors in the urban space to develop innovative sustainability solutions and strengthen institutional capacity to move towards building net zero carbon, nature positive, inclusive and climate resilient cities. The program will have the following global functions to deliver large scale environmental benefits and contribute to GEF-8 transformation objectives:

a) *Catalyze shared and collaborative city action to scale up integrated urban planning and sustainability investments:* By supporting a cohort of ambitious and motivated cities and utilizing their global influence, the program will extend outreach and create a significant scale and impact of the integrated approaches to contribute to global climate and nature ambitions. The program will strengthen the evidence-base for integrated approaches, strengthen collaboration and cross-learning between cities and other stakeholders, and create an enabling environment for increased flow of finance to cities.

b) *Support knowledge exchange and city-to-city learning on sustainability approaches:* The program will enable cities to collaborate and build capacities through a global platform by facilitating exchange of knowledge and experiences. Through this, the program will scale up best sustainability practices and unleash innovation.

c) *Promote a harmonized portfolio of innovative sustainability solutions at global scale:* With a focus on addressing systemic drivers of environmental degradation, the program will target investments that will yield long term benefits for a *Healthy Planet, Healthy People* outcome. It will focus on themes of global importance including technology innovation, policy coherence for net zero emissions in the built environment, urban Nature-based Solutions, models for circularity pathways and application of spatial data and digital technologies. The portfolio of projects will result in a set of private sector and community engagement models, prototypes of technology and infrastructure solutions, incentive mechanisms, scientific approaches and governance frameworks that will collectively tackle urban sustainability challenges.

d) *Strengthen multi-stakeholder coalitions for higher ambition and action:* The program will foster multiple stakeholder partnerships between national governments, sub-national governments, cities, private sector, investors and civil society to address inter-linked urban challenges. The IP will also focus on chemicals and waste in cities and facilitate global collaboration on this important aspect of urban sustainability.

85. With the above key global programmatic functions, the Sustainable Cities IP will work with partner cities and stakeholders on the following strategic entry points:

a) *Advancing integrated and systems-based interventions:* Adopt an integrated approach for systems level transformation through integration in three key dimensions: 1) *Spatial*

integration and planning with a regional/territorial aspect, to holistically be able to tackle the drivers of environmental degradation in and around cities, including urban sprawl 2) *Institutional integration* both through vertical integration between national, sub-national and local governments for alignment of policies, plans and financing, and through horizontal integration between urban departments to break sectoral silos in cities; and 3) *Strengthening people's engagement,* by embedding approaches for inclusion and environmental justice building on the urban opportunities to catalyze behavioral change and address societal aspects such as inequality, poverty and gender discrimination. To enable integrated spatial planning, governance and engagement of stakeholders, the program will also support accelerated application of digital and geospatial technologies and improved data management systems and analytical tools.

b) *Integrating nature in urban development and regional planning:* Advance integration of nature in cities through improved land use planning, demonstrating urban Nature-based Solutions and supporting enabling policy and regulatory environment for scaling up actions to bring nature into cities. The program will promote a regional planning approach that also considers urban peripheries and surrounding ecosystems including key biodiversity areas, protected areas and other effective area-based conservation measures. It will support urban biodiversity, ecological connectivity and Nature-based Solutions through interventions such as protection and restoration of wetlands and water bodies, urban forestry, green urban corridors, green spaces and green-blue-grey mix of urban infrastructure for provision of key ecosystem services such as clean water and air, flood management, carbon sequestration and heat reduction in cities. The program will work with city leaders, national government, civil society, and the private sector to create policies, incentives and regulations for systemic integration of nature in urban development. By integrating nature in urban planning, the program will drive the *Healthy Planet, Healthy People* approach, and generate socio-economic benefits such as green jobs, new livelihood opportunities, and food and water security, contributing to enhanced resilience and a green recovery.

c) *Decarbonizing the built environment:* Support development of plans, policies and strategies to design and implement solutions to decarbonize urban infrastructure, including buildings, energy, waste management, water and transportation systems. It will also factor-in post-COVID scenario of hybrid working in cities and integrate aspects related to resource efficiency and behavioral change in infrastructure planning. The program will focus specifically on promoting livable density through compact land use planning and support integrated urban infrastructure solutions such as mass and clean transport including transit-oriented-development, renewable energy, energy efficiency, sustainable building materials and construction methods, and integrated waste management. It will also support improved landfill management and increased energy efficiency in buildings and lighting systems which can contribute to the reduction of hazardous chemicals, including POPs and mercury. Finally, it will support greater application of green and nature-based

infrastructure as an alternative to, or in combination with, grey infrastructure for carbon sequestration.

d) *Adopting circular economy approaches:* Cities offer unique opportunity to adopt circularity approaches and reduce their resource requirements or the "weight of cities".[101] The program will support the development of policies and physical infrastructure targeting strategic entry points for circularity, including local and sustainable building materials, water and waste management, urban food system value chains (production, packaging, transportation and consumption patterns), plastic value chains (production, consumption, disposal), and urban industries. To prevent build-up of hazardous materials and chemicals in cities, the program will support effective circular and life-cycle management systems, promoting Green Standards and Certifications, Green Procurement, and increased transparency of environmental reporting.

e) *Promoting innovative financing:* The program will catalyze increased flow of finance to cities to meet the sustainability financing gap, in collaboration with global financial institutions including Multilateral and National Development Banks, bilateral financial institutions, private sector and other institutional investors. It will support cities in building their capacity related to public finance management, public private partnership frameworks, creditworthiness, and strengthening national policy and fiscal frameworks including utilizing stimulus funding for green investments. The program will support developing innovative financing mechanisms and the economic case for Nature-based Solutions and low-carbon built infrastructure, to accelerate public and private sector investment. The program will aim to support cities in mobilizing large scale capital through mechanisms such as green bonds, de-risking instruments such as guarantees and insurance, and revenue enhancements through value-capture and carbon revenues.

86. The program will advance gender-inclusive approaches, empower women across urban sectors, and identify potential entry points, indicators and targets to be able to track the integration of gender issues across the program. Compared to men, women in cities have less access to decent work opportunities, financial assets, housing security, urban services and governance engagement.[102,103] Better inclusion of gender dimensions within city policies and plans is crucial not only to address social inequities, but also to unlock the potential of both women and men to successfully address environmental issues. Against this background, the IP will:

- Promote women's voice in urban decision-making, policy, planning and governance;

[101] IRP (2018). The Weight of Cities: Resource Requirements of Future Urbanization. Swilling, M., Hajer, M., et al. A Report by the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya
[102] Chant S. & McIlwaine C. (2016) Cities, Slums and Gender in the Global South. Abingdon, Oxon: Routledge
[103] Moser CON. Gender transformation in a new global urban agenda: challenges for Habitat III and beyond. Environment and Urbanization. 2017;29(1):221-236. doi:10.1177/0956247816662573

- Promote the use of gender-responsive approaches to urban climate policy, including gender assessments, gender budgeting, and capacity development;
- Promote gender-inclusive design and use of urban spaces, infrastructure and services and support women's health, livelihood opportunities and economic contribution in cities.

87. *Selection criteria:* The Sustainable Cities Integrated Program will consider the following criteria for the selection of cities and projects:

1. Cities in highly urbanized or rapidly urbanizing regions, especially in LDCs and SIDS where the integrated approach to urban sustainability can be adopted to tackle environmental degradation (GHG emissions, biodiversity loss, land degradation and pollution).
2. Demonstrated political leadership, cross sectoral collaboration and whole of government approach by countries and cities towards tackling environmental degradation
3. Ability of cities and partners to leverage financing from both domestic resources and private capital, to achieve large scale impact.
4. Integrated, systems based and innovative project approaches with explicit and clear entry points for delivering multiple global environmental benefits through the program.
5. National and/or local level policies and governance models that create an enabling environment for achieving global environmental benefits targets in relation to MEAs and avoid negative subsidies which contribute to environmental degradation in cities.
6. Potential to deliver key socio-economic co-benefits such as increasing resilience and inclusion and reducing air pollution.
7. Strategic engagement with multiple stakeholders including the private sector and civil society to leverage their expertise and resources for innovation and scalability of sustainability solutions. Participation of cities in the global platform for knowledge exchange and learning.

Existing Platforms and Potential Partners

88. The Sustainable Cities IP will engage with various global urban platforms, networks, and alliances to strengthen collaboration between urban actors and bring together diverse expertise to tackle systemic environmental, social, economic, and public health challenges that cities face. It will promote new partnerships to co-create sustainability solutions, mobilize investments, distribute risks and influence collective leadership of urban actors to contribute to global environmental goals, SDGs, and a green recovery. In this context, the program will support cities in their engagement in global initiatives such as the Race to Zero and Race to Resilience campaigns and BiodiverCities by 2030.

89. The program will build on the partnerships established in previous phases of the Sustainable Cities program with the GEF agencies ADB, AfDB, DBSA, IADB, UNEP, UNDP, UNIDO and the World Bank, UN-Habitat and global city networks including ICLEI, C40 and, UCLG, UNESCO Cities Platform and specific initiatives such as WRI's Cities4Forests, IUCN Urban Alliance, FAO's Green Cities Initiative, Cities Alliance, the Resilient Cities Network, Cities Climate Finance Leadership Alliance and the GFDRR Cities Resilience Program. The IP will partner with the World Business Council for Sustainable Development, World Economic Forum and CDP which are advancing collaboration between cities and the private sector. It will engage with scientific, research and academic institutions and networks such as the UNEP's International Resource Panel and the Science Based Targets Network.

90. The program will coordinate with other GEF IPs and engage with sectoral platforms related to urban sustainability, such as e-mobility, clean energy, transport, food system, waste management, including for plastic waste and scrap (e.g. Global Plastics Action Partnership), for circular economy (e.g. Partnership to Accelerate Circular Economy) and for infrastructure (e.g. Sustainable Infrastructure Partnership). It will develop effective partnership with multilateral and bilateral urban sustainability programs and investment portfolios including those of MDBs, GCF, specialized institutions such as the European Space Agency and philanthropic organizations including Rockefeller Foundation, Bloomberg Philanthropies and Ellen Macarthur Foundation.

Contributions of this Program to MEAs and Related Global Environmental Benefits

91. MEAs are increasingly recognizing the role of cities both as drivers of environmental degradation and as key actors in meeting Convention objectives. By taking a systems-based approach, the program will create an enabling policy environment, build cities' capacity and promote cross-sectoral investment with benefits across all Conventions served by the GEF.

92. The UNFCCC recognizes that urban areas are responsible for 71-76% of global CO_2 emissions.[104] It also highlights the importance of aligning urban investment with the country NDCs.[105] The program will directly contribute to climate change mitigation and adaptation through integrated approaches, decarbonization of infrastructure and carbon sequestration through Nature-based Solutions. The Convention on Biological Diversity (CBD) acknowledges the transformative power of cities, and how urban planning and behaviors can contribute to global biodiversity conservation. The First Draft of the Global Biodiversity Framework[106] also recognizes the importance of engagement of sub-national governments, cities and other local authorities. The IP will directly contribute to CBD's objectives particularly of increasing area, access to, and benefits from green and blue spaces in urban areas through its focus on integrating nature in cities. By adopting a territorial planning approach linking cities with surrounding ecosystems, the program

[104] https://unfccc.int/resource/climateaction2020/media/1308/Urban_Environment_17.pdf
[105] https://unfccc.int/sites/default/files/resource/SCF%20Forum%202019%20report_final.pdf
[106] https://www.cbd.int/doc/c/d605/21e2/2110159110d84290e1afca98/wg2020-03-03-en.pdf

will contribute to UNCCD's objectives related to sustainable management of land and water resources, and avoidance of land degradation.

93. Cities produce significant amounts of hazardous chemical waste and plastic pollution. The construction sector in particular is a major contributor to the emissions of mercury from the production of cement,[107] while open burning of waste at landfill and residential sites in cities are sources of POPs[108] and mercury. Cities are also responsible for 60% of plastics marine debris.[109] Circularity and integrated approaches that promote long-term management of materials and chemicals as well as waste management in cities can therefore lead to reduction of plastic waste and hazardous chemicals including those under the Stockholm and Minamata Conventions.

Role of the Private Sector in Supporting this Program

94. Cities are characterized by the presence of a dynamic private sector providing innovative solutions and bringing expertise and finance to deliver urban services. The Sustainable Cities IP will engage with the private sector as an important actor to innovate, finance and scale up urban sustainability action, with the objective to co-create solutions and developing long-term partnerships for joint action. In line with GEF's Private Sector Engagement Strategy (PSES),all scales and typologies of the private sector are included in the consideration of such networks.

95. The IP is well positioned to amplify the work of the UN Race to Zero initiative which brings the non-state actors such as cities and the private sector together under the common goal of net-zero emissions. The program can be a global partner of such initiatives and effect private sector commitments into results at the city scale through the entry point of climate change and biodiversity, and deliver multiple benefits including human health benefits related to cleaner air, more open space and reduced levels of extreme heat.

96. To ensure sustainability and replication of city-business partnerships, the IP will focus on developing mechanisms of private sector engagement across various levels:

- *Global level:* Taking a multi-sectoral approach for global engagement though multi-stakeholder platforms such as C40, WBCSD, CBCA and others that can create networks, bring new private actors on board and connect across institutions. A 'whole of portfolio approach' covering GEF-6-7-8 will be adopted to enhance the scale and depth of the program's private sector engagement.
- *National – sub-national level:* In collaboration with national governments, sub-national governments and the private sector, the program will advance public private partnership models and work with governments and businesses to create an enabling environment

[107] UN Environment, 2019, Global Mercury Assessment 2018, UN Environment Programme, Chemicals and Health Branch Geneva, Switzerland

[108] http://chm.pops.int/theconvention/overview/textoftheconvention/tabid/2232/default.aspx

[109] https://wwf.panda.org/wwf_news/?1020291/CITIES-TAKE-LEAD-IN-THE-FIGHT-AGAINST-PLASTIC---WORLD-CITIES-DAY-2020

including country-city policy cohesion, land use planning, and standards for green procurement and resilient infrastructure.

- *City level:* The program will support small-scale opportunities, organically building ideas from smaller businesses, start-ups and tech companies to develop innovative, cutting edge and tailored sustainability solutions. Private sector collaboration will be extended to universities and community-based organizations to develop solutions closer to citizens, including mentoring, calls for proposals, and development of innovation hubs.

Amazon, Congo, and Critical Forest Biomes Integrated Program

Introduction

97. Forests still cover around 30% of Earth's land area. They provide critical ecosystem goods and services such as food, fiber, water, shelter, and nutrient cycling among others. Forests play a fundamental role for biodiversity: they are host to over half of the world's known terrestrial plant and animal species and they contain 80% of terrestrial biomass. In addition, around 300 million of the world's poorest people depend almost entirely on forests for their subsistence and survival, including 60 million indigenous peoples. A further one billion people depend on them for their livelihood.[110] Forests are also critical for climate change mitigation as they stock around 662 Gt C[111] of which 2.2 Gt C is released in the atmosphere each year because of deforestation and other disturbances.[112] Tropical forest ecosystems, where most of the deforestation occurs, have a biomass carbon stock estimated to be 247 Gt C (193 Gt C stored aboveground and 54 Gt C stored belowground in roots), with almost half in Latin America (49%), and the rest divided between sub-Saharan Africa (25%) and Southeast Asia (26%).[113] It has become clear that the goals of the Paris Agreement will not be met without fully functioning Amazon and Congo Basin systems, representing the two largest blocks of tropical forests in the world.[114]

98. An intact forest landscape (IFL)[115] is a seamless mosaic of forest and naturally treeless ecosystems with few signs of habitat degradation and a minimum area of 500 km^2. IFLs are critical for stabilizing terrestrial carbon storage, harboring biodiversity, regulating hydrological regimes, and providing other ecosystem functions. Although the remaining IFLs comprise only 20% of tropical forest area, they account for 40% of the total aboveground tropical forest carbon. They are also home to millions of Indigenous People and Local Communities (IPLCs) whose livelihoods, culture and traditional stewardship is tightly intertwined with the ecosystem. Among these, the Amazon and the Congo Basin are globally critical for biodiversity and carbon storage, and provide livelihoods and subsistence to communities that rely on forests and agriculture for their survival. Beyond the large intact biomes, some regions are also home to smaller patches of primary forests that are vital as biodiversity refugia and can serve as cornerstone for ecological restoration efforts in fragmented landscapes.

99. Forest carbon stocks are often considered the principal mitigation value of IFLs. However, recent research has shown that intact forests are removing carbon from the atmosphere in far

[110] FAO & UNEP (2020). The State of the World's Forests 2020. http://www.fao.org/3/ca8642en/online/ca8642en.html
[111] Global Forest Resources Assessment (2020). http://www.fao.org/3/I8661EN/i8661en.pdf
[112] Harris N. L. et al. (2021). Global maps of twenty-first century forest carbon fluxes (Nature Climate Change, 2021)
[113] Saatchi et al. (2011). Benchmark map of forest carbon stocks in tropical regions across three continents. PNAS 108 (24) 9899-9904; https://doi.org/10.1073/pnas.1019576108
[114] United Nations Environment Programme (2021). Emissions Gap Report 2021: The Heat Is On – A World of Climate Promises Not Yet Delivered. UNEP Nairobi.
[115] Potapov et al. (2017). The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. Science Advances, 2017; 3:e1600821

greater quantities than previously expected. It is estimated that forest ecosystems soak up to 30% of the anthropogenic GHG emissions, 84% coming from old and primary forests.[116,117] So, when such forests are cleared, not only is their carbon stock released but also their future role as carbon sinks is lost.

100. Since 1990, it is estimated that some 420 million hectares of forest have been lost through conversion to other land uses.[118] Loss of these globally important ecosystems can also increase the risks of zoonotic diseases and spillovers. Protection of IFLs and forests with globally significant biodiversity is therefore a major imperative for advancing the Amazon, Congo, and Critical Forest Biomes Integrated Program through the *Healthy Planet, Healthy People* approach (HPHP). This will reinforce the critical importance of forests as natural climate solutions and for the health and well-being of humanity.

101. Many challenges still exist to reverse the trend of forest loss and degradation with regional differences: Agriculture, including animal husbandry, is the main proximate driver of deforestation worldwide while logging is the biggest single driver for forest degradation. In Africa, fuelwood for energy also plays a much larger role.[119] Market failures and perverse incentives still create the conditions that promote forest clearance to more "productive" uses such as agriculture. Governance at all scales and the rule of law including land tenure are often weak or non-existent. Current incentives for forest protection are insignificant compared to other land uses. And competing land uses, especially for food production to feed a growing global population, is exacerbating the pressure on the remaining standing forests.[120] Poorly managed forests and basins add to the risks of flood, droughts and can impact various infrastructures. Finally, poverty and lack of economic alternatives also put pressure on land use change and deforestation.

102. Achieving a global net-zero goal for CO_2 emissions is critical for the health of the planet, the stability of ecosystems, including forests, and to ensure safe conditions for future generations.[121] Ambitious policies that prioritize the maintaining of forest integrity, especially in the threatened primary forests, are now urgently needed alongside current efforts aimed at halting deforestation and restoring the integrity of forests globally. Strategies and policies to safeguard tropical forests must explicitly consider both carbon stocks and biodiversity.[122]

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[116] Harris N. L. et al. (2021). Global maps of twenty-first century forest carbon fluxes (Nature Climate Change, 2021)
[117] Funk J. M. et al. (2019). Securing the climate benefits of stable forests. https://www.tandfonline.com/doi/full/10.1080/14693062.2019.1598838
[118] FAO & UNEP (2020). The State of the World's Forests 2020. https://www.fao.org/3/ca8642en/online/ca8642en.html#chapter-executive_summary
[119] Curtis et al. (2018). https://science.sciencemag.org/content/361/6407/1108
[120] Pendrill F. et al. (2019). https://www.sciencedirect.com/science/article/pii/S0959378018314365
[121] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf
[122] Sullivan M. Talbot et al. (2017). Diversity and carbon storage across the tropical forest biome. Sci Rep 7, 39102. https://doi.org/10.1038/srep39102

103. IPLCs are well known to play a key role to impede deforestation, forest degradation, fragmentation, and associated greenhouse gas emissions and biodiversity loss.[123] Recent research indicates that protecting IPLC lands is not only important for human rights, but is a cost-effective way to preserve forests.[124,125] These contributions can be greatly enhanced through policies that recognize land tenure, access and resource rights, the application of free, prior and informed consent, fair and equitable sharing of benefits, and transparent co-management strategies with IPLCs with considerations of the different roles and responsibilities of IPLC women, youth, and men.

104. The GEF has to-date played an important role in safeguarding forests globally. Targeted investments have included the creation and effective management of protected areas, sustainable forest management, and integrated approaches to tackle drivers of deforestation. Recent trends in deforestation from anthropogenic sources (e.g., fires in the Amazon) and emerging lessons from the COVID-19 pandemic reveal the need for more transformative actions to safeguard and sustainably use tropical forests.

GEF-8 Integrated Program

105. The Amazon, Congo, and Critical Forest Biomes Integrated Program (IP) aims to maintain the integrity of the globally important critical tropical forests in order to maximize multiple global environment benefits related to carbon and biodiversity. This IP will increase and strengthen the protection and governance of IFLs, tackling the drivers of deforestation and forest degradation at jurisdictional or landscape level. Beyond the protected areas, it will be important to consider other effective area-based conservation measures (OECMs).[126] This IP will also support PES, corridors and also coordinated management with neighboring countries to improve connectivity at transboundary or regional level. This IP will catalyze stakeholder engagement at different levels - global, regional, national, and sub-nationals- to enable transformational changes in governance models, policies, financial frameworks, information, and social systems and reconcile social, economic, and environmental objectives. The role of IPLCs and marginalized groups, including women, will be central, and will require robust safeguard systems. Gender equality will be mainstreamed in this program.

[123] Walker W. et al. (2020). https://www.researchgate.net/publication/338858779_The_role_of_forest_conversion_degradation_and_disturbance_in_the_carbon_dynamics_of_Amazon_indigenous_territories_and_protected_areas

[124] Bradbury R. et al. (2021). https://www.nature.com/articles/s41893-021-00692-9

[125] Baragwanathand K. & Bayi E. (2020); Pnas: Collective Property Rights Reduce Deforestation In The Brazilian Amazon, HTTPS://DOI.ORG/10.1073/PNAS.1917874117

[126] The CBD has defined “OECMs” as “A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values” (CBD Decision 14/8).

106. This program will address the drivers of forest loss and degradation -specific to each region- through strategies aimed at creating a better enabling environment for forest governance; supporting national and sub-national land use planning across mixed-use landscapes; strengthening of protected areas; clarifying land tenure and other relevant policies; supporting alternative livelihoods and the sustainable management of commercial and subsistence agriculture lands to reduce pressure on adjoining forests; and utilizing financial mechanisms and incentives for sustainable forest utilization such as markets, the REDD+ Framework and other PES. If sustainably managed, success in these areas can serve as models for addressing the nexus between generating global environment benefits, poverty alleviation, and improved economic development.

107. Maintaining ecosystem integrity and resilience is fully aligned with a *Healthy Planet, Healthy People* approach. Healthy natural ecosystems, and especially primary forests, are providing a safety net for people that depend on forests. We must act rapidly as the ability of terrestrial ecosystems to continue to absorb GHG emissions will be compromised by ongoing climate change and land degradation.

Objectives, Key Interventions, and Selection Criteria

108. The objective of this program is to invest in the conservation and effective governance of critical forest biomes that sustain the health of the planet and flow of vital ecosystem services that underpin human well-being. The program will focus specifically on the Amazon and Congo Basin but also target other biologically important regions such as Indo-Malaya, Meso-America, and Western Africa where forest conservation will generate significant benefits for global biodiversity, climate, and people.

109. Key Interventions include the following:

- Expand the coverage of protected areas in the critical forest biomes to safeguard globally significant biodiversity, carbon stocks and sinks, and improve ecological connectivity in the forest biomes (national, sub-national, transboundary).
- Strengthen the management of existing forests, including those in protected areas and protected area systems (national and sub-national).
- Promote Other Effective Area-Based Conservation Measures (OECMs) and various Nature-based Solutions to achieve conservation outside the protected areas.
- Develop integrated land-use planning, including information and monitoring systems to prevent large-scale deforestation and forest degradation, and improve management of ecosystem service flows.

- Support conservation-friendly livelihoods at the local level and improve the sustainability of the "productive" sectors to ensure that they are compatible with the conservation of critical forest biomes, including primary forests.
- Assist developing financial and other incentives for forest conservation while promoting the elimination of perverse incentives that increase the pressure on critical forests.
- Strengthen multi-scale and multi-stakeholder governance and law enforcement for increased policy coherence on incentives and mechanisms to conserve and sustainably manage forests and eliminate perverse subsidies.
- Improve land tenure rights and policies especially the legal recognition of the customary rights and tenure security of IPLCs (e.g., free, prior, and informed consent processes and Indigenous and Community Conserved Areas).
- Promote regional cooperation: South-South learning, technical exchanges, intergovernmental cooperation, knowledge management, and communication strategies, notably at the scale of river basins or shared ecosystems; and
- Improve resource mobilization and contribute to the implementation of the international development agenda related to financial incentives to conserve and restore critical forests, including the REDD+ Framework, carbon markets, nature-positive trade policies that reward forest conservation and restoration, and long-term financing of protected areas.
- Support analysis to enhance the role of forest conservation and restoration in ambitious nationally determined contributions (NDCs), net zero emissions strategies, 30 x 30 targets, Bonn Challenge targets, and other national strategies and targets.

110. As well, global and regional interventions will focus on:

- *Biome Connectivity:* Actions will focus on connectivity of the forest and freshwater ecosystems and aquatic resources in each biome on which local livelihoods depend on for food security, transport, and water. Securing ecological connectivity and maintaining forest integrity will also help conserve important resident and migratory species that live in these forest biomes.
- *Capacity Building and Regional Cooperation:* In each forest biome, actions will be aligned with existing initiatives to avoid duplication and maximize technical and financial resources. Regional actions will be designed to complement the national projects and maximize the efficiency of the broader approach. This component will provide opportunities for south-south learning, foster intergovernmental cooperation, use M&E tools and geospatial services, apply best practices and peer review and develop portfolio-wide training and communication strategies.

- *Global enabling environment on forests*: Contribute to the implementation of the international development agenda related to resources mobilization, relevant global platforms and initiatives, policy coherence and coordination.

111. The Amazon and Congo Basins will be prioritized for this program by virtue of their global importance as IFLs, which creates opportunity for direct engagement and cooperation with all riparian countries. Forests in other regions will be considered based on the following criteria: evidence of globally important biodiversity, high carbon storage and carbon dioxide removal capacity, potential for restoring ecosystem integrity at the regional scale, and high threats. Potential targets include the following regions: Indo-Malaya, Guinean forests of West Africa, and Mesoamerica.

Existing Platforms and Potential Partners

112. At the global level:

- The Convention on Biological Diversity (CBD) and the UN Framework Convention on Climate Change (UNFCCC) are natural relevant global platforms, as well as the Collaborative Partnership on Forests, its fifteen members,[127] and the UN Forum on Forests (UNFF). The proposed IFL approach is also very compatible with guidance from the UN Convention to Combat Desertification (UNCCD) and particularly the LDN framework.
- International Climate Initiatives (IKI;[128] The Legacy Landscapes Fund;[129] LEAF Coalition;[130] Glasgow Leaders Declaration on Forests and Land Use[131]).
- The Coalition for Private Investment in Conservation (CPIC) initiative, the Finance for Tomorrow platform, Rainforest Alliance, the Forest Investor Club, the Global Agribusiness Alliance, Grow Asia, and sustainable commodity initiatives, such as the Roundtable for Sustainable Palm Oil (RSPO).
- REDD+ partners: FCPF, UN-REDD, Green Gigaton Challenge dedicated to bringing REDD+ to scale, for instance.
- International NGOs: African Parks, African Wildlife Foundation, Birdlife International IUCN, Conservation International, Rainforest Alliance, TNC, WCS, WWF, ZSL.
- Research Centers, such as the CGIARs, CIFOR, and ICRAF.

[127] https://www.un.org/esa/forests/collaborative-partnership-on-forests/members/index.html; https://www.cbd.int/doc/press/2021/pr-2021-02-05-ITTO-CBD-en.pdf
[128] https://www.international-climate-initiative.com/en/about-iki/iki-funding-instrument
[129] https://legacylandscapes.org/
[130] https://www.emergentclimate.com/leaf-mobilizes-1-billion-for-forest-protection/
[131] https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/

113. At the regional level:

- Amazon: Knowledge Platform of the Amazon Sustainable Landscape Impact Program (ASL), Alliances and initiatives involved in the implementation of the Leticia Pact,[132] ACTO, IADB's initiative for sustainable development of the Amazon region, REDPARQUES.[133]
- Congo: Regional Platform of the Congo Impact Program, Congo Basin Forest Partnership (CBFP), Economic Community of Central African States (ECCAS), Central Africa Forest Initiative (CAFI), Central African Forests Commission (COMIFAC), specialized networks (Network of IPLCs for the sustainable management of forest ecosystems in Central Africa, REPALEAC, and Conference on Dense and Moist Forest Ecosystems of Central Africa, CEFDHAC).
- Asia Pacific: ASEAN (ASEAN Regional Network on Forest and Climate Change), regional programs from multi, bilateral, and NGOs.
- Central American Commission for Environment and Development (CCAD) for the "5 Great Forests Initiative", The Dry Corridor Initiative.
- Guinean Forests of West Africa: Critical Ecosystem Partnership Fund (CEPF), Transboundary Tai-Grebo-Krahn-Sapo Forest, Gola Transboundary Forest Landscape, Cross River-Korup-Takamanda Transboundary Initiative, private sector (Sao Tome and Principe).

Contributions of this Program to MEAs and Related Global Environmental Benefits

114. The Amazon, Congo, and Critical Forest Biomes Integrated Program responds to multiple MEA guidance and will also promote better integration between them.

115. By focusing on IFLs, the Amazon, Congo, and Critical Forest Biomes Integrated Program aims to provide a significant and efficient contribution to the net zero decarbonization goal around 2050. The focus on tropical forests will potentially secure IFLs in biomes that account for two-thirds of all terrestrial species on the planet, including the vast array of invertebrate species and microbes that underpin the productivity and stability of forest ecosystems.

116. Article 5.1 of the Paris Agreement stresses that Parties should take action to conserve and enhance forests. Conserving primary forests will constitute a major contribution to the "+" of the REDD+ Framework, as well as to efforts to limit the emissions from deforestation and forest degradation. Parties to the UNFCCC have recognized the critical role forests play in combatting

[132] https://www.reuters.com/article/us-brazil-environment-amazon-summit/amazon-countries-sign-forest-pact-promising-to-coordinate-disaster-response-idUSKCN1VR2B1

[133] ACTO: Amazon Cooperation Treaty Organization; REDPARQUES: the Latin America Network for Technical Cooperation in National Parks, other Protected Areas, Wild Flora and Fauna.

climate change, including through the Ministerial Katowice Forests for Climate Declaration and the Glasgow Leaders Declaration on Forests. Promoting adequate framework to increase resource mobilization, the Program will also contribute to the implementation of Articles 5 and 6 of the Paris Agreement.

117. Conservation and sustainable management of critical forest biomes, especially IFLs, respond particularly well to multiple CBD items under several decisions - protected areas and OECM, indigenous people and local communities, (14/8, para 1, 2, 4, 5, and 7), traditional knowledge, sustainable use of forest biodiversity (9/5), ecosystem-based approach (13/4, 14/2…). CBD also noted in its analysis of the forest-related Aichi biodiversity targets and other forest related multilateral commitments "the urgent necessity to avoid major fragmentation, damage to and loss of primary forests of the planet…" (COP 14/30).[134]

118. The overall approach is aligned with several elements from the UNCCD, and especially the LDN response hierarchy of avoiding, protecting, and reversing land degradation.

119. The program also contributes to the achievement of the UN Strategic Plan for Forests 2017-2030 under the UNFF and its six Global Forest Goals, notably through reversing the loss of forest cover, improving the livelihoods of forest dependent people, increasing the area of protected forest, mobilizing additional financial resources, promoting adequate governance frameworks and enhance cooperation, coordination, coherence and synergies worldwide.[135]

120. Beyond the Rio Conventions, supporting the transformation of small-scale artisanal gold mining (including the ban of mercury) and finding alternatives in IFLs will generate benefits potentially accountable under the Minamata Convention.[136] Transboundary and regional water agreements will finally provide the framework for complementary interventions on freshwater and connectivity of aquatic resources.

Role of the Private Sector in Supporting this Program

121. The globalization of trade in agriculture and other commodities has created complex interactions between geographically distant actors and actions at the local level to the global level. The ultimate drivers of environmental and social change can be far from the places where many adverse impacts happen and where decisions on investment and resource allocation are made. The action at the local level is one critical aspect and will remain a priority in GEF-8. However, concerted action at the global level to drive positive environmental and social changes is also

[134] https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-30-en.pdf
[135] https://www.un.org/esa/forests/documents/un-strategic-plan-for-forests-2030/index.html
[136] This is responsive to one of the recommendations of the recent ASGM Evaluation that the GEF should seek opportunities for multi-focal area ASGM interventions due to the cross-sectoral linkages of the ASGM sector. GEF/E/C.59/02, Evaluation of GEF Interventions in the Artisanal and Small-Scale Gold Sector, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF_.E_C59_02_ASGM_Evaluation_Nov_2020.pdf

needed. There is a growing interest in the private sector community for promoting sustainability along the value chains (responsible sourcing,[137] gold mining for instance[138]). More than 190 companies, governments, and CSOs have signed the New York Declaration on Forests to end natural forest loss by 2030 and reduce deforestation by 50% by 2020; these engagements also being connected to the SDGs to ensure sustainable consumption and production patterns.[139,140] While these commitments go in the right direction, we can unfortunately note that enabling conditions are missing and the targets are not met.

122. This IP will connect with different global platforms to improve cooperation, information sharing, and transparency. Consistency with relevant elements of Article 6 of the Paris Agreement will be sought as well as opportunities to pursue or enhance private sector investment in implementation of the relevant NDCs, both for adaptation and mitigation. Such investments could include allocations made under Nature-based Solutions such as highlighted in Section VI on private sector engagement. The proposed private sector technology platform for GEF-8 could also provide valuable support for the development and deployment of advanced monitoring and observation systems to inform decision making and resource allocation. The GEF may also provide support for innovative finance using the blended instrument (or Non-Grant Instrument), including to IPLCs, through microfinancing institutions or the insurance sector. Private sector led multi-stakeholder initiatives such as the Fire-Free Village program (FFVP)[141] have the scaling potential to avoid millions of tons of GHG emissions from the burning of forests and peatlands and further support efforts to strengthen sustainable value chains in deforestation risk commodities.

[137] Cisco C. & Chorn B. (2009). https://www.bsr.org/reports/BSR_Responsible_Sourcing__KPIs_Summary.pdf
[138] Van der Brink et al. (2019). https://www.sciencedirect.com/science/article/pii/S092134491930103X
[139] https://datatopics.worldbank.org/world-development-indicators/wdi-and-the-sustainable-development-goals.html
[140] https://sdg-tracker.org/sustainable-consumption-production
[141] The Fire Free Village program is an initiative led by major forestry and agribusiness with incentives to not use fire and take action to prevent and stop fires. Launched in 2015, the initiative has resulted in a 90% reduction in forest fires. https://www.aprildialog.com/en/?s=FFVP

Circular Solutions to Plastic Pollution Integrated Program

Introduction

123. The exponential increase in plastic production, consumption and waste is impacting marine, freshwater and terrestrial ecosystems as well as contributing to greenhouse gas and hazardous chemical emissions with implications for human health, economies and social wellbeing around the world.[142] These adverse impacts from both macroplastic and microplastic pollution, which stem from sources ranging from car tires to water bottles, are expected to escalate as plastic production has increased annually ~9% since 1950 outpacing any other manufactured material.[143] Most recently, during COVID-19 single-use plastic consumption and subsequent waste has surged raising further alarm.[144,145,146]

124. Tackling plastic pollution through circular solutions will deliver Global Environmental Benefits tied to Biodiversity, International Waters, Chemicals and Waste and Climate Change Mitigation focal areas.[147] In terms of marine and freshwater transboundary ecosystems, currently 8-12 million tonnes of plastic pollution enter the ocean annually resulting in over >150 million tonnes in the ocean, including over 5 trillion plastic particles.[148] The resulting cumulative hazards and direct impacts to marine ecosystem services cost an estimated $500-$2500B/year.[149] Recent studies have found that migratory species are among the most vulnerable to plastic pollution in marine, freshwater and terrestrial ecosystems affecting river¸ land-based and avian species.[150] With plastic waste flowing through multi-national rivers to the ocean[151] and found as remote as the Mariana's Trench,[152] this is truly a transboundary water issue.

[142] Barra et al. 2018. Plastics and the circular economy. STAP. Washington, DC.
[143] R. Geyer, J. R. Jambeck, K. L. Law, Production, use, and fate of all plastics ever made. Sci. Adv. 3, (2017). https://www.science.org/doi/10.1126/sciadv.1700782
[144] https://www.economist.com/international/2020/06/22/covid-19-has-led-to-a-pandemic-of-plastic-pollution
[145] https://www.forbes.com/sites/lauratenenbaum/2020/04/25/plastic-waste-during-the-time-of-covid-19/?sh=ed6e7e67e484
[146] https://www.weforum.org/agenda/2020/05/plastic-pollution-waste-pandemic-covid19-coronavirus-recycling-sustainability
[147] STAP (2011). Marine Debris as a Global Environmental Problem: Introducing a solutions based framework focused on plastic. A STAP Information Document. Global Environment Facility, Washington, DC.
[148] Jambeck, J. R. et al. Plastic waste inputs from land into the ocean. Science. 3 Feb 2015 Vol 347, Issue 6223. pp. 768-771.DOI: 10.1126/science.1260352
[149] https://enb.iisd.org/media/spbf-2021-feb-19-jacqueline-mcglade-unep-video
[150]https://www.cms.int/sites/default/files/publication/cms_report_migratory_species_and_plastic_pollution_31AUG2021.pdf
[151] https://www.scientificamerican.com/article/stemming-the-plastic-tide-10-rivers-contribute-most-of-the-plastic-in-the-oceans/
[152] https://www.nationalgeographic.org/article/plastic-bag-found-bottom-worlds-deepest-ocean-trench/

125. The biodiversity effects of plastic pollution are associated with entanglement, toxic ingestion, suffocation, starvation, and general debilitation.[153,154,155] These deadly effects are evident across marine, freshwater and terrestrial ecosystems.[156] Among the marine species affected by plastic pollutions, 17% are listed as threatened or near threatened on the IUCN Red List.[157] The adverse effects are also experienced at the ecosystem level with plastic pollution identified as the second biggest threat to the future of coral reefs as it increases disease outbreaks by more than 20 times.[158]

126. Tackling plastic pollution by reducing production, consumption and disposal will also reduce carbon emissions since GHGs are emitted at every stage of the plastic lifecycle. Conventional plastic production depends on virgin fossil feedstocks. The basic building block for plastic, ethylene, is produced from natural gas and crude oil, which is an energy intensive process. The most commonly used plastics produce greenhouse gases when exposed to sunlight[159] and once disposed, if incinerated, release CO_2. These adverse impacts are expected to rise. In 2014, 6% of oil production went toward plastic, which is expected to increase to 20% by 2050[160] as the oil and gas industry moves out of the energy sector.

127. Further, in terms of chemical and waste concerns, the open burning of plastic waste and incineration that is not done according to best available techniques can lead to releases of POPs, specifically uPOPs. Moreover, many plastic products and plastic waste contain hazardous additives that are POPs (e.g. PBDEs, PFOS, PFOA, SCCPs) and can have adverse effects on human health and the environment, including as a result of long-range environmental transport. Exposure to POPs can lead to serious health effects, including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damage to the central and peripheral nervous systems.[161] The Stockholm Convention controls various intentionally and unintentionally produced POPs.[162]

[153] G.G.N. Thushari, J.D.M. Senevirathna, Plastic pollution in the marine environment, Heliyon, Volume 6, Issue 8, 2020, e04709, ISSN 2405-8440, https://doi.org/10.1016/j.heliyon.2020.e04709

[154] Gregory Murray R. 2009. Environmental implications of plastic debris in marine settings. Phil. Trans. R. Soc. B3642013–2025. http://doi.org/10.1098/rstb.2008.0265

[155] José G.B Derraik, The pollution of the marine environment by plastic debris: a review, Marine Pollution Bulletin, Volume 44, Issue 9, 2002, Pages 842-852, ISSN 0025-326X, https://doi.org/10.1016/S0025-326X(02)00220-5

[156] https://www.cms.int/sites/default/files/cms_report_migratory_species_and_plastic_pollution_31AUG2021.pdf

[157] S.C. Gall, R.C. Thompson, The impact of debris on marine life, Marine Pollution Bulletin, Volume 92, Issues 1–2, 2015, Pages 170-179, ISSN 0025-326X,

[158] J. B. Lamb, B. L. Willis, E. A. Fiorenza, C. S. Couch, R. Howard, D. N. Rader, J. D. True, L. A. Kelly, A. Ahmad, J. Jompa, C. Drew Harvell, Plastic waste associated with disease on coral reefs. Science 359, 460–462 (2018).

[159] Royer S-J, Ferrón S, Wilson ST, Karl DM (2018) Production of methane and ethylene from plastic in the environment. PLoS ONE 13(8): e0200574. https://doi.org/10.1371/journal.pone.0200574

[160] https://ellenmacarthurfoundation.org/the-new-plastics-economy-rethinking-the-future-of-plastics

[161] https://www.annualreviews.org/doi/10.1146/annurev-environ-102016-060700

[162] http://www.pops.int

128. Plastic pollution is even more relevant to the GEF given the mandate to focus in developing countries, which are major consumers of single-use plastic items (e.g. plastic bags, sachets), often the recipients of plastic waste from developed countries,[163,164,165] and are unable to manage waste adequately.[166,167] Given the prominence of women and children as waste pickers in the informal sector, there is particular concern for poor labor conditions and the adverse health effects from waste.[168] Following documentation of Asia as the hotspot for plastic waste entering rivers and ocean[169,170] and as a major producer and consumer of plastics and plastic products,[171] Asia has been a priority region; however, with growing urbanization in Africa and Latin America, these regions are also priorities for investment.[172]

129. Packaging is the primary use of plastic (30%) with single-use plastic constituting over half of plastic waste.[173, 174] The food and beverage industry is a particular concern due to the high volume of single use packaging. Nine out of 10 of the most common beach clean-up items are tied to the food and beverage sector[175] and the top brands tied to plastic pollution are associated with the food and beverage industry.[176] This concern is prevalent in developing countries as indicated by analyses of Viet Nam, Thailand, South Africa, Mozambique, and Kenya where packaging is the dominant category of plastic waste, particularly from the food and beverage industry, including bags, lids, caps, bottles, and food containers.[177]

GEF-8 Integrated Program

130. This Integrated Program will tackle plastic pollution using a circular economy approach through interventions across the entire plastic value chain from production to consumption to disposal (Figure 4). Such a holistic approach leverages the interlinkages across the processes and sectors contributing to plastic pollution. Historically the focus has been on downstream actions related to disposal (i.e. collection, recycling, waste-to-energy, incineration, landfill). However,

[163] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7608798/
[164] https://www.theguardian.com/us-news/2019/jun/17/recycled-plastic-america-global-crisis
[165] Babayemi, J.O., Nnorom, I.C., Osibanjo, O. et al. Ensuring sustainability in plastics use in Africa: consumption, waste generation, and projections. Environ Sci Eur 31, 60 (2019). https://doi.org/10.1186/s12302-019-0254-5
[166] https://ourworldindata.org/plastic-pollution
[167] Licciardello, F. 2017. Packaging, blessing in disguise. Review on its diverse contribution to food sustainability.
[168] https://learn.tearfund.org/-/media/learn/resources/reports/2019-tearfund-consortium-no-time-to-waste-en.pdf
[169] Jambeck, J. R. et al. Plastic waste inputs from land into the ocean. Science. 3 Feb 2015 Vol 347, Issue 6223. pp. 768-771.DOI: 10.1126/science.1260352
[170] https://pubs.acs.org/doi/10.1021/acs.est.7b02368
[171]https://www.plasticseurope.org/application/files/5716/0752/4286/AF_Plastics_the_facts-WEB-2020-ING_FINAL.pdf
[172] https://www.unep.org/resources/report/mapping-global-plastics-value-chain-and-plastics-losses-environment-particular
[173] Ibid.
[174] https://www.unep.org/interactive/beat-plastic-pollution/
[175] https://oceanconservancy.org/wp-content/uploads/2019/09/Final-2019-ICC-Report_EMBARGOED-UNTIL-9.3.19.pdf
[176] https://www.breakfreefromplastic.org/globalbrandauditreport2020/
[177] https://plastichotspotting.lifecycleinitiative.org/pilots/

eliminating plastic pollution also requires taking upstream stages to reduce the production and consumption of plastic, which are contributing to the flow of mismanaged plastic waste. This IP is taking both upstream and downstream actions, by addressing the entire plastic value cycle: material engineering; product and process design; consumer use and behavior; and collection systems and recycling.[178,179,180] At a global scale such a system change is predicted to cut government costs $70 billion and save businesses $1.3 trillion dollars compared to the current business as usual trajectory while creating more economic opportunities and jobs, providing for improved labor an health conditions, empowering women throughout the value chain, and dramatically cutting down on ocean pollution and reducing projected plastic-related greenhouse gas and hazardous chemical emissions.[181,182]

Figure 4. The circular economy value chain

131. Moving toward a circular economy approach in the food and beverage industry necessitates enhancing the efficiency of the packaging system to reduce packaging and foster reuse across the food system; upgrading recycling infrastructure for packaging waste; and developing and/or adopting business models that promote the re-use and recycling of food packaging. This approach will require systemic change in the way producers, processors, retailers, distributors and consumers operate, and will necessitate a high level of cross-collaborative engagement through the development of circular partnerships.[183] Consumer education on the use of plastics will also be required to shift mindsets and behaviors.

132. Women are expected to play a strong role in addressing plastic pollution given their prevalence throughout the plastic value chain. Women are often the major decision-makers regarding household consumption, are a high portion of social entrepreneurs, and are prevalent in

[178] https://ellenmacarthurfoundation.org/topics/plastics/overview
[179] https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings
[180] https://gefmarineplastics.org/publications/addressing-marine-plastics-a-roadmap-to-a-circular-economy
[181] Barra et al. 2018. Plastics and the circular economy. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.
[182] https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings
[183] Rolle, R.S. 2021. Packaging-linked Food Loss and Waste across the Agri-Food Value Chain: Moving toward circular and sustainable systems. Forthcoming publication.

the waste management industry as waste pickers.[184,185] Therefore, women can be the engines of circular economy solutions on all levels from households and communities to businesses and politics.

133. Through the proposed program, the GEF will catalyze circular economy approaches to reduce plastic production, consumption and waste. Packaging, particularly single-use related to the food and beverage sector, will be the priority for the Plastic IP since it is the main source of plastic waste in developing countries. As plastic pollution efforts tend to focus on waste collection, recycling and clean-ups, the GEF will prioritize actions early in the plastic value chain, i.e. production and consumption. By aligning with existing waste management efforts, the full value chain will be addressed. Consequently, this program will support initiatives that:

- eliminate the production and use of problematic and unnecessary plastic products and phase out plastic products containing hazardous chemicals;
- reengineer products toward materials that are made from recycled materials that are non-toxic, are recyclable and are ocean-safe if they leak into the ocean while ensuring the ecological impacts are considered (see the European EU criteria[186]);
- design for circularity through increased reusability, recyclability and composability;
- innovate better reuse, repair, remanufacturing and recycling business models, including service as product;
- circulate products by shifting consumer behavior and by fostering markets for recycled non-toxic material; and,
- create cross-cutting enabling conditions by strengthening collaboration and coordination along the plastic value chain, creating harmonized visions, fostering knowledge sharing, and increasing investment in innovative solutions.

Objectives, Key Interventions, and Selection Criteria

134. The objective of this IP is to catalyze circular economy approaches to reduce plastic production, consumption, and waste. This IP will invest in national and city-level initiatives; however, given the global nature of the value chain and given that many countries are only beginning to tackle plastic pollution, limited global-level investments will be pursued as well.

[184] https://www.forbes.com/sites/bridgetbrennan/2015/01/21/top-10-things-everyone-should-know-about-women-consumers/?sh=4bef67366a8b
[185] https://learn.tearfund.org/-/media/learn/resources/reports/2019-tearfund-consortium-no-time-to-waste-en.pdf
[186] https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/scientific-support-eu-policies/group-chief-scientific-advisors/biodegradability-plastics-open-environment_en

Global Investments

135. The global investments will focus on:

- Sharing best practices (e.g. plastic alternatives, reuse and refill programs) and lessons learned (e.g. how businesses have adopted plastic-free practices, how policies catalyzed change) among the cities, including through regional centers of excellence with emphasis on fostering South-South learning and knowledge sharing as recommended by the IEO;[187,188]
- Establishing guidance on what constitutes "circular products and services" to foster reuse, extended life and recyclability of traded plastic products;
- Providing monitoring and evaluation guidance to governments and businesses to evaluate progress along the value chain toward achieving circular solutions to reduce plastic pollution as well as to assess GHG emissions, hazardous chemicals and ecosystem impacts and guidance on green accounting to incorporate plastic footprints into decision-making;
- Advising global corporations how to achieve their circular goals, connecting these corporations with circular innovations and connecting them with national initiatives to ensure their products are designed for circularity in the recipient importing countries;
- Establishing transparent tracking mechanisms for the global trade (import of consumer goods, export of waste) of plastic products from production to consumption to waste to foster reuse, recyclability and composability at end of life; and,
- Raising public and stakeholder awareness of the circular economy concept, promoting circular solutions actions, and fostering a culture of circularity by infusing circular concepts and solutions into mainstream media and high-profile outreach campaigns.

National and City Investments

136. Investments in city initiatives within the context of national initiatives will depend on, and help strengthen collaborative, public-private partnerships that encompass stakeholders throughout the plastic value chain and set a common vision with ambitious targets.

137. Given the significant role of women in consumption, waste and circular enterprises, their engagement will be prioritized. At the same time, the IP will connect the informal sector of often marginalized waste-pickers with the formal sector with attention to labor and health conditions.

[187] Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021.
[188] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_04_evaluation_of_KM_GEF_2020.pdf

138. Building on these collaborations, investments will support national and city action plans, including actions targeting governments, businesses and the public. This program will help foster several national and city government roles:

- Creating the enabling policy environment for circular solutions by establishing regulations and incentives that foster circular economy best practices for the plastic industry.
- Building circular infrastructure and retrofitting existing infrastructure for greater circularity;
- Establishing public procurement policies that support circular systems to help drive market demand, test products and services and de-risk scaling-up; and,
- Raising awareness on the need for, and economic opportunity associated with, circular solutions within government agencies that engage in the food and beverage industry, such as city planning, tourism, and health departments.

139. Policy coherence across government agencies will be a priority to ensure plastic pollution reducing measures are not negated by contradictory policies. Ensuring policy coherence will require a thorough review of government policies and strong interagency communication, collaboration and negotiation.

140. Building on these governments strategies, particularly the regulations and incentives, the program will foster circularity within the private sector, specifically throughout the food and beverage industry by:

- Encouraging the production and use of alternative, ocean-safe materials that are devoid of hazardous chemicals, particularly POPs, promoting the use of recycled materials, and promoting circularity for the food and beverage industry;
- Innovating circular product designs that are reusable, refillable, modular or recyclable and fostering ecolabeling to clarify sustainability for consumers;
- Catalyzing business models that extend the life of products through repair, shared systems, resale, and service as product (e.g. buying lighting instead of light bulbs);
- Incentivizing companies that create circular systems (e.g. reusable food container systems);
- Promoting recycling technologies and initiatives that change the type of plastics that enters the economy and the environment to ensure that they are not hazardous, including devoid of POPs, and can be reused and recycled;
- Helping circular SMEs innovators bridge to commercialization through innovation prizes, incubators, accelerators and other mechanisms; and

- Promoting voluntary extended producer responsibility schemes as well as corporate adoption of circular solutions.

141. Finally, this program will foster a cultural paradigm shift by consumers, particularly youth, toward a more circular economy that will help galvanize political and private sector action by:

- Ensuring solutions that reduce plastic production and consumption (e.g. reusable to-go coffee cups) are accessible and affordable to the public; and
- Developing transparent, harmonized systems, and ecolabeling so the public can easily discern which products and services are sustainable and, through consumer purchasing power, drive market demand for circular products and services.

142. Selection of countries, including cities, will be based on the state of plastic pollution, including high and escalating levels of production, consumption and/or disposal. The ecological and socioeconomic impacts will be considered as well as the extent to which the public and private sectors have committed to tackle plastic pollution, such as through a common vision and national or city action plans. Countries positioned and committed to serve as centers of excellence to share best practices and to play catalytic roles in their regions will also be prioritized. The Plastic IP will coordinate with the Sustainable Cities IP given the mutual interests in sustainable production, consumption and waste and the urban environment.

Existing Platforms and Potential Partners

143. The program will benefit from, and partner with, the wealth of global initiatives and alliances that have emerged to tackle plastic pollution. In terms of national and city action plans, the program will continue the GEF-7 alignment with the Global Plastic Action Partnership (GPAP) through country-level investments. The Plastic IP will also align country investments with the New Plastic Economy led by the Ellen MacArthur Foundation and UNEP and with the Alliance to End Plastic Waste on global corporate and country initiatives. The program will also work with the Break Free from Plastics[189] movement to bring in CSOs to ensure national and city partnerships include community interests and at a global scale to help infuse circular thinking into mainstream media. There are many other global, regional and national initiatives that will play a role in Plastic IP investments depending on needs. These initiatives include (among others) the International Resource Panel, One Planet Network, Urban Ocean, Trash Free Seas, Plastic Pollution Coalition, WBCSD, the Circular Economy Coalition of Latin America and the Caribbean, the African Circular Economy Alliance, Prevent Waste Alliance, the Global Alliance on Circular Economy and Resource Efficiency and work undertaken by GEF Agencies, including UNEP, IUCN, WWF, UNIDO, UNDP, ADB, and WB.

[189] https://www.breakfreefromplastic.org/

Contributions of this Program to MEAs and Related Global Environmental Benefits

144. The program is unique in delivering global environmental benefits across nearly all the focal areas – Chemicals and Waste, International Waters, Climate Change Mitigation, and Biodiversity – and supporting several MEAs and SDGs. Reducing the production, consumption and disposal of plastic products will reduce the emission of GHGs in support of the Paris Agreement and will reduce the emission of hazardous chemicals, including uPOPs, in support of the Stockholm Convention. Reducing plastic waste from entering the environment will help maintain the health of ecosystems and the species affected by entanglement and ingestion, in support of the CBD, the Convention on Migratory Species and other relevant MEAs. As plastic waste represents a transboundary pollutant in both riverine and marine systems, the program will contribute to the objective of the International Waters focal area via the reduction of transboundary pollution.

145. This program will also contribute to socioeconomic co-benefits, including diversified livelihoods and economic growth through the innovative, circular solutions, improved labor conditions for the informal sector, women empowerment and improved human health through potable water and uncontaminated food. Increased job opportunities are also expected from the business opportunities associated with zero waste solutions.[190]

Role of the Private Sector in Supporting this Program

146. Engagement of the private sector is a central tenant of this program as moving to a more circular economy requires transforming business operations. These plans are targeted around food and beverage businesses based on the IEO guidance to narrow private sector focus.[191]

147. At the global scale, the IP will pursue advising businesses on moving toward circular practices through innovation, sharing best practices, and raising awareness of circular economy opportunities and the business case for adopting circular practices. To achieve these objectives, the IP will closely partner with the World Economic Forum hosted Global Plastic Action Partnership, the Alliance to End Plastic Waste, whose members are predominantly corporations, and the New Plastic Economy, which is working with over 450 businesses and other organizations, such as WRAP, to meet the Global Commitment to 100% reusable, recyclable, and compostable products.

148. At the national and city levels, this program will foster circularity within the food and beverage industry by increasing awareness within the industry of circular solutions and making the business case for adoption, fostering circular SME innovators to get to market and scale

[190] https://zerowasteworld.org/zerowastejobs/

[191] Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021.

through grants, loans, tax incentives, incubation, accelerators, prizes, and challenges; and, promoting extended producer responsibility schemes by companies as well as their adoption of circular solutions through grants, loans and tax incentives.

149. Such engagement at the national and city levels will require collaborative, public-private partnerships that encompass stakeholders throughout the plastic value chain. Multi-stakeholder collaboration ensures the various parties (e.g. plastic producers, food and beverage suppliers, restaurants, grocery stores, governments, recyclers etc.) coordinate to ensure a functioning, circular system. Through such partnerships, businesses can work with policy-makers to establish policies that will catalyze change (e.g. requiring eateries to serve on reusable dishware) and to design infrastructure that will foster circular systems (e.g. collection systems for reusable food delivery containers).

Blue and Green Islands Integrated Program

Introduction

150. Nowhere is the interconnection between nature and people's livelihoods and well-being more obvious than in Small Island Developing States (SIDS). Although countries worldwide are faced with accelerating change and environmental challenges, for SIDS it tends to be more intense and rapidly felt because of their small physical scale, geographic isolation, remoteness from international markets, and small economies which rely on a limited resource base including unique biodiversity.[192] At the same time, many SIDS face a variety of socio-economic challenges: urban density, food water and health insecurity, vulnerability to climate change and sea level rise, high cost of energy, and disproportionate impacts of pollution from hazardous chemicals and waste. They are also heavily indebted with limited access to and options for financial mechanisms that can place nature at the center of their development. While there are many commonalities, SIDS are also not a homogenous group of countries, with each of the geographical sub-regions of the SIDS (the Caribbean, the Pacific, and the Atlantic, Indian Ocean and South China Sea (AIS)) having different challenges as well as variations in size, capacity, gross domestic product (GDP), and connectivity.

151. There are multiple drivers of ecosystem degradation affecting the SIDS, in particular in key economic sectors including tourism, food (both agriculture and fisheries), and growing urban development as well as the pollution caused by these sectors. These key sectors, which are the main contributors to GDP[193] in most SIDS, rely heavily on the use of natural resources and ecosystem services, often in an unsustainable manner.

152. Land resources in the SIDS are limited but vital. However, land use change and conversion,[194] widespread unsustainable practices on productive landscapes for agriculture and forests,[195] including poor management of hazardous chemicals and associated wastes in agriculture and other sectors has led to diminished soil health, loss of forests and vegetative cover, loss of wetlands, especially coastal and marine wetlands and loss of other key biodiversity, particularly in areas of high endemism. This puts the related ecosystem services[196] at risk. As well, island species make up 75% of globally recorded terrestrial vertebrate extinctions.[197] Land and forest degradation

[192] CBD 2014, Island Biodiversity — Island Bright Spots in Conservation & Sustainability, Convention on Biological Diversity
[193] In the Seychelles, for example, ecotourism indirectly accounts for more than 50% of GDP (UN-OHRLLS 2017, Small Island Developing States in Numbers: Biodiversity & Oceans)
[194] Driven by agriculture and increased food demand, mining, illegal logging and urban development.
[195] For example, in Mauritius, the total annual cost of land degradation is estimated at $16 million – this is equal to 0.2% of the country's GDP. A considerable share of the costs of land degradation (37%) is due to the decline in ecosystem services (such as food security, water supply, etc.), which has a significant impact on the population of the country.
[196] Provisioning (e.g. food and fuel for livelihoods), regulating (e.g. reducing greenhouse gas emissions, erosion control) and supporting (soil protection and habitat for biodiversity)
[197] Tershy, B. R., Shen, K., Newton, K. M., Holmes, N. D. & Croll, D. A. The importance of islands for the protection of biological and linguistic diversity. Bioscience 1–6 (2015).

processes also further threaten livelihoods, well-being, food and water security, and increase vulnerability to climate change of SIDS, for example by contributing to landslide risks during high-intensity rainfall events.

153. For the marine environment, the Exclusive Economic Zone (EEZ) is, on average, 28 times the country's land mass[198] in SIDS and supports many livelihoods reliant on fisheries, aquaculture, and tourism. Marine resources and ecosystems such as coral reefs and mangroves are also impacted by land-based sectors such as agriculture and urban development as well as marine activities such as illegal, unreported and unregulated (IUU) fishing. Unsustainable practices in these sectors have led to a variety of environmental problems including marine species loss, destruction of ecosystems, and increased land-based pollution in particular linked to pesticide run off in marine areas threatening ocean health, and the ecosystem services that these resources provide.

154. SIDS also suffer from water quality and quantity stress due to contamination by human and livestock waste, deforestation, hazardous chemicals, including those controlled by the Stockholm and Minamata Conventions and other forms of pollution from industrial and agricultural activities. SIDS are particularly sensitive to pesticide run-off, including POPs and Highly Hazardous Pesticides (HHPs), given the close proximity of freshwater sources and high biodiversity marine areas to agricultural production areas. Adequate freshwater is important for the continued growth of the tourism, agriculture and other sectors.[199]

155. High vulnerability to climate change compounds these challenges. SIDS are already facing the impacts of climate variability and will continue to face a range of challenges including frequent and extreme weather events, freshwater stress, changes in fish migratory patterns, sea level rise and related issues with salinization, flooding, permanent inundation, erosion and pressure on ecosystems, changes in precipitation patterns, and drought sensitivity.[200]

156. SIDS economies and livelihoods have been significantly affected by the global COVID pandemic, in particular in the tourism, agriculture and fisheries sectors. SIDS' GDP dropped by 6.9% compared to 4.8% in all other developing countries.[201] It is also important to recognize the varied gender dynamics amongst the SIDS regions, and how this may differentially affect societal resilience as well as influence institutional decision making, use of resources/ecosystems and access to benefits from these resources.

157. Challenges also exist in terms of environmental policies and governance, such as poor land use and lack of marine integrated spatial planning and governance; policy incoherence; inadequate

[198] UN-OHRLLS 2017, Small Island Developing States In Numbers: Biodiversity & Oceans
[199] CBD 2014, Island Biodiversity — Island Bright Spots in Conservation & Sustainability, Convention on Biological Diversity
[200] IPCC 2018, Special Report Global Warming of 1.5ºC
[201] OECD. January 2021. COVID-19 pandemic: Towards a blue recovery in small island developing states. https://www.oecd-ilibrary.org/social-issues-migration-health/covid-19-pandemic-towards-a-blue-recovery-in-small-island-developing-states_241271b7-en

financial frameworks and financial mechanisms to apply Nature-based Solutions (to development and societal challenges); and poor or absent engagement of the private sector.

158. The Dasgupta review makes the case that the solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it.[202] This is paramount in the SIDS context.

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159. SIDS have the opportunity to lead the world in demonstrating the transformational potential of incorporating the value of nature into decision-making and using innovative Nature-based Solutions (NbS)[203] to achieve development goals and address humanity's greatest challenges, such as food security, climate change mitigation and adaptation and reduction and where possible elimination of hazardous chemical pollution.

160. Nature-based Solutions are actions to address societal challenges through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being, including the creation of livelihoods.[204]

161. Given the high degree of interconnectivity among marine and terrestrial ecosystems, economic sectors and livelihoods, the SIDS are uniquely positioned to pioneer a NbS approach. Simultaneously, the GEF is also uniquely equipped to support the Blue and Green Islands program, that provides the integrated approach needed to address these interconnected environmental challenges driven by key sectors—tourism, food (agriculture, fisheries) and urban development—which also impact each other. This approach responds directly to the recent SIDS Evaluation by the GEF IEO, which emphasizes the need for more integrated interventions.[205,206]

162. Previous GEF investments in SIDS, through initiatives such as the GEF-5 Ridge to Reef program in the Pacific, Integrating Water, Land and Ecosystems Management (IWECO) in the Caribbean, and the recent ISLANDS (Implementing Sustainable Low and Non-Chemical Development in SIDS) program have demonstrated the linkage between environmental health and

[202] Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)
[203] The recent SIDS Evaluation by the GEF's Independent Evaluation Office underscored the importance of supporting innovative approaches in the SIDS, even if there may be a higher risk involved. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf
[204] Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review
[205] GEF/ME/C.57/02, Strategic Country Cluster Evaluation of The Small Island Developing States, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf.
[206] This also addresses emerging findings from the OPS7 study on "Innovation in the GEF" that highlight the challenges of scale in the promotion, feasibility and piloting of innovation in smaller countries. GEF IEO, 2021 "Highlights: Evaluation Findings 2018-2021"

human well-being. Building on this, a more comprehensive nature-based development model can lead to more sustainable and resilient outcomes for nature and people.

163. This program will encourage SIDS to fully integrate natural capital valuation into relevant economic sectors so that nature and its assets can support healthy societal growth that is durable.

Objectives, Key Interventions, and Selection Criteria

164. The objective of the Blue and Green Islands Integrated Program is to apply Nature-based Solutions in key ecosystems that support socio-economic development in SIDS countries. This will place nature at the center of human well-being and generate multiple global and local environmental and societal benefits.

165. Two key features of the program— *integration* and the *centrality of nature* —will be demonstrated by:

i) Addressing cross-cutting upstream challenges related to accounting and valuing of ecosystems, policy coherence, and domestic public and private sector resource mobilization, among other areas;

ii) Addressing landscape level challenges related to 3 key sectors for the SIDS context (tourism, food-fisheries/agriculture, urban development).

166. Integration will be applied at different scales, including i) across the countries involved in the program (e.g, through sub-regional initiatives, both intra and inter); ii) at the national level (horizontally) across sectors; iii) vertically across different levels of governance, and iv) across groups of stakeholders including private sector, government, NGOs, and vulnerable groups including women and IPLCs, etc.

167. A global coordination function of the program will provide technical support, national level capacity building, learning, tools, guidance, and action on: enabling environment interventions such as natural capital accounting, valuing ecosystems, policy coherence; improvement of national financial frameworks and development of blended finance mechanisms and solutions for the public and private sector; coordinating and leveraging (as a block of countries) external funding opportunities for impact at scale across multiple benefits; meaningful engagement of private sector (both local and international) for innovative NbS specific to the SIDS context; and engagement with existing sub-regional governance platforms/bodies to help to embed Nature-based Solutions in regional level institutional and policy frameworks, including facilitating the development of

integrated policies. South-South learning, knowledge exchange, and collaboration will be a key aspect of the program.[207]

Interventions for enhancing the enabling environment

168. These interventions will benefit from support through the global program and will also require action in country.

169. *Natural Capital Accounting (NCA)[208] and Ecosystem Service Valuation* – This activity will be undertaken on key natural resources and ecosystems including, forests, coastal, marine, freshwater, etc. This activity could support: i) valuation under different frameworks related to ecosystems, agriculture/forests/fisheries, land, freshwater/marine environments to identify the links between an ecosystem and the economy in both physical and monetary terms and to identify trade-offs among different land uses; and ii) standardization of data and modelling approaches to embed natural capital accounting in national economic accounts[209] and facilitate cross-sectoral decision making on national level budgeting. Resilience and adaptation benefits will be included as part of assessments.

170. *Integrated and Comprehensive Planning* – Policy coherence through integrated and comprehensive planning will be needed and will require collaboration across relevant Ministries such as Finance/Economic Development/Planning, Agriculture, Environment, Urban/Housing, Tourism, and Trade. This intervention will utilize the data provided from the valuation of natural capital, to facilitate the development of integrated sectoral policies at sub-regional, national and local levels, engage in national and local level integrated land use/coastal zone planning, policy reform and cross-ministerial decision making. This will be important to support decisions around conservation and sustainable use of critical ecosystems, sustainable management of marine and coastal ecosystems, and sustainable fisheries management and governance[210] while at the same time managing trade offs. Multi-stakeholder and mutli-sector collaboration at both the national and local level will be an important mechanism to facilitate this process.

[207] This is line with the recent SIDS Evaluation by the GEF's Independent Evaluation Office, which recommended that regional programs should encourage a transfer of knowledge to the poorest SIDS through a South-South capacity-building approach.GEF/ME/C.57/02, *Strategic Country Cluster Evaluation of The Small Island Developing States*, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

[208] NCA covers accounting for individual environmental assets or resources, both biotic and abiotic (such as water, minerals, energy, timber, fish), as well as accounting for ecosystem assets (e.g. forests; wetlands), biodiversity and ecosystem services. UN System of Environmental-Economic Accounting (SEEA)

[209] Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review

[210] Here the BGI IP can assist with implementation of the Port State Measures Agreement (PSMA) for those SIDS who have adopted the PSMA and/or capacity building towards adoption of the PSMA. To date 16 SIDS have adopted the PSMA. PSMA is particularly beneficial for fisheries management, which can move overexploited and collapsed fisheries to more sustainable levels.

171. *Enhancing Financing Options from the Public and Local Private Sector* – Facilitating and supporting domestic resource mobilization in SIDS in support of NbS is a necessary enabling factor to achieving multiple and lasting benefits. Utilizing the information from NCA and valuation, and supporting integrated planning and policy coherence, this intervention may include: strengthening of the relevant financial and lending policies to discourage investments that lead to degradation ecosystems, channeling public and private funding to activities that enhance natural assets and ecosystem services, applying harmonized incentive mechanisms across the priority sectors, testing incentive mechanisms such as payment for ecosystem services (linked to water, forests or other ecosystems), and developing blended finance mechanisms specific to the needs of the SIDS context.

172. *Knowledge Management, Awareness and Collaborative Engagement*[211] – The program will support opportunities to capture and utilize knowledge specific to the SIDS context in relation to NbS, NCA, and valuation, including within countries and within and across regions. Operational mechanisms such as crowd-sourcing data as well as multi-stakeholder platforms and dialogues will also be explored at the national, sub-regional, and inter-regional level for cross-learning and to crowd in international private sector engagement and additional financing for Nature-based Solutions targeting the tourism, food and urban sectors.

Interventions in country in implementing NbS in key economic sectors

173. In addition to the targeted, upstream activities, national activities will also be expected to implement landscape and seascape level innovative Nature-based Solutions tied to one or more of the key sectors. Innovation will be prioritized both in the type of activities undertaken and/or in the financial mechanisms used to make them possible.

174. *Tourism* – Tourism represents over 30% of export GDP in SIDS and 98% and 88% of export GDP in St Lucia and Palau respectively. It also contributes heavily to employment, generating 27% in Caribbean islands, 24% in Africa and Indian Ocean islands and 20% in the Pacific. Women comprise 54% of global tourism employment.[212] Countries choosing to work on this theme could undertake activities that support conservation and sustainable use of critical ecosystems; restoration of coastal and marine habitats and ecosystems such as mangroves, seagrasses, coral reefs; integrated sustainability planning and decision making for tourism development; marine and terrestrial protected areas management; engaging tourism enterprises in the care and restoration of nature; and coral reef insurance. The activities will deliver substantial

[211] The recent SIDS Evaluation by the GEF's Independent Evaluation Office emphasized the promotion of knowledge exchange among SIDS. GEF/ME/C.57/02, Strategic Country Cluster Evaluation of The Small Island Developing States, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

[212] UNDP. 2020. https://www.undp.org/content/undp/en/home/blog/2020/how-can-small-islands-reimagine-tourism-for-a-green-recovery.html

benefits for terrestrial and marine protected areas and help to maintain the ecosystem services areas associated with these areas.

175. *Food Sector (agriculture and fisheries)* – Caribbean and Pacific SIDS import 60% of their food, with half importing more than 80%. Women make up 52% of the agricultural workforce but have less access to land, resources, and credit than men.[213] Countries may: receive technical support for small farmers and fishers to move towards more sustainable production practices; engage in activities to maintain, improve and restore agro-ecosystems in support of food production and livelihoods; engage in regenerative agriculture and integrated pest management to reduce agrochemical use; apply NbS to curb sources of land-based pollutants including persistent organic pollutants (POPs); building robust and sustainable supply chains and strengthen farmer and fisher organizations; and improve community-based fisheries management, commercial fisheries management, aquaculture and/or marine and terrestrial protected areas management. These activities will enhance people's well-being through improved nutrition, health, and livelihoods, as well as the protective and buffering services of healthier ecosystems.

176. *Urban* – Approximately 60 percent of SIDS populations live in urban areas.[214] Limited available land means that people are living at high densities even if population numbers do not appear to be large. Ecosystems supporting and impacted by urban activities include forests, mangroves, coral reefs. For example, poor wastewater management leads to poor coastal water quality, impacting high-biodiversity coral reefs. Countries choosing to work in this sector may focus on innovative Nature-based Solutions to wastewater management, water security, urban flooding, renewable energy, and/or solid waste management; and restoration of degraded productive landscapes in peri-urban and rural areas to improve the ecosystem services they provide in urban areas. The solutions may take place in ecosystems that support urban spaces such as forests and coastal areas and can deliver ecosystem service benefits as well as support resilience for highly vulnerable populations.

177. *Inclusive and gender responsive approaches* – Gender is embedded in all economic sectors addressed in this program. The program will include gender analyses to define the context specific gender dynamics linked to the sectors and include provisions to apply gender-responsive approaches. Projects should strive to include IPLCs particularly women and youth, such as through support for and strengthening systems of: territorial and natural resource management; traditional foods and agricultural practices; sustainable tourism related livelihoods and benefits sharing.

178. Given the potential adaptation benefits of the program, opportunities to collaborate with the GEF's adaptation funds (LDCF/SCCF) will also be explored.

[213] FAO. 2019. FAO's Work with Small Island Developing States. http://www.fao.org/3/ca5170en/ca5170en.pdf
[214] UN-Habitat. 2015. Urbanization and Climate Change in Small Island Developing States. https://sustainabledevelopment.un.org/content/documents/2169(UN-Habitat,%202015)%20SIDS_Urbanization.pdf

179. All GEF-eligible SIDS may participate in the program, with each country applying upstream activities to address cross-cutting challenges and downstream activities specific to one or more of the sectors that are dominant in their specific contexts. Selection of countries will take into account the level of ecosystem degradation linked to the key sectors and the potential for multiple environment and societal benefits (biodiversity, land degradation, chemicals and waste pollution, climate change mitigation, and adaptation and resilience, to support sustainable development and secure livelihoods). Countries will need to demonstrate strong political will across key ministries, have baselines upon which to build activities related to NCA, valuation and Nature-based Solutions, opportunities for private sector engagement and potential to leverage public and private sector funding. The program will strongly encourage participation from all SIDS sub-regions. Selection will also be based on innovation and potential to drive transformational change of proposed activities.

Existing Platforms and Potential Partners

180. The program will seek to engage and build on the work of existing bodies such as the UN Inter-Agency Consultative Group (IACG) on SIDS, Alliance of Small Island States (AOSIS) and support the implementation of global frameworks such as the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway.

181. Potential partners could include i) the existing funding mechanisms such as the Caribbean Biodiversity Fund, Micronesia Conservation Trust, Global Fund for Coral Reefs, International Climate Initiative (IKI) and multilateral and regional financial institutions which can provide opportunities to incorporate blended finance; ii) sub-regional governance partners such as CARICOM, OECS, SPREP, SPC, which would be useful to embed NbS approaches in regional level policy frameworks; iii) private sector partners such as AXA[215] to develop innovative NbS leverage finance and pilot PES mechanisms; iv) global SIDS partners such as SIDSDOCK and other regional bodies such as the Caribbean Community Climate Change Centre to leverage and share knowledge; v) global, regional, national, and sub-national processes focused on health security action planning in SIDS, where there is an intersection with the objectives of the program

182. Potential platforms and coalitions to collaborate with related to the private sector and finance, include the SIDS Global Business Network (SIDS-GBN), the Ocean Risk and Resilience Action Alliance (ORRAA), as well as those platforms which may not yet have a SIDS presence such as Taskforce on Nature-related Financial Disclosures. Platforms that may be useful in relation to policy coherence and accessing finance could also include trade related platforms given the link to the economic sectors of focus.

[215] AXA XL is working with multiple science partners to develop a ground-breaking Coastal Risk Index (CRI) that integrates the protective benefits of coastal ecosystems into insurance risk models.

183. The program can also build on and compliment the knowledge sharing platform established by the GEF ISLANDS program which operates in 33 SIDS.

Contributions of this Program to MEAs and Related Global Environmental Benefits

184. The integrated nature of the program and the Nature-based Solutions approach will provide an avenue to support countries to meet their commitments and targets under all of the MEAs simultaneously. In the context of the 2030 targets and beyond, supporting a coalition of SIDS to set ambitious targets for 2030 will simultaneously cut across various GEF mandates and priorities.

185. This program will directly address the objectives of the CBD and CBD-relevant objectives of other biodiversity-related multilateral instruments/agreements. It will support the valuing of protected areas and natural ecosystems, increasing finance for protected areas, and mainstreaming biodiversity conservation in agriculture and fisheries. It will also seek to address causes of habitat degradation and other drivers of biodiversity loss. There will also be indirect benefits for biodiversity from many of the lines of intervention, such as reducing land-based sources of pollution for coastal waters including sedimentation from poor agriculture, forestry, and land management practices.

186. Globally, 250 million hectares are committed to restoration under the Nationally Determined Contributions (NDCs) to the UNFCCC.[216] With updated NDCs capturing both adaptation commitments and forest and land use commitments, the program can contribute to mitigation actions under the agriculture, forestry and other land use (AFOLU) sectors. The Program also contributes to Article 5 of the Paris Agreement on carbon sinks and REDD+ [217] and Article 7.1 on climate adaptation.[218]

187. Under the UNCCD, as 23 SIDS have committed to voluntarily set LDN targets, the Blue and Green Islands Integrated Program can contribute to their commitments under the Convention and the UNCCD Strategy (2018-2030). The response hierarchy of the LDN – to avoid and reduce desertification and land degradation and to reverse degraded land – aligns well with the Nature-based Solutions approach, in particular the focus on restoration.

188. The program will also support the objectives of the Stockholm and Minamata Conventions. These include reduction of use and emissions of POPs, particularly POPs pesticides and highly hazardous pesticides used in agriculture, and industrial POPs used in the construction sector, particularly in the tourism and other sectors. The program will also support integrated projects that

[216] Sewell et.al, PBL Netherlands Environmental Assessment Agency 2020, Goals and Commitments for the Restoration Decade

[217] Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases' and 'reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.'

[218] 'Enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with the view to contributing to sustainable development and ensuring adequate adaptation response in the context of the temperature goal.'

consider co-benefits related to objectives of the Minamata Convention, by reducing the use of mercury containing products- such as lighting and others to be determined based on country level investments-,in relevant sectors being addressed by the program. The program will also provide an opportunity to build on elements of the ISLANDS program targeting tourism and agriculture.

189. The program is also expected to contribute to many of the priorities of the High Level Panel on Sustainable Ocean Economy including protection and restoration of marine and coastal ecosystems and sustainable fisheries management.

190. The program will also complement other GEF Integrated Programs on Food Systems, Ecosystem Restoration, Sustainable Cities, Clean and Healthy Ocean and the Net-Zero Nature-Positive Accelerator Programs.

Role of the Private Sector in Supporting this Program

191. Engaging the private sector at the national, sub-regional and global level will be necessary for the success of this program. The private sector has a significant presence across all three economic sectors and can provide opportunities for developing financial mechanisms to deliver NbS as well as innovative solutions for the SIDS context. These may include IDB's Compete Caribbean or WRI's Land Accelerator initiative. The private sector will also be an essential partner in upstream activities to collaborate and provide inputs on strengthening of financial frameworks that integrate nature and at the downstream level for piloting of mechanisms such as PES and strengthening supply chains (including for high value products).

192. The private sector plays a critical logistics role in SIDS which can be leveraged i) to support the aggregation of smallholder commodities (high value cash commodities such as vetiver and vanilla, among others); and ii) to provide a more robust source of regional food and nutrition security that can reduce the need for emissions intensive and low nutrition imports. The global project will also work to engage larger private sector entities (such as cruise companies), who may be difficult to negotiate with as a single country.

193. The Blue and Green Islands program can also provide investment pathways (based on the Natural and Social Capital Protocols), which can both reduce the negative externalities of sectors such as tourism and build the resilience of the ecosystems that underpin these economic activities.

194. There is an opportunity to explore private sector support on knowledge aspects using innovations in digital technology. Digital interventions can be used for data collection and monitoring, decision support tools that optimize the outcome of investments that deliver GEBs, to monitor and track the progress of investments, and to capture and repackage knowledge that is generated by the projects.

Clean and Healthy Ocean Integrated Program

Introduction

195. A sustainably managed ocean is essential to ensure the economic, social and ecological services that it provides. The ocean is currently providing the world economy with values conservatively estimated at US$2.5 trillion each year to the world economy in market goods and services and many times that in non-market amenities.[219] Services provided by marine ecosystems include food security, climate stability, tourism opportunities, carbon sequestration and coastal protection. Therefore, we need the ocean to be thriving with balanced use, an abundance of fauna and flora in the coastal zones, ensuring that the ocean can continue to be the stabilizing factor for mankind's activities, while being the pivotal centerpiece that provides cultural identity, livelihoods and social structures to local communities, nations and regions.

196. In most coastal countries of the world the story is the same, near-shore ecosystems have been destroyed or their functionality severely impaired with the resultant loss of biodiversity and ecological goods and services, including fish habitat and wave attenuation. Coastal pollution has been the primary culprit, since municipal wastewater and agricultural run-off is released into the marine environment untreated, via leaching, freshwater river systems, or piped outlets. While access to appropriate sanitation is increasing globally, the collection and treatment rates are still extremely low. Untreated wastewater and agricultural run-off being poured straight into our shared ocean, leads directly to eutrophication. In coastal waters, oxygen declines are caused by increased levels of nitrogen, phosphorus and organic matter from agriculture and sewage, causing eutrophication. Oxygen is essential for life in the Ocean, but alarmingly, the levels of oxygen in the Ocean have been declining dramatically over the past 50 years, leading to more than 500 eutrophic/deadzones, covering an area roughly the size of the European Union.

197. It will not be possible to experience healthy resilient sustainable ocean-based economic development across the world, unless the issue of coastal pollution is addressed. Coastal waters are often a repository of a wide range of agricultural run-off, urban, and industrial wastewater. Coastal pollution caused by land-based activities is one of the most serious threats to the world's coastal ecosystems, directly affecting human health and economic prosperity. Today, 44% of the world's population live within 150 km of a coastline, and two-thirds of the planet's largest cities are located in low-lying coastal areas. Assuming that the current pace of urbanization and demographic trends continue, the impact on coastal ecosystems will increase dramatically leading to more dead zones. On top of these trends, wastewater from agricultural and municipal sources is given nearly zero political attention, negatively impacting the amount of public investment being earmarked to treatment of these pollution sources. This means that today only ~1/5 of wastewater is treated and most of this only to a level that does not stem flows of nitrogen, phosphorous, organic

[219] Hoegh-Guldberg, O. et al. 2015. Reviving the Ocean Economy: the case for action - 2015. WWF International, Gland, Switzerland., Geneva, 60 pp.

matter, pharmaceuticals, POPs, mercury compounds, endocrine disruptors, vira and bacteria like *E.coli*, *Salmonella typhi* and SARS-CoV-2.

198. Considering the multiple economic, environmental, social, cultural, and societal benefits from investments in secondary or tertiary wastewater treatment,[220,221] the global community can simply not afford to not invest heavily in wastewater management and treatment. In return, a suite of benefits will be realized, some of which will have lasting impacts towards securing a healthy ecosystem and improving livelihoods for local communities. Among these are; long-term improved health benefits for fauna and humans by removing water-borne viruses, bacteria, endocrine disruptors, mercury compounds, microplastic particles, POPs, nitrogen, phosphorous, pharmaceuticals and other chemical compounds; improved economic opportunities; increased societal well-being; reduction in water-borne viral and bacterial diseases, improved reef and ecosystem services, improved health of blue forests ecosystems (mangroves, salt marshes, seagrasses, kelp and seaweed forests and reefs) and the fauna within them.

199. Agricultural run-off and wastewater from municipal settlements are a major threat to coastal ecosystem health and integrity. Excessive amounts of nitrogen, phosphorous and organic matter will lead to algae blooms and hypoxic zones, which will push living organisms out of the ecosystem and ultimately lead to dead zones. On top of these devastating effects, that leaves the coastal ecosystems fragile to climate induced impacts. Untreated wastewater brings viruses and bacteria to the coastal zones, such as E.coli and SARS-CoV-2.[222] Currently, somewhere between 70-80% of the global wastewater is being transported untreated into the ocean, via rivers or directly discharged. Of the remaining 20-30% treated wastewater, most is only given primary treatment, that only removes large particles, and hence do not deal with nutrients, microplastics, pesticides or bacteria. Investing in wastewater infrastructure combined with NbS to treat agricultural run-off and wastewater is in line with the global calls for building back greener/bluer, and will target a serious issue impacting ocean ecosystem and human health and well-being. The problem of ocean pollution starts on land but has detrimental effects on the opportunity for sustainable ocean-based economic development

200. Treatment of wastewater to at least secondary level, but preferably tertiary level, will have direct and clearly quantifiable effects on the corresponding marine coastal ecosystems that they are a part of. Investments in wastewater treatment, will not only benefit the global human population, but also curb potential infection of marine species by SARS-CoV-2[223] and shellfish

[220] Costello, C., L. Cao, S. Gelcich et al. 2019. "The Future of Food from the Sea." Washington, DC: World Resources Institute. https://www.oceanpanel.org/blue-papers/future-food-sea; IEA and ETP. 2017. "International Energy Agency, Energy Technology Perspectives 2017." www.iea.org/etp2017

[221] Hoegh-Guldberg, O., et al. 2019. "The Ocean as a Solution to Climate Change: Five Opportunities for Action." Washington, DC: World Resources Institute. https://oceanpanel.org/sites/default/files/2019-10/HLP_Report_Ocean_Solution_Climate_Change_final.pdf

[222] Tran et al 2021: SARS-CoV-2 coronavirus in water and wastewater: A critical review about presence and concern.

[223] Mathavarajaha et al 2021: Pandemic danger to the deep: The risk of marine mammals contracting SARS-CoV-2 from wastewater

infection from *Salmonella typhi.*[224] Proper treatment of municipal and industrial wastewater will not only directly curb pollution and chemical waste, that has detrimental environmental effects to freshwater and ultimately marine ecosystems, but also break one of the pathways for bacteria and viruses to spread.

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201. Curbing land-based pollution entry into the ultimate sink, namely the world's ocean, will demand action across multiple sectors, for example between public and private sector actors to inform policy formulation and foster direct action that directly will limit agriculture, municipal pollution to the ocean ecosystem. The misfit between current incentives to pollute without penalty or accountability and the necessary shifts in cultural norms, institutions, financial incentives, enforcement practices, etc. required to achieve transformation, is a major obstacle. Therefore, securing a healthy vibrant coastal ecosystem, will not be possible unless countries stop fertilizer incentive schemes, change cultivation methods to minimize run-off and ensure proper treatment of municipal sewerage before discharging it to receiving waters. Pollution of the ocean has a devastating impact on local and distant ocean ecosystems and the ocean's resilience to increasing human activity and climate induced changes.

202. The multitude of point and non-point sources of liquid pollution, being carried by tides and currents into neighboring countries' EEZ, indeed makes this a transboundary issue, which is complex to manage. The GEF recognizes that efforts targeted at prevention, reduction, and control of pollution caused by land-based activities are crucial to maintaining the ecological, social, and economic well-being of countries situated along the coasts of the world's Large Marine Ecosystems (LMEs).[225] The linkages between LMEs and river basins have long been realized, among others through the concept of Source to Sea interlinkages, as explored by GEF STAP.[226]

203. To ensure a strong anchoring and the most optimal foundation for successful implementation of the program, it will be imperative that the investments recognize the importance of inclusion of all the human capital that exists locally, nationally and regionally. This approach recognizes the important roles women play in generating and sustaining change. Women play a prominent role in the productive use and management water and marine resources. Therefore, gender issues and mainstreaming of gender considerations into all processes and investments will be required.

[224] WHO 2021: Typhoid Fever https://www.who.int/ith/diseases/typhoidfever/en/
[225] Sherman K, 1991: The Large Marine Ecosystem Concept: Research and Management Strategy for Living Marine Resources. Ecological Applications Vol. 1, No. 4 (Nov., 1991), pp. 350-360
[226] GEF STAP 2016: a conceptual framework for governing and managing key flows in a source-to-sea continiuum - A summary and policy recommendations for the GEF Partnership. 1GEF/STAP/C.50/Inf.05/Rev.01

Objectives, Key Interventions, and Selection Criteria

204. The Objective of this Integrated Program is to address hypoxic zones by curbing coastal pollution from agricultural, industrial and municipal sources through infrastructure investments combined with NbS. By limiting inflow of untreated wastewater into the coastal zone, the coastal ecosystem will become richer in biodiversity, which will lead to expansion of the local livelihood opportunities, as coastal ecosystem integrity and resilience increases. The potential of deploying NbS for wastewater treatment will provide entry points for local anchoring, engagement and economic opportunities. In order to ensure local uptake, it is important that local stakeholders and community leaders feel a responsibility for the success of the investments. *The above-mentioned system transformation* will only happen if the impacts of successful implementation and management is perceived as directly contributing to a local sustainable blue economy.

205. Addressing this global challenge through an IP will deliver a range of impacts that single investments would not be able to achieve. Among these are:

1) A concerted effort on industrial, municipal and agricultural runoff into the coastal zone, will renew the global attention to the topic. There has, over the last years, been a tendency to merely associate coastal pollution with plastic debris, which is a more visible problem. While marine litter is clearly an important challenge, it is essential that the local, national and global discourse also includes the less visible marine pollution sources, if we are to secure local economic opportunities and human health.
2) Inform and incentivize national coordinated policy formulation process that will link policy reforms with needed financing and implementation on the ground.
3) Integration at different scales, including regionally between countries, nationally through inter-ministerial committees, public and private entities as well as through communities of practice on specific technical or innovative approaches.
4) Leveraging of substantial infrastructure funding and technical skills. By addressing this issue through an IP, the IP will stimulate and inform investment portfolios nationally as well as with IFIs. Previous investment portfolios in GEF that have targeted agricultural and municipal pollution, have been able to generate substantial co-financing. It is believed that this IP will generate considerable co-financing too.
5) The IP will support a global coordination function that will strengthen the national, regional and global resource base. This will be done through facilitating knowledge management and sharing lessons learned between national and global stakeholders. Furthermore, the global coordination efforts will also include development of “how to” guides, that will focus either on policy formulation or on different technical solutions as well as ecosystem health indicators to be able to measure the impact of the interventions and tabulate these at program level.

206. Stopping inflow from the agricultural and municipal sectors into the ocean, should be done through a combination of upstream infrastructure investments and adjustments to management practices in both sectors, combined with policy formulation to support these measures. One of the central pathways towards succeeding in anchoring larger structural investments to local livelihood can be realized by supporting a range of different Nature-based Solutions. Such approaches offer long-term economic savings for local and national authorities compared to relying strictly on grey infrastructure and important entry points for supporting local sustainable ocean-based economic development in the coastal zone. Further, if managed and cleaned properly, wastewater from the agricultural and municipal sector can be reused directly for irrigation, aquifer recharging etc.

207. Below are a few examples on possible interventions that may be considered under this IP. Please note this list is not exhaustive, but merely included to provide some indication of what the IP may entail:

Governance and policies

- Inform policy formulation to support implementation of NbS wastewater treatment solutions, through collection, management and use of data on water quality to be able to track pollutants and their origination
- Incentivize management strategies such as implementing riparian buffers to curb nutrient pollution from agricultural sources;

Financial leverage

- Funding of low-cost, decentralized and centralized innovative Nature-based Solutions in coastal areas, to increase flexibility and ability to act.
- Funding Nature-based Solutions to be combined with new or existing grey wastewater infrastructure for secondary or tertiary treatment of industrial, municipal effluents and agricultural non-point/point run-off;

Innovation

- Testing of innovative nutrient recycling tools and modalities;
- Testing of zero or low energy input NbS, to increase deployment in off-grid and remote settings
- Catalyze deployment of decentralized NbS wastewater treatment systems, such as constructed wetlands, activated sludge systems, sand and other filter systems;
- Development of innovative solutions to curb different sources of wastewater

Multi-stakeholder dialogue

- Ensure coastal pollution efforts are coordinated between municipalities and between countries, to avoid efforts being diluted by lack of action of others

- Inform global discourse on the multifaceted impacts from untreated wastewater and agricultural run-off into coastal zone and the ocean

208. A major barrier to improved wastewater management is the low levels of public political attention and therefore public investment. As a natural effect of the current pandemic, the need for improved wastewater management globally is crystal clear. Utilizing the renewed attention this IP will bring, to direct investments in flexible, functional wastewater treatment systems, will lead to transformational environmental status changes. These changes will benefit human and ocean health, and lead to positive shifts in the health and sustainability of rivers, landscapes, aquifers and thereby ensuring that infection of potable water sources will be minimized too. This approach will facilitate political coordination and planning, and foster joint efforts of collaboration between the environmental health agencies.

209. The proposed integrated program will link directly to the International Waters Focal area, where the IP investments will be supported through activities in both Objective 1 and Objective 3. Furthermore, this program will have clear linkages to investments, BD, LD, CC and CW Focal areas. The increased focus on reforms and investments addressing wastewater issues will directly and indirectly deliver towards CW targets.

210. Further, the IP will also have clear connections with following Integrated Programs; Food Systems, Sustainable Cities, Circular Solutions to Plastic Pollution, Blue and Green Islands, and Ecosystem Restoration.

Existing Platforms and Potential Partners

211. The Clean and Healthy Ocean Integrated Program will offer a unique entry point for the GEF and its partners to leverage substantial financing from IFIs, pension funds and private banking operations. On top of these financial actors, there are a number of NGO, CSO, and private sector able to support knowledge generation through its investments. A substantially financed IP, like this one, will be essential in raising the importance of proper wastewater treatment in the global discourse. Finally, there may be good opportunities for partnering and leveraging lessons learned through the Global Wastewater Initiative (GW^2I), The International Water Association (IWA) and Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA), Horizon 2020 and the partners around the Sustainable Blue Economy Finance Principles. Finally, this IP is expected to contribute to implementing recommendations of the High Level Panel for a Sustainable Ocean Economy and to coordinate with and report to the high level panel, as relevant.

Contributions of this Program to MEAs and Related Global Environmental Benefits

212. All global and regional MEAs and many NDCs note the importance of a healthy and vibrant ocean ecosystem to ensure a healthy planet that will support humanity. Regional economic commissions, global and regional investment banks have dedicated large funding envelopes to address the devastating impact of wastewater and agricultural run-off into the ocean, due to the recognized impact on social, economic and cultural development opportunities in society. This IP will directly be aligning with and delivering towards the draft Post-2020 Global Biodiversity Framework target of reducing nutrients lost to the environment by at least half. Moreover the IP will be delivering against the UN Decade of Ocean Science for Sustainable Development, in particular to its ninth challenge of "beating and understanding marine pollution".

213. Curbing wastewater flow to the ocean, by cleaning it, will directly deliver against two GEF core indicators linked to the CBD and UNFCCC respectively, namely core indicator 5 and 6. Cleaning wastewater and thereby curbing inflow into the marine habitat will lead to "Area of marine habitat under improved practices to benefit biodiversity (million hectares; excluding protected areas)". However, it will be difficult to estimate a direct quantifiable number of HAs, that will have improved practices. The real impact will rather be measured through the sub-indicators 1) Number of Large Marine Ecosystems with reduced pollution and hypoxia and 2) Amount of Marine Litter Avoided. Further, untreated wastewater has a clear identified.

214. It is well-known that there is a direct connection between untreated wastewater and CO2 release. Therefore, preventing run-off from agriculture and cleaning wastewater from municipal and industry sources will directly cut the amount of released CH4 and N2O, which ultimately will deliver against Core Indicator 6 "Greenhouse Gas Emissions Mitigated (million metric tons of CO2e)". Again here a clear quantifiable target is very hard to set from the onset of the IP, as the composition and amount of wastewater will be essential to know in order to estimate the actual numeric impact. Finally, the IP may deliver against CW core targets, but again, this can only be established for each specific investment, when the composition of the wastewater is known.

Role of the Private Sector in Supporting this Program

215. The Clean and Healthy Ocean Integrated Program will offer multiple entry points for private sector actors, from financial institutions on testing new financial tools, over knowledge and solutions providers, to SMEs and large conglomerates for testing and deploying new technologies and innovations:

- Development and deployment of new financial tools and products to stimulate private sector banking and pension funds to invest in grey and green pollution reduction facilities. Wastewater is a resource and hence there are economic value associated with treating it through tariffs as well as selling some of the by-products at the end of the treatment process. Therefore, the suite of investments under this IP, will offer an outstanding opportunity to

showcase, at scale, different financial tools and products being utilized to support curbing pollution to the ocean ecosystem. The IP would among others draw on lessons from GEF investments such as the CREW and CREW+ and blue and green bonds modalities that currently are being developed and deployed globally;

- Stimulate innovation and technology development through e.g. moonshots and other innovation platforms among technology and solution providers from SMEs and large conglomerates; and,
- Through leveraging organizations like The International Water Association (IWA), Coalition for Private Investment in Conservation (CPIC), World Business Council for Sustainable Development and the CEO Water Mandate the IP will stimulate wastewater and agricultural runoff sector development, that directly will open engagement opportunities for private sector investors and service providers.

Net-Zero Nature-Positive Accelerator Integrated Program

Introduction

216. The pace of global climate action needs to accelerate substantially over the next decade if we are to avert the most catastrophic impacts for people and nature from an excessively heated planet. A dire warning came from the latest IPCC report released on February 28 of this year, calling for concerted efforts at both global and national level to coordinate actions on all fronts, including on technology, land use and conservation. According to IPCC, humanity still has a chance to avert less catastrophic path, provided action toward net-zero objectives is accelerated in the next 5 years by all actors in this space. While some climate impacts are destined to worsen, the amount that Earth ultimately warms is not yet written in stone if swift action is implemented. According to the report, humanity cannot afford to wait one more day to take action — otherwise we may miss the "brief and rapidly closing window of opportunity to secure a livable and sustainable future for all." In this context, the GEF is definitely well positioned to help accelerate action standing on three decades of experience in the provision of climate financing.

217. There is growing consensus among ecologists, engineers and managers that a combination of green and grey may be the best solution in many contexts.[227] This require a holistic and cross-sectoral approach, which is often hindered by fragmented or incoherent decision making structures and slowed down by mis-aligned incentives and subsidies.

218. Achieving net-zero objectives will require a whole-of-economy and whole-of-government strategy, across all sectors and actors. Rapid emissions decline from power generation, transportation and from the industrial sector, will have to be coupled with significant transformations in the way we manage land, forests, coastlines and wetlands, which currently account for about a quarter of global carbon emissions.

219. Such integrated approach needs to be built upon the growing evidence showing that the twin threats of global biodiversity loss and climate change are inextricably linked.[228] Projected climate change impacts on the terrestrial carbon sink are an epitome of the biodiversity-climate nexus: while terrestrial ecosystems currently mitigate around 30% of all anthropogenic emissions, the impact of increased temperature alone on biological processes could induce a near halving of the land sink strength by as early as 2040.[229]

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[227] Hernandez, Rebecca R., Alona Armstrong, Jennifer Burney, Greer Ryan, Kara Moore-O'Leary, Ibrahima Diédhiou, Steven M. Grodsky et al. "Techno–ecological synergies of solar energy for global sustainability." Nature Sustainability 2, no. 7 (2019): 560-568.

[228] Pörtner et al. (2021) IPBES-IPCC CO-SPONSORED WORKSHOP BIODIVERSITY AND CLIMATE CHANGE WORKSHOP REPORT.

[229] Duffy, Katharyn A., Christopher R. Schwalm, Vickery L. Arcus, George W. Koch, Liyin L. Liang, and Louis A. Schipper. "How close are we to the temperature tipping point of the terrestrial biosphere?." Science advances 7, no. 3 (2021): eaay1052.

220. Actions to conserve, sustainably manage and restore biodiversity play a significant role in mitigating climate change by increasing both natural carbon stocks and their resilience to disease, pests and climate extremes. At the same time, a considerable number of proposed targets for the post-2020 global biodiversity framework indeed risk being severely compromised due to climate change, even if other barriers to their achievement are removed.[230] As such, rapidly reducing anthropogenic greenhouse gas emissions is a fundamental contribution to protecting ecosystems and biodiversity.

221. With the urgency to tackle both threats toward achieving carbon neutral, nature positive, and reduced pollution economies, there is considerable scope and opportunity for harnessing synergies, and a strong need to minimize tradeoffs. Notwithstanding the wide range of benefits arising from limiting warming to well below 2 °C for all ecosystems and for the conservation of biodiversity, several prominent measures to achieve mitigation outcomes have indeed been identified to be detrimental to biodiversity conservation, as well as to the supply of several ecosystem services and human well-being.[231] These measures include technology-based solutions with large land footprint as well as agroforestry-based solutions involving large-scale growth of bioenergy crops or expansion of forest area with a heavy reliance on monocultures or low diversity plantations.[232] There is therefore a need to ensure that net-zero plans maximize synergies with biodiversity strategies, acknowledge the unavoidable trade-offs with nature and minimize them across broader spatial scales. This calls for an integrated approach that will foster a whole-of-economy approach as well as broad engagement across all sectors and stakeholders.

222. To put the global community on the path to net-zero emissions by around 2050, some studies suggest that, at a global level, tree cover gains would need to increase five times while deforestation would have to come to a complete halt by 2030.[233] Significant regeneration of organic content in soils will be necessary for agriculture productivity to keep up with rapid population growth and it will need to be coupled with substantial changes in dietary and consumption patterns. In the power sector, this will mean increasing the penetration of renewable energy six times by 2030 and phasing out unabated coal five times faster than it is currently happening.[234] In the built environment, all actors will need to step up decarbonization actions by a factor a five for the sector to align with net-zero targets by around 2050.[235] Further, in the transport

[230] Arneth, Almut, Yunne-Jai Shin, Paul Leadley, Carlo Rondinini, Elena Bukvareva, Melanie Kolb, Guy F. Midgley, Thierry Oberdorff, Ignacio Palomo, and Osamu Saito. "Post-2020 biodiversity targets need to embrace climate change." Proceedings of the National Academy of Sciences 117, no. 49 (2020): 30882-30891

[231] Pörtner et al. (2021) IPBES-IPCC CO-SPONSORED WORKSHOP BIODIVERSITY AND CLIMATE CHANGE WORKSHOP REPORT.

[232] Seddon, Nathalie, Alexandre Chausson, Pam Berry, Cécile AJ Girardin, Alison Smith, and Beth Turner. "Understanding the value and limits of nature-based solutions to climate change and other global challenges." *Philosophical Transactions of the Royal Society B* 375, no. 1794 (2020): 20190120

[233] WRI (2020), State of Climate Action: Assessing Progress toward 2030 and 2050.

[234] WRI (2020), State of Climate Action: Assessing Progress toward 2030 and 2050.

[235] United Nations Environment Programme (2020). 2020 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Nairobi.

sector, the rate of adoption of electric vehicles will need to increase twelve times compared to current global sales rates by 2030.[236]

223. Responding to the political momentum generated by COP26, more and more countries have adopted net-zero targets and incorporated them in either law, policy or political pledges. Countries will now need to roll out coherent strategies and operationalize investment pipelines that pursue deep decarbonization pathways. Conservation and sustainable use of biodiversity and nature-based solutions need to be an integral part of any viable decarbonization pathway, together and in coordination with technology-based approaches. In addition, technology-based approaches will need to be designed to ensure not only that negative impact on the environment are avoided, but also that design options with potential to result in nature-positive outcomes are prioritized.

224. The transition to a net-zero and nature-positive world is technically feasible and can bring substantial economic and development opportunities.[237,238] This effort should be multi-pronged, and encompass all actors in the climate finance space, including the GEF which arguably possess the longest and most comprehensive knowledge in the provision of climate finance for targeted action. Decarbonization of economies while protecting nature and reducing pollution offer significant opportunities for shaping healthy environments and can contribute substantially to the post-pandemic economic recovery, including by supporting the alignment of domestic stimulus packages and international climate finance flows to the principles of the *build back greener* agenda. In the short-term, economic recovery measures will likely focus on job creation and stimulating the economy, which if properly aligned with nature-positive decarbonization efforts, can lead to sustainable job creation and economic gains, while supporting greater stability in the long-term through the proper consideration of future climate change and transition-related risks.

The GEF-8 Integrated Program

225. The Net-Zero Nature-Positive Accelerator Integrated Program (NZNP Accelerator IP) will support countries to develop and implement integrated solutions to reach the long term goals of the Paris Agreement. Actions supported by this IP will include (i) investments in new technologies for sectors like energy and transportation, (ii) investments in sustainable land use and conservation actions and (iii) investments in nature-based solutions across all sectors. Taken together, these intervention can support the implementation of effective decarbonization strategies.

226. To align the climate change and biodiversity agendas, the Program will leverage existing and define new methodologies to support transformational changes towards net-zero and nature-

[236] WRI (2020), State of Climate Action: Assessing Progress toward 2030 and 2050.
[237] IDB and DDPLAC (2019). Getting to Net-Zero Emissions: Lessons from Latin America and the Caribbean. Inter-American Development Bank, Washington D.C
[238] For a description of the implications relative to the sourcing and management of technology-critical materials and elements which will be needed to implement net-zero roadmaps, please refer to a recent STAP paper: Ali, S. and Katima, J. 2020. Technology Critical Elements and their Relevance to the Global Environment Facility. A STAP Background Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

positive trajectories and will complement bottom-up processes with top-down support, contributing to raising the collective level of ambition of nature-aligned global climate efforts.

227. By advancing the integrated approach, the NZNP Accelerator IP will complement the bottom-up processes to develop and implement NDCs, with top-down actions that fully integrate biodiversity and land degradation neutrality in climate mitigation policies and investments. As a result, the IP will contribute to generate multiple global environmental benefits and generate practical lessons above and beyond those created by programming solely within the GEF Focal Areas.

228. This Program will promote an integrated, whole-of-economy approach to leverage synergies and align sectoral policies relevant for deep decarbonization efforts. Given the importance of maximising synergies and minimizing trade offs between the climate and biodiversity agendas, all child projects will be required to ensure that biodiversity and land degradation neutrality are fully integrated in the net-zero strategies developed and/or implemented through the Program.

229. Integration will take place at several levels. First, across sectors, as it will require a systems approach and the participation of all line ministries with a role to play for the decarbonization of the economy, including finance, environment, agriculture, fisheries and forestry, energy, transport, industry, mining, housing/planning, tourism, etc.

230. Second, action will take place across different value chains, providing an opportunity for seeking synergies with other GEF Focal Areas as well, notably Biodiversity and Land Degradation, but also Chemicals and Waste. For example, the program will promote nature-based solutions that incorporate diverse native species, avoid damaging ecosystems and respect social safeguards whenever such solutions are relevant. Interventions aimed at enhancing carbon sinks through jurisdictional approaches and conserving high carbon ecosystems will be systematically designed to provide co-benefits for land degradation neutrality and biodiversity.

231. The IP will also provide an efficient entry point to support the full integration of nature and biodiversity considerations in the energy and infrastructure sectors,[239] which often prove to be difficult to engage on the sole biodiversity agenda. The program will notably advance the development of mutually beneficial relationships between technological and ecological systems, e.g. in planning for solar energy expansion.[240] There is indeed growing consensus among

[239] CBD COP 14/3 - Mainstreaming of biodiversity in the energy and mining, infrastructure, manufacturing and processing sectors

[240] Hernandez, Rebecca R., Alona Armstrong, Jennifer Burney, Greer Ryan, Kara Moore-O'Leary, Ibrahima Diédhiou, Steven M. Grodsky et al. "Techno–ecological synergies of solar energy for global sustainability." Nature Sustainability 2, no. 7 (2019): 560-568.

ecologists, engineers and managers that the best solutions to address the threats from climate change and biodiversity loss should include a combination of green and grey approaches.[241]

232. Finally, integration will be sought across levels of governance, between national government priorities and international commitments, between national government plans and those of city or local governments, as well as across actors central to climate action, from the public sector, to the private sector and civil society.

Objectives, Key Interventions, and Selection Criteria

233. The overarching objective of the NZNP Accelerator IP is to accelerate implementation of nature positive, net-zero pathways by investing in nature and new technologies. The IP aims to push the ambition of national climate plans beyond the current levels and contribute to closing the gap that currently exist between the expected combined impacts of adopted national policies and the well-below 2 C degrees path enshrined in the Paris Agreement.[242] Building on the consideration that the climate change and biodiversity loss impact human societies in a deeply interlinked fashion, and that bold solutions are required that integrate environmental and societal objectives, the IP will support investments that fully reflect nature-positive climate strategies.

234. Accordingly, this IP will produce benefits for biodiversity and land degradation neutrality, as well as for climate. Furthermore, GEF resources channeled through the NZNP Accelerator IP will be relevant for tagging under the OECD-DAC Rio Markers for both climate change and biodiversity.

235. Specific objectives, depending on the country context and readiness, will include the following:

i. Support the adoption of net-zero strategies and policies that are coordinated with national biodiversity conservation and land degradation strategies and objectives.

ii. Contribute to the effective integration of the climate and biodiversity agendas at the national and global level.

iii. Invest in NZNP-aligned pipelines of projects that generate multiple global environmental benefits.

iv. Support the development of robust data systems to monitor progress towards NZNP targets.

[241] Arneth, Almut, Yunne-Jai Shin, Paul Leadley, Carlo Rondinini, Elena Bukvareva, Melanie Kolb, Guy F. Midgley, Thierry Oberdorff, Ignacio Palomo, and Osamu Saito. "Post-2020 biodiversity targets need to embrace climate change." Proceedings of the National Academy of Sciences 117, no. 49 (2020): 30882-30891

[242] UNFCCC, Nationally determined contributions under the Paris Agreement. Revised synthesis report by the secretariat. 25 October 2021, FCCC/PA/CMA/2021/8/Rev.1

236. Each national project will have a high-level upstream component and one or more downstream components. The high-level component will include the provision of support for establishing cross-ministerial coordination processes for the development of NZNP long-term strategies, and activities needed to translate long-term strategies into enforceable domestic policies. Such policies would have to consider short- and medium-term actions, synergies and tradeoffs taking an economy-wide approach to decarbonizing development, fully integrating nature-positive considerations, minimizing the potential for stranded assets and allowing for a just transition for affected communities, lifting market and regulatory barriers, and unlocking transformational investments.

237. The high-level component would ensure coordination and full coherence with the strategies and plans developed to implement the post-2020 global biodiversity framework. It would notably critically assess which mitigation measures to prioritize in order to halt and reverse biodiversity loss, and clearly identify the contributions that nature can make to climate change mitigation.

238. To allow for monitoring of the progress achieved, the Program will also support the establishment of credible data collection systems, in coordination with other relevant initiatives, including the CBIT, building off and integrating with existing systems. A baseline assessment to be conducted early during the design of national child projects will allow the program to build on foundational work participating countries may have already conducted and to appropriately engage and leverage existing providers of knowledge and technical services.

239. Where needed and appropriate, the Program will support cost-benefit analyses of implementation options of net-zero nature-positive plans, in order to highlight the broad societal benefits of the systems transformation across emitting sectors. A clear understanding of the trade-offs and net socio-economic benefits linked to a nature-positive long-term deep decarbonization is crucial to generate support from economic and political stakeholders and ensure the sustainability of the adopted policy reform packages.

240. Policy coherence and elimination of subsidies to non-Paris aligned technologies or practices will be central to these efforts. This may include support for the econometric analyses of scenarios to reform fiscal spending and subsidies in the agriculture, energy and transport sectors, amongst others. In the context of the fiscal pressure and exacerbated debt constraints posed by COVID-19, unlocking of resources earmarked for unsustainable subsidies may generate fiscal space and allow for new strategic spending in nature and climate-compatible development. Leapfrogging policies, technologies and business models that have long-term potential to constitute sustainable solutions will be supported. Transition technologies, policies or approaches that do not fit well with the systemic transformations needed for a net-zero or nature-positive world will not be considered.

241. Institutional reforms that may be supported include fiscal, budgetary, financial, regulatory, organizational and governance reforms. Specific examples may include addressing fossil fuel

subsidies, taxing emissions, introducing carbon pricing measures, requiring disclosure of emissions data for publicly listed companies, setting up regulatory schemes to cut emissions, adopting green government procurement programs, mandating all infrastructure and urban projects to take into account lowest emissions and most nature-positive options, mandating building or factory permit applications to select lowest emissions alternatives. All proposed policy packages will have to consider their implications for nature, and options that ensure nature-positive outcomes will be prioritized.

Priority areas for targeted investments

242. This IP will support countries with specific investments that can significantly advance the achievement of net-zero targets, while ensuring that synergies are maximized and trade-offs minimized between climate and biodiversity conservation, while reducing pollution and waste, including chemicals controlled by the Stockholm Convention and Minamata Convention. The specific mix of investments to be financed at child project level will be determined based on national priorities and emission profiles, amongst priority sectors which may include the following ones:

243. Nature-based Solutions (NbS): The Program will support innovative interventions that encourage investments at scale to cost-effectively reduce emissions from, and enhance natural carbon sinks and their resilience in, forests, productive landscapes, wetlands and coastal ecosystems. Specific interventions may include reorienting policies, subsidies and public investments towards long-term conservation and maximization of carbon sinks, increasing awareness of the value of nature, mainstreaming NbS in national strategies and improving the enabling conditions that facilitate the participation of the private sector (including through market-based approaches and adequate pricing). Such interventions will be designed to ensure biodiversity benefits, and compatibility with water, food and health security. They will seek to further build policy coherence across these sectors.

244. Agriculture and food: The Program will support development of and investment in actions to support the alignment of the agricultural and food production sectors with the net-zero goals. In addition to increasing carbon sinks in agricultural land, this may include development of strategies and investments aimed at curbing non-CO2 emissions from Nitrogen-based fertilizers use or livestock operations, as well as the significant emissions embedded in losses along the food production value chain and food waste.[243] Investments in this sector can have a significant impact on advancing the nature-positive agenda, as they can reduce the pressure to convert more land to agricultural uses.

[243] Galford, Gillian L., Olivia Peña, Amanda K. Sullivan, Julie Nash, Noel Gurwick, Gillian Pirolli, Meryl Richards, Julianna White, and Eva Wollenberg. "Agricultural development addresses food loss and waste while reducing greenhouse gas emissions." *Science of The Total Environment* 699 (2020): 134318.

245. Energy systems: The Program will support pipeline interventions in the context of the energy sector net-zero plan, which may include integrated resource planning analyses to realign the sector with net-zero targets and incorporate climate resilience considerations. Innovative interventions aimed at accelerating the penetration rate of renewable energy on the power grid will be supported, such as energy storage and grid modernization solutions, as well as energy demand-side management and smart metering. Interventions in this sector will not only have to show no net biodiversity loss or land degradation, but also shown that options with the highest capacity to deliver co-benefits, including though the use of integrated techno-ecological solutions,[244] have been prioritized.

246. Built environments: The Program will support the development of standards and protocols to incentivize the development of zero-emission infrastructure in the context of urban development. Specifically, the Program will prioritize efforts to incentivize the use of low carbon construction materials, including bio-based materials to displace higher-emission materials, with the view to start tackling embodied carbon, as well as energy efficient district cooling and heating systems. Furthermore, building practices that integrate nature based solutions (such as green facades, use of urban tree cover to reduce urban heat, etc), promote biodiversity and reduce potential emissions from land use changes will be prioritized.

247. Industry and manufacturing: The Program will support interventions in the industry sector to support clean manufacturing of heavy and light commodities, shifting processes towards electricity/green hydrogen, substitution of zero carbon-intensive products, and incorporating a circular economy approach. Investments will target a broad range of sectors including steel, cement, aluminum, metals and mining (including informal-mining and mining for minerals and metals that support clean technologies), chemicals and plastics, and textile/apparel. This will provide additional opportunities for integration with the Chemicals and Waste Focal Area.

248. Mobility: The Program will support the development and implementation of integrated zero-carbon mobility plans at national and local level, which may include comprehensive avoid/reduce, shift and improve approaches (A-S-I). Program investments may include support for public transport infrastructure and electrification, including through green hydrogen options, and direct integration of renewable energy with charging infrastructure for electric vehicles. Investments in net-zero mobility will be screened to consider synergies and trade-offs with biodiversity conservations and land degradation targets, and that minimize potential emissions from land use change. Additional co-benefits for the Chemical and Waste Focal Area are expected through investments aimed at promoting the safe disposal and repurposing of batteries for electric vehicles.

[244] Hernandez, Rebecca R., Alona Armstrong, Jennifer Burney, Greer Ryan, Kara Moore-O'Leary, Ibrahima Diédhiou, Steven M. Grodsky et al. "Techno–ecological synergies of solar energy for global sustainability." *Nature Sustainability* 2, no. 7 (2019): 560-568.

Global Coordination and Knowledge

249. There is clear need to identify best practices and work with developing country champions as sector or system influencers and early adopters, setting global benchmarks and encouraging alignment by others. The global nature of the NZNP Accelerator IP will allow for methodologies, tools and lessons learned from national experiences to be captured and consolidated, contributing to the growing repository of global knowledge on how to design, plan and implement economy-wide net-zero and nature-positive strategies. In addition, consolidated global lessons and tools will be downscaled within and beyond participating countries to promote South-South cross pollination and accelerate the pace of systemic change.

250. Specific South-South exchanges and learning experiences will be facilitated and supported by the Program, including through partnerships with national and international providers of technical services already operating in this space. This may include trainings for public officials on specific aspects of sectoral and cross-sectoral decarbonization strategies, mainstreaming of biodiversity-related indicators in net-zero plans and climate mitigation policies, and the development of international "zero-carbon origin" certification schemes for carbon-intensive commodities such as cement, steel and aluminum, as well as for green hydrogen.

Selection Criteria

251. Selection criteria for national project proposals would include:

i. Commitment to long term deep decarbonization action consistent with the ultimate objectives of the Paris Agreement. Several aspects will be considered to assess this, including for instance whether the country has (in order of priority): (i) adopted an NDC that is aligned with a net-zero path to be reached around 2050; (ii) adopted an around 2050 net-zero target or long-term strategy (outside the NDC); and/or (iii) made commitments or announced intention to adopt a net-zero target/LTS at highest levels of political representation.

ii. Potential of the proposal to effectively integrate nature-positive practices and approaches, including biodiversity and land restoration, into climate mitigation and net-zero plans, thus generating multiple global environmental benefits.

iii. Willingness to engage at the highest level of policy decision-making and direct participation in the project governance of multiple ministries relevant to long-term planning for nature-positive net-zero goals.

iv. Potential of the proposal to engage with and mobilize private sector actors and investments at scale for the downstream components of each national project.

v. Commitment to ensure a broad national stakeholder consultation to ensure wide acceptance and sustainability of the proposed interventions including the impacts on women and girls.

vi. Consideration of measures to promote behavioral change compatible with nature-positive net-zero goals, including with respect to dietary and mobility habits, will also be encouraged.

Existing Platforms and Potential Partners

252. The growing awareness around the need to reach net-zero emissions by mid-century has sparked action and brought together actors from both the public and private sectors. Key initiatives and potential partners this program will aim to engage and coordinate with include:

253. The World Economic Forum (WEF) and the World Business Council for Sustainable Development (WBCSD), which have established the Natural Climate Solutions Alliance to identify options to increase financing in natural climate solutions.

254. The UN Race to Zero Campaign, whose additional commitments and announcements from COP 26 can strengthen and amplify success stories in GEF countries, and support the replication of successful experiences.[245]

255. The Deep Decarbonization Pathways Initiative (DDPi), funded with support from Germany, and the Institute for Sustainable Development and International Relations (IDDRI) who have developed methodologies which can be adapted to the extent possible to the local circumstances of participating countries.[246]

256. The World Bank's Climate Support Facility, which in December 2020 launched a Green Recovery Initiative (GRI), aimed at supporting countries advancing a low-carbon and climate-resilient recovery from COVID-19.

257. The Inter-American Development Bank (IDB), which has worked on the decarbonization strategy for Costa Rica and has also partnered with the DDPi on the decarbonization pathways for Latin America and the Caribbean (DDPLAC) project, co-financed by the Agence Française de Développement (AFD).[247]

258. The United Nation Development Programme (UNDP), which has experience in supporting the preparation of NDCs and LTSs through the "Climate Promise" initiative, and the "NDC Support Programme."

[245] https://unfccc.int/climate-action/race-to-zero-campaign

[246] Climate Works Australia (2020), Growth Through Transformation: an Investment Vision Guide for Climate and Development.

[247] IDB and DDPLAC (2019). Getting to Net-Zero Emissions: Lessons from Latin America and the Caribbean. Inter-American Development Bank, Washington D.C

259. The United Nation Environment Programme (UNEP), which as part of its Emission Gap Report, tracks country net-zero target setting, and hosts net-zero alliances on banking, asset ownership and insurance.

260. The International Renewable Energy Agency (IRENA), which hosts the Long-Term Scenario for Energy Transitions campaign that "aims to promote the wider adoption and improved use of long-term model-based energy scenarios to support and accelerate the energy transition among Clean Energy Ministerial (CEM) countries."

261. Additional potential partners could include, inter alia, the Coalition of Finance Ministers for Climate Action, the International Energy Agency (IEA), the 2050 Pathways Platform, the NDC Partnership, the Climate Policy Initiative (CPI), the UNFCCC Technology Mechanism, other Multilateral Development Banks, UNEP, UNIDO, WRI, SE4All, LEDS Global Partnership and the Rocky Mountain Institute (RMI).

Contributions of this Program to MEAs and Related Global Environmental Benefits

262. UNFCCC: The NZNP Accelerator IP responds directly to the need to speed up the pace of decarbonization efforts and is directly linked to the ultimate goal of the Paris Agreement.

263. UNCBD and UNCCD: The NZNP Accelerator IP is specifically designed to fully incorporate biodiversity and land degradation goals into climate mitigation and net-zero planning and investments. The IP would notably contribute to coordination and coherence between the strategies and plans developed to implement the Paris Agreement and the post-2020 global biodiversity framework. It is expected to generate GEBs towards biodiversity and land degradation focal area targets as it will support activities aimed at preserving and enhancing resilient carbon sinks in natural ecosystems.

264. Stockholm and Minamata Conventions: the NZNP Accelerator IP will create opportunities to achieve multiple goals of the Stockholm Convention on persistent organic pollutants (POPs) and the Minamata Convention. Particular attention will be given to the sourcing, use and recycling of components of batteries used for chemical energy storage and ensuring they are managed on accordance with relevant Basel Convention guidelines for management of hazardous waste.

265. SDGs: The NZNP Accelerator IP is fully aligned with several SDGs, including: SDG13 on climate action and SGD7 on sustainable energy. It is also well aligned with SDG11 on sustainable cities, SDG15 on life on land, and SDG12 responsible consumption and production.

Role of the Private Sector in Supporting this Program

266. At global level, the Program will leverage existing and establish new coordination arrangements for the private sector to provide practical inputs to the Program's long-term decarbonization and nature-positive alignment toolkits. The toolkits will house examples of

successful policies and actions being implemented worldwide to achieve deep decarbonization while mainstreaming biodiversity and land degradation neutrality planning worldwide. At national level, participation of the private sector will be essential both as input providers in the preparation of national decarbonization plans and of the specific implementation policies, as well as providers of nature-positive climate-related solutions and finance. It is expected that the Program will also support countries in their engagement with private sector actors to estimate the potential of long term decarbonization policies to generate well-paying green jobs and to highlight and prioritize measure to minimize short-term unintended impacts on employment.

267. The Program will work closely with private sector coalitions and organizations to galvanize private sector engagement and further increase likelihood of adoption of private sector commitments to nature-positive net-zero targets. To do this, The Program will maintain close coordination with the World Economic Forum (WEF), the World Business Council for Sustainable Development (WBCSD), the Science Based Targets Initiative (SBTi), and the Carbon Disclosure Project (CDP), along with additional private sector partners.

Wildlife Conservation for Development Integrated Program

Introduction

268. The COVID-19 pandemic has highlighted the interconnectedness of people and nature via zoonotic disease spillover; shown us the vulnerability of economies and protected areas dependent on international tourism market; and made obvious the value of diversification, resilience and an integrated approach that takes into account the health of ecosystems, health of wildlife, livestock, and well-being of people. The Red List Index shows that there has been no reduction in the rate at which species are moving towards extinctions as a result of human impacts, including growing threats to species and the Key Biodiversity Areas and wider landscapes and seascapes they depend upon.[248]

269. A complex set of drivers including land/sea use changes, climate change, overexploitation of resources, pollution and invasive alien species are behind these declines. Although there are regional and sub-regional differences, the overexploitation of wildlife and destruction of habitat is driven by: illegal and unsustainable consumption and trade of wildlife, both at the domestic and international level, and the underlying demand for wildlife and wildlife products; undervaluation of natural resources and perverse incentives; lack of viable economic alternatives; and poor natural resource governance at the local, national and global scales. Despite some recent progress,[249] wildlife crime continues to be a lucrative global business, with high demand driving high prices, and with low risk of apprehension. Nearly 6,000 species of fauna and flora have been seized between 1999 and 2018, with nearly every country in the world playing a role in the illegal wildlife trade.[250]

270. Travel and other pandemic-related restrictions have led to the collapse of the nature-based tourism market with social, economic and ecological impacts. The tourism sector is a major source of employment, revenue and foreign exchange, and projected declines of 58% to 78% put at risk 100 to 120 million direct tourism jobs. In Africa over a third of all direct tourism in 2018 was attributable to wildlife. Loss of this tourism has resulted in mixed impacts with reported increases

[248] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental. Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany. 56 pages. And Sustainable Development Goals Report, UN 2019.

[249] Elephant poaching in Africa has fallen to the lowest levels since 2003: See https://cites.org/eng/CITES_MIKE_elephants_PIKE_report_poaching_lower2003_1112021

[250] UNODC, World Wildlife Crime Report 2020: Trafficking in Protected Species.

in wildlife crime but also some declines where lockdowns have reduced transportation.[251]

271. Although the loss of wildlife and habitat is persisting and worsening by most measures, the news is not all bad. A decade ago the illegal killing of African elephants and rhinos gained global public recognition as a crisis due to dramatic uptick in the poaching, international trafficking and consumption of ivory and rhino horn. Since then, there has been significant public and private investment in wildlife and habitat conservation (approximately $261 million of international donor funding per year in tackling illegal wildlife trade in Africa and Asia alone),[252] increased political will[253] and accountability, the advent of creative financing options applied to wildlife conservation,[254] a significant drop in rhino horn and ivory prices,[255] domestic bans on rhino horn and ivory trade, and an increasing understanding of the potential impacts of policy measures on wildlife consumption on livelihoods (including for IPLCs), food security and biodiversity[256,257] and the need for nuanced, risk-based, context-specific actions.

272. Although we are still gauging what the pandemic shock has meant for key indicators of wildlife and landscapes, the GEF-6 & 7 investments through the Global Wildlife Program have been essential in these positive signs, buffering wildlife, ecosystems and the people they depend on from even graver impacts and preparing a greener recovery through collective action at the national, regional and global levels. The GEF-8 WCD IP will build on this strong foundation.

GEF-8 Integrated Program

273. The GEF-8 Wildlife Conservation for Development Integrated Program (WCD IP) will work across the human health-wildlife health nexus as the only GEF-8 IP to explicitly address this critical element of the *Healthy Planet, Healthy People* (HPHP) framework. The IP is designed to achieve results across multiple sectors including in the conservation of globally important biodiversity (species and landscape conservation and sustainable use); land degradation (restoration of key wildlife habitats); climate change (GHG avoidance through habitat

[251] UNCTAD. (2020). COVID-19 and tourism. Assessing the economic consequences; World Tourism Organization. (2020). Impact assessment of the COVID-19 outbreak on international tourism. May 2020. Shaban, R.Z., Sotomayor-Castillo, C. F., Malik, J. and Li, C. (2020). Global commercial passenger airlines and travel health information regarding infection control and the prevention of infectious disease: What's in a website? *Travel Medicine and Infectious Disease 33*: 101528; Tatem, A. J., Hay, S. I. and Rogers, D. J. (2006). Global traffic and disease vector dispersal. *Proceedings of the National Academy of Sciences 103*: 6242–6247; European Commission. (2020). Spotlight on COVID-19 and Africa's protected area tourism. Spenceley, A. (2020). Presentation to GEF Task Force on post-COVID action. 1 September, 2020.

[252] World Bank Analysis of International Funding to Tackle Illegal Wildlife Trade 2016.

[253] London Conference on the Illegal Wildlife Trade (2014 and 2018) and London Declaration with follow-up summits in Kasane (2015) and Hanoi (2016) with coinciding high level-statements.

[254] GEF support to Rhino and Wildlife bonds in GEF-5 and GEF-7.

[255] UNODC, World Wildlife Crime Report 2020: Trafficking in Protected Species.

[256] Possible negative consequences of a wildlife trade ban, Dilys Roe and Tien Ming Lee. Comment in Nature. 19 January 2021.

[257] Booth et al., Investigating the risks of removing wild meat from global food systems, Current Biology (2021).

conservation); and human-wildlife health (reduce risk of zoonotic spillover from wildlife into humans, livestock or domestic animals).

274. The IP will support countries to secure terrestrial, freshwater and marine wildlife[258] populations and key landscapes through an integrated approach to combat the illegal and high-risk[259] consumption and trade by addressing key elements of the supply chain (poaching, trafficking and demand); and it will support strategies for the coexistence of human and wildlife populations through landscape-level conservation and by managing human-wildlife conflict, while incorporating a new focus on zoonotic spillover risk reduction by promoting control and proper regulation of wildlife trade and unsustainable wildlife exploitation for non-trade purposes.

275. Building on the significant progress made through the GWP in GEF-6 and GEF-7, the WCD IP will make important contributions by taking a HPHP approach, considering the interconnectedness of ecosystem, wildlife and human health to deliver multiple benefits, by addressing multiple drivers of the loss of wildlife and wildlife habitats. The national actions will be supported by strategic actions, interdisciplinary partnerships and sound analytics and knowledge management at the global level with regional level coordination and engagement. This will result in increased ecological connectivity and integrity of wildlife landscapes; increased wildlife populations; reduced risk of zoonotic spillover; and increased sustainable benefits from wildlife and landscapes.

Objectives, Key Interventions, and Selection Criteria

276. The objective of the WCD IP is to conserve wildlife and landscapes by transforming the drivers of species loss and ensuring that countries and communities are benefiting from these natural assets. Achieving this requires an approach with both global and national dimensions, with regional coordination and engagement.

277. The IP will include targeted activities in areas that national projects have a challenging time addressing, such as: i) international trafficking and transboundary issues; ii) behavior change for reducing consumer demand for illegal or unsustainable wildlife (prioritizing high-zoonotic risk and nationally and internationally illegally traded and consumed wildlife); iii) support for One Health approaches to reducing zoonotic spillover risks; and iv) global and regional donor coordination and knowledge management, with emphasis in South-South collaboration. The three WCD IP components for national projects will work together and investments in each reinforce one another with support of a global platform and targeted regional coordination and engagement, taking into consideration compliance with international obligations.

[258] Includes marine, freshwater and terrestrial wildlife, excludes IUU fishing and timber. Note that sustainably harvested NTFPs can be included in Wildlife-based Economies and Sustainable Diversified Livelihoods activities.
[259] High-risk from a zoonotic transmission perspective, could be legal or illegally traded wildlife species.

278. The first component, *Human Wildlife Coexistence*, will support countries to conserve the extent, integrity and connectivity of key wildlife landscapes, including protected areas, ecological corridors, areas managed by IPLCs, and OECMs.; deploy actions and policies to reduce zoonotic spillover from wildlife to humans and livestock; with complementary activities that avoid and mitigate human wildlife conflict, including sustainable measures to reduce habitat fragmentation and wildlife-livestock contact to further reduce zoonotic risk. Potential activities under this component include: protected area management; integrated landscape management and restoration of ecological connectivity; community-based management including efforts to increase security of local resource access, rights and land tenure; monitoring high-zoonotic risk wildlife and ecosystems; education and behavior change; actions to reduce high-risk wildlife encounters; innovative agricultural (including livestock) approaches; wildlife damage insurance options; and measures to increase sustainability and decrease health risk of legal, local wildlife trade and consumption, including bushmeat.

279. The second component, combating *Illegal and High-Risk Wildlife Trade* takes a supply-chain approach to curbing poaching, disrupting trafficking, and reducing demand for illegal, unsustainable and high zoonotic-risk wildlife within and between countries. This builds directly on significant GWP advances in this area to more broadly address the threat that illegal wildlife trade poses to a wide range of species and to human health. Potential activities under this component include: i) site-based anti-poaching; ii) community-based-monitoring and engagement; iii) reform and enforcement of national wildlife-related laws and policies;[260] iv) mainstreaming wildlife into law enforcement and prosecution; v) information and intelligence and enforcement coordination within and between countries; vi) application of tools and technology; vii) cutting-edge analytics to help invest to reduce risks of emerging infectious diseases; viii) capacity building and technical assistance; and ix) social and behavior change communications.

280. The third component *Wildlife for Prosperity* strives to ensure that local communities and governments value, invest-in and benefit from wildlife and habitat conservation including the recovery of nature-based tourism, landscape restoration and diversification of sustainable livelihoods and private sector engagement for building sustainable wildlife based economies and to better ensure that the harvest and use of wildlife, when occurring is legal and sustainable. Potential activities under this component include: i) diversified enterprise development; ii) job generation in sustainable livelihood activities, iii) public-private partnerships (enterprises, concessions, technology, etc); iv) nature-based tourism recovery; v) enabling policy environment including increasing and clarifying community and IPLC rights to manage and use resources; and vi) innovative financing and insurance products.

281. The WCD IP will support this transformation through a global platform, incorporating and building on GWP-6/7 Global Coordination grants to bolster, support and supplement national

[260] Including sanitary regulations for trade and consumption of wildlife products with direct wildlife conservation benefit.

projects focused on Components 1-3. The global platform will provide: i) targeted support to national projects on behavioral and social science approaches; ii) engage and form interdisciplinary partnerships to support wildlife conservation and human health; iii) knowledge management and learning, including application of innovative and appropriate technology; iv) capacity building to increase technical capabilities and strengthen local institutions; v) critical analytics and natural capital assessments; vi) monitoring and evaluation for the entire program; and vii) fostering stronger interagency, intersectoral, and regional collaboration including increasing transparency and data sharing.

282. WCD IP will consist of a set of national projects that will work across the IP components depending on the in-country conditions and national-priorities. The global platform will work at a global, regional or transnational level and include a set-aside grant window to support social and behavioral sciences approaches to demand reduction for internationally trafficked and high-risk species, noting that demand reduction behavior change efforts aimed at domestic markets should be mainstreamed through the approach of national projects as well.

283. The program will adopt a dual approach with a global project and country specific investments. It will build on the existing program governance structure of GEF-6 and GEF-7 with a clear value-added proposition to scale up impact in the GEF-8 period and beyond. The program will include the following criteria for financing: (i) Role of the country in supply chains of globally significant[261] wildlife species, including those that pose a high zoonotic risk;[262] (ii) Presence of high poaching risk at sites of global significant biodiversity; (iii) Increasing/emerging threat of illegal trade including shifting consumer demand; (iv) Potential benefits for conservation and livelihoods from wildlife-based economies; (v) Potential to cooperate with other countries to address threats to wildlife, habitats and ecological connectivity; (vi) Opportunity for strong multi-focal area, interventions producing multiple benefits while contributing to GEF focal area objectives; and(vii) Testing and scaling innovations for wildlife management, human wildlife conflict, sustainable livelihoods, wildlife monitoring, enforcement, and zoonotic surveillance etc.

284. The WCD IP investments will also emphasize the application of a gender-responsive approach covering the differential vulnerabilities and capacities of women and men, and gender differences and potential inequalities and opportunities for project impact, effectiveness and sustainability. Projects under WCD IP should include measures to improve the participation and decision-making of women in natural resource governance and target socio-economic benefits and services for women. Projects will also include gender analyses, using gender as part of the design

[261] Please reference the GEF-8 biodviersity focal area strategy for the definition of 'globally significant' biodiversity and footnoted references therein.

[262] Shivaprakash et all, 2021 Mammals, wildlife trade, and the next global pandemic, Current Biology, 31, 3671–3677, indicate that primates, ungulates, carnivores and bats are the major zoonotic reservoirs in wildlife trade, as these four groups alone harbor 132 of the 226 currently known zoonotic viruses, or 58% overall.

and development of wildlife management interventions, as well as during monitoring and evaluation.

285. This IP will be transformational given it will be bolstering a strong set of economic incentives for wildlife conservation, landscape-level conservation and management approaches that benefit both wildlife and livelihoods. Also this IP will be taking a systems-approach to strengthen institutions and create enabling environments that are critical to address wildlife conservation and drivers of IWT and unsustainable wildlife taking and consumption across target landscapes, rather than taking a narrowly-focused species approach to the issue.

Existing Platforms and Potential Partners

286. The Wildlife Conservation for Development IP will engage with various global and regional platforms and alliances to strengthen collaboration between wildlife related actors to address multifaceted environmental, social, economic and public health challenges facing wildlife conservation and sustainable management. In addition, working across a variety of land and resource rights regimes will mean engagement with IPLCs and institutions including indigenous associations, resource user groups, and conservancies, in addition to public and private sector entities. Under the GWP 6 and 7, the global coordination project has successfully established a coordination and knowledge platform (KP) that provides technical resources and enables the exchange of lessons learned to help project teams with the implementation of their activities on combating IWT and conserving wildlife and habitats and reducing demand.

287. The enormous global impacts of zoonotic disease pathogens (e.g Ebola, SARS, HIV) have propelled multi-stakeholder coalitions to expedite collaboration in order to fortify environmental services, biodiversity, and health. The pandemic has brought increased attention to zoonotic disease risk of wildlife trade and trafficking and represents an opportunity to engage with new partners such as The World Health Organization (WHO), and others to build new and strengthen existing partnerships through a *Healthy Planet, Healthy People* approach.

288. WCD IP will also strengthen existing and build new coalitions such as the strong coordination with the International Consortium on Combating Wildlife Crime (ICCWC).[263] This collaborative effort of five inter-governmental organizations working to bring coordinated support to the national wildlife law enforcement agencies and to the sub-regional and regional networks that act in defense of natural resources. The partner agencies to ICCWC are the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, INTERPOL, the United Nations Office on Drugs and Crime (UNODC), the World Bank and the World Customs Organization (WCO).

[263] https://cites.org/eng/prog/iccwc_new.php

Contributions of this Program to MEAs and Related Global Environmental Benefits

289. The WCD IP embodies an integrated approach to deliver global environment benefits across the GEF's focal areas and IPs, and MEAs in a more impactful and efficient manner. The program is structured to contribute directly to achieving the following action targets of the first draft of the *Global Biodiversity Framework*:

- Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict.
- Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.
- Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities.

290. Although the GEF is not the financial mechanism for CITES nor the Convention on Migratory Species (CMS), and thus will not directly support countries' CITES nor CMS implementation activities, this program will make meaningful contributions to addressing the drivers of illegal wildlife trade and overexploitation of wildlife and strengthening sustainability in the use of wildlife; and maintenance of ecological connectivity, and wildlife health.

291. The WCD IP will produce multiple GEBs for biodiversity, climate change mitigation and land degradation. Increasing integrity and connectivity of wildlife populations and landscapes and providing more diversified and resilient economies through generating value from wildlife and its habitats will reduce biodiversity loss and enhance human wellbeing. Alternative livelihoods can allow IPLCs to not only depend on agriculture but also on wildlife-based and other diversified sources of livelihood can help to reduce the stress of unsustainable agriculture practices, exploitation of resources from conservation areas and also contribute to restoration goals.

292. The WCD IP will include activities aimed at preserving and enhancing carbon sinks in natural ecosystems, including habitat restoration and agroforestry, and also strengthening the climate-resilience of IPLCs and target areas. Further, the WCD IP will directly contribute to

several other GEF IPs including: Ecosystem Restoration; Amazon, Congo and Critical Forest Biomes; Clean and Healthy Ocean; and Greening Transportation Infrastructure Development.

293. The WCD IP is fully aligned with several SDGs, including: SDG15 life on land, for which it provides direct solutions to protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss, and SGD13, which focuses on climate action. It is also well aligned with SDG3 on good health and well-being and SDG12 on life responsible consumption and production, through the program's activities for reducing risks of zoonotic spillovers and stimulating behavior change to reduce unsustainable wildlife consumption respectively.

Role of the Private Sector in Supporting this Program

294. Private sector engagement is essential to achieve the innovation and transformational change in wildlife conservation and sustainable livelihoods. GEF financing will incentivize actions by national governments to promote the tourism sector to develop and expand nature-based tourism opportunities and wildlife-based value chains to generate sustainable livelihood opportunities that reduce conflicts between communities and wildlife. The private sector can also play an important role in protected area management models and habitat restoration.

295. The travel, restaurant and retail sectors will be engaged to address the trade and consumption of illegal wildlife and wildlife products. Technology and IT companies will be engaged to support the development of innovative solutions that help address IWT, monitor zoonotic diseases, influence demand reduction and consumption of wildlife and wildlife products. With the goal of developing more flexibility and fostering innovation, more emphasis will be put on innovation/tech/development grants/prizes that allow for private sector engagement at all levels including for remote patrolling and surveillance technology solutions.

296. WCD IP will also explore opportunities to engage new investor groups/asset classes to support innovative financial solutions and work with the financial sector to curb wildlife trafficking. For the development of small and medium-sized enterprises (SMEs) there is also the possibility of blended finance or outside sources of concessional finance, and grant funding for technical assistance. The private sector commitments to biodiversity, climate change mitigation and adaptation, land restoration, social equity and NbS frameworks represent further opportunities for channeling resources to target protected areas/landscapes and diversified livelihood activities. The GEF's participation in relevant multi-stakeholder platforms and finance initiatives will be used to capitalize on these opportunities.

Greening Transportation Infrastructure Development Integrated Program

Introduction

297. Infrastructure development is essential to meet humanity's social and economic needs, including ramping up a global energy transition to meet net zero targets. This is especially true in developing economies where millions of people continue to lack access to basic services like water, energy, transportation, and telecommunications. It has been estimated that $95 trillion in new infrastructure is needed by 2040 alone to meet demand—twice what existed in 2012.[264,265] This much infrastructure development will have profound social and environmental consequences including biodiversity loss, deforestation and GHG emissions unless significant challenges in infrastructure planning and development are overcome.

298. Anticipated investments in transportation and energy sectors are expected to be particularly impactful. More than 25 million km of new roads are anticipated by 2050, 90% in developing countries.[266] New roads will drive further deforestation in the last remaining old-growth forests, increasing habitat fragmentation and loss of ecosystem connectivity while elevating risks for zoonotic disease spillover. Ninety-five percent of deforestation in the Amazon, for example, occurs within 5 km of a road.[267] Existing transportation infrastructure already has significant costs for people and wildlife with animal-vehicle collisions representing a leading source of mortality in many wildlife populations. Freshwater and coastal ecosystems fare no better, with hydropower dams already fragmenting 67% of long rivers. More than 3,700 dams are planned in the coming years and decades, reducing connectivity for aquatic species by as such as 40%. Already more than half of coastal wetlands have been lost as cities and infrastructure have expanded along coastlines.[268,269,270]

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[264] Oxford Economics. 2017. Global Infrastructure Outlook. Global Infrastructure Hub. https://www.oxfordeconomics.com/recent-releases/Global-Infrastructure-Outlook

[265] Bhattacharya, A., Oppenheim, J. & Stern, N. 2015. Driving Sustainable Development through Better Infrastructure: Key Elements of a Transformation Program. Brookings Institution, The New Climate Economy and Grantham Research Institute, Washington, DC, USA.

[266] Alamgir M., M.J. Campbell, S. Sloan, M. Goosem, G. R. Clements, M.I. Mahmoud, W. F. Laurance. 2017. Economic, Socio-Political and Environmental Risks of Road Development in the Tropics. Curr Biol. 27(20):R1130-R1140.

[267] Barber, C.P., M. A. Cochrane, C. M. Souza, W. F. Laurance. 2014. Roads, deforestation, and the mitigating effect of protected areas in the Amazon. Biological Conservation 177: 203-209

[268] Grill, G., B. Lehner, M. Thieme, B. Geenen, D. Tickner, F. Antonelli, S. Babu, P. Borrelli, L. Cheng, H. Crochetiere, H. Ehalt Macedo, R. Filgueiras, M. Goichot, J. Higgins, Z. Hogan, B. Lip, M. E. McClain, J. Meng, M. Mulligan, C. Nilsson, J. D. Olden, J. J. Opperman, P. Petry, C. Reidy Liermann, L. Sáenz, S. Salinas-Rodríguez, P. Schelle, R. J. P. Schmitt, J. Snider, F. Tan, K. Tockner, P. H. Valdujo, A. van Soesbergen, and C. Zarfl. 2019. Mapping the world's free-flowing rivers. Nature 569:215-221.

[269] Barbarossa, V., R. Schmitt, Mark. Huijbregts, C. Zarfl, H. King, and A. Schipper. 2020. Impacts of current and future large dams on the geographic range connectivity of freshwater fish worldwide. Proceedings of the National Academy of Sciences Feb 2020, 117: 3648-3655.

[270] Li, X., R. Bellerby, C. Craft, and S. Widney. 2018. Coastal wetland loss, consequences, and challenges for restoration. Anthr. Coasts 1, 1–15.

299. There are two important drivers of these impacts. First is the development of infrastructure based on an insufficiently holistic understanding of true investment risks and environmental costs and benefits. Recent definitions of 'sustainable' infrastructure have more clearly articulated a comprehensive approach across the full life cycle of a project to ensure economic and financial, social, environmental (including climate), and institutional sustainability.[271] In addition, private sector investors have shown an increasing interest in environment, social and governance (ESG) considerations. Yet consideration of the environmental factors in decision making remains uneven. Mitigating greenhouse gas emissions is getting increasing attention but nature: biodiversity, land degradation, water management and ecosystem services, remains the least integrated factor. One cited reason for this lag is that available key performance indicators are not readily translated into a quantifiable financial impact, leaving biodiversity and other impacts on the natural environment to be considered only during the latter due diligence stages of the process.[272]

300. Investors rely on environmental impact assessment and other institutional safeguards to try to limit environmental damage only, but these measures are applied too late. Employed on a project-by-project basis, they preclude community consultation at land/seascape scales upstream of detailed designs and financing arrangements, fail to consider systems-scale cumulative dynamics and impacts across sectors, make mitigation measures seem like costly add-ons, and do not promote nature gains. Project-level design also rarely sufficiently considers well-researched forecasts of future infrastructure service needs based on socioeconomic trends or climate scenarios.

301. Second, decision makers are not realizing the full potential of nature-based infrastructure solutions. While ecosystem services are increasingly valued, their benefits are rarely incorporated into infrastructure sector plans because current cost-benefit analysis standards and practices do not sufficiently consider the true negative costs of built assets or the positive benefits of these solutions. Nature-based infrastructure solutions are fundamentally disadvantaged compared to built infrastructure in both policy and practice, rarely classified as a comparable or substitute solution for service delivery due to the lack of guidance and engineering know-how.

302. These two overarching challenges in current infrastructure development practice are resulting in negative impacts on wildlife, forests, land, and climate, regardless of project-level sustainability. Simply stated, without significant change in this status quo, additional infrastructure development investment in the coming decades will make meeting the goals of the UNFCCC, CBD, and UNCCD impossible. Given the breadth of activity that infrastructure encompasses and considering the very direct impact on biodiversity and climate change that transportation infrastructure will exert, the GEF will focus this new integrated program on the transportation infrastructure sector.

[271] IDB. 2018. What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle.
[272] Oliver Wyman and WWF. 2020. Incorporating Sustainability into Infrastructure.

GEF-8 Integrated Program

303. This program will deliver Global Environmental Benefits by enabling countries to meet transportation infrastructure needs and the attendant economic and social benefits, critical to achieving the SDGs and Paris Agreement goals by 1) avoiding the placement of transportation infrastructure in globally important and particularly sensitive ecological areas, thus significantly reducing negative impacts to ecosystems from essential infrastructure development; 2) enabling countries to recognize ecological services that must be maintained to either serve infrastructure needs, such as free flowing rivers that enable multi-modal transport systems, or reduce risks to engineered infrastructure, such forested slopes that protect roads from landslides and erosion, and 3) striking a balance between investment in new transportation infrastructure and maintaining existing assets to meet sustainable infrastructure service delivery requirements.

304. The program will achieve this by improving planning, regulatory, financial, and institutional and management frameworks geared to the differential needs of countries and landscape specificities. Important criteria that will be considered as part of these frameworks include whole life costs, holistic investment, net-zero, resilience, flexibility, and multi-use design. These framework elements are essential for a well-operating transportation infrastructure industry and more importantly for embedding sustainability into infrastructure operations.

305. By redirecting the investment trajectory of some of the trillions of dollars aimed at transportation infrastructure development toward low and zero-carbon, efficient, and resilient options less harmful to biodiversity, the Impact Program will mobilize a new source of funding for conservation. Funds supporting new infrastructure options can serve to conserve significant blocks of intact habitat by avoiding negative transportation infrastructure encroachment and securing natural infrastructure services.

306. Shifting transportation infrastructure investment in this manner will positively impact the environmental quality of long stretches of rivers, mitigate and sequester millions of tons of CO2, and improve the status of millions of hectares of protected areas in line with an individual country's commitments to the CBD, UNFCCC, and SDGs. Key priority landscapes will be targeted for integrated planning approaches and investments to reduce habitat fragmentation caused by major transportation infrastructure development. The program's innovative approach is to support investments in integrated transportation systems that incorporate both sustainable engineered components and the conservation of ecological services that can serve either as infrastructure or to protect infrastructure against existing and future risks of climate change. Rather than seeing nature only as a due diligence issue, the program envisions nature as a significant and integral part of the infrastructure that countries need to achieve their development goals.

Objectives, Key Interventions, and Selection Criteria[273]

307. The objective of the program is to enable countries to develop portfolios of transportation infrastructure projects at national or land/seascape levels that build in sustainability from inception. The IP seeks to ensure that transportation infrastructure projects will emphasize the incremental biodiversity, avoided land degradation, and climate change mitigation benefits and outcomes that the IP aspires to achieve through, inter alia, (i) avoiding placing infrastructure in critical ecosystems (ii) biodiversity restoration around the right of way of a road, (iii) maintaining flows / connectivity for fluvial transport; (iv) maintaining or enhancing wildlife crossings or other natural infrastructure to increase connectivity and facilitate the movement of animals.

308. The program will enable countries to develop integrated approaches that identify and maintain critical ecosystem services that play a role in both meeting infrastructure needs and protecting or enhancing sustainably engineered transportation infrastructure. It is increasingly clear that more effective strategies will incorporate a combination of engineered and natural system management approaches.

309. With the accelerating pace of infrastructure investment, proven approaches to securing global environmental benefits while delivering infrastructure are needed. Efficiency benefits will accrue if multiple countries apply and share experience with such proven approaches. At the country and landscape/seascape scale, the program will simultaneously target three key areas:

a) Improve the policy enabling environment for decision-making and investing in the delivery of transportation infrastructure services through integrated and sustainably engineered approaches via:

    - Transparency and equity of participation requirements, including IPLCs, in planning and design under the principle of free, prior, informed consent.

    - Regulations requiring integrated planning for any/all infrastructure investments.

    - Procurement incentives to require incorporation of ecological services and to advantage sustainable, biodiversity-positive, transportation infrastructure solutions.

b) Strengthen integrated, multisectoral, and participatory upstream planning and design. The GEF will support countries to create and apply systems for multisectoral, stakeholder-based upstream planning to identify transportation infrastructure service needs at the national and sub-national landscape/seascape scale and over long-term horizons, along

[273] As the selection criteria for country participation is further refined, the IP will take note of the 10 guiding principles of the "International Good Practice Principles for Sustainable Infrastructure" as appropriate to the specific focus of the IP.

with priority areas of investment in nature to provide ecological services. Such information will be made available to sectoral ministries and project developers to establish a common understanding of key environmental parameters and drive down the costs of project-level analysis and risks of investing. Integrated assessments will cover:

- Current and future climate change impacts and risks.
- Spatial analysis and valuation of ecosystem services and biodiversity, including those delivering ecological services that could be threatened by transportation infrastructure or those that will be needed to secure the viability of future transportation infrastructure.
- Socioeconomic development needs and priorities based on population growth, energy transition needs and other relevant long-term socio-economic trends.
- Necessary technical design solutions including, for example, linear infrastructure adaptations that maintain ecosystem connectivity.

c) Enhance financing and de-risking mechanisms for delivery of sustainably engineered approaches to providing transportation infrastructure services. Building conservation considerations into infrastructure service delivery represents a massive and often unrecognized opportunity, but it requires considerable coordination among governments, companies, public and private financial institutions, and local stakeholders. The program will support the development of approaches to the allocation of infrastructure financing to complement existing infrastructure project preparation and project delivery vehicles and facilitate sustainable infrastructure investments by:

- Enhancing the development and standardization of biodiversity targets for transportation infrastructure.
- De-risking investment opportunities through the provision of catalytic first loss capital for early stage project development (e.g. pre-feasibility, feasibility studies).

310. At the global level, a platform will be created for information exchange and learning across participating countries. This will provide a means for optimizing the contributions of each project and associated partners, based on knowledge and experience gained. Coordination and reporting at the program level will also be handled through the platform. The program will compliment and explore synergies with other GEF programs that may not have the capacities and capabilities to address these challenges. Potential areas to be addressed through the knowledge management elements of the platform include the following, based on the experience and demand of participating countries:

- Assessing and promoting the true environmental costs of traditional transportation infrastructure and the value of integrated, multi-sectoral sustainable transportation

infrastructure planning and development, including solutions that secure and do not degrade ecological services provided by nature.

- Learning around the design of sustainable transportation infrastructure that is biodiversity-positive.
- Shared understanding of innovative approaches to facilitating the financing of sustainable infrastructure.

311. To maximize global environmental benefits, the program will focus on built transportation infrastructure likely to create the greatest harm—or nature-based infrastructure solutions with the greatest potential benefit—in areas of high biodiversity and potential for greenhouse gas emission reductions and/or contributions to climate resilience, and threat of land degradation, based on the latest global science. Priority infrastructure investments for attention under the program will include roads, rail, and ports. Interest is expected from countries that have:

- Desire and political will to apply the approach.
- Large-scale transportation infrastructure investment aspirations in the sub-sectors of greatest impact.
- Intact habitats providing high biodiversity and/or climate benefits.

Existing Platforms and Potential Partners

312. In the past two years key policy decisions by international platforms have sent powerful signals to the infrastructure community and provided incentives for catalyzing enabling environments for more sustainable infrastructure around the world.[274] Even though COVID-19 economic recovery plans may surface poorly designed infrastructure projects in response to stimulus demands, the recent G20 agreement on Quality Infrastructure Investment (QII) Principles and the European Union Taxonomy may put a brake on highly unsustainable options. Public and private sector investors are heeding these calls for the integration of environmental considerations, including ecosystems, biodiversity, and climate change mitigation and adaptation, in all infrastructure investments to meet national and international environmental goals.

[274] Two leading platforms are: 1) Climate Finance Leadership Initiative **(**CFLI) convenes leading investment and insurance companies to mobilize and scale private capital for climate solutions. The CFLI, in partnership with the Association of European Development Finance Institutions and the Global Infrastructure Facility is developing guidance on strengthening investment conditions for private climate finance in emerging markets, particularly in clean energy, sustainable urban transport, climate-smart water and waste, green buildings, and sustainable land use; and 2) Finance to Accelerate the Sustainable Transition – Infrastructure (FAST-Infra). FAST-Infra is a finance industry led, multi-stakeholder platform (also consisting of MDBs, academic and non-governmental organizations) charged with transforming sustainable infrastructure and scaling up private investment in sustainable infrastructure in emerging and developing countries.

313. Several platforms are emerging to help facilitate alignment across the infrastructure sector and expand attention to nature-based infrastructure solutions, including Finance to Accelerate the Sustainable Transition – Infrastructure (FAST-Infra), a private finance-led platform to facilitate sustainable infrastructure investing in developing and emerging markets, and the G20's Global Infrastructure Hub, supporting global sustainable infrastructure investing. They and others are in the process of honing the accountability frameworks needed to enable investors to demonstrate nature-positive and Paris Agreement-aligned outcomes. Coalitions such as the UNEP-hosted Sustainable Infrastructure Partnership (SIP), launched in 2018 with GEF funding, are supporting knowledge sharing and research to help clarify the actions needed to enable integrated approaches. The Coalition for Climate-Resilient Investment (CCRI) has brought together private companies, governments, inter-governmental bodies, and investment managers overseeing more than $10 trillion in assets to help ensure that infrastructure investments properly assess physical risks to existing and new infrastructure from climate change impacts. Likewise, Friends of Ecosystem Based Adaptation (FEBA) is a collective of 80+ organizations and agencies working jointly to share learning and knowledge to improve implementation of EbA and Nature-based Solutions.

314. However, while beginning to enhance sustainability in a range of infrastructure sectors or in relation to certain technical fields, these platforms do not address the entirety of the collective action failures outlined above. The GEF partnership is uniquely positioned to leverage the expertise within those GEF agencies with capabilities in this arena and to conduct comprehensive policy and investment program dialogues with GEF-eligible countries on infrastructure broadly, with a particular focus in GEF-8 on transportation infrastructure.

Contributions of this Program to MEAs and Related Global Environmental Benefits

315. This program will help deliver Global Environmental Benefits by a) avoiding or reducing negative impacts to ecosystems from transportation infrastructure development, and b) incentivizing conservation of healthy ecosystems by creating enabling conditions for biodiversity-positive transportation infrastructure solutions to be mainstreamed into national infrastructure portfolios.[275] Key contributions to generating Global Environmental Benefits will include:

- Biodiversity conservation through conservation of key habitats, maintenance of ecological connectivity, and reduction of negative impacts, including wildlife mortality from transportation infrastructure installations.

316. Nature-based planning would avoid placing built infrastructure in areas critical for maintaining biodiversity, and where avoidance is not entirely possible, ensure that critical habitats and ecosystem connectivity are maintained.

[275] Inter-American Development bank and Acclimatise. 2020. Increasing Infrastructure Resilience with Nature-based Solutions (NbS): A 12-step technical guidance document for project developers. Inter-American Development Bank, Washington, DC, USA.

- Reducing loss and degradation of forests, wetlands, deltas, rivers and other ecosystems caused by poor planning and siting of infrastructure.

317. Poorly planned infrastructure can drive environmental degradation through changes in land, ocean and water use and expansion into pristine habitats – contributing to declines in the health and well-being of humans, wildlife populations (including migratory species), and ecosystems. Roads are the principal cause of global terrestrial ecosystems fragmentation.[276]

- Reducing GHG emissions linked to land degradation and deforestation and unsustainable building materials and practices.

318. Existing infrastructure is associated with 60% of global greenhouse gas (GHG) emissions.[277] Eight percent of global greenhouse gas emissions are caused by the production of cement alone, a key input in construction.[278] By alleviating deforestation and land degradation, better planned built infrastructure will reduce associated GHG emissions, while also reducing the demand for built infrastructure and associated building materials.

319. The program will contribute to helping countries meet their commitments under multilateral environment agreements in a variety of ways, including:

- Achieving five of the 21 action targets (1, 8, 11, 14 and 15) set under the post-2020 Global Biodiversity Framework of the Convention of Biological Diversity, including CBD-relevant objectives of other biodiversity-related multilateral instruments/agreements;
- Contributing to agreed actions toward achieving land degradation neutrality under the UN Convention to Combat Desertification;[279] and
- Meeting UN Framework Convention on Climate Change ambitions for climate mitigation and adaptation expressed through Nationally Determined Contributions to the Paris Agreement.

Role of the Private Sector in Supporting this Program

320. Infrastructure investments for provision of public services generally follow from a government-led process that produces an associated plan, program, or policy. While financing is

[276] Ibisch, P.L., Monika T. Hoffmann, Stefan Kreft, Guy Pe'er, Vassiliki Kati, Lisa Biber-Freudenberger, Dominick A. DellaSala, Mariana M. Vale, Peter R. Hobson, Nuria Selva. 2016. A global map of roadless areas and their conservation status. Science 354, no. 6318: 1423–2.
[277] The Global Commission on the Economy and Climate. 2016. The sustainable infrastructure imperative: financing for better growth and development: key messages and executive summary, page 4. New Climate Economy.
[278] WWF Germany. 2019. Climate protection in the concrete and cement industry: Background and possible courses of action.
[279] United Nations Convention to Combat Desertification. Achieving Land Degradation Neutrality. https://www.unccd.int/actions/achieving-land-degradation-neutrality, accessed February 24, 2021.

mostly public, such infrastructure investments are increasingly implemented through public-private partnerships. The role of private sector financing for infrastructure is expanding, as such investments are increasingly seen by asset managers as a defined asset class alongside traditional fixed income investments.

321. There is specific private investor interest in supporting "sustainable infrastructure", as evidenced, for example, by the recent rapid growth of green bonds as an emerging financing instrument. Rising demand for sustainable investments means that private capital may be attracted to infrastructure investments that meet sustainability criteria, especially if these are coupled with government incentives such as access to environmental data, preferential financing terms for pro-nature and pro-climate infrastructure designs, or other enabling conditions.

322. Environmental bonds adhere to recognized norms, such as the Green Bond Principles or the Climate Bonds Initiative, but these do not require upstream multi-sectoral, stakeholder-based planning conducted at the stage when the overall aims of infrastructure investment plans, programs or policies are set. When applied properly to infrastructure design above the project level, such planning can identify opportunities to avoid or reverse biodiversity loss, land degradation, greenhouse gas emissions, or threats to human welfare from changes in environmental quality or reduced climate resiliency. Both governments and the private sector can ensure that infrastructure investments do not undermine the global environmental benefits provided by healthy ecosystems and can enhance them by drawing upon the services they provide as cost-effective alternatives to traditional built infrastructure.

Elimination of Hazardous Chemicals from Supply Chains Integrated Program

Introduction

323. Globally significant supply chains extend over national borders and have multiple environmental impacts across all focal areas of the GEF. These include plastics, electronics, fashion, textiles, construction, vehicles and food. The environmental damage and pollution from these supply chains have significant impacts on environmental and human health.[280]

324. Several of these supply chains, including construction and fashion have been at the forefront of recent work at the international level as there is growing evidence that they contribute to significant environmental degradation caused by use of hazardous chemicals, emissions of greenhouse gases and destruction of biodiversity and land degradation.[281,282,283]

325. Existing work to advance environmental sustainability in these supply chains focus primarily on climate change and increasingly on biodiversity. There is however little evidence that significant progress is made to integrate the elimination of hazardous chemicals and materials, particularly those controlled by the Stockholm and Minamata Conventions and relevant to Strategic Approach to International Chemicals Management and the Montreal Protocol that would be critical to facilitating circularity. The proposed IP seeks to address this need by focusing specifically on supply chains in the priority sectors including construction and fashion industry, among others.

326. The following section, using construction and fashion as examples, illustrates the features that demonstrate the multifaceted environmental impact of supply chains that could be addressed under this integrated program.

Construction

327. A UNEP report[284] highlights that most of the natural resource use and environmental impacts in the construction sector takes place at the material production stage, the construction stage, and the operation stage of the value chain. However, there is limited scope at these stages

[280] UN Environment Programme (2020). Sustainability and Circularity in the Textile Value Chain - Global Stocktaking. Nairobi, Kenya.
[281] Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development
[282] Box 4.4, pg. 116, Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)
[283] Kozlowski A, Bardecki M, Searcy C. Environmental Impacts in the Fashion Industry: A Lifecycle and Stakeholder Framework. Journal of Corporate Citizenship. 2012;(45):17-36
[284] United Nations Environment Programme (2021). Catalysing Science-based Policy action on Sustainable Consumption and Production – The value-chain approach & its application to food, construction and textiles. Nairobi.

to make the needed changes for several reasons, including the informality, fragmentation, complexity, and availability of options.

328. The report also points out that the most influential actors along the construction value chain are governments, international organizations, financial institutions, and major market players, who are primarily acting at the financing stage and the planning and design stage of the construction value chain. The key decisions made at these stages largely shape the activity along the rest of the value chain.

329. Sustainable construction materials will be critical to building the cities of the future and there is need to have available alternative materials that do not use or contribute to hazardous chemical build up, increase deforestation, or increase land degradation.

330. The construction sector is a major contributor to the emissions of mercury from the production of cement, the production of polyvinyl chloride (PVC), and non-ferrous metals production. The UNEP 2018 Global Mercury Assessment[285] places the cement industry as the third largest source of mercury emissions after artisanal and small-scale gold mining and coal fired power plants.

331. The construction industry drives the PVC sector which is expected to grow to nearly 60 million metric tons in 2025.[286] The manufacture of PVC emits dioxins and the manufacture of its precursor, vinyl chloride monomer is done, in some countries using a mercury catalyst. PVC is difficult to recycle and is often burned as a means of disposal, which emits dioxins. The construction sector uses POPs such as brominated flame retardants and short chain chlorinated paraffins (SCCPs) as well as paints, solvents, metals, cement, and timber. PVC[287] are widely used in PVC tubes, pipes, fittings, plastic PVC profiles, cables, etc. The construction sector accounts for 39% of global greenhouse gas (GHG) emissions.[288]

332. The sector also depends heavily on naturally sourced materials including timber which results in deforestation, land degradation, biodiversity loss and water and air pollution.

[285] UN Environment, 2019, Global Mercury Assessment 2018, UN Environment Programme, Chemicals and Health Branch Geneva, Switzerland

[286] Global PVC production volume 2018 & 2025, Published by Ian Tiseo, Jan 27, 2021

[287] Polyvinyl Chloride (PVC): 2021 World Market Outlook and Forecast up to 2030

[288] United Nations Environment Programme (2021). Catalyzing Science-based Policy action on Sustainable Consumption and Production – The value-chain approach & its application to food, construction, and textiles. Nairobi.

Fashion

333. The United Nations Alliance for Sustainable Fashion estimates that the industry accounts for 8% to 10% of the world's greenhouse gas emissions and 20% of the world's industrial wastewater.[289]

334. According to the World Economic Forum, in 2014, on average, people bought 60% more garments than they did in 2000 and clothing production has roughly doubled since 2000.

335. UNEP 2020[290] notes that over 8,000 chemicals are used in the various textile manufacturing processes including chemicals controlled by the Stockholm Convention. 750 were found to be hazardous to human health. 440 substances were found to be environmentally hazardous.[291]

336. In the luxury sector, the demand for responsibly produced ASGM gold is increasing and more effort to phase out mercury in this sector is needed.

337. UNEP, 2016[292] notes women make up 70% of the 3 million people employed in garment factories in Bangladesh, and Mexico and Cambodia. Women's jobs are in the "bottom tier" of textile production systems exposing them to the highest risks of occupational injuries and exposure to hazardous chemicals (UNEP, 2016).[293] Furthermore, women are particularly susceptible to the health risks from hazardous chemicals used in the wet processing of textiles (UNEP, 2016).[294] As a result, improvements in this sector will significantly reduce the harmful impacts of chemicals on women employed in this sector.

338. Hotspots in the textile value chain with regard to impacts on ecosystem quality are fibre production (cotton cultivation) and the wet processing stage of textile production (bleaching/dyeing and finishing).

GEF-8 Integrated Program

339. Supply chains that can be addressed in this IP, including fashion and construction supply chains, are characterized by their global scale; materials and products produced overall several and diverse geographic regions and countries; informality, fragmentation, complexity, and lack of availability of options for sustainable solutions.

[289] UN Alliance for Sustainable Fashion; Retrieved from https://unfashionalliance.org/
[290] UN Environment Programme (2020). Sustainability and Circularity in the Textile Supply chain - Global Stocktaking. Nairobi, Kenya.
[291] KEMI. 2014. Chemicals in Textiles. Risks to Human Health and the Environment.
[292] UNEP. 2016. Global Gender and Environment Outlook.
[293] UNEP. 2016. Global Gender and Environment Outlook.
[294] UNEP. 2016. Global Gender and Environment Outlook.

340. The most influential actors along complex supply chains are governments, international organisations, financial institutions, and major market players, who are primarily acting at the financing stage and the planning and design stage of the chains. The key decisions made at these stages largely shape the activity along the rest of the supply chain.

341. Existing work in complex supply chains largely focus on one issue at a time, such as energy efficiency in buildings, or water use in textile processing. This approach has resulted in improvements in those areas; however, actions are not holistic which can result in duplicating effort. This IP is aimed at accelerating the elimination of hazardous chemicals from supply chains through an integrated approach that generates multiple environmental benefits. Central to this IP is the notion of "materials as the convener".

342. For supply chains, including fashion and construction sectors, to become sustainable, circular approaches along with behavioral change of consumers and businesses combined with green and cleaner production will be required. To achieve this goal, eliminating hazardous chemicals and materials is critical to transforming these supply chains. The IP will also facilitate global coordination along these supply chains to ensure actions are coordinated.

Objectives, Key Interventions, and Selection Criteria

343. To have responsible supply chains there needs to be better design of the end products, access to suitable materials, and a well understood and defined supply chain. To accomplish this the program's objective is to prevent chemical pollution from the supply chains of priority sectors including fashion and construction, reduce greenhouse gas emissions, adopt more energy efficient technologies and practices, use Nature-based Solutions and contribute to biodiversity protection and conservation by influencing material choices and ensuring these materials are available and accessible. The program also seeks to create circular and closed loop supply chains through the following two interrelated and linked objectives:

Objective 1: Policy Coherence for the Management of Sustainable Supply Chains

344. The lack of transparency in the supply chains of materials is a major barrier for decision making by key actors along the supply chain including governments, and the private sector including the finance sector. Supporting harmonized regulatory systems, environmental standards and access to finance allow for more uniform management of supply chains to prevent release of hazardous chemicals, protection of biodiversity, reduction of land degradation, reduction of emissions of greenhouse gases and prevention of water pollution at all stages of the life cycle. This allows regulatory certainty that facilitates private sector innovation within a stable regulatory environment leading to the creation of green business to business (B2B) partnerships. Actions include inter alia:

- Mapping the supply chain to understand materials flows and points of contamination and reviewing effectiveness of existing legislation
- Harmonizing policy incentives to drive innovation across the supply chain and that support business to business partnerships and financial incentives.
- Green industry standards/guidelines and certification schemes on products and materials that build upon existing industry standards in accordance with related Conventions.
- Environmental reporting, including those related to hazardous chemicals in products and materials in accordance with related Conventions.
- Regenerative design of products and materials to advance environmental sustainability of materials and products and facilitate more closed loop and circular supply chains.
- Reverse logistics and supply chains to enable recovery of materials and products for reuse, thereby preventing them for building up in the environment.
- Green procurement to facilitate elimination of products and materials that contain or can contribute to the emission or releases of hazardous chemicals and a buildup of material that contains hazardous chemicals.

Objective 2: Green by Design

345. Ensuring there is responsible sourcing of materials and products within supply chains will be critical. The following areas can be supported:

- Green and sustainable chemistry, 3Rs (Reduce, Reuse and Recycle) circularity and Nature-based Solutions for redesign of materials and products used in the fashion industry.
- Agriculture practices that do not drive deforestation, exacerbate threats to wildlife, contribute to land and soil degradation, or use hazardous chemicals where possible.
- Efficient materials recovery from fashion products, including fiber recovery and materials recovery from buildings and another built environment.
- Designing out harmful materials including microplastics from supply chains.

346. The selection criteria for countries and supply chains to be relevant for this program will focus on:

- Countries that can demonstrate the large global environmental benefits for at least the Stockholm or Minamata Conventions.
- Supply chains that have the higher percentage of hazardous chemicals will be prioritized.

- Projects must at a minimum have global environmental benefits for chemicals and waste MEAs and meet multiple global environmental benefits under other MEAs including CBD, UNFCCC and UNCCD.
- Projects that can bring together the major private sector partners that are engaged in the supply chain or sub-supply chain.
- Projects that use regenerative design, implement reverse logistics and green procurement as a base component to transform the supply chains.
- Projects that can influence behavioral changes in consumer, private sector, and government to facilitate responsible sourcing of materials and products.

Existing Platforms and Potential Partners

347. The Elimination of Hazardous chemicals from Supply Chains IP will engage with various global and regional platforms initiatives and alliances to strengthen collaboration, cooperation, and coordination with them.

Fashion

348. In the Fashion sector the various platforms, initiatives and alliances can be grouped into four groups that align with the objective of green by design in this IP.

349. Better production and sourcing of materials – Several multi-stakeholder initiatives and national initiatives are ongoing in this area to increase the use of sustainable cotton internationally, bringing together international brands and retailers, sustainable cotton standards, existing industry initiatives and other stakeholders across the supply chain. Working with this group will facilitate access to best practices and lessons learned that can be further scaled through the work in the IP.

350. Product labels, certifications, benchmarks, pledges, and agreements – Certification and agreements plays an important role in creating transparency in the supply chain and facilitating responsible sourcing. Working with these platforms will allow for more broadly deploying the regulatory frameworks and policy environment to create harmonization across national jurisdictions so that traceability can be ensured from end to end. The Fashion Pact[295] and the Fashion Industry Charter for Climate Action[296] under the UNFCCC, work on climate change and biodiversity targets, while Bluesign[297] certifies textiles consumer products that are responsibly and sustainably manufactured include the use of chemicals.

[295] https://thefashionpact.org
[296] https://unfccc.int/climate- action/sectoral-engagement/global-climate- action-in-fashion/about-the-fashion-industry-charter-for-climate-action
[297] https://www.bluesign.com/en

351. Production of more sustainable materials –Existing work can be leveraged and further built and scaled across a wider range of geographies. The stakeholders engaged in this category work on reduction of chemicals, implementing clean and sustainable technology and increasing circularity. The Zero Discharge of Harmful Chemicals (ZDHC)[298] foundation, sets out a roadmap for eliminating hazardous chemicals from textiles. DyeCoo[299] is technology that provides waterless and chemical free textile processing and Repreve[300] which produces fibers for athletic and fashion apparel from recycled plastic bottles.

352. Platforms that are working specifically on sustainability in textiles - More well know platforms such as Clean by Design,[301] UN Alliance for Sustainable Fashion[302] and the Sustainable Apparel Coalition[303] will be necessary to leverage their large networks to identify both contributors and partners to the work in the IP.

Construction

353. For the construction sector the primary focus on sustainable building initiatives currently is based on climate change considerations.

354. Excellence in Design for Greater Efficiencies (EDGE)[304] which is an International Finance Corporation (IFC) certification program on green buildings. This can be further expanded to chemicals standards and hazard content of materials being used in buildings.

355. The World Green Building Council (WorldGBC)[305] is a global action network comprised of around 70 Green Building Councils globally that are working on transforming the building and construction sector. Working with these to expand to other countries and incorporate chemicals standards and hazard content of materials being used in buildings which allow for the switch to more circular building practices.

356. The Global Alliance for Buildings and Construction (Global ABC),[306] launched at the 21st Conference of Parties (COP21), is a voluntary partnership of national and local governments, inter-governmental organizations, businesses, associations, networks and think thanks committed to a common vision: A zero-emission, efficient and resilient buildings, and construction sector. The Global ABC network currently includes over 130 members, among which are 30 countries.

[298] https://www.roadmaptozero.com/?locale=en
[299] http://www.dyecoo.com/
[300] https://repreve.com/
[301] https://www.nrdc.org/resources/clean-design-apparel-manufacturing-and-pollution
[302] https://unfashionalliance.org/
[303] https://apparelcoalition.org/
[304] https://edgebuildings.com/
[305] https://www.worldgbc.org/
[306] https://globalabc.org/).

Contributions of this Program to MEAs and Related Global Environmental Benefits

357. Fashion – As stated above the fashion sector produces GHGs higher than the entire global transport sector and textiles alone by volume uses over 50% by weight in chemicals. In addition to this, the textiles sector alone contributes 8% of global GHG emissions, uses over 215 trillion liters of water and contributes 9% of microplastics released in the environments well as negative impacts on wastewater, biodiversity, and land use. Work in this sector is therefore expected to have GEBs for all MEAs and processes covered by the GEF.

358. Construction – This sector alone accounts for 39% of global GHG emissions and is driving the global PVC sector. The sector also has significant impacts on land, biodiversity loss, air, water, and land pollution. Work in this sector is therefore expected to have GEBs for all the MEAs and processes covered by the GEF.

Role of the private sector in supporting this program

359. As part of the overall strategy to sufficiently cover such a large and diverse industry, the IP will focus its private sector engagement through multi-stakeholder platforms that can address the concerns of the marketplace, investors and policy makers at the scale required to support systemic transformation. Such platforms include the GEF Gold initiative, the Sustainable Tire Industry Project, the renewable bioeconomy platforms of the WBCSD and the WEF, and GEF's own opportunities to catalyze or consolidate platforms to better address the marketplace opportunities for better chemicals and waste outcomes.

360. These supply chains will require engagement and participation by the private sector at all points along them including agriculture, textile mills, recycling, manufacturing, plastics, chemical industry, fashion brands. The private sector will need to be both an instrument of change and a beneficiary of change.

361. A detailed mapping of each supply chain will be required to identify the best entry points for GEF action and partnerships such as the Fashion PACT will help in this work. There will be opportunities to create new enterprises, including women led and owned businesses in each supply chain that adhere to a green/sustainable business model.

DELIVERY PATHWAYS OF INTEGRATED PROGRAMS TO BLUE AND GREEN RECOVERY

362. As noted in the introduction, significant opportunities and pathways exist for the GEF to support and enhance investments that are being made by governments worldwide to stimulate economic recovery in the post-COVID world. The Integrated Programs offer a rich set of entry points for governments to match critical environmental conservation and restoration with urgently needed economic activity.

363. All GEF focal areas lend themselves to investments that can boost the blue and green recovery. In the Biodiversity focal area, investments in ecosystem restoration and sustainable tourism development and support, for example, the GEF can demonstrate the multiple economic benefits of these investments while focusing on conserving and restoring globally important biodiversity.

364. The Climate Change focal area strategy will contribute to the blue and green recovery agenda by supporting measures aimed at stimulating the economy that simultaneously accelerate the decarbonization of economies, consistent with the goals of the Paris Agreement. In the short- to medium-term these measures may focus on the promotion of renewable energy, zero-carbon mobility, energy efficient built environment and industry, innovation and deployment of zero-emissions technologies, fiscal reforms of fossil fuel subsidies, and Nature-based Solutions which will further contribute to job creation and economic stimulus.

365. As per the UNCCD, land is the key to building back better: avoiding future degradation, reducing current degradation and reversing harm from the past can accelerate the progress on all 17 SDGs in the face of both the COVID-19 pandemic and climate change. Efforts to avoid, reduce and reverse land degradation are necessary to sustain a healthy planet and to deliver opportunities and essential benefits in particular for women, youth and the rural poor.

366. The current pandemic has made it clear for all levels of society how important a role freshwater security and access to healthy marine ecosystems and the resources within is for cultural and societal cohesion, economic opportunities and human health. Post-pandemic International Waters investments are an opportunity to "build back better" by ensuring that green and Nature-based Solutions are better integrated into development plans and implementation. The sustainability of these ecosystems is essential to reach global goals far beyond SDG 6 and 14. Therefore, we need to ensure that our actions catalyze strong resilient transboundary marine and freshwater ecosystems that will contribute to long-term human well-being and ability to recover faster from disasters, climate change impacts, and other disruptions of sustainable development, growth and human prosperity.

367. As part of the work of the Chemicals and Waste focal area in green chemicals and alternatives, creation and/or adaptation of businesses to manage chemicals and materials at the end

of life and in safe recovery of materials will contribute to a green recovery, job creation, and economic stimulus. By shifting to low or non-chemicals systems, the pollution of land and water can begin to decline which will in part, over time, facilitate the increased resilience of ecosystems and species and the improved productivity of humans by a reduction of the disease burden caused by chemicals pollution.

368. The Integrated Programs in particular are well suited to deliver in multiple areas of recovery in a more efficient and impactful manner. These include efforts to protect and restore natural systems and their ecological functionality while also limiting forest fragmentation and in particular in high-risk areas based on what we know of potential future pandemics. Focusing investment in production landscapes and land use practices within them can also decrease the risk of human/nature conflicts. The GEF can also promote circular solutions to reduce unsustainable resource extraction and environmental degradation. And the GEF can promote low carbon solutions for climate mitigation that maximize the delivery of socio-economic co-benefits, such as job creation and reduction of public spending for the purchase of polluting fuels or technologies.

369. By investing in these options and approaches for a green and blue recovery, the IPs will directly support transformation of the key systems toward a healthy and resilient planet.

370. The following table summarizes the numerous areas where the IPs can contribute significantly to the blue and green recovery and hopefully lead to a healthier future for nature and people.

Table 1. Supporting a Green and Blue Recovery through the Integrated Programs

GEF-8 Integrated Programs	Options and Approaches
Food Systems	• Sustainable and nature-positive production • Renewable Energy and Energy Efficiency technologies • Circularity in supply chains engaging more local stakeholders • Food loss / waste management improved • Internalizing environmental costs of production including positive incentives • Shifting diets and reduced risks of zoonotic spillovers

Sustainable Cities	• Urban biodiversity and Nature-based Solutions • Supply chain and waste management • Renewable Energy and Energy Efficiency technologies (Public transport and e-mobility) • Management of hazardous chemicals and waste • Green Spaces and quality of life
Amazon, Congo, and Critical Forest Biomes	• Conservation of biodiversity and carbon stocks • Avoiding deforestation and forest degradation from energy infrastructure • Securing tree-based and forest ecosystem services and the creation of positive incentives • Local livelihoods linked to nature-based economy • Reducing risks of zoonotic spillovers
Wildlife Conservation for Development	• Reducing illegal and unsustainable wildlife trade and habitat loss • Reducing dependency on and consumption of wildlife • Preventing threats from energy infrastructure • Reduce demand for wildlife • Wildlife-based economy and local livelihoods • Reducing risks of zoonotic spillovers
Clean and Healthy Ocean	• Protection of marine and freshwater ecosystems • Reducing impacts of agricultural point and non-point nutrient pollution • Renewable Energy and Energy Efficiency technologies • Reducing wastewater pollution and micro plastics • Reducing risks from pollutants, particularly viruses, bacteria and dead zone impacts
Ecosystem Restoration	• Forest landscape and ecosystem restoration work at the local level • Regenerative production practices • Renewable Energy and Energy Efficiency technologies • Innovative solutions for restoring degraded lands • Restoration for healthy and resilient ecosystems to support people

Blue and Green Islands	• Protection of terrestrial and marine ecosystems; Valuing nature • Sustainable production in agriculture and fisheries • Innovative Nature-based Renewable Energy and Energy Efficiency technologies • Nature-based Solutions for green and resilient cities • Local livelihoods linked to nature-based economy • Reducing water pollutants
Net-Zero Nature-positive Accelerator	• Natural climate solutions • Renewable Energy and Energy Efficiency technologies in Transport, Buildings and Construction sector • Innovation and employment generator
Circular Solutions to Plastic Pollution	• Reducing pollution from plastic waste • Plastic alternatives in the food supply chain • Renewable Energy and Energy Efficiency technologies • Circularity and efficient waste management and innovative technologies • Reducing exposure to plastic pollutants
Greening Transportation Infrastructure Development	• Nature-based "infrastructure" solutions and local employment opportunities • Reducing impacts on critical production systems • Preventing threats from energy infrastructure development • Reducing threats from built infrastructure and decarbonization • Reducing exposure to risks of degradation • Cost-effective technology delivering multiple benefits

FOCAL AREA STRATEGIES

Biodiversity Focal Area

Global Context of Biodiversity

371. The Convention on Biological Diversity (CBD) defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems."

372. Numerous analyses and studies over the last 15 years have advanced our understanding of biodiversity beyond its intrinsic value to recognize that biodiversity is a societal asset that makes significant contributions to advance economic development and human well-being.[307,308] The recently released Dasgupta Review reiterated with even greater clarity the dependency of our economy, livelihoods, and well-being on Nature.[309]

373. While our scientific understanding of biodiversity as a provider of goods (food, water, materials) and ecosystems services (climate regulation, pollination, disaster protection, etc.) to advance human well-being has grown more nuanced and comprehensive, our management of biodiversity has not been sufficient to ensure its long-term persistence as recent global studies on biodiversity loss have noted.[310,311] The recent IPBES report on biodiversity and ecosystem services solidified our understanding, first established by the Millennium Assessment in 2005, that the five main direct drivers of biodiversity loss and declines in nature remain: land/sea use change, direct exploitation, climate change, pollution and invasive alien species. Increasingly, the expansion of infrastructure is being recognized as one of the most critical direct drivers of land use change in the immediate future driving environmental degradation through changes in land, ocean and water

[307] Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington DC; TEEB (2010) The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB.

[308] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany. 56 pages.

[309] Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review. (London: HM Treasury)

[310] IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

[311] Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5 – Summary for Policy Makers. Montréal.

use and expansion into pristine habitats – contributing to declines in the health and well-being of humans, ecosystems and wildlife populations.[312]

374. Unfortunately, the Global Biodiversity Outlook 5 (GBO 5) indicates that the global community is not responding with the scale and urgency required. The GBO 5 analyzed national reports on progress against all 20 of the Aichi Biodiversity Targets that were established to monitor implementation of the Strategic Plan for Biodiversity, 2011-2020. At the global level none of the 20 targets have been fully achieved, though six targets have been partially achieved (Targets 9, 11, 16, 17, 19 and 20).[313]

375. We are already feeling the consequences of biodiversity loss in numerous ways including as outlined in a recent report of the IPBES workshop on biodiversity and pandemics.[314] The same forces that are increasing zoonotic spillovers are the driving forces behind the loss of biodiversity on a global scale: increased changes in land use, the expansion and intensification of agriculture, the trade and consumption of wildlife, human encroachment into wild areas, all of which have contributed to fragmentation of ecosystems and an increase in proximity between humans and wildlife, livestock and humans and thus with the pathogens they carry.

The First Draft of the Post 2020 Global Biodiversity Framework

376. The first draft of the Post 2020 Global Biodiversity Framework (GBF) has outlined a renewed approach to biodiversity conservation and sustainable use that emphasizes biodiversity's fundamental contributions to sustaining a healthy planet and delivering benefits essential to all people.[315] The framework is based on a theory of change that proposes to bend the curve of biodiversity loss by 2030 and achieve the Convention's vision of "living in harmony with nature by 2050" the following actions are required: (a) put in place tools and solutions for implementation and mainstreaming, (b) reduce the threats to biodiversity, and (c) ensure that biodiversity is used sustainably in order to meet people's needs. These actions are to be supported by enabling conditions, and adequate means of implementation, including financial resources, capacity, and technology.

[312] The Global Commission on the Economy and Climate. 2018. Unlocking the inclusive growth story of the 21st Century: Accelerating climate action in urgent times: key findings and executive summary, page 2. New Climate Economy.
[313] Secretariat of the Convention on Biological Diversity (2020) Global Biodiversity Outlook 5.
[314] IPBES (2020) Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services. Daszak, P., das Neves, C., Amuasi, J., Hayman, D., Kuiken, T., Roche, B., Zambrana-Torrelio, C., Buss, P., Dundarova, H., Feferholtz, Y., Foldvari, G., Igbinosa, E., Junglen, S., Liu, Q., Suzan, G., Uhart, M., Wannous, C., Woolaston, K., Mosig Reidl, P., O'Brien, K., Pascual, U., Stoett, P., Li, H., Ngo, H. T., IPBES secretariat, Bonn, Germany, DOI:10.5281/zenodo.4147317
[315] First Draft of the Post-2020 Global Biodiversity Framework CBD/WG2020/3/3

377. The First Draft includes a set of four goals and 21 Action targets. The four goals of the first draft of the GBF are:

- Goal A: The integrity of all ecosystems is enhanced, with an increase of at least 15 per cent in the area, connectivity and integrity of natural ecosystems, supporting healthy and resilient populations of all species, the rate of extinctions has been reduced at least tenfold, and the risk of species extinctions across all taxonomic and functional groups, is halved, and genetic diversity of wild and domesticated species is safeguarded, with at least 90 per cent of genetic diversity within all species maintained.
- Goal B: Nature's contributions to people are valued, maintained or enhanced through conservation and sustainable use supporting the global development agenda for the benefit of all.
- Goal C: The benefits, from the utilization of genetic resources are shared fairly and equitably.
- Goal D: The gap between available financial and other means of implementation, and those necessary to achieve the 2050 Vision, is closed.

378. The GBF recognizes that gender equality, women's empowerment, youth, and gender-responsive approaches and the full and effective participation of IPLCs are necessary elements for successful implementation of the framework. A new gender plan of action for the post-2020 period is also under development proposing three overarching goals in the current draft.[316] Finally, partnerships involving organizations at global, national, and local level will be required for successful implementation of the GBF. It also assumes that a whole-of government and society approach is required to achieve the 2030 draft goals and the 2050 Vision.

GEF-8 Biodiversity Focal Area Investments and Associated Programming

379. The GEF-8 biodiversity focal area investments and associated programming through other focal areas and integrated programs will support the implementation of the goals and action targets of the Global Biodiversity Framework. The GEF-8 strategy responds to the objectives of the CBD and its Protocols including CBD-relevant objectives of other biodiversity-related multilateral instruments/agreements, thereby promoting mutually supportive implementation and programmatic synergies amongst these instruments/agreements.

380. The GEF-8 strategy is predicated on the following assumptions: 1) biodiversity is a shared societal asset that requires a management approach that is multi-sectoral and fully incorporates the fundamental importance of Nature to human well-being; and 2) any solution to the biodiversity

[316] CBD/SBI/3/4/ADD2, Draft outline of a post-2020 gender plan of action (https://www.cbd.int/doc/c/1037/0c47/974ee71c8778acceb3813a95/sbi-03-04-add2-en.pdf)

crisis requires the participation of all stakeholders in society most notably IPLCs, women, youth, as well as the private sector.

381. Gender can strongly influence people's relationship to nature, dependence upon it, and access to the benefits it provides. Gender roles affect economic, political, social, and ecological opportunities and constraints faced by both men and women. Recognizing women's roles as primary land and resource managers and differences in access to resources is central to the success of biodiversity policy. Gender considerations are not solely a women's issue; instead, this approach yields advantages for whole communities and benefit all people. For these reasons, all GEF biodiversity investments must incorporate gender dimensions to ensure maximum impact. GEF-8 gender-responsive approaches will seek to contribute to the goals that are eventually agreed in the post-2020 Gender Plan of Action.

382. The goal of the GEF-8 Biodiversity focal area strategy is globally significant

383. biodiversity conserved, sustainably used, and restored.

384. To achieve this goal, the strategy will support the following three objectives:

1. To improve conservation, sustainable use, and restoration of natural ecosystems.
2. To effectively implement the Cartagena and Nagoya protocols.
3. To increase mobilization of domestic resources for biodiversity.

Objective 1. To improve conservation, sustainable use, and restoration of natural ecosystems (Goals A and B of the GBF)

Rationale

385. GEF-8 marks a shift in the GEF strategy from investing in landscape and seascape management through the two distinct strategic entry points of protected area management and biodiversity mainstreaming to an area-based investment strategy that has one entry point to support integrated landscape/seascape management approaches that use multiple tools and strategies to respond to the drivers of biodiversity loss within large landscape and seascape mosaics.[317] This strategic shift reflects the evolution of the GEF portfolio as countries are already blending

[317] Integrated landscape management and landscape approaches have no universally agreed definition. For GEF, support to integrated landscape/seascape management refers to an investment strategy that provides tools for allocating and managing terrestrial and marine ecosystems to most effectively achieve GEF's mandate to deliver global biodiversity benefits while supporting important social, economic, and environmental co-benefits in areas where agriculture, fisheries, mining, forestry, etc. compete with biodiversity goals. This approach is fully consistent with the ecosystem approach long espoused by the CBD and the landscape approach discussed at SBSTTA 15 and within the recommended guiding principles for landscape level approaches (UNEP/CBD/SBSTTA/15/13)

protected areas, other effective area-based conservation measures (OECMs),[318] sustainable use, and biodiversity mainstreaming approaches in the context of large-scale investments in landscape and seascape mosaics.[319] This more integrated and complimentary approach to protected areas management, sustainable use of biodiversity, and management of production landscapes/seascapes is likely to achieve more durable results in conservation, sustainable use, and restoration

386. Protected areas are often found in mixed-use landscapes and seascapes (mosaics) where natural resources are intensively managed for satisfying human needs such as food, water, fuel, and wood. Protected area administrations are thus challenged to manage protected areas to achieve their conservation objectives while sectoral policy decisions, land/sea-use and management actions taken by the private sector and other actors outside protected area borders, can often work at cross-purposes to their conservation goals. In the most extreme cases, protected areas are downgraded, downsized, and degazetted.[320] By recognizing the bio-physical and socio-economic milieu that protected areas are part of, the strategy is seeking to turn a potential management problem into an opportunity to sustain protected areas for the long-term. Ideally, GEF investments will build upon existing social and institutional arrangements to ensure that conservation, sustainable use, production, and local benefit objectives are all met in a way that can be socially and economically sustained. As a management approach, the strategy will emphasize the interdependence of meeting the objectives of protected areas, other natural resource management strategies including sustainable use and OECMs, and local economic development and depend on multi-stakeholder approaches, cross-ministry collaboration, and sectoral policy coherence.

387. Consistent with the GEF mandate to generate global environmental benefits, these landscapes and seascapes will contain globally important biodiversity. As is currently done, project proponents will demonstrate the global importance of the project's anticipated biodiversity benefits. Most of the time it will involve justifying the project`s contribution to the persistence of some biodiversity components - genes, species, or ecosystems - in relation to their worldwide extent or population size. Proponents will be invited to use criteria commonly used to identify

[318] OECMs are defined in CBD/COP/DEC/14/8 as: A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio–economic, and other locally relevant values.

[319] In the context of the GEF-8 strategy, mosaics are defined as networks of protected areas and complementary landscapes/seascapes that include combinations of protected areas, OECMs, sustainable use areas, production landscapes and seascapes, and IPLC managed lands and waters. Landscapes include all the freshwater and aquatic biodiversity therein.

[320] Qin, S., Golden Kroner, R.E., Cook, C., Tesfaw, A.T., Braybrook, R., Rodriguez, C.M., Poelking, C. and Mascia, M.B. (2019), Protected area downgrading, downsizing, and degazettement as a threat to iconic protected areas. Conservation Biology, 33: 1275-1285.

areas for biodiversity conservation, but other well-justified criteria will be accepted with consideration for the specific project context and data availability.[321]

388. In addition, within these integrated approaches opportunities to restore areas to ensure the persistence of globally significant biodiversity will be supported. Recent research indicates that using multiple criteria to identify the areas to be restored is important for achieving multiple benefits for biodiversity and climate change mitigation and is also more cost-effective.[322] Furthermore, restoration gains are more durable if coupled with strategies for retaining natural ecosystems within landscape approaches that integrate conservation, restoration and improved use of agricultural lands.[323] Complementing GEF investments in the Ecosystem Restoration IP and the Amazon, Congo, and Critical Forest Biomes IP, the Biodiversity focal area strategy will fund cost-effective restoration activities that *improve the status of biodiversity* and are part of integrated landscape management approaches.

389. An integrated landscape/seascape management approach to support the persistence of biodiversity will by necessity include a broader array of stakeholders and intervention strategies than when GEF supports protected area management, sustainable use, and biodiversity mainstreaming separately. This will also help foster a multi-sectoral approach across government ministries.

390. Embedded as a fundamental element in this new approach is the central role of IPLC managed lands and waters and their contribution to improved biodiversity conservation and sustainable use and critical socio-economic benefits at local and national levels. GEF will support the contribution and engagement of IPLCs within the context of these integrated approaches.

Project Support

391. The complementary strategies of protected area management, sustainable use, and biodiversity mainstreaming that can be supported in an integrated landscape/seascape intervention are presented below.

[321] A recent review (Asaad et al. 2017) identified 8 commonly used criteria: (1) habitat rarity or uniqueness; (2) habitat fragility/sensitivity; (3) ecological integrity; (4) habitat representativity; (5) presence of species of conservation concern; (6) occurrence of restricted range species; (7) species richness; and (8) importance for life history stage. Asaad, I., Lundquist, C. J., Erdmann, M. V., & Costello, M. J. (2017). Ecological criteria to identify areas for biodiversity conservation. Biological Conservation, 213, 309-316.

[322] Strassburg, B.B.N., Iribarrem, A., Beyer, H.L. et al. Global priority areas for ecosystem restoration. Nature 586, 724–729 (2020). https://doi.org/10.1038/s41586-020-2784-9

[323] Ibid.

Financial Sustainability, Effective Management, and Ecosystem Coverage of Protected Area Systems

392. GEF support will continue to focus on strengthening three elements of a sustainable protected area system: 1) effective protection of ecologically viable and climate-resilient representative samples of the country's ecosystems and adequate coverage of threatened species at a sufficient scale to ensure their long term persistence; 2) sufficient and predictable financial resources available, including external funding, to support protected area management costs at the site and system-level; and 3) sustained individual and institutional capacity to manage protected areas such that they achieve their conservation objectives.[324]

393. The integrated landscape/seascape management approaches proposed under objective one envisions protected areas and other effective area-based conservation measures (OECMs) as a core land-use strategy that will continue to receive GEF support with an aim towards helping countries achieve target three of the GBF.[325] Consistent with the GEF-7 strategy, we will encourage that new protected areas and other effective area-based conservation measures (OECMs) established with GEF support be globally significant including as defined by the Key Biodiversity Area (KBA) standard. When KBA criteria are not met, proposals will be considered on a case by case basis. Notably, the GEF will support the protection of areas recognized by the CBD as ecologically or biologically significant marine areas (EBSAs),[326] focusing on areas within national jurisdictions.

394. GEF will continue to promote the empowerment, participation, and capacity building of IPLCs, especially women, in the design, implementation, and management of protected area projects including Indigenous and Community Conserved Areas.[327] GEF will also promote protected area co-management between government and IPLCs where such management models are appropriate and activities that support the recognition and realization of the rights of IPLCs to control and manage their lands and territories.

Sustainable Use of Biodiversity

395. GEF will continue to support the sustainable use of biodiversity as part of integrated landscape/seascape management. This will include sustainable use of: (a) wild and native species from terrestrial, freshwater, and marine ecosystems; and (b) agrobiodiversity including protection

[324] A protected area system could include a national system, a sub-system of a national system, a municipal-level system, IPLC-managed areas, or a local level system or a combination of these.

[325] Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. We recognize this target may change and the strategy will adjust accordingly in future drafts.

[326] https://www.cbd.int/ebsa

[327] Indigenous and Community Conserved Areas are natural sites, resources and species' habitats conserved in voluntary and self-directed ways by IPLCs.

of Crop Wild Relatives (CWR) in-situ through CWR Reserves; plant genetic resources, through farmer management, in Vavilov Centers of Diversity and other globally important diversity centers; and animal genetic resources to conserve the wild relatives of domesticated livestock, not solely focusing on breeds. GEF investments can also support customary sustainable use of biodiversity by Indigenous Peoples and Local Communities (IPLCs), thereby supporting the implementation of the Global Plan of Action on Sustainable Customary Use. GEF support to biodiversity mainstreaming in the agriculture, forestry, fisheries, and tourism sectors is another strategy through which sustainable use of biodiversity will be supported in the strategy.

396. As noted in Annex 1, in addition to the support provided by the Biodiversity Focal Area; the Food Systems Integrated Program; International Waters Focal Area; Amazon, Congo, and Critical Forest Biomes Integrated Program; Inclusive Conservation Initiative; and, the Wildlife Conservation for Development Integrated Program, will make contributions to action targets 9 and 10 of the Global Biodiversity Framework which focus on the sustainable use of biodiversity.

Biodiversity Mainstreaming in Priority Sectors[328]

397. GEF will continue to focus primarily on supporting the following suite of activities to advance biodiversity mainstreaming:

- Spatial and land/sea-use planning to ensure that land, freshwater, and marine resource use is appropriately situated to optimize production without undermining or degrading biodiversity.
- Improving and changing production practices to be more biodiversity-positive and to promote sustainable use of biodiversity as appropriate with a focus on sectors that have significant biodiversity impacts (agriculture, forestry, fisheries, tourism, extractive industries (gas, oil, and mining) and infrastructure development).[329]
- Developing policy and regulatory frameworks that remove subsidies harmful to biodiversity and provide incentives for biodiversity-positive land and resource use that remains productive but that does not degrade biodiversity.
- Natural Capital Assessment and Accounting (NCAA) exercises designed to respond to specific target decisions or policy questions. Recognizing that all countries have not yet developed the capacities to carry out NCAA at national scale, local applications with demonstrated practical relevance will be supported. This responds to many of the

[328] The GEF defines biodiversity mainstreaming as: "the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably used both locally and globally."

[329] GEF support to agrobiodiversity conservation including the sustainable use of plant and animal genetic resources would continue under this element of biodiversity mainstreaming.

recommendations made by the IEO in its evaluation on GEF's Support to Mainstreaming Biodiversity.[330]

398. Natural Capital Assessment and Accounting will also be supported by Objective 3 and the global program on domestic resource mobilization and we envision that elements of expenditure reviews and natural capital assessment and accounting will inform the development of policy and regulatory frameworks to be eventually supported by the GEF. This also responds directly to a recommendation of the IEO which proposes that GEF '*design mainstreaming interventions with a longer-term perspective and a resource envelope to ensure sustainability*".[331]

Prevention, Control and Management of Invasive Alien Species

399. GEF-8 will continue to focus support on addressing IAS in island ecosystems within the context of integrated landscape management supported under this objective. This focus is driven not only by programming demand, but by an ecological imperative: IAS are the primary cause of species extinctions on island ecosystems and if not controlled can degrade critical ecosystem services such as the provision of water.

400. GEF will support the implementation of comprehensive prevention, early detection, control, and management frameworks that emphasize a risk management approach by focusing on the highest risk invasion pathways. As with the entirety of objective one of the GEF-8 strategy, this comprehensive approach to IAS management will require a whole-of-government approach that cuts across numerous ministries and government responsibilities. In addition, collaboration with the private sector will be required to ensure sustained implementation of a pathways approach. Targeted eradication will be supported in specific circumstances where proven, low-cost, and effective eradication would result in the extermination of the IAS and the survival of globally significant species and/or ecosystems. While GEF will maintain a focus on island ecosystems and engage with island states to advance this agenda, projects will be supported from continental countries that address IAS management and control through a comprehensive pathways approach with a focus on ensuring the long term effectiveness and sustainability of any intervention.

[330] GEF/ME/C.55/inf. 02, Evaluation of GEF's Support to Mainstreaming Biodiversity, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C.55.inf_.02_Biodiversity_Mainstreaming_Evaluation_Synthesis_Report%20Nov_2018.pdf

[331] Ibid.

Objective 2. To effectively implement the Cartagena and Nagoya protocols (Goals A, B and C of the GBF)

The Cartagena Protocol on Biosafety

Rationale

401. GEF's strategy to build capacity to implement the CPB prioritizes the implementation of activities that are identified in country stock-taking analyses and in the COP guidance to the GEF, in particular the key elements in the framework and action plan for capacity building for effective implementation of the CPB at the sixth COP serving as the Meeting of the Parties to the CPB (COP-MOP 6) and the Strategic Plan for Biosafety, 2011-2020 agreed at COP-MOP 6.

402. Currently, a draft implementation plan and a capacity-building action plan are contained in CBD/SBI/3/18 which was discussed at SBI 3 for submission to COP-15. The plans include a range of goals to be achieved under "Implementation Areas" and "Enabling Environment". GEF project support listed below will be updated to reflect the final agreement of the implementation and capacity-building action plan.

Project Support

403. The GEF will support the ratification of the Protocol by the countries that have not done so and support the implementation of National Biosafety Frameworks (NBFs). The aim of GEF investment is to build capacity to ensure that countries have functional NBFs and are in full compliance with the requirements of the Protocol and have mobilized adequate resources to support implementation of the Protocol. Parties will be supported to implement the provisions of the Protocol, including capacity-building related to risk assessment and risk management in the context of country-driven projects, and enhancing public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms. In addition, GEF will support the updating and revision of existing NBFs and compliance action plans to allow countries to adapt to the regulation and safe use of new biotechnologies and synthetic biology consistent with the provisions of the protocol.

404. The GEF will support thematic projects addressing some of the specific provisions of the Cartagena Protocol. The thematic projects will also address the integration of the Protocol into the Convention as anticipated into the approach adopted in the GBF and the Post 2020 implementation plan and capacity building action plan. These projects should be developed at the regional or sub-regional level and built on a common set of targets and opportunities to implement the Protocol beyond the development and implementation of NBFs.

405. The GEF will also provide support for the ratification and implementation of the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the CPB. There will also be a

specific focus on capacity building and regional cooperation to support the effective implementation of the supplementary Protocol.

The Nagoya Protocol on Access and Benefit Sharing

Rationale

406. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization provides a legal framework for the effective implementation of the third objective of the Convention on Biodiversity (CBD). The Protocol was adopted by the Conference of the Parties to the Convention on Biological Diversity at its tenth meeting on 29 October 2010 in Nagoya, Japan, entered into force on 12 October 2014, and 131 parties have ratified the Protocol to date. The successful implementation of ABS at the national level has the potential to make considerable contributions to biodiversity conservation and sustainable use.

Project Support

407. GEF will support national and regional implementation of the Nagoya Protocol and, if still required, targeted capacity building to facilitate ratification of the Protocol. As such, the GEF will support the following core activities to comply with the provisions of the Nagoya Protocol and promote its implementation:

- Stocktaking and assessment. GEF will support gap analysis of ABS provisions in existing policies, laws and regulations, stakeholder identification, user rights and intellectual property rights, and assess institutional capacity including research organizations.
- Development (or revision) and implementation of national ABS frameworks. This could include the policy, legal, and regulatory frameworks governing ABS, National Focal Point, Competent National Authority, checkpoints, institutional arrangements, administrative procedures for Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT), monitoring of use of genetic resources and publishing information, including on applicable ABS procedures, to the ABS Clearing-House", and compliance and enforcement with legislation and cooperation on transboundary issues. GEF will continue financing capacity development to ensure that countries develop clear ABS requirements and permitting systems, including biocultural community protocols for IPLCs, and ensure the relevant information (including biocultural community protocols) is made available on the ABS Clearing-House. GEF will also provide support to national coordination and data collection for reporting.
- Development or revision of national laws and policies that promote scientific research and development and national investments on the use of genetic resources under national ABS frameworks. These include bioeconomy and scientific development policies that provide

policy and economic incentives to foster scientific research and investments on genetic resources.

- Capacity-building to add value to genetic resources for access and benefit-sharing, biodiversity conservation, and sustainable use. In countries with national ABS policies, the GEF will support capacity-building and training for domestic users of genetic resources to add value to genetic resources. This will include not only training on scientific research & development procedures but also biodiversity-friendly practices for value chains needed for industries that use genetic resources. Countries may consider institutional capacity-building to carry out research and development to add value to their own genetic resources and traditional knowledge associated with genetic resources. The GEF will also support efforts of IPLCs concerning their traditional knowledge associated to genetic resources including the cultivation of source species and marketing of products.

408. The GEF will also enhance national implementation of the Nagoya Protocol through regional collaboration. Regional collaboration will help build capacity of countries to add value to their own genetic resources and traditional knowledge associated with genetic resources and avoid duplication of regulatory mechanisms while encouraging intra-regional collaboration. Regional collaboration can also address the financial and human resource constraints faced by small or least developed countries through sharing regulatory and scientific resources.

409. As was employed in the GEF-7 strategy, in recognition of the importance of genetic resources for food and agriculture and in achieving food security worldwide, the GEF will consider projects for the mutually supportive implementation of the Nagoya Protocol and the International Treaty on Plant Genetic Resources for Food and Agriculture for countries that are Parties to both instruments.

Objective 3. To increase mobilization of domestic resources for biodiversity (contribution to GOAL D of the GBF)

Rationale

410. According to the most comprehensive estimates to date, the global biodiversity funding gap between total annual capital flows toward global biodiversity conservation and the total amount of funds needed for conservation and sustainable use may be as high as $598–824 billion per year by 2030.[332] While recognizing the role all societal actors have to play and that ODA is a major funding source for biodiversity in many countries, 73–82% of the $124–143 billion currently spent on biodiversity per year are derived from the domestic public sector. Current international

[332] Deutz, et al. 2020 Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability

public biodiversity finance ($3.9 to 9.3 billion per year)[333] represents 0.5-1.6% of the anticipated 2030 gap. While it is acknowledged that ODA will have to increase for a global biodiversity goal to be achieved, domestic resource mobilization (DRM) will continue to play a central role for biodiversity.

411. CBD COP 14 affirmed that resource mobilization would be an integral part of the post-2020 GBF.[334] Based on the first draft of the GBF, the framework has a dedicated Goal "The gap between available financial and other means of implementation, and those necessary to achieve the 2050 Vision, is closed. Three milestones are included for 2030, along with two action targets related to incentives harmful for biodiversity (target 18) and the increase of financial resources from all international and domestic sources (target 19).

412. The GEF is uniquely positioned to help interested countries in leveraging Domestic Resource Mobilization (DRM) work under the CBD to help reduce this funding gap and deliver on targets 18 and 19. The need to strengthen DRM indeed pervades the entire sustainable development agenda as recognized in the Addis Ababa Action Agenda, which includes a commitment to further strengthening the mobilization and effective use of domestic resources.

Project Support

413. GEF will support a global program on Domestic Resource Mobilization for Biodiversity to help countries create the enabling conditions, including baseline diagnostics, capacity, institutional arrangements, and planning required to mobilize resources at scale to implement the GBF. Embracing a broad definition of DRM, activities under objective three will support reduction or redirection of resources causing harm; generate additional financial and non-financial resources from all sources; enhance effectiveness and efficiency of use of resources and develop and implement DRM plans.

414. The objective is meant to set up a transformative process for biodiversity finance, in all participating countries. It should be carried out in in parallel to the revision of NBSAPs that may arise out of the agreement on the Global Biodiversity Framework. While focused on the GBF, it will aim at leveraging synergies in DRM to support implementation across MEAs.

415. A key focus will be the establishment of the enabling conditions for countries to undertake harmful subsidy reform. GEF and BIOFIN's experiences have shown very limited uptake on the subsidy reform agenda, which suffers chiefly from a lack of political will rather than technical barriers. The program will thus help countries be equipped with the capacity, knowledge, and

[333] OECD (2020) A Comprehensive Overview of Global Biodiversity Finance. https://www.oecd.org/environment/resources/biodiversity/report-a-comprehensive-overview-of-global-biodiversity-finance.pdf

[334] Decision COP XIV/22

strategy to seize political opportunity windows whenever they arise, including through multi-lateral development bank's policy-based loans.

416. As countries seek to mobilize resources for biodiversity, GEF will also explore the opportunities that Conservation Trust Funds (CTF), Payment for Ecosystem Services (PES), national Access and Benefit Sharing (ABS) measures , and other financing mechanisms provide to facilitate mobilization of resources that can be invested in biodiversity conservation, sustainable use, and NbS. Versatile and durable, CTFs can play important roles as conduits and/or implementers of biodiversity offsets, compensation funds and other mechanisms for increasing funding opportunities for biodiversity.

417. The program will support three complementary components in each national-level country project: diagnostics and planning, early implementation, and capacity building and institutional set-up for implementation and monitoring. A global knowledge platform will be supported to provide methodological support, exchange lessons, codify learning, and foster south-south exchanges amongst all participating countries.

418. The three components include:

1. *Diagnostics and planning (funded by the biodiversity set aside):*

- a policy and institutional review analyzing the root causes of biodiversity loss. A specific effort will be dedicated to the identification and costing of harmful subsidies. This activity would include a capacity needs assessment.
- an expenditure review assessing spending related to the biodiversity, across all sectors (e.g., energy, transport, infrastructure, agriculture, agriculture, forestry, fisheries, extractive industries).
- an assessment of the financial needs to implement the GBF.
- the development and adoption of national DRM plans that set out a coherent and comprehensive national approach to DRM for biodiversity, including a mix of priority finance solutions.

419. All these steps should be carried out involving key stakeholders, such as the Ministry of Finance and other ministries and private sector actors from the aforementioned sectors involved in the biodiversity expenditure review, specific to each country situation. To facilitate uptake by the government and credibility by the finance ministries, the diagnostics and planning will be based on an agreed conceptual framework, e.g. integrated within the national statistical system or budgeting framework. Countries that are most advanced in Natural Capital Accounting and Assessment approaches will be encouraged and supported to use such a framework, including the

UN System of Environmental-Economic Accounting (SEEA), to develop their diagnostics, inform their planning and monitor its implementation.

2. *Early implementation (funded through each country's STAR)*

420. While full implementation of national DRM plans would be out of the scope of the program, it is foreseen that early implementation will be supported, including the prototyping and piloting of priority measures or mechanisms identified in the DRM plans.

421. Countries will be encouraged to use the many possibilities offered in GEF-8 to implement their DRM priorities in full, such as through biodiversity mainstreaming interventions to reduce or redirect financial flows harmful to biodiversity, or the development of PES, ABS, offset schemes or other relevant financing mechanisms to generate new resources.

3. *Capacity building and institutional set-up for implementation and monitoring (funded through each country's STAR)*

422. National project investments will support the development of capacity and expertise of staff responsible for DRM implementation, monitoring and reporting (e.g. green budget tagging) to increase transparency and accountability on environmental spending, including biodiversity spending (e.g. Green Budgeting Statement accompanying the budgets). Projects will also help establish national-level platforms to foster a whole-of-government approach and multi-stakeholder coordination to support implementation.

423. The program will be supported by a global knowledge platform, funded by the biodiversity set aside, that will support program-level knowledge management to expand the global knowledge base, from technical aspects to barriers to implementation and ways to overcome them. It will most notably promote peer-to-peer learning.

424. National projects focused on the development of DRM plans (or updates of existing plans) to support GBF implementation would be entirely funded through the biodiversity focal area set-aside. Implementation of these plans would be funded by the STAR.

425. Potential partners include a) UNDP's Biodiversity Finance Initiative (BIOFIN); b) Natural Capital Assessment and Accounting initiatives, including the UN SEEA; c) The Capitals Coalition; d) the Natural Capital Project; and e) OECD. The program will seek to leverage synergies with UNCCD and UNFCC as appropriate.

Focal Area Set Aside

426. Several priority activities that will be supported through the focal area set-aside are described below.

Enabling Activities

427. Support will be quickly and efficiently provided to all GEF-eligible countries at the start of GEF-8 to revise their NBSAP(consistent with forthcoming COP guidance) with a view to align them with the GBF and to ensure that national policies are also aligned with the GBF. Support will be provided to produce the National Report to the CBD as well as national reporting obligations under the Cartagena Protocol and Nagoya Protocol identified during upcoming COPs and COP-MOPs**.**

Inclusive Conservation Initiative

428. Approximately 25% of the Earth's surface and ocean areas are managed by indigenous peoples and local communities (IPLCs), but it is estimated these areas hold 80% of the Earth's biodiversity. Most of the world's forests are found on communal and indigenous lands[335] and which in many places have been shown to be more effective than national parks in reducing deforestation.[336,337] Approximately 40 percent of land listed by governments as under conservation is managed by IPLCs,[338] which means better engagement and empowerment of IPLCs is critical to reaching targets on the effective management of protected areas and other effective area-based conservation measures (OECMs)[339] and associated SDGs.

429. The vital role of IPLCs is underlined in the landmark IPBES report,[340] which recognized, inter alia, that IPLCs are often better placed than scientists to provide detailed information on local biodiversity, environmental change and management practices, and are important contributors to the governance of biodiversity from local to global levels. IPLCs are also among the most threatened on Earth by the impacts of climate change and global development and are often highly dependent on biodiversity and ecosystem services.

[335] Rights and Resources Initiative Annual Review 2015-2016. Closing the Gap: Strategies and scale needed to secure rights and save forests.
[336] Ricketts et al. 2010. Indigenous Lands, Protected Areas, and Slowing Climate Change. PLOS.
[337] Oldekop et al. 2019. Reductions in deforestation and poverty from decentralized forest management in Nepal. Nature Sustainability.
[338] Garnett et al. 2018. A spatial overview of the global importance of Indigenous lands for conservation. Nature Sustainability.
[339] Dasgupta 2020, Final Report of the Independent Review on the Economics of Biodiversity Dasgupta Review
[340] Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019) Summary of Policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

430. IPLC land stewardship is also key in preventing climate change. IPLCs occupy areas that hold at least 24 percent (54,546 MtC) of the total carbon stored aboveground in tropical forests. Working with IPLCs on land management is also a cost-effective strategy to mitigating climate change.[341] Yet, only 21 countries included clear commitments to implement land and resource tenure initiatives related to IPLCs in their Nationally Determined Contributions.

431. IPLCs have been stewards of vital biodiversity and carbon stocks for generations, but the larger forces of development are often undermining their ability to continue to do so. Over 2.5 billion people around the world depend on collectively held land for their livelihoods. A global review conducted by WRI showed how discrepancies in the processes and resources required to formalize land rights between companies and communities provides significant advantages to companies seeking extractive or productive rights over community claims.[342]

432. In GEF-7, the GEF supported a pilot Inclusive Conservation Initiative to provide support directly to IPLCs to conserve biodiversity, deliver other global environmental benefits, and provide development benefits. When a Call for Expressions of Interest was put out in March 2020, more than 400 expressions of interest were received. However, there were only resources to support nine expressions of interest. The GEF-7 Inclusive Conservation Initiative will support IPLC stewardship of over 9 million hectares in areas of high biodiversity importance and the mitigation of 141 million tCO_2e.

433. Given the great potential to generate biodiversity and other global environment benefits through supporting IPLCs and a strong demand for this support, the GEF-8 strategy will provide additional resources for the ICI. The GEF's Independent Evaluation Office,[343] STAP,[344] and the GEF's Indigenous Peoples' Advisory Group have all made recommendations that larger volumes of GEF resources be made available for IPLCs to enable them to continue to realize their role as stewards of the global environment.

434. While the Inclusive Conservation Initiative will work in a diversity of geographies and contexts, the aim of the ICI will be to support a limited number of initiatives in different parts of the world to enable impact commensurate with the scale of the problem they are currently facing as their territories become progressively encroached by unsustainable activities. In contrast with existing small grants initiatives, such as GEF's SGP which continues to be one of the main points of entry for IPLCs, the ICI approach seeks more in-depth and substantial investments in a limited set of locations to scale-up impact. In this way, the ICI is meant to be additional and

[341] Ding et al 2016. Climate Benefits, Tenure Costs: The Economic Case For Securing Indigenous Land Rights in the Amazon. WRI.
[342] Notess et al. 2018. The Scramble for Land Rights: Reducing inequity between communities and companies. World Resources Institute.
[343] GEF IEO. Evaluation of GEF Engagement with Indigenous Peoples (April 2018)
[344] GEF STAP. Local commons for global benefits: indigenous and community-based management of wild species, forests and drylands (May 2019)

complementary to the support for IPLC activities in the rest of the GEF portfolio. The ICI will continue to recognize the challenges faced by IPLC women and the vital role they play in the management of natural resources in all projects and ensure that this recognition is reflected in project designs.

435. The lack of recognition and secure land rights for IPLCs is a major driver of environmental degradation. Without secure land rights, land users are encouraged to adopt unsustainable management practices that generate short term profits but damage long term productivity and lead to degradation of the land and biodiversity. At the same time, weak land rights and underpowered landholders create the conditions that allow illegal and/or corrupt land conversion for agriculture, logging, mining, and land grabbing. Therefore, in GEF-8 there will be an expanded focus on addressing issues related to land tenure and natural resource rights and access.

436. The Inclusive Conservation Initiative will continue to support global knowledge management and exchange building upon the work done in GEF-7. The ICI will leverage the GEF's convening ability to collect and disseminate knowledge and demonstrate how supporting IPLCs is effective for protecting the global environment and realizing the SDGs.

Other Global Programs

437. The focal area set aside will also support the Global Program on Resource Mobilization described under objective three and the development of DRM/national biodiversity finance plans. We will also consider funding work to support countries on establishing policy coherence across different sectors to better deliver sound environmental practices, as well as narrow the financial gap for nature.

Key Contributions of Other Focal Areas and Integrated Programs to Biodiversity Outcomes and the Global Biodiversity Framework [345]

438. The GEF-8 biodiversity focal area strategy investments and associated programming strategies build on the integrated approaches to achieve biodiversity conservation and sustainable use outcomes implemented since GEF-6. Achieving the goal and objectives of the biodiversity focal area strategy requires a wide array of actions and while all are necessary none will be enough on their own. GEF's associated programming investments that are channeled through other focal areas and Integrated Programs (IPs) will help achieve the focal area strategy goal and objectives while specifically supporting Goals A and B of the Global Biodiversity Framework. These include:

- The Ecosystem Restoration Integrated Program: support to restoration of ecosystems including in production landscapes and seascapes.

[345] Please see Annex 1 for a detailed summary of the contributions that the GEF biodiversity focal area, other focal areas, and the integrated programs will make to achieving the action targets of the Post-2020 Global Biodiversity Framework.

- The International Waters Focal Area, Blue and Green Islands Integrated Program, and Clean and Healthy Ocean Integrated Program: support to sustainable management of fisheries and marine protected areas.
- The Climate Change-Mitigation Focal Area and the Food Systems Integrated Program: support to land-based climate change mitigation.
- The Chemicals and Waste Focal Area: support to targeted actions to reduce pollution.
- The Food System Integrated Program: support to the sustainable production of food.
- The Amazon, Congo, and Critical Forest Biomes Integrated Program: support to the conservation and sustainable management of critical forest biomes.
- The Wildlife Conservation for Development Integrated Program: support to conservation and sustainable use of wildlife.
- The Net-Zero Nature-Positive Accelerator Integrated Program: support the alignment of national climate and biodiversity strategies, and investments in nature-based solutions, including the protection of forest areas.
- The Greening Transportation Infrastructure Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, and the Clean and Healthy Ocean Integrated Program: support to the maintenance of connectivity and ecosystem integrity including in production landscapes and seascapes.

Role of the Private Sector in Supporting Biodiversity Outcomes

439. The private sector is an important factor and stakeholder in the success of GEF's biodiversity strategy. When an individual, collective, or company's development activities across a wide array of sectors affect biodiversity negatively, the business faces potentially significant regulatory, financial, operational, and reputational risks. GEF provides support to governments to develop policies and regulatory framework to ensure that companies and developers take responsibility for such impacts and avoid or mitigate them. GEF also provides capacity building and technical training to help enterprises improve production practices to totally avoid causing negative impacts on biodiversity. Anticipating, avoiding, mitigating, and compensating for adverse impacts on the project site and/or from the footprint of the business are the first steps in what is referred to as the "mitigation hierarchy". The ability of GEF's investments to influence the actions of the private sector will be critical for delivering on the strategy's biodiversity outcomes and will be essential to achieve the scale of change required to achieve the goals of the Global Biodiversity Framework.

440. In recent years, we have witnessed a marked shift in the emphasis and prioritization that the private sector has placed on biodiversity. A growing level of awareness in the business community of their dependencies on natural capital as well as their impacts, the widely viewed

findings of the 2019 IPBES Global Assessment Report,[346] the Dasgupta review recommendations, and the WEF Global Risks Report have all contributed to elevating biodiversity from a general concern among business leaders to a major factor in business planning, investing and resource allocation.

441. In response to these reports the business and investment community has launched a raft of new initiatives to raise the level of accountability among private sector actors including sectoral guides for natural capital accounting, the Taskforce on Climate-related Financial Disclosure and reporting protocols such as CDP.

442. In the lead up to CBD COP 15, and as part of the UN Decade of Restoration, several new business and multi-stakeholder platforms have been formed with the goal of raising business ambition and galvanizing commitments to biodiversity. These include Business for Nature's (BfN) and One Planet for Business and Biodiversity in which the GEF has played an active role. The period of GEF-8 now opens a critical window for private sector engagement in the GEF Partnership to ensure that associated private sector goals and targets are aligned with the GBF.

[346] IPBES (2019): Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. S. Díaz, J. Settele, E. S. Brondízio E.S., H. T. Ngo, M. Guèze, J. Agard, A. Arneth, P. Balvanera, K. A. Brauman, S. H. M. Butchart, K. M. A. Chan, L. A. Garibaldi, K. Ichii, J. Liu, S. M. Subramanian, G. F. Midgley, P. Miloslavich, Z. Molnár, D. Obura, A. Pfaff, S. Polasky, A. Purvis, J. Razzaque, B. Reyers, R. Roy Chowdhury, Y. J. Shin, I. J. Visseren-Hamakers, K. J. Willis, and C. N. Zayas (eds.). IPBES secretariat, Bonn, Germany.

Climate Change Focal Area

Global Context of Climate Change

443. Climate change is an urgent and growing threat to human and natural systems. Since the Paris Agreement was adopted in 2015, governments and non-state actors have mobilized to implement it through stronger and more ambitious climate action. However, recent assessments indicate that existing commitments and development pathways are insufficient to meet the long-term temperature goals of the Paris Agreement.[347]

444. The IPCC Special Report on 1.5°C of global warming assesses that human activities have already caused approximately 1.0°C of global warming above pre-industrial levels, and GHG emissions and atmospheric concentrations continue to increase, interrupted only briefly by the pandemic-induced recession. This is already leading to climate change impacts that threaten countries' development, economic growth and stability, and will lead to long-term changes in the climate system. The same IPCC report has assessed the differences in climate-related risks associated with a 1.5°C and a 2.0°C of global warming to be robust with respect to climate and weather extremes.[348]

445. In order to limit global warming to 1.5°C above pre-industrial levels, global net anthropogenic carbon dioxide (CO_2) emissions will have to decline by 45% from 2010 levels by 2030 and reach net zero by mid-century, compared to a reduction of 25% by 2030 and reaching net zero by around 2070 to meet the 2°C goal.[349] This will require rapid and profound transitions in energy, land, urban, and industrial systems.

446. The urgency for rapid decarbonization to avoid the worst impacts of climate change, supported by the Paris Agreement's cycle of ambition, is leading to a growing momentum to establish net-zero commitments and Long-Term Strategies (LTSs). Before and during COP 26 many developing countries submitted enhanced NDCs and long-term strategies and announced net-zero pledges. By the end of 2021, more than 130 countries, representing in excess of 85% of global CO_2 emissions have pledged plans to reach net-zero by around mid-century.[350] Furthermore, the Glasgow Climate Pact calls for a higher level of ambition to tackle climate emergency by inviting Parties to communicate enhanced NDCs and long-term strategies in 2022.[351]

447. However, the September 2021 NDC Synthesis Report prepared by the UNFCCC Secretariat, as complemented by the two update reports issued in advance of and during COP 26, shows that while countries have increased individual levels of ambition to reduce emissions, the

[347] United Nations Environment Programme (2021). Emissions Gap Report 2021. Nairobi.
[348] IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report
[349] IPCC, 2018: Global Warming of 1.5°C. IPCC Special Report
[350] Net Zero Tracker, 2021. Accessed on 11/16/2021.
[351] Decision 1/CMA.3, paragraphs 28–29 and 32:
https://unfccc.int/sites/default/files/resource/cma3_auv_2_cover%20decision.pdf

combined impact still falls short of the emission reduction cuts necessary to meet the Paris Agreement goals.[352,353] The focus must now be on scaled up and coherent implementation of climate mitigation action that minimizes tradeoffs and risks, and maximizes synergies with other government priorities, including post-pandemic recovery measures, and benefits for the people and the planet.

448. In light of the commitments made and the global call for higher ambition, the GEF, as an operating entity of the Financial Mechanism, has a mandate to continue to support developing countries to translate their commitments into implementation. The Glasgow Climate Pact points to such important role of the GEF by urging it and other financial institutions to further scale up investments in climate action and calling for a continued increase in the scale and effectiveness of climate finance from all sources globally.[354]

Guidance provided to the GEF by Parties under the UNFCCC

449. The GEF serves as an operating entity of the Financial Mechanism under the Convention. In addition, Article 9 of the Paris Agreement stated that the Financial Mechanism of the Convention, and the GEF as one of its operating entities, shall serve as the Financial Mechanism of Paris Agreement. Further, Article 13 of the Paris Agreement establishes an enhanced transparency framework for action and support, and the COP requested the GEF to make arrangements to support the establishment and operation of a Capacity-Building Initiative for Transparency (CBIT) during GEF-6 and through future replenishment cycles.

450. The GEF-8 Climate Change strategy is structured to support climate action in developing countries in line with the GEF's role as an operating entity of the Financial Mechanism of the UNFCCC and responding to COP guidance. The GEF-8 period is demarcated by the ambition mechanism of the Paris Agreement, with the communication of LTSs and of new or updated NDCs prior to the start of GEF-8, the First Global Stocktake that will take place in 2023, and the communication of the next round of NDCs towards the end of GEF-8.

451. The most recent guidance was provided to the GEF at COP 26, including guidance from the COP and from the COP serving as the meeting of the Parties to the Paris Agreement (CMA). The COP 26 guidance to the GEF reaffirmed the key role of the GEF as provider of financial resources for climate action in developing countries, as well as for the implementation of the enhanced transparency framework under the Paris Agreement.

[352] UNFCCC 2021. Nationally determined contributions under the Paris Agreement Revised synthesis report by the secretariat. Available at: https://unfccc.int/sites/default/files/resource/cma2021_08r01_E.pdf

[353] UNFCCC 2021. Message to Parties and Observers to COP26: Nationally Determined Contribution Syntesis Report (Update). https://unfccc.int/sites/default/files/resource/message_to_parties_and_observers_on_ndc_numbers.pdf

[354] Decision 1/CP.26, paragraph 28: https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf

452. COP 26 welcomed the work undertaken by the GEF on approval of climate change projects and programs, integration of climate change in its other focal areas, collaboration with the Green Climate Fund, and adoption of the private sector strategy.[355] The COP also called for a robust eight replenishment of the GEF and encouraged the GEF to consider ways to increase financial resources allocated for climate action and to prioritize projects that generate environmental co-benefits.[356] The COP also requested, as part of the eight replenishment process, to take note of and consider the needs and priorities for climate finance of developing country Parties, including with regards to the allocation of resources through the STAR system and the non-grant instrument.[357] With regards to the private sector, the COP encouraged the GEF to reinforce its efforts to engage with and mobilize resources from the private sector under its eight replenishment.[358]

453. On transparency, the CMA, at its third meeting (CMA 3), welcomed the actions taken by the GEF to provide support to developing countries for the preparation of the biennial transparency reports (BTR) and to build their institutional and technical capacity for the enhanced transparency framework (ETF) under the Paris Agreement, including through the CBIT.[359] CMA 3 encouraged the GEF, Parties and Implementing Agencies to work collaboratively to ensure that this support is delivered in a timely manner.[360] The CMA requested the GEF to continue to facilitate improved access to the CBIT by developing country Parties.[361] In addition, the CMA also requested the GEF to consider increasing its support for the ETF as part of its eighth replenishment process and to consider combining the application processes for support for producing BTRs, including by considering raising the funding ceiling of expedited enabling activity projects, and for CBIT projects, as appropriate, and by developing an expedited process for projects related to preparing BTRs.[362]

454. At COP 25 in 2019, the COP welcomed the approval of several new policies and guidelines on gender equality, monitoring and evaluation, improved fiduciary standards, and anti-money laundering and counterterrorism finance. The COP invited the GEF to continue its efforts to minimize the time for project approval and disbursement of funds. Under the Koronivia Joint Work on Agriculture, while no guidance has been provided, the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA) have invited the operating entities to continue to contribute to the work under the Koronivia road map, which includes the evaluation of a set of identified interventions and areas contributing to climate change mitigation and adaptation.

[355] Decision -/CP.26, paragraph 2. https://unfccc.int/sites/default/files/resource/cop26_auv_8d_GEF.pdf
[356] Decision -/CP.26, paragraphs 3 and 4. https://unfccc.int/sites/default/files/resource/cop26_auv_8d_GEF.pdf
[357] Decision -/CP.26, paragraphs 5, 11 and 18. https://unfccc.int/sites/default/files/resource/cop26_auv_8d_GEF.pdf
[358] Decision -/CP.26, paragraph 14. https://unfccc.int/sites/default/files/resource/cop26_auv_8d_GEF.pdf
[359] Decision -/CMA.3, paragraphs 3 and 4. https://unfccc.int/sites/default/files/resource/CMA3_auv_8c_GEF.pdf
[360] Decision -/CMA.3, paragraph 4. https://unfccc.int/sites/default/files/resource/CMA3_auv_8c_GEF.pdf
[361] Decision -/CMA.3, paragraph 5. https://unfccc.int/sites/default/files/resource/CMA3_auv_8c_GEF.pdf
[362] Decision -/CMA.3, paragraphs 6 and 8. https://unfccc.int/sites/default/files/resource/CMA3_auv_8c_GEF.pdf

455. Also at COP 25, Parties agreed to a five-year enhanced Lima work program on gender and its gender action plan, which sets out objectives and activities for gender-responsive climate action. As an operating entity of the Financial Mechanism, the GEF has a role in providing financial and technical support for promoting the strengthening of gender integration into climate policies, strategies and actions, including good practices to facilitate access to climate finance for grassroots women's organizations and IPLCs.

456. Guidance from COP 24 in 2018 included reflections on the seventh replenishment. COP 24 welcomed the seventh replenishment of the GEF, but recognized with concern the decrease in allocation to the climate change focal area, including the STAR, compared with its sixth replenishment. The COP also acknowledged the increased integration of climate change priorities into other focal areas and the impact programs, as well as the increased focus on innovation and enhanced synergies with other focal areas, while highlighting the importance of enhancing country ownership in the impact programs.

The GEF in the climate finance landscape.

457. In the context of the evolving climate finance space, the GEF strategically invest in close coordination with the other major climate funds, with the view to enhance complementarity and maximize synergies. A recent review of the project portfolios of GEF, GCF, AF and CIFs found that the GEF, unsurprisingly, as the oldest mechanism, has implemented or ongoing projects in most of the geographies where other funds are now active. The convergence of funding on specific geographies is a precondition of, and indicates a large potential for, synergies.[363]

458. One of the key defining characteristics of the GEF lies in the fact that it serves as the Financial Mechanism for the three Rio Conventions and the two Chemicals Conventions, and that it is active in other global environmental areas such as international waters and forests. GEF's investments, as articulated through focal areas and integrated programs, have therefore the ability to simultaneously deliver multiple GEBs and to directly contribute to several of the SDGs that underpin the health of the biosphere.

459. In addition to the advantages stemming from its broad mandate, as also highlighted by a recent study by the Multilateral Organization Performance Assessment Network (MOPAN),[364] the GEF's comparative advantage can be articulated around four key aspects. First, the GEF provides climate finance almost entirely through predictable, non-reimbursable, grant funding.

460. Second, related to the previous point, funding provided by the GEF is in most cases received without implications for the recipient countries' ability to borrow as sovereign guarantees

[363] CIF and GCF, 2020, Synergies Between Climate Finance Mechanisms. Available at: https://www.greenclimate.fund/sites/default/files/document/synergies-climate-finance.pdf

[364] MOPAN, 2021, Lessons in Multilateral Effectiveness: Pulling together – The multilateral response to climate change, *Publication forthcoming*.

from the host Government which are normally required for loans, aren't generally requested for grants. This is particularly important in the post-COVID context for developing countries with already limited fiscal space.

461. Third, unique amongst climate funds, the GEF allocates climate, biodiversity and land degradation funds through the System for Transparent Allocation of Resources (STAR). The STAR ensures that all recipient countries will receive funds to implement NDCs according to national circumstances and to enable them to meet Convention's obligations. The upfront earmarking of funds provides clarity, predictability, and transparency on resources availability and allow recipient countries and GEF Agencies to take early decisions on project prioritization. Investments made through the biodiversity and land degradation focal areas deliver strong climate mitigation and adaptation co-benefits and greatly contribute to the achievement of the climate change mitigation core indicators targets.

462. Fourth, the GEF can and should take risks as indicated by the recent study on Innovation by the IEO.[365] Tolerating risks is key to the GEF's mission of promoting innovation and early-stage technologies and business models. Risk-appetite can support the identification of leapfrogging clean technologies, and it was central to some of the major market transformations the GEF has enabled over the last decades, such as the development of the wind power market in Uruguay and of concentrated solar power in Morocco.

Long Term Vision on Complementarity with the GCF

463. To respond to COP guidance on the issue of complementarity and recognizing similar mandates in the climate finance space, since 2018 the GEF and GCF have been collaborating on a Pilot Coordinated Engagement Initiative, to strengthen collaboration and maximize synergies between the operating entities of the financial mechanism of the Convention. Building on such efforts and to further define modalities for shared engagements, the GEF and the GCF defined a Long-Term Vision on Complementarity, Coherence, and Collaboration (LTV) which was submitted to and welcomed by the GEF Council and the GCF Board in June 2021.[366]

464. The respective visions and missions of the GEF and GCF are partly shared and fully mutually reinforcing. The vision of the GCF is to promote the paradigm shift towards low-emission and climate-resilient development pathways in the context of sustainable development, while the GEF's mission is to safeguard the global environment by helping developing countries meet their commitments to multilateral environmental conventions and by creating and enhancing partnerships at national, regional and global scales based on the principle of sectoral integration and systemic approaches.

[365] See GEF/E/C.60/02

[366] GEF, 2021, Long-Term Vision on Complementarity, Coherence, and Collaboration between the Green Climate Fund and the Global Environment Facility, Council Document GEF/C.60/08.

465. The LTV aims at enhancing the planning, implementation, and outcomes of GEF and GCF investments, providing a strategic direction for complementarity designed to inform future programming and prospective joint work. More specifically, the LTV will help both entities to jointly progress on coordinating support for major initiatives, facilitate national investment planning, inform each entity's investment and programming strategies, identify, share and apply lessons learned to facilitate the implementation of project and programs for partners, collaborate on development of methodologies and guidance to maximize climate impacts, develop a list of activities or programs each entity will prioritize and support the establishment of collaborating financing platforms.

GEF-8 Climate Change Focal Area Strategy and Associated Programming

466. The GEF-8 Climate Change focal area strategy aims to support developing countries to make transformational shifts towards net-zero GHG emissions and climate-resilient development pathways.

467. To achieve this goal, the strategy is organized around two pillars and six objectives:

Pillar I: Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts

1.1. Accelerate the efficient use of energy and materials.

1.2. Enable the transition to decarbonized power systems.

1.3. Scale up zero-emission mobility of people and goods.

1.4. Promote Nature-based Solutions with high mitigation potential.

Pillar II: Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies

2.1. Support capacity-building needs for transparency under the Paris Agreement through the CBIT.

2.2. Support relevant Convention obligations and enabling activities.

Pillar I: Promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts

468. The GEF-8 climate change investments will focus on opportunities with a potential to trigger the transformation of key economic systems, including energy, transport, and land use. Interventions will combine technologies, financial mechanisms, policy and regulatory support, and best practices that support country-driven strategies towards rapid reductions in GHG emissions

to reach carbon neutrality by mid-century, while integrating climate change risks considerations and resilience measures.

469. All projects supported by the climate change focal area will be required to demonstrate alignment to national climate strategies and plans, including NDCs and LTSs, as well as to develop and demonstrate innovative approaches that are sustainable beyond the project implementation period. The GEF support will prioritize interventions for transformative policies, innovative technological solutions, and private sector engagement that have clear potential for replication and scale up and are complementary to efforts of other financial mechanisms, such as the GCF. Climate change projects will continue to ensure meaningful gender mainstreaming and the inclusion of gender-responsive approaches and results, in line with the relevant policy, strategy and guidance.

470. An effective decarbonization of the energy system, which including transport represents nearly three quarters of the world's GHG emissions,[367] will need to include aggressive efficiency measures, massive expansion of renewable energy, electrification of end-use sectors, the replacement of fossil fuels with zero emission alternatives, such as green hydrogen, and a shift to low-carbon materials and circular economy approaches. In addition, significant progress is needed to achieve universal access to sustainable energy by 2030, as targeted by SDG7.

471. Agriculture, Forestry and Other Land Use (AFOLU) contribute about 23% of the anthropogenic GHG emissions including through loss and degradation of forests and other ecosystems,[368] and this share is even higher for the subset of countries eligible for GEF financing. However, the sector can contribute about one third of the cost-effective climate mitigation needed by 2030 to limit the global warming below 2°C,[369] while also generating significant climate adaptation benefits, combatting deforestation, desertification and land degradation, and enhancing biodiversity, food security, and prosperity for farmers.

472. This Pillar will be supported through four specific objectives, corresponding to key areas of intervention that have been identified as central to the systems transformation required to rapidly reduce GHG emissions over the next decade and achieve long-term carbon neutrality goals. These objectives are not mutually exclusive and single projects or programs may target multiple objectives where linkages and synergies exist.

473. In addition, cross-cutting and/or upstream interventions may be funded through a combination of two or more of the relevant focal area objectives. Examples of projects that could be supported with this approach would include those aimed at supporting fiscal policy and green

[367] Climate Watch Historical GHG Emissions. 2020. Washington, DC: World Resources Institute. Available online at: https://www.climatewatchdata.org/ghg-emissions

[368] IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019)

[369] Griscom et al. (2017). Natural climate solutions. Proceedings of the National Academy of Sciences, 114(44), 11645. doi: https://doi.org/10.1073/pnas.1710465114

finance interventions to align financial flows with climate goals, in line with Art 2.1c of the Paris Agreement, interventions supporting clean technology and innovation across more than one focal area objectives, and interventions aimed at supporting the establishment of carbon pricing schemes. Projects that involve the use of fossil fuels will continue to be excluded from GEF's eligibility for funding.

Objective 1.1: Accelerate the efficient use of energy and materials

474. The built environment accounts for 38% of the global energy use and carbon emissions.[370] Alignment to the Paris Agreement goals necessitates all new buildings to be net-zero on operational emissions and to reduce embodied carbon by 40%-50% by 2030. By 2050, all new and existing assets will need to be net-zero for both operational and embodied emissions, across their entire lifecycle.[371] While countries have mentioned building efficiency in their NDCs, adequate decarbonization policies are lacking: more than two thirds of projected new buildings by around 2050 are in countries that currently do not have building energy codes.

475. The GEF will support the adoption of a new generation of energy efficiency policies and green building codes that are in line with updated NDCs and LTSs. The GEF will continue to support financial and fiscal instruments, mechanisms and business models, including those promoting "energy as a service" approaches, that can scale up and aggregate demand for energy efficiency products and services. The GEF will also support roadmaps that propose an integrated approach to buildings, from materials, new building energy codes and performance, integration of renewable energy, and net-zero building standards and demonstrations, with an enhanced focus on public buildings and social housing. This support would also include necessary capacity development for monitoring and enforcement of policies and green building codes. Approaches to leverage land use jurisdictions and building permits to provide incentives to use Nature-based Solutions that reduce building energy needs (e.g. green facades and roofs) and urban heat will also be supported.

476. Cooling accounts for almost 20% of the global electricity demand today and is expected to grow to 37% by 2050 under business-as-usual scenarios.[372] In this area, the GEF will focus on the wide adoption and implementation of new energy efficiency performance standards, and look for synergies with other programs, including to maximize the climate benefits of actions to implement the Kigali Amendment of the Montreal Protocol. This may include grant schemes to subsidize the

[370] United Nations Environment Programme (2020). 2020 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Nairobi

[371] GlobalABC/IEA/UNEP (Global Alliance for Buildings and Construction, International Energy Agency, and the United
Nations Environment Programme) (2020): GlobalABC Roadmap for Buildings and Construction: Towards a zero-emission,
efficient and resilient buildings and construction sector, IEA, Paris.

[372] IEA, 2018, The Future of Cooling, Opportunities for Energy-Efficient Air Conditioning. Paris

costs for early adopters and support for new technologies such as district cooling, super efficient cooling appliances, deployment of digitalization and energy management systems, and innovation in cold chains with linkages to food security, water, and health.

477. System decarbonization requires not only a reduction in energy use, but also adequate considerations to the sourcing and use of materials. This can be achieved by applying circular economy strategies such as recover, reduce, reuse, redesign, regenerate and remanufacturing. Boosting circular economy approaches may also result in a reduction in energy use per unit of output. Support in this area will be focused on the development of low-carbon material pathways, including support for certifications and standards (e.g. green cement, steel, etc.), demonstrations through green public procurement, and the development of new business models.

478. In the manufacturing sector, industrial energy supply has traditionally depended on subsidized heavy fuels, and many micro, small and medium sized industrial & manufacturing enterprises (industrial MSMEs) are still inefficient in the use of heat and energy (boilers, furnaces, motors, etc.). The GEF will support mitigation measures in this sector including sectoral medium- and long-term roadmaps, electrification of heat uses and wider adoption of digital technologies, harmonized benchmarks for low- and zero-carbon products and associated certification schemes, aggregating demand for low- and zero-carbon products, and technology transfer of new innovations in this space. The GEF may also consider supporting the demonstration of net-zero industrial parks or clusters through integrated zero-carbon technologies and application of circular economy practices.

479. Projects under this objective will take into account women's and men's differentiated knowledge of, access to, and use of energy-efficient technologies, as well as their attitudes towards the risks and benefits associated with adopting new technologies. Projects will also support the development of skills and training to promote women's participation in the development and deployment of energy efficient technologies and services and relevant decision-making processes.

Objective 1.2: Enable the transition to decarbonized power systems

480. The clean energy market has seen rapid progress throughout the last decade. Significant technological advances and cost reductions have made renewable options cheaper than fossil fuel alternatives in most locations, even without financial incentives. However, the annual grow rate of renewables in the electricity generation mix would have to increase five-fold by 2030 and to triple between 2030 and 2050 to meet the Paris Agreement goals.[373] At the same time, policies for the phase out of coal and other fossil fuels are urgently needed to avoid lock-in of emissions.

[373] Lebling, K., Ge, M., Levin, K., Waite, R., Friedrich, J., Elliott, C., Chan, C., Ross, K., Stolle, F., & Harris, N. 2020. "State of Climate Action: Assessing Progress toward 2030 and 2050". World Resources Institute, Washington, US.

481. In light of the significant technology cost reduction gains over the last decade, the highest priority is increasing the pace of renewable energy growth and its integration to the grid, as well as the electrification of all end uses. The GEF will support long-term planning and modelling from a systems perspective and interventions aimed at aligning financial flows for energy generation with the goals of the Paris Agreement. Investments in this area will include smart-grids, demand-side management including advanced metering infrastructure, energy storage, and grid modernization to enable the scaled-up integration of renewable energy, including flexibility and balancing needs of power systems, to bridge gaps in technical, policy and regulatory capacity.

482. Opportunities to enhance the climate and economic resilience of communities through improved access to clean, reliable, affordable and climate resilient energy generation and distribution systems, especially in SIDS and LDCs, will also be pursued, including through multi-trust funds programming with LDCF and SCCF. The GEF may also provide early support for green hydrogen—produced with renewable electricity through electrolysis—as an additional option for energy storage and potential to help decarbonize hard-to-abate sectors.

483. Energy access will remain a priority for the GEF. Latest data from the UN shows that 759 million people still lack access to modern and reliable energy.[374] Access to energy is essential for the provision of basic services, such as water purification, health care, cooking, lighting, heating, mechanical services and transportation, amongst others. The COVID-19 pandemic is impacting significantly current and future progress on energy access, making basic electricity services unaffordable for up to 30 million people who had previously enjoyed access and further endangering the achievement of SDG7 by 2030.[375] The GEF will support decentralized clean and affordable energy solutions, focusing on micro- and mini- grid systems in rural and peri urban areas. Support will target streamlined regulatory processes, integrating productive uses to drive demand, and other measures to scale up financing. In this area, the GEF may support the development of local supply chains and the promotion of entrepreneurship for sustainable/zero-carbon energy. Opportunities to link energy access with other priority GEF areas such as energy efficiency, agriculture and cooling will also be pursued.

484. Women play a critical role in the provision of energy in households, and are disproportionately affected by impacts on health, productivity, unpaid labor and employment burdens from a lack of access to affordable, reliable, sustainable and modern energy. Women are also underrepresented in the energy sector as workers and entrepreneurs, and face additional barriers including access to finance. Projects under this objective will aim to provide opportunities for training and skills development to promote the participation of women in technical and

[374] IEA, IRENA, UNSD, World Bank, WHO. 2021. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC.
[375] Ibidem.

nontechnical roles in the sector, increase women's role in decision-making, and access to finance for energy access, as well as to produce positive health, economic and other development benefits.

Objective 1.3: Scale up zero-emission mobility of people and goods

485. For the transport sector to support the Paris Agreement's long-term temperature goals, a rapid and deep decarbonization of all transport modes towards zero-emissions is needed by 2050.[376] It is estimated that in road transport, 85% of the reductions will need to come from efficiency and electrification. The remaining 15% will have to come from behavioral changes, reduction of needs (e.g. telework) and distance of travels, modal shifts (more walking, cycling and mass transport) and land-use/urban planning (transport-oriented development).[377]

486. In many developing countries, key barriers prevent such transformations from taking place. Mass transit is still based largely on old and inefficient fleets, operated by small companies with very limited access to credit for efficiency upgrades and awareness and capacity to take advantage of new technologies. Electric drive vehicles (EVs), where available in local markets, still present higher upfront capital costs than traditional internal combustion engine (ICE) vehicles, and the lack of adequate charging infrastructure contributes to range anxiety. The unavailability of servicing networks, local expertise and lack of well-designed charge-rate structures represent additional barriers. Finally, in many GEF countries the import of secondhand ICE vehicles from developed countries allows old, inefficient vehicles to remain on the road much longer than intended, locking in additional emissions.

487. Thus, the GEF will support integrated approaches to support the transition towards zero-emission mobility, including through avoid/reduce, shift and improve approaches (A-S-I), financing of supportive policies and local capacity building to further electrification, recycling of lithium ion batteries and other critical materials, integration of EV electricity demand with the electric grid and direct coupling with renewable energy deployment, and fiscal considerations related to revenues from fuel taxes. The GEF, where feasible and appropriate, will also support local manufacturing and market development and South-South cooperation.

488. The way transport is used by men and women is influenced by gender and social roles and norms and thus leads to differences in modes of transport, purposes for transport, and levels of access. Projects under this objective will ensure approaches, decision-making and policies are inclusive, gender-responsive, and responsive to these differences, and aim to promote women's participation in decision-making processes and transport services.

[376] International Council on Clean Transportation, 2020. Vision 2050. Available at: https://theicct.org/sites/default/files/publications/ICCT_Vision2050_sept2020.pdf

[377] UNFCCC. 2020. Executive Summary. Climate Action Pathway: Transport. Available at: https://unfccc.int/sites/default/files/resource/Climate%20Action%20Pathway%20Transport.%20Executive%20Summary.pdf

489. Building on the successful GEF-7 Global Program to Support the Shift to Electric Mobility, the GEF will consider additional investments to support developing countries which have not yet benefitted from programming towards the shift to electric mobility, as well as to further promote the integration of renewable energy sources with charging networks and advanced technologies such as Vehicle-to-Grid mechanisms (V2G). Innovative and scalable solutions to accelerate the decarbonization of the shipping and aviation sectors will also be considered.

Objective 1.4: Promote Nature-based Solutions with high mitigation potential

490. To achieve the goal of net zero emissions by around mid-century, the emissions from deforestation and ecosystem degradation will have to be reduced by 95%, nearly becoming a net sink, and the emissions from the agriculture sector and food systems by 25%.[378] The GEF will seek to support the most efficient investments to generate GHG mitigation benefits, in natural ecosystems and agriculture landscapes. The scope of proposed investments will support mitigation options in two priority areas: in high carbon ecosystems and in the agriculture sector, supporting actions as aligned as possible with the Koronivia process outcomes. The interventions supported by this objective are expected to generate significant co-benefits, notably in terms of climate adaptation and improved livelihoods for large numbers of farmers and rural communities, enhanced biodiversity and reduced land degradation.

491. Aligned with country climate strategies as stated in the NDC, the GEF will also support interventions in forest ecosystems with high mitigation potential, such as the intact forests that store twice more carbon than other forests.[379] In addition, wetlands, peatlands and coastal habitats such as mangroves, seagrass and marshes, are known to be important carbon sinks (primarily from sediments and soils) but at the same time, threatened by human activities and climate change. The GEF scope of interventions will also include the protection and restoration of these ecosystems. In the targeted areas, the activities supported will need to demonstrate a high potential in terms of reducing carbon loss and providing continued or enhanced natural CO_2 removal.

492. The Koronivia Joint Work on Agriculture launched by COP 23 identified issues related to agriculture which have a potential to contribute to the mitigation of climate change: improved soil carbon, improved nutrient use and manure management towards sustainable and resilient agricultural systems, and improved livestock management systems. Following the work and results of this ongoing process under UNFCCC, the GEF will support enabling frameworks, capacity development and investment activities with clear potential to result in cost-effective and high-impact climate mitigation outcomes in the agriculture sector.

[378] UNFCCC. 2020. Executive Summary. Climate Action Pathway: Land Use. Available at: https://unfccc.int/sites/default/files/resource/ExecSumm_LandUse.pdf

[379] Mawell et al. (2019). Degradation and forgone removals increase the carbon impact of intact forest loss by 626%. Science Advances.

493. Gender gaps in the access to and control of natural resources are further exacerbated by the impacts of climate change, which disproportionately affect the poor and most vulnerable, especially women. The design and implementation of projects under this objective will consider and respond to gender-specific differences in the access to resources, services, information and employment opportunities for the sustainable and productive use of natural resources, and in capacity for resilience to climate change. Projects will promote gender-responsive approaches and decision-making built on inclusive stakeholder consultations and aim to empower women in the implementation of Nature-based Solutions and in the promotion of sustainable income-generating opportunities.

Pillar II: Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies

494. The GEF continues to address the need for enabling conditions to mainstream climate change concerns into national planning and development agendas through its support for enabling activities, including Convention obligations and the CBIT, through sound data, analysis, and policy frameworks. As in prior GEF cycles, under the GEF-8 Climate Change focal area strategy countries will have access to resources intended for Convention obligations and CBIT support from set-asides that do not draw on country allocations. Country allocations will be available to deliver on other enabling activities. Activities under this pillar provide opportunities to recognize, build capacity, and develop actions that advance gender equality and women's empowerment in the preparation of climate change plans, strategies policies and reports.

<u>Objective 2.1: Support capacity-building needs for transparency under the Paris Agreement through the CBIT</u>

495. The GEF will continue to provide support for projects that build institutional and technical capacity to meet the provisions of the transparency framework of the Paris Agreement. The CBIT, as per paragraph 85 of the COP decision adopting the Paris Agreement, will aim:

- To strengthen national institutions for transparency-related activities in line with national priorities;
- To provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement;
- To assist in the improvement of transparency over time.

496. The Paris Agreement in Article 13 establishes an enhanced transparency framework for action and support, with built-in flexibility which takes into account Parties' different capacities and builds upon collective experience. The transparency framework shall provide flexibility in the implementation of the provisions of Article 13 to those developing country Parties that need it in the light of their capacities. The purpose of the framework for support is to provide clarity on

support provided and received by relevant individual Parties, and, to the extent possible, to provide a full overview of aggregate financial support provided, to inform the global stocktake. The purpose of the framework for action is to provide a clear understanding of climate change action, including on tracking progress towards achieving Parties' NDCs. The CBIT will support activities aligned with its aim at the national and regional/global levels building on the experience and results from CBIT projects supported in GEF-6 and GEF-7.

Objective 2.2 Support relevant Convention obligations and enabling activities

497. The CMA decided that Parties shall submit their first BTR and national inventory report, if submitted as a stand-alone report, in accordance with the adopted modalities, procedures and guidelines, at the latest by 31 December 2024 and that LDCs and SIDS may submit this information at their discretion.

498. All developing country Parties to the Paris Agreement are eligible to receive financing for the preparation of BTRs. Countries can access resources at full agreed cost for the BTR preparations, including the national inventory report if submitted as a stand-alone report, from the climate change focal area set-aside resources. If countries require additional resources, they can utilize resources from their respective STAR allocation.

499. Parties to the Paris Agreement may continue to report a separate national communication (NC) every four years, or may choose to submit a combined BTR/NC report in the years a NC is submitted, following the modalities, procedures and guidelines for BTRs and include:

- Supplemental chapters on research and systemic observation and on education, training and public awareness, in accordance with applicable guidelines in 17/CP.8 or 6/CP.25;
- An additional chapter on adaptation for Parties that have not included this information in the BTR, in accordance with applicable guidelines in 17/CP.8 or 6/CP.25.[380]

500. UNFCCC Parties eligible for GEF support that are not Parties to the Paris Agreement will continue to have access to financing from set-aside resources for the preparation of NCs and Biennial Update Reports, according to guidance.

501. Following COP guidance, support for TNAs will be made available under this objective for small island developing states and least developed countries which have not yet undertaken one and wish to do so. Other countries may use their country allocations for the preparation of TNAs. The GEF will also continue to make financial support available for the preparation of NDCs, following COP guidance. Countries may use country allocations for these activities.

[380] The supplemental chapters referred to under (a) and (b) will be supported with GEF resources, in an amount equivalent to the difference between the suggested cost for a stand-alone BTR and a combined BTR/NC report.

Focal Area Set Aside

502. In addition to Objectives 2.1 and 2.2, the Focal Area set aside envelope will provide resources for global and regional programming for strategic areas with potential to generate global lessons and promote technology transfer. Global or regional programs that may be considered could include initiatives on: (i) zero-carbon built environments, (ii) development of green hydrogen technologies, (iii) support for the energy access, (iv) electric grid modernization, including through digitalization and integration of storage capabilities, and (v) acceleration of electric mobility.

Key Contributions of Integrated Programs to Climate Change Outcomes

Net-Zero Nature-Positive Accelerator

503. The NZNP Accelerator IP will significantly contribute to the generation of climate change mitigation outcomes by raising the level of ambition of climate mitigation plans and NDCs in participating countries to a level that aligns with the pathway needed to reach net zero emissions around 2050. It will support countries to prepare NDCs and LTSs that are consistent with the long term temperature goals of the Paris Agreement, translate them into short- and medium-term targets coupled with coherent and enforceable policies, and move swiftly from planning to implementation.

Food Systems

504. The Food Systems IP provides the opportunity to foster climate-smart agriculture and sustainable land management, while also increasing the prospects for food security for smallholders and communities that are dependent on farming for their livelihoods. Restoring agricultural productivity while also reducing GHG emissions is key for countries to jointly meet their NDC and SDG goals. It will also foster a sustainable supply chain with regard to production, processing, and demand for key agricultural products that are vital to long-term emissions reductions from agriculture including through avoided deforestation of tropical forests.

Sustainable Cities

505. The Sustainable Cities IP will be critical to address both short-term and long-term climate change challenges in the rapidly growing urban sector. It targets urban interventions with significant climate change mitigation potential to help cities shift towards low-emission and resilient urban development in an integrated manner. Cities must be empowered to effectively support the implementation of NDCs and low-carbon development pathways.

Amazon, Congo, and Critical Forest Biomes

506. The GEF's historic SFM investments have already demonstrated the significant climate change benefits available through integrated approaches on forests. In GEF-8, this IP will foster low-carbon strategies focusing on intact forest landscapes, such as the Amazon and the Congo Basin. The targeted ecosystems, which are key carbon sinks with high capacity of carbon removal, are increasingly threatened, and are therefore critical to halting the release of GHG emissions through sustainable forest management and avoided deforestation and by enhancing carbon stocks above and below ground.

Circular Solutions to Plastic Pollution

507. The Circular Solutions to Plastic Pollution IP will tackle plastic production, consumption and waste, which will reduce carbon emissions since GHGs are emitted at every stage of the plastic lifecycle. The IP will work toward eliminating plastic pollution, promoting innovative solutions, and fostering circular systems. By using resources more efficiently, reducing waste, and following cradle-to-grave design principles, GHG emissions can be significantly reduced.

Ecosystem Restoration

508. Soils play a crucial role in global climate processes through their regulation of CO_2, nitrous oxide, and methane. At the global scale, soils and the biomass they hold are the major terrestrial reservoir of carbon and therefore have a major influence on the concentration of GHG in the atmosphere, making the restoration of ecosystems crucial to global climate change mitigation efforts. The Ecosystem Restoration IP will work to restore carbon stocks and reservoirs in a variety of ecosystem types, including peatlands, and will produce significant climate adaptation and livelihood co-benefits for farmers and rural communities.

Role of the Private Sector in Supporting Climate Change Outcomes

509. Supportive policies and strategies are fundamental to catalyze innovation and technology transfer for mitigation options and to enhance private sector investment. Resources from the GEF play a key role in piloting emerging innovative solutions, including technologies, management practices, supportive policies and strategies, and blended finance which foster private sector engagement for technology and innovation, and more importantly scaling up.

510. The private sector is be expected to play a key role in supporting the objectives of the Climate Change focal area strategy. In line with the GEF 2020 Private Sector Engagement Strategy,[381] the focal area strategy will prioritize interventions with potential to work strategically

[381] GEF/C.59/07/Rev.01, GEF's Private Sector Engagement Strategy, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.59.07.Rev_.01_GEFs%20Private%20Sector%20Engagement%20Strategy_.pdf

with multi-stakeholder platforms and will adopt a systematic approach to crowd in the private sector across the entire climate change portfolio. Key private sector actors will include SMEs, entrepreneurs, energy suppliers and distributors, vehicle manufacturers, industrial producers and manufacturers, farmers and producers, and financial institutions, among others.

511. The GEF IEO evaluation of GEF's engagement with micro, small and medium enterprises highlighted that successful partnerships with the MSME sector generally included three types or scales of private sector entities demonstrating that value chain engagements bring a wider spectrum of actors projects.[382] The evaluation also showed that innovation and scaling-up roles for the private sector were more common in the climate change focal area, and so targeted approaches that foster on-the-ground private sector activities from MSMEs should be developed.

512. The many net-zero commitments made by countries and private companies, provide an excellent opportunity to build alliances with the private sector and other non-state actors such as CSOs and cities, to deliver on their climate change ambitions. The climate change focal area will focus on translating these ambitions, including notably those from signatories of the UN campaign "Race to Zero," into real-economy emissions reductions. It will also connect the work of governments with the many voluntary and collaborative actions taken by cities, regions, businesses and investors through linkages to the Climate Champions Network as part of the UN-led Marrakesh Partnership. Multi-sectoral climate initiatives that align with the GEF-8 integration agenda will be supported to advance the achievement of the multiple key goals of the Rio Conventions through strengthened partnerships that bring together biodiversity and land degradation neutrality outcomes with climate change mitigation actions. Multi-stakeholder initiatives will be also supported to advance the shared objectives of the UNFCCC with the Minamata and Stockholm Conventions on chemicals, as there is growing recognition of the interlinkages between climate change, hazardous chemicals and wastes.[383] The GEF Partnership can provide expertise, guidance, and strategic alignment to such platforms with climate change goals in GEF countries.

513. In addition, GEF investments in climate mitigation will look to engage and work with business committing to Science Based Targets (SBTi) and to provide pathways for private sector actors to align with deep decarbonization targets in key areas relevant for the transformation of energy, transport and land use systems. Focus will be given to supporting the private sector with key metrics and reporting frameworks, including on potential use of market instruments that are established under or consistent with the relevant elements of Article 6 of the Paris Agreement and

[382] The GEF IEO Evaluation of GEF Engagement with Micro, Small and Medium Enterprises 2021 https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_05_MSME_evaluation.pdf

[383] UNEP, Secretariats of the Basel, Rotterdam, Stockholm Conventions, and the Minamata Convention on Mercury, Chemicals, Wastes and Climate Change. Interlinkages and potential for Coordinated Action, May 2021, https://www.unep.org/resources/report/chemicals-wastes-and-climate-change-interlinkages-and-potential-coordinated-action

voluntary carbon markets, to better account and offset for their direct and indirect supply chain emissions.

514. A strategic goal for the Climate Change focal area is to use these ambition frameworks and science-based multi-stakeholder platforms to reach all scales of business and support the upstream investment into value chains where abatement has historically been hard to achieve, such as in agricultural commodities, in textiles and fashion, and in the fossil-fuel dependent economies and geographies, including in SIDS and LDCs.

515. Targeted activities in these areas will be operationalized through the involvement of diverse private sector partners in project activities beyond a co-financing role and extend to technical assistance, knowledge and skills training in technologies or practices, awareness and education initiatives, and access to financing for interventions that generate global environmental benefits. The provision of incentives that account for differences in each target groups' needs, capacities, motivations, and barriers are crucial for creating a business case for private sector actors at all scales to participate in transformational climate change activities. Further work to create an enabling environment for the private sector should support the removal of logistical, administrative, and financial barriers to switching to new technologies and practices.

Land Degradation Focal Area

Global Context of Land Degradation

516. Land degradation is a global challenge, which aggravates economic, social and environmental problems such as poverty, poor health, food insecurity, biodiversity loss, water scarcity, reduced resilience to climate change impacts, and forced migration. Land degradation negatively affects 3.2 billion people especially rural communities, smallholder farmers, and the extremely poor and results in an economic loss of around 10% of the annual global gross product.[384]

517. 70% of the world's poorest people depend on agriculture for their livelihoods. At the same time, globally, 24% of the land is degrading and more than 1.5 billion people directly depend on these degraded lands.[385] Land degradation processes threaten the livelihoods, well-being, food, water and energy security and increase vulnerability of millions of people.

518. Agriculture and land use change is the dominant driver for land degradation and deforestation worldwide, caused by the unsustainable management or over-exploitation of resources, such as vegetation clearance, nutrient depletion, overgrazing, inappropriate irrigation, and excessive use of agrochemicals. Urban sprawl, pollution, mining, and quarrying are additional drivers.[386] Agricultural land use reverberates across local ecosystem functions and dynamics to the global level, such as land-atmospheric interactions,[387] and with cross-scale implications from local to global scales underlining the importance of land use, and land degradation, as a global driver of environmental degradation.

519. Pressures on the global land resource are still increasing mainly due to: (i) growing demand for food and agricultural commodities for an expanding and more affluent world population; (ii) competition for productive land for biofuel, urban expansion and other non-productive uses; (iii) decrease in productivity due to decline in soil health, lower nutrient status and organic matter; (iv) weakened resilience of agricultural production systems due to depleted biodiversity; and (v) natural factors such as increased climate variability and extreme weather events.

520. With the current pandemic and against the background of degradation significantly altering ecological systems worldwide, the link between land conversion and agricultural and livestock intensification with the risk of emerging infectious disease is even more pronounced.[388]

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[384] The IPBES Assessment Report on Land Degradation and Restoration, 2018
[385] UNCCD Global Land Outlook Working Paper- Land Under Pressure Health Under Stress, 2019
[386] UNCCD, Global Land Outlook Report, 2017.
[387] Moore, J.C. The re-imagining of a framework for agricultural land use: A pathway for integrating agricultural practices into ecosystem services, planetary boundaries and sustainable development goals. Ambio, 2021.
[388] UNCCD Global Land Outlook Working Paper- Land Under Pressure Health Under Stress, 2019

521. Dryland areas are particularly vulnerable to desertification, land degradation and drought (DLDD) issues. They make up 41% of the Earth's surface, with populations in drylands projected to increase by 43 %—from 2.7 billion in 2010 to 4.0 billion in 2050.[389] Drylands face governance challenges such as low human resource capacity (e.g. low education attainment), low investment of public resources, weak penetration of government services, and insecure land tenure and resource rights in particular for vulnerable populations such as women, IPLCs and youth.

522. Climate change exacerbates land degradation processes and leads to variations in yields and income from agriculture, threatening the resilience of agro-ecosystems and stability of food production systems. Drought is one of the major drivers of global food and water insecurity, affecting agricultural production and access to food and water. Drought can, in extreme cases, force people to abandon their land, resorting to migration as a last livelihood strategy.[390] Every year, 12 million hectares of land become unproductive due to desertification and drought and the livelihoods of more than 1 billion people in some 100 countries are threatened by desertification.[391,392]

523. Women's input, knowledge and guidance are indispensable to any productive, sustainable efforts to avoid, reduce and reverse land degradation and mitigate the effects of drought. When women are empowered, entire families benefit, and these benefits often have an effect on future generations. However, gender inequality still plays a significant role in land-degradation related issues. Women farmers often have less access to land, decision making processes and leadership, credit, information, technology, and extension. Challenges remain in relation to the generation, availability, statistics and indicators of gender. In this context, the UNCCD Gender Action Plan[393] and the associated guidelines[394] represent a landmark opportunity to transform gender equality and human rights into action.

Conference of the Parties (COP) Decisions with relevance for the GEF

524. GEF's mandate to invest in global environmental benefits from production landscapes relates directly to its role as a financial mechanism of the UNCCD. The Land Degradation Focal Area (LDFA) provides the opportunity for eligible countries to utilize GEF resources for implementing the Convention and the UNCCD Strategy (2018-2030),[395] which is a comprehensive global commitment to avoid and reduce desertification and land degradation and to restore the productivity of degraded land to achieve Land Degradation Neutrality (LDN), improve the

[389] The IPBES Assessment Report on Land Degradation and Restoration, 2018
[390] UNCCD Science Policy Interface, Land Management and Drought, 2019
[391] Ibid
[392] IPPC report on Climate and Land, 2019
[393] https://www.unccd.int/actions/gender-action-plan
[394] https://www.unccd.int/publications/manual-gender-responsive-land-degradation-neutrality-transformative-projects-and
[395] https://www.unccd.int/sites/default/files/relevant-links/2018-08/cop21add1_SF_EN.pdf

livelihoods of more than 1.3 billion people, and mitigate the impacts of drought on vulnerable populations.

525. LDN is the overarching concept of the UNCCD, defined as "a state whereby the amount and quality of land resources necessary to support ecosystem function and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems".[396] LDN allows to set measurable targets for sustainable land management, promoting a response hierarchy of measures to avoid and to reduce degradation of land combined with measures to reverse past degradation. The IPBES Assessment Report on Land Degradation and Restoration embraced the LDN response hierarchy for the implementation of land-based interventions of Avoid > Reduce > Reverse land degradation, where prevention is viewed as better than the cure. The LDN concept encourages adoption of a broad range of measures to avoid or reduce land degradation through appropriate planning, regulation and sustainable land management practices, combined with actions to reverse past degradation, through land restoration and rehabilitation, to achieve a state of no net loss of healthy and productive land. As of December 2021, 128 countries have committed to set voluntary LDN targets.

526. The UN General Assembly has recently reaffirmed that achieving LDN has the potential to act as an accelerator and integrator for achieving the SDGs and respond to the overall objectives of the 2030 Agenda for Sustainable Development, and it has recognized that land-based solutions, as part of nature-based solutions, are promising options for sequestering carbon and enhancing the resilience of people and ecosystems affected by desertification, land degradation and drought, as well as the adverse effects of climate change. The IPCC has reported that policies promoting LDN can also enhance food security, human wellbeing and climate change adaptation and mitigation.[397] LDN also promotes synergies, manages trade-offs, and improves policy coherence across sectors and at all levels, including the national agendas relating to the Paris Agreement and the post-2020 Global Biodiversity Framework.

527. The most recent UNCCD COP decisions with relevance for the GEF were made during COP 14 held in India in September 2019 and are summarized in Table 2 below.

[396] Cowie, A. et al. 2018. Land in balance: The scientific conceptual framework for Land Degradation Neutrality

[397] See key messages B.1.3, B.4.4, C.1.1, C.1.3 in the IPCC 2019 Special Report on Climate Change and Land, 2019

Table 2. Convention Decisions with relevance for GEF-8 LDFA Investments

UNCCD decisions with relevance for GEF	Delivery through Integrated Programs and LDFA Investments
COP14 invites the GEF to continue its support for countries in programming GEF Land Degradation focal area resources to combat desertification/land degradation and drought and achieve their voluntary land degradation neutrality targets, including in the context of land degradation neutrality transformative projects and programs. COP14 invites the GEF, within its mandate, to support the implementation of relevant aspects of the national drought plans and other drought-related activities within the scope of the Convention. COP14 Invites the GEF to continue supporting Parties to meet their reporting obligations under the Convention and encourages the GEF to provide adequate financial resources in a timely manner. COP14 Encourages the GEF to continue and further enhance the means to harness opportunities for leveraging integration among the Rio conventions and other relevant environmental agreements, as well as the 2030 Agenda for Sustainable Development.	**Integrated Programs:** Food Systems Ecosystem Restoration Amazon, Congo, and Critical Forest Biomes Net-Zero Nature-Positive Accelerator Blue and Green Islands **LDFA investments** Sustainable Land Management (SLM), including drought-smart land management (D-SLM) Restoration of agro-ecosystems in production landscapes Address DLDD issues, emphasizing drought mitigation, particularly in drylands Improve the enabling policy and institutional framework for LDN UNCCD Enabling Activity Support

GEF-8 Land Degradation Focal Area Strategy and Associated Programming

528. The goal of the LDFA is to avoid, reduce, and reverse land degradation, desertification and mitigate the effects of drought. The LDFA strategy aligns with GEF's vision to achieve healthy and resilient ecosystems by promoting sustainable land management and supporting the achievement of LDN.

529. The LDFA strategy is fully in line with the UNCCD Strategic Framework 2018 – 2030 which has the vision "for a future that avoids, minimizes, and reverses desertification/land degradation and mitigates the effects of drought in affected areas at all levels and strive to achieve a land degradation-neutral world consistent with the 2030 Agenda for Sustainable Development, within the scope of the Convention", by supporting all five Strategic Objectives.

530. The LDFA strategy supports the implementation of voluntary LDN targets that 127 countries have set. It will apply the LDN concept by following the response hierarchy to avoid, reduce, and reverse land degradation, desertification, and deforestation. The Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP) checklist[398] and the Operational Guidance for Country Support[399] will serve as general guidance for design and implementation of GEF Land Degradation focal area projects and programs in GEF-8.

531. LDFA investments focus on addressing the drivers of land degradation in production landscapes where agricultural, forestry and rangeland management practices underpin the livelihoods of rural communities, smallholder farmers and pastoralists. It focuses on innovative interventions that can be scaled to maximize global benefits for the environment and simultaneously address the issues of local livelihoods and poverty. A specific emphasis in GEF-8 is placed on sustainable land management in drylands addressing, among other issues, drought-prone ecosystems and populations. GEF investments may also support the implementation of relevant aspects of national drought plans and other drought-related activities within GEF's mandate to generate global environmental benefits.

532. GEF will continue to apply a comprehensive landscape approach to address the broad multi-faceted nature of land degradation across the range of agro-ecological and climatic zones globally. The landscape approach is underpinned by integrated land use planning to maintain or increase land-based natural capital and to address the trade-off and conflicts between competing land uses, including tenure issues. The landscape approach promotes the connectivity and integrity of socio-ecological systems and maximizes the benefits for human well-being, which will be critical in efforts towards green recovery from the pandemic.

533. Building resilience of landscapes, people and the institutional systems to maintain or create healthy landscapes may need adaptive changes or radical transformational change to a completely different system. Understanding how to use resilience, adaptation or transformation will enable systems to better dealing with shocks. LDFA investments support the design of projects and programs which can help to guide interlinked social and well-connected ecological systems into the future, informed by sound science and a structured knowledge management process.

534. By adopting an integrated approach to natural resources management, the LDFA drives an agenda for multiple GEBs, including those related to the conservation and sustainable use of biodiversity, climate change mitigation and adaptation, and the sustainable use of transboundary watersheds. In this regard, joint programming with other GEF focal areas will be actively pursued, especially in integrated programs and MFA projects and programs. This effort will also consider opportunities to develop dedicated LDFA programmatic initiatives where they are likely to trigger

[398] https://knowledge.unccd.int/sites/default/files/2018-09/LDN%20TPP%20checklist%20final%20draft%20040918.pdf
[399] https://www.unccd.int/publications/land-degradation-neutrality-transformative-projects-and-programmes-operational

transformational changes in the natural resource management sectors, such as the Great Green Wall Initiative (GGWI) and regional programs in drylands to address DLDD issues.

535. The GGWI is a country-driven platform that engages diverse partners for advancing integrated responses to the effects of climate change, biodiversity loss, desertification and land degradation, in the context of promoting landscape restoration and socio-economic development and resilience across the Sahel. The GEF has a long history of supporting the GGWI through key catalytic interventions starting in GEF-5, which were continued in GEF-6 and GEF-7. Most recently, the GEF has funded the project *Harnessing the Great Green Wall Initiative for a Sustainable and Resilient Sahel* (UNEP) which engages with GGWI partners to foster meaningful dialogue with countries and lay out a longer-term vision for the region promoting systems transformation for sustainable and climate resilient growth.

536. The Great Green Wall multi-actor Accelerator, announced by the President of France Emmanuel Macron and other world leaders at the One Planet Summit on January 11th, 2021, seeks to facilitate the coordination and collaboration of donors and stakeholders involved in the GGWI. With the recent pledge of over $19 billion in funding[400] from a coalition of the Green Climate Fund (GCF), international development banks, and governments, the GGWI platform is poised to profoundly scale-up and accelerate efforts to sustain livelihoods, conserve biodiversity, and combat desertification and climate change.[401]

537. The renewed initiative that emerged from recent discussions between donors and GGW countries has set the goals of this African-led initiative to restore 100 million hectares of degraded land, sequester 250 million tonnes of carbon and create 10 million green jobs in rural areas. To support these goals, the countries under the leadership of African Union have established the political and technical governance framework including at regional level the Panafrican Agency of the Great Green Wall steered by Heads of States Summit of 11 countries and at national level the national Great Green Wall National Agencies.

538. The GEF experience and achievements with SLM offers an appropriate anchor for countries to harness this opportunity in a holistic and coherent manner, which will be critical for building back better and green recovery. Based on country demand, the GEF-8 LDFA strategy offers the option for a dedicated regional program that would help coordinate these efforts with a view to apply best practices, ensure multi-stakeholder involvement, and a comprehensive approach to knowledge management and capacity building, all geared towards leveraging and upscaling impactful investments of GEF and its long-standing partners such as IFAD, the World Bank, FAO, UNEP, GCF, including through cooperation with the LDCF.

[400] https://www.greatgreenwall.org/great-green-wall-accelerator
[401] https://www.ifad.org/en/web/latest/news-detail/asset/42264232

539. The GEF-8 LDFA strategy mainstreams gender considerations by applying the recent guidance note developed by UNCCD (2019)[402] and recommendations of Collantes et al (2018)[403] to (i) enhance understanding, and to advance gender-responsive LDN plans and programs, and (ii) include gender considerations in LDN assessments. Programming will give attention to practical gender needs such as improving the conditions of women through secure tenure and access to resources, services and opportunities, and strategic interventions to foster women's participation and empowering women's representation in decision making bodies at all levels.

540. The LDFA strategy will contribute to its goal of avoiding, reducing, and reversing land degradation, desertification and mitigating the effects of drought with four objectives as follows:

Objective 1. Avoid and reduce land degradation through sustainable land management (SLM)

541. This objective promotes the wider application and scaling of SLM interventions that improve productivity and maintain or improve flow of agro-ecosystem services that underpin food production and livelihoods. SLM is broadly defined by the UN 1992 Rio Earth Summit as "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions." GEF will provide support to a wide range of SLM practices such as:

- Agroecological intensification and diversification and other regenerative agriculture practices that rely on natural ecological processes to enhance yields and reduced agrochemical inputs for the benefit of the environment. Increasing species diversity in agricultural farms contributes to improved soil quality and increased crop yields, and improved habitat connectivity and flow of ecosystem services (Kremen, 2020).[404]
- Climate-smart agriculture (CSA) is an approach for transforming and reorienting agricultural systems to support food security responding to climate change trends in rainfall and temperature patterns, to food market disruptions, and to the need for avoiding GHG emissions and sequestering carbon in agricultural land use systems (Lipper et al., 2015).[405] CSA also works towards increasing the adaptive capacity and resilience of farmers and improves resource use efficiency in agricultural production systems.
- Drought-smart land management (D-SLM) characterizes land-based interventions for drought mitigation (i.e., against drought impacts and vulnerability). Such D-SLM interventions improve the capacity of soil to accept, retain, release and transmit water and increase plant water use efficiency. They can do so by increasing the water supply where

[402] https://www.unccd.int/publications/land-degradation-neutrality-interventions-foster-gender-equality
[403] Collantes V et al. 2018. Moving towards a twin-agenda: Gender equality and land degradation Neutrality.
[404] Kremen C., 2020. Ecological intensification and diversification approaches to maintain biodiversity, ecosystem services and food production in a changing world. https://doi.org/10.1042/etls20190205
[405] https://www.nature.com/articles/nclimate2437

it is needed by living organisms (e.g. crop root systems) or by reducing water demand through drought-resistant crop varieties (UNCCD/Science-Policy Interface, 2019).[406]

542. Investment in those SLM types above will focus on: (i) agro-ecological methods and approaches including conservation agriculture, agroforestry, and agro-silvo-pastoral practices; (ii) improving rangeland management and sustainable pastoralism, regulating livestock grazing pressure through sustainable intensification and rotational grazing systems, increasing diversity of animal and grass species, and managing fire disturbance; (iii) strengthening community-based natural resource management, including legitimate tenure rights recognition and safeguards; (iv) integrated watershed management, including wetlands where SLM interventions can improve hydrological functions and services for agro-ecosystem productivity; and (v) implementing integrated pest management approaches to improve soil fertility and water management.

543. Investing in SLM to avoid and reduce land degradation in the wider landscape is an essential and cost-effective way to deliver multiple GEBs related to agro-ecosystem functions such as: a) biodiversity conservation by reducing the conversion of natural habitats, improving their connectivity and safeguarding agro-biodiversity; b) improved soil health and reduced soil erosion, pollution risks, degradation and fragmentation of water resources to ensure sustainable flow for consumptive uses; c) reduced emission of greenhouse gasses by improving vegetation cover and accumulation of soil organic matter; and d) increasing sustainability and resilience of agro-ecosystem services. Investing in SLM also improves yields, and helps maximizing outputs and diversifying sources of income and livelihoods thus creating socio-economic benefits, including for nutrition and health.

Objective 2. Reverse land degradation through landscape restoration

544. This objective will support countries to (i) restore agro-ecosystem services and avoid the reduction of trees and vegetative cover, and (ii) restore forests, avoid forest loss and degradation, including sustainable forest management (SFM).[407] An increased emphasis on restoration is warranted as an important element in the LDN response hierarchy and was one of the key recommendations of the 2018 GEF IEO evaluation of the LDFA.

545. Investments under this objective will focus on strengthening the resilience of landscapes and creating future options to adjust and further optimize ecosystem goods and services as societal needs change or new challenges arise.[408] It is assisting the recovery of landscapes that have been

[406] UNCCD/Science-Policy Interface (2019). Land Management and Drought Mitigation. Science-Policy Brief No: 6. September 2019. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany

[407] This LDFA objective has a focus on production landscapes improving agro-ecosystems and livelihoods of communities at subnational and local scale. It is thus more specific compared to the wider scope of the Ecosystem Restoration Integrated Program.

[408] See Global Partnership of Forest and Landscape Restoration (GPFLR) principles: https://www.iucn.org/theme/forests/our-work/forest-landscape-restoration

degraded, damaged, destroyed, or modified to an extent that the land and/or agro-ecosystem cannot fulfil its ecological functions and/or fully deliver food production services. Agro-ecosystem restoration and bringing degraded agricultural lands back into production will create socio-economic benefits and improve livelihoods of IPLCs. At the same time, and in order to achieve LDN at the landscape level, it will be important to complement restoration activities with the sustainable management of forest, rangeland and wetland resources, reducing the risk of degradation and the loss of vegetative cover, ecosystem services and biodiversity.

546. Restoration may include activities appropriate to local socio-ecological conditions to improve vegetative cover and its functionality, assisted natural regeneration of woodlands, planting of community woodlots, the establishment of shelterbelts, agro-forestry and agro-silvo-pastoral models, practices to enhance soil and water conservation, erosion control, and ground water recharge. Restoration and the management of restored and existing forest areas will be addressed through comprehensive land-use planning and protection measures. Activities will increase forest and vegetation cover, improve of agro-ecosystem services such as provisioning (e.g. food and fuel for livelihoods), regulating (e.g. reducing greenhouse gas emissions, erosion control) and supporting (restoring and connecting habitats for biodiversity). Restoration and SFM interventions will be mainly implemented through community-based approaches.

Objective 3. Address desertification, land degradation, and drought (DLDD) issues, particularly in drylands

547. DLDD issues are especially prominent and, in many ways, specific to drylands. Land degradation processes are aggravating the effects of droughts and vice-versa. Avoiding, reducing and reversing land degradation is therefore an important mitigation measure for the effects of drought and can be addressed within the mandate of the GEF to create GEBs.

548. This objective will specifically support countries in dryland geographies to build resilience to mitigate the effects of droughts and to prevent the aggravating effects of land degradation through (i) comprehensive land-use planning taking drought risks into account; (ii) the use of drought databases and tools such as the UNCCD drought toolbox; and (iii) the implementation of drought-smart land management (D-SLM), including croplands, rangelands, dryland forests, and mixed land-uses. GEF investments will address the entire range of land uses in the production landscape aimed at creating GEBs and building resilience. Based on the specific context, interventions may focus on cropland management, dryland forest management, and rangeland restoration and management.

549. GEF interventions will support comprehensive land-use planning at all levels to influence land-use patterns at the appropriate scale (jurisdiction or landscape). In dryland areas, drought should be addressed as a priority in land-use plans. Proactive drought risk management is a more

efficient way to reduce drought impacts on communities, economies and the environment.[409] Data and information and participatory approaches will involve all stakeholders to develop land use plans, identify and assess droughts risks, and define mitigation measure in land and water use plans, including monitoring systems. GEF investments may also support the implementation of relevant aspects of national drought plans, within GEF's mandate, and will be coordinated with initiatives of other donors supporting climate change adaptation, including the LDCF.

550. Good, effective and participatory land and water governance will be promoted through the LDFA as an important enabling environment for drought mitigation and the adoption and scaling up of D-SLM and associated technologies. Such an environment requires, inter alia, effective institutions combined with the empowerment of women (one of the majority groups among rural land and water users) and legal security (land tenure, water rights).

551. Objective 3 also provides an entry point for potential LDFA regional programs to address DLDD issues, based on country interest and demand, and availability of regional set-aside funding. In this context, joint programming and synergy with adaptation projects funded by the LDCF and other donors will be encouraged.

Objective 4. Improve the enabling policy and institutional framework for LDN

552. This objective support countries to (i) improve policy coherence and financing systems, (ii) further develop the institutional and regulatory framework and build capacity, and (iii) implement UNCCD enabling activities to fulfil planning and reporting obligations.

553. A key outcome under this objective will be to incorporate LDN into the existing national planning frameworks to meaningfully involve local governments, IPLCs, and women. Comprehensive and multi-sectoral land use planning will reduce pressures on natural resources from competing land uses and enable the large-scale application of good management practices. This will also facilitate synergies in the implementation of the MEAs and with programming of other GEF focal areas at the national level. Promoting good governance and the resolution of land tenure issues[410] that are obstacles to LDN objectives will be important considerations.

554. National policy frameworks can be made more coherent through cross-sectoral integration with a focus on harmonized sector policies and coordination between different institutions involved in various aspects of integrated landscape management. This may include harmonized government resource allocations within and among sectors, and/or at national and subnational levels of government, as well as assessments of the efficiency and effectiveness of those allocations in the context of the environmental management priorities.

[409] UNDRR (2021): Special Report on Drought. https://www.undrr.org/publication/gar-special-report-drought-2021
[410] Application of FAO's Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security will be encouraged.

555. In parallel, catalyzing and better targeting of national financing streams to mobilize domestic and private sector funding, and to address harmful subsidies in the agriculture sector are essential to improve financing systems towards instruments and mechanisms that provide incentives for reducing the pressures and competition between land use systems. Activities may also include targeted support for the re-orientation of private/public domestic financing through banks, credit unions, and microfinance that supports small and medium enterprises. Support for local incubators, associations, smallholders and small-scale food processing and marketing enterprises through special lending and extension systems will be considered.

556. Building capacity at all levels will be facilitated through provision of actionable knowledge and by making decision support tools widely available. Activities may include lessons learning, knowledge exchange, south-south cooperation, innovation, monitoring and information systems on impacts, trade-offs, cost-benefit analyses, and identifying synergies.

Focal Area set aside

557. Focal area resources that are set aside from STAR will be used (i) to promote programming through integrated programs, (ii) for UNCCD enabling activities to support countries to fulfil obligations to the convention, focusing on reporting and formulation of national strategies and plans in line with current and upcoming COP decisions and the UNCCD strategy, and (iii) for global and regional projects to promote cross-cutting thematic issues such as innovation, land tenure, gender mainstreaming, capacity building, and knowledge exchange in context of the LDFA strategic objectives. This may include linking and coordinating nationally developed LDFA projects through programmatic approaches, such as the GGWI and regional programs in drylands to address DLDD issues.

Key Contributions of Integrated Programs to Land Degradation Outcomes

Food Systems

558. This Integrated Program provides the opportunity to addressing land degradation challenges in landscapes with a focus on sustainable, regenerative and nature positive food productions systems for globally important food crops, commercial commodities, and livestock. In line with LDFA objective 1, it will help countries to implement and scale-out SLM and regenerative farming approaches to increase food security for smallholders and communities avoiding deforestation from commercial commodities. It will link smallholder producers and pastoralists, and small-scale food and agro-processing enterprises to markets and sustainable supply chains, assist with crop and systems resilience, and create stable revenues with agricultural commodities. The Program will pursue policy changes in the enabling environment to shift financial flows away from perverse subsidies and nature-degrading investments toward nature positive investments such as PES.

Ecosystem Restoration

559. This Integrated Program will generate multiple environmental benefits, create jobs and secure livelihoods through the restoration of degraded ecosystems globally. It will make a significant contribution to achieving LDN and complement efforts towards restoration under the LDFA with a broader scope on multiple benefits and at a larger scale. The Program will link countries in regional clusters for upscaling their project-based efforts through accessing platforms, knowledge products, and best practices. For example, the Program may include GGWI countries wishing to invest in restoration at scale through an integrated and programmatic approach working across multiple sectors and crosscutting themes. Connecting LDFA project-based restoration activities with the large-scale ecosystem restoration program will contribute to a coherent approach and a common message under the UN Decade for Ecosystem Restoration.

Amazon, Congo, and Critical Forest Biomes

560. The Integrated Program conserves globally important forest addressing land degradation, specifically deforestation and forest degradation in remaining primary tropical and subtropical forests by halting agricultural encroachment and the logging frontier through promoting alternative livelihoods and food security. The program will engage of multiple stakeholders at global, regional, national, and local levels and promote good governance, enhanced policies and financial frameworks, and management information systems to reconcile social, economic, and environmental objectives. The program is therefore an important contribution to achieving LDN globally and in line with the LDFA goal to avoid further land and forest degradation.

Net-Zero Nature-Positive Accelerator

561. The Integrated Program will promote NbS to help countries meet the net zero decarbonization goal around 2050. By reducing GHG emissions and increasing carbon stocks in forests and landscapes, it will encourage investments through reorienting policies, subsidies and public investments, increasing awareness of the value of nature, mainstreaming NbS in national strategies, and facilitating the participation of the private sector. Complementary to LDFA efforts and with a whole-of-economy approach, this program will support selected SLM activities and protect forests. In the agriculture sector, important outputs will include improved soil carbon, soil health and fertility in grasslands and croplands; integrated water management, more efficient nutrient use and manure management, and improved livestock management systems.

Blue and Green Islands

562. Degradation of ecosystems tied to key economic sectors is evident in almost all landscapes in the 3 SIDS sub-regions. Through the SIDS-Nature-based Solutions program, the tourism, urban and food sectors (agriculture and fisheries) will be targeted. The program will address integrated upstream challenges linked to ecosystem degradation of agricultural lands and forests as well as

implement downstream interventions to maintain, improve and restore the flow of agro-ecosystem services in support of food production and livelihoods. The program will therefore contribute to achieving the voluntary LDN targets in SIDS and it directly aligns with the LDFA objectives to avoid, reduce and reverse land degradation.

Role of the Private Sector in Supporting Land Degradation Outcomes

563. The LDFA strategy will focus on three areas for private sector engagement: (i) farmer's and small-scale agribusiness enterprises access to credit, (ii) technical assistance and capacity building, and (iii) whole value chains for agricultural commodities (with a link to food systems).

564. Access to finance and markets for smallholders and small businesses in most land sectors is a big challenge. GEF will therefore promote engagement with Micro, Small, and Medium Enterprises (MSMEs) and Microfinance institutions (MFIs) in LDFA projects and programs to expand services to underserved MSMEs and small holder farmers for sustainable agriculture and restorative practices, including through linkages with GEF's Blended Finance Global Program. MFIs are the primary providers of private capital to MSMEs, farmers and low-income populations in many developing regions. At the same time, MFIs are highly exposed to loan default because their low-income clients are directly impacted by climate change and environmental degradation. As a result, most MFIs are highly motivated to reduce their exposure to environmental risk by developing and offering lending products that account for climate and environmental risks. Civil society, with close connections to small holders and MSMEs, can facilitate new public/private partnerships and channels for investment.

565. In this context, the LDN Fund is an innovative private sector fund, which invests in profit-generating SLM and restoration projects worldwide. GEF will continue to cooperate with the LDN Fund through the LDN Fund Technical Assistance Facility[411] to bring public and private funding to transformative projects and guarantee involvement of all stakeholders.

566. Private sector engagement will also be explored for technical assistance and capacity building for farmers through farmer field schools and eco-models.

567. Value chain development for agricultural commodities will be promoted in cooperation with the Food Systems Integrated Program and will expand in LDFA projects and programs beyond globally important commodities to nationally and locally important commodities and products such as honey, olives, grapes, fruits, nuts, etc. and various species of livestock.

[411] https://www.idhsustainabletrade.com/landscapes/ldn-taf/

International Waters Focal Area

Global Context of International Waters

568. The health of our shared freshwater and marine ecosystems underpins social and economic aspirations at local, national and regional levels. The sustainability of these shared ecosystems is essential to support biodiversity and reach global goals far beyond SDG 6, 14 and 15. Hence, good governance of our shared ocean, river basins and their wider catchments is a foundation for building resilient systems that benefit the global environment and people. Therefore, we need to ensure that our actions catalyze strong resilient transboundary marine and freshwater rivers, lakes and aquifers, that will contribute to long-term human well-being and ability to recover faster from disasters, climate change impacts, and economic activities.[412]

569. Many ecosystems have benefitted the slow-down in human activities due to the COVID Pandemic[413] and experience improved ecosystem functioning. However, this is not a uniform development. Within the sectors of freshwater and marine fisheries, some fisheries and geographies have seen positive effects, whereas others have experienced increased pressures caused by the current Pandemic.[414,415,416] The current pandemic has made it crystal clear that water is an essential resource that will enhance our ability to respond, recover and rebuild a post-COVID-19 world and provides an opportunity for us to rethink and reprioritize our interests, ambitions and resources.[417]

570. Healthy fisheries depend on smooth coordination between local resource users, policy makers and commodity supply and value chains. With only 6.2 % of assessed fish stocks being "underfished" the world is at a point where fish stocks require active management to maintain fishing activity at a sustainable level in the 59.6% of stocked fished at the maximally sustainably level and to promote the recovery of the 34.2% of stocks fished at biologically unsustainable levels. Sustainable fisheries management and aquaculture are vital to the 3.3 billion people, for which fish provide up to 20% of the animal protein of their daily diet. Wild capture freshwater fish account

[412] Marian J. Neal (2020) COVID-19 and water resources management: reframing our priorities as a water sector, Water International, 45:5, 435-440, DOI:10.1080/02508060.2020.1773648

[413] Rutz, C., Loretto, MC., Bates, A.E. *et al.* COVID-19 lockdown allows researchers to quantify the effects of human activity on wildlife. *Nat Ecol Evol 4*, 1156–1159 (2020). https://doi.org/10.1038/s41559-020-1237-z

[414] COVID-19 pandemic impacts on global inland fisheries Gretchen L. Stokes, Abigail J. Lynch, Benjamin S. Lowe, Simon Funge-Smith, John Valbo-Jørgensen, Samuel J. Smidt Proceedings of the National Academy of Sciences Nov 2020, 117 (47) 29419-29421; DOI: 10.1073/pnas.2014016117

[415] Nathan J. Bennett, Elena M. Finkbeiner, Natalie C. Ban, Dyhia Belhabib, Stacy D. Jupiter, John N. Kittinger, Sangeeta Mangubhai, Joeri Scholtens, David Gill & Patrick Christie (2020) The COVID-19 Pandemic, Small-Scale Fisheries and Coastal Fishing Communities, Coastal Management, 48:4, 336-347, DOI: 10.1080/08920753.2020.1766937

[416] Bianca Haas, Ruth Davis, Harriet Harden-Davies and Quentin Hanich, 2020. Regional fisheries management: Virtual decision making in a pandemic - Information Paper for 17th meeting of the Western Central Pacific Fisheries Commission.

[417] Marian J. Neal (2020) COVID-19 and water resources management: reframing our priorities as a water sector, Water International, 45:5, 435-440, DOI:10.1080/02508060.2020.1773648

for 13% of the world's annual catch, totaling 12 million tonnes each year and are estimated to be worth over US$38 billion per year.[418] Further, improved management will be pivotal to efforts to restore and conserve fisheries habitats, such as river basins, lakes, deltas, wetlands, seagrass, mangroves and reefs, which are critical nursery and breeding habitats for many fish and crustacean species. Countries, therefore, need to step up national and regional actions safeguarding their marine and freshwater ecosystems to ensure continued growth, prosperity and unlock new economic opportunities. Simultaneous efforts on advancing sustainable aquaculture production and supply chains needs to be sped up. Wild caught stocks are under pressure and if marine and freshwater based protein is to support population growth and local economic opportunities, while allowing capture fisheries to recover, aquaculture holds a great potential that needs to be explored.

571. Run-off from agriculture, wastewater from industry and municipal sources leads to dead-zones in the worlds transboundary freshwater lakes, coastal areas and the shared ocean, often due to inadequate governance structures and lack of proper infrastructure investments. Hypoxic coastal and ocean areas are more fragile and hence less likely to be able to cope with climate induced stress as well as other impacts from human activities. It is imperative that wastewater treatment is increased from the current ~20% if we are to ensure that rivers, lakes, coastal zones and ocean ecosystems can support environmental, economic and human needs.

572. During this pandemic, single-use plastic consumption has surged, which may lead to negative impacts on the biodiversity in the ocean and connected freshwater riverine ecosystems.[419,420,421] Tackling plastic pollution requires incentivizing a shift towards a circular economy approach through interventions across the entire plastic value chain including material engineering; product and process design; consumer use and behavior; and collection systems and recycling.[422,423] At a global scale, such a system change is predicted to stimulate cost savings for governments and private sector, support job creation, cut down on plastic ocean pollution and reducing projected plastic-related greenhouse gas and hazardous chemical emissions.[424,425]

573. Habitat destruction of marine and coastal ecosystems from coastal development, including tourism, commercial and residential construction, roadways and other infrastructure, including unsustainable aquaculture, are also having a significant impact on marine and coastal ecosystems,

[418] WWF 2021: The World's Forgotten Fishes. WWF International pp1-48
[419] https://www.economist.com/international/2020/06/22/covid-19-has-led-to-a-pandemic-of-plastic-pollution
[420] https://www.forbes.com/sites/lauratenenbaum/2020/04/25/plastic-waste-during-the-time-of-covid-19/?sh=ed6e7e67e484
[421] https://www.weforum.org/agenda/2020/05/plastic-pollution-waste-pandemic-covid19-coronavirus-recycling-sustainability/
[422]https://www.newplasticseconomy.org/#:~:text=In%20a%20new%20plastics%20economy%2C%20plastic%20never%20becomes%20waste%20or%20pollution.&text=Eliminate%20all%20problematic%20and%20unnecessary,reusable%2C%20recyclable%2C%20or%20compostable.
[423] https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings
[424] https://www.thegef.org/sites/default/files/publications/PLASTICS%20for%20posting.pdf
[425] https://www.pewtrusts.org/en/research-and-analysis/articles/2020/07/23/breaking-the-plastic-wave-top-findings

including mangroves, seagrass, beaches and coral reefs. These ecosystems have tremendous biodiversity and highly valuable ecosystem services, including carbon sequestration, shoreline storm protection and fisheries nursery areas. Therefore, it is important to support improved governance and inform political priority setting through Marine Spatial Plans and utilize these plans to operationalize political priorities.

574. The state of the ocean and its importance for enabling a sustainable development trajectory, has been enjoying an increased attention globally over the last years and most recently by the process spearheaded by the 14 heads of state that forms the High-Level Panel for a Sustainable Ocean Economy.[426] The ocean ecosystem is facing unparalleled stress from climate change, acidification, habitat loss, pollution, fishing, shipping, and a suite of land-based activities. The world's Large Marine Ecosystems alone represent $12 trillion annually in market and nonmarket ecosystem goods and services.[427] However, unless we change our management strategy in and around the ocean, it will not be able to continue to deliver biodiversity and food security, climate regulation, shoreline storm protection, carbon sequestration, recreational opportunities, economic opportunities and cultural cohesion for billions of people.

575. A whole 64% of the world's ocean surface is designated as Areas Beyond National Jurisdiction (ABNJ).[428] International arrangements and governance bodies are critical to the conservation and sustainable use of ecosystems and biodiversity in ABNJ, but implementation and enforcement pose a challenge due to the vast area the ABNJ covers. Due to the vast area the ABNJ covers, and the lack of data to support real-time management and enforcement, a long range of harmful activities continues to impact the integrity of the ecosystem and the biodiversity within it. Some of the harmful activities include intensified fishing for highly migratory species, bottom trawling on seamounts, maritime transport, dumping and other stressors. Resources, training and capacity are needed to effectively implement current and potential future arrangements. Learning from the science based LME approach potentially could help inform management approaches to ABNJ.[429,430]

576. Freshwater ecosystems and especially transboundary river basins, lakes and aquifers has historically been and continues to be the pivotal point for development, the rise and fall of cultures,

[426] Ocean Panel, 2020: Transformations for a Sustainable Ocean Economy A Vision for Protection, Production and Prosperity

[427] Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., et al. (1997). The value of the world's ecosystem services and natural capital. Nature, 387(15 May 1997), 253-260.

[428] E.M. De Santo,*,Asgeirs dottir, A. Barros-Platiau, F. Biermann, J. Dryzeke,L.R. Gonçalves, R.E. Kimd, E. Mendenhall, R. Mitchell, E. Nymani, M. Scobie, K. Sunk,R. Tiller, D.G. Webster, O. Young, 2019: Protecting biodiversity in areas beyond national jurisdiction: An earth system governance perspective. Earth Observation Systems.

[429] IOC-UNESCO and UNEP (2016). Open Ocean: Status and Trends, Summary for Policy Makers. United Nations Environment Programme (UNEP), Nairobi.

[430] Ringbom H. and Henriksen, T. (2017). Governance Challenges, Gaps and Management Opportunities in Areas Beyond National Jurisdiction. Global Environment Facility – Scientific and Technical Advisory Panel, Washington, D.C.

economic activities, societal and cultural cohesion. Predictability of available water resources and resilience to absorb climate change induced impacts diminish as water demand increases due to population growth, shifting diets and economic activities. It is estimated that current management approaches to freshwater in developing countries may have a much stronger effect on water stress than climate change, which may lead to more than 50% of the world's population living in regions with severe water stress within the next 30 years.[431]

577. Water is a precondition for human and ecosystem survival, underpins many economic activities and is fundamental to achieving most of the SDGs. Increasing scarcity in many regions of the world along with pollution threatens human health and economic development. International and transboundary cooperation over shared water resources provides a unique opportunity to inform political decision making and investment priority setting through a participatory approach involving both public and private sectors. Such regional frameworks will support a broader and longer-term vision on transboundary freshwater ecosystems, which in turn will be able to continue to provide essential ecosystem services. Building trust and agreeing on cooperative frameworks are particularly important, in fragile economies impacted by different forms of conflict, to keep communication open to support water sharing agreements, sectoral prioritization, and avoid deepening tensions between countries.

578. Healthy transboundary marine and freshwater ecosystems are prioritized in many INDCs and NBSAPs and will be essential in supporting delivering towards the CBD, UNFCCC, UNCCD and UN Decade of Ocean Science for Sustainable Development targets. While the GEF is not the financial mechanism nor does it have any obligations to international conventions in relation to the transboundary mandate of International Waters, the GEF International Waters focal area investments may support actions to deliver against the Convention on the Law of the Non-navigational Uses of International Watercourses of 1997 and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (the Water Convention), the UN Convention on the Law of the Sea, the Ramsar Convention on Wetlands, and to the CBD and the post-2020 Global Biodiversity Framework as well as the ongoing developments on a potential agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of Areas Beyond National Jurisdiction. Further, GEF investments will also assist countries in delivering towards a number of the SDGs, such as SDG 6 and 14. Finally, IWLEARN, the GEF funded cross-agency and multi-actor platform of knowledge exchange and capacity building, supports facilitating partnerships between a range of actors to stimulate conversation and capacity between, and beyond, GEF funded activities.

[431] C. Adam Schlosser, Kenneth Strzepek, Xiang Gao, Charles Fant, Élodie Blanc, Sergey Paltsev, Henry Jacoby, John Reilly, Arthur Gueneau, 2014: The future of global water stress: An integrated assessment, in Earths Future, Volume 2, Issue 8, pp 341-361

GEF-8 International Waters Focal Area Strategy and Associated Programming

579. The integrity of transboundary water ecosystems can only be achieved through cooperation across political borders and between sectors. The GEF through its International Waters focal area is supporting cooperation in shared marine and freshwater ecosystems, to achieve long term benefits. This will be achieved through the following three key objectives in GEF-8 International Waters strategy: 1) accelerate joint action to support a Sustainable Blue Economy; 2) advance management in the Areas Beyond National Jurisdiction (ABNJ), and 3) enhance water security in shared freshwater ecosystems

580. These objectives will be realized through investments to support regional priority setting and fact finding (TDAs) and national implementation of the regional ministerial endorsed cooperative investment frameworks (e.g. SAPs). Moreover, select global investments will be considered on a case by case basis, some potentially as programmatic approaches, if they advance the objectives of the International Waters focal area. The TDA/SAP process, as first described in the 1995 GEF Operational Strategy, consists of a Transboundary Diagnostic Analysis in which common fact finding, and scientific analysis identifies the shared threats in a given transboundary ecosystem. This process leads to the formulation of the Strategic Action Program, which is a politically endorsed document, that identifies the interventions needed to address the agreed threats in the region.

581. This approach recognizes the important role women play in generating and sustaining change. Women play a prominent role in the productive use and management of water and marine resources. Therefore, it is imperative that women are properly represented in the formulation and implementation of legal, regulatory and institutional frameworks. This has been the operating principle for the TDA/SAP process in previous replenishments and this will be continued in GEF-8. Further, since women in many countries support knowledge management and undertake training and teaching of the next generation, it is important to ensure women have access to up-to-date knowledge and training products, if we are to ensure that women and men together can set targets and work towards implementing these for a prosperous future for all. Therefore, gender issues and mainstreaming of gender considerations into all processes and investments will be prioritized.

Objective 1. Accelerate joint action to support a Sustainable Blue Economy

582. Oceans are fundamental to life on earth covering 71% of its surface and providing livelihoods, food security, climate regulation, essential habitats, shoreline storm protection, carbon sequestration, recreational opportunities, social and cultural cohesion. In order to support a multisectoral cooperative approach, the GEF will continue its successful application of utilizing the Large Marine Ecosystem as the organizing principle for GEF investments. This will ensure that investments are not happening in a vacuum, but are coordinated with land-based activities, and between multiple sectors.

583. The GEF will assist countries in identifying sustainable public and private investments to accelerate joint action in support of Blue Economies. This will be done through funding of collective management of coastal and marine systems and implementation of the full range of integrated ocean policies, legal and institutional reforms. The GEF will catalyze regional participatory and collaborative processes, such as the Transboundary Diagnostic Analysis/Strategic Action Program (TDA/SAP) in order to build trust and set investment priorities, securing the health and resilience of the Large Marine Ecosystems. In GEF-8 the International Waters strategy will assist countries in addressing a suite of stressors such as overfishing, by-catch, ghost gear, land-based sources of pollution, acoustic pollution and biofouling of vessels, loss and damage of key coastal and marine ecosystems and their connectivity, if identified in the regional SAPs. The critical issue of land-based pollution will be addressed through the Clean and Healthy Ocean Integrated Program, where curbing of virus, bacteria, micro plastics and pollution from municipal wastewater and agricultural run-off will be in focus. A few strategic upstream investments on stemming plastic pollution reaching the ocean, coordinated with the Chemicals and Waste Focal Area Strategy, may be supported. Under the Objective 1, investments will be strengthening nations sustainable blue economy opportunities, through two areas of strategic transboundary action: 1) sustaining healthy blue ecosystems, and 2) advancing sustainable fisheries management.

Sustaining healthy blue ecosystems

584. The overall vision is to bring ocean ecosystems under balanced use, harboring an abundance of fauna and flora, and with resilient "blue forest ecosystems" (deltas, mangrove forests, seagrass meadows, saltwater marshes mussel beds/oyster reefs, lagoons and corals). This vision will enable coastal ecosystems to absorb impacts from a changing climate and other anthropogenic and natural shocks, while being the pivotal centerpiece that provides cultural identity, decent livelihoods and social structures to local communities, nations and regions. The coastal and marine habitats can be restored through policy, improved management strategies, and more inclusive engagement of local users of the marine resources and deployment of different area-based management tools, including effectively managed Marine Protected Areas (MPAs) and other effective area-based conservation measures. Building capacity to manage marine ecosystems will be critical. This can be achieved through the sharing of knowledge across regions to foster innovation and scaling up of successes. Building capacity and mainstreaming climate change considerations will be essential to local, national and regional marine ecosystem management actions, including advancement of cost effective and strategic coral reef protection, and the effective use of MPAs and other area-based effective conservation measure resources.

585. Marine spatial planning (MSP) is a critical tool to achieve Ecosystem Based Management via an integrated planning framework that moves away from sectoral management to address multiple objectives related to achieving economic and ecological sustainability and the need to reduce resource conflicts in marine environments. These plans identify what spaces of the ocean

are appropriate for different uses and activities, to advance economic and social development, while furthering effective management and connectivity of ocean ecosystems. MSP informs political decision making and ultimately supports the overarching goal of the High Level Panel for a Sustainable Ocean Economy of having 100% of the ocean under sustainable management. Moreover, MSP presents the cornerstone of the national sustainable blue economy plans as they illustrate the socio-economic opportunities, constraints and linkages to ocean resources and inform political decision making. Sustainable blue economy plans will discuss cost of tradeoffs, outline the national EEZ and identify areas for economic development, protection as well as laying out specific services that are central to local and national social and cultural cohesion.

586. Under this objective, we will support regional investments that:

- Lead to cooperative legal and institutional frameworks built on TDAs/SAPs approach, towards addressing the multiple anthropogenic pressures, including, but not limited to climate, nutrient, noise pollution, upstream plastic issues and improved management related effects in the LMEs;
- Contribute to the implementation of Strategic Action Programmes to support a Sustainable Blue Economy by deployment of tools such as MSP, MPA, NbS and PES;
- Foster collaboration among LMEs, Regional Seas Conventions and Regional Fisheries Management Organizations (RFMOs) to protect and restore these key habitats;
- Create multi-state cooperation frameworks in transboundary deltas including an integrated source-to-sea approach;
- Develop and update Marine Spatial Plans and Sustainable Blue Economy Plans to inform policy decisions in the EEZ;
- Establish and support marine protected areas of national and international importance, and their transboundary connection if identified in SAPs, and other area-based conservation measures in key biodiversity hotspots and coastal habitats through regional investments under LME SAPs;
- Restore degraded key marine and coastal habitats through deployment of Nature-based Solutions and Payment for Ecosystems Services demonstrations;
- Mainstream marine area-based management and spatial tools in regional entities, to delivering towards global targets;
- Stimulate private sector engagement, through relevant industry sectoral roundtables and industry groups.

Advancing sustainable fisheries management.

587. Fish is an important source of protein for more than 3 billion of people. But according to FAO, global fish stocks are under tremendous pressure, which underscores the importance of moving to improved management of fisheries, not only the wild caught marine fisheries, but also wild freshwater species as well as fish produced via aquaculture. The sustainability of marine fisheries, which among other actions will mean curbing Illegal Unreported Unregulated (IUU) fisheries practices, and implementation of Ecosystem Approach to Fisheries, FAO Code of Conduct on Responsible Fisheries, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) requires improved governance mechanisms to restore and conserve critical habitats to fisheries, coupled with deployment of a range of management tools and actions at all levels from small-scale, near-shore fisheries to large commercial fleets. The ratification and implementation of the Port State Measures Agreement may be one of the global tools to support a shift towards more sustainably managed fisheries locally, nationally, regionally and globally.

588. Actions that enhance fish stocks to sustainable stock sizes, will require sustainable fisheries management and potentially major reduction in fishing efforts in fisheries that have experienced overfishing To secure access to essential marine proteins for local and global markets, sustainable management of wild stocks and aquaculture approaches is needed. Aquaculture will play a key role in meeting future food security demands and may simultaneous relieve some of the pressure that wild caught stocks are experiencing. The challenge is to position nature at the core of the sector's delivery of jobs, affordable and low carbon footprint fish protein, and human health improvements, while minimizing impacts of wild capture fisheries.

589. Therefore, under this objective the GEF will support:

- Formulation of (including updates to) Transboundary Diagnostic Analysis and Strategic Action Programmes.
- Policy and regulatory reforms to end IUU, overfishing, limit by-catch and sustainably manage marine capture fisheries, while taking human rights and broader environmental aspects into consideration,
- Advancement of adoption and implementation of the Port State Measures Agreement
- Strengthening and creating policy frameworks, including work with countries to eliminate harmful incentive structures,
- Implementation of market mechanisms to support sustainable fisheries value chains,
- Strengthening and creating policy frameworks, including working with countries to eliminate harmful incentive structures,

- Standard setting for sustainable aquaculture to regulate fishmeal supply, enhance marine ecosystem health, livelihoods and improving food and nutrition security,
- Advancement of spatial zoning instruments (marine spatial plans) to define the boundaries over which aquaculture sustainability should be assessed,
- Development of sustainability indicators and monitoring systems in respect to the local ecological carrying capacities, taking into account observed and projected impacts of climate change, biodiversity loss, natural disasters, overfishing and pollution
- Reliable data to inform policy and decision making, to inform capacity building, policy reform and piloting of innovation and best available tech,
- De-risking innovation through incremental finance and piloting innovative technologies

Objective 2 Advance management in the Areas Beyond National Jurisdiction (ABNJ)

590. The Areas Beyond National Jurisdiction cover 64% of the ocean or 40% of the world's surface. The ABNJ is facing several threats, such as over-fishing of some iconic pelagic migratory species, ocean energy facilities, bottom trawling on seamounts, and pollution. There is an urgent need to support international agreements that will make it easier to manage this vast area of the planet, in a way that will ensure that resources are utilized in a sustainable manner. One of the central pillars to increase local, national, regional and global management capacity is access to knowledge and its proper use. Management of the "unknown" is nearly impossible, hence the need for data (potentially obtained through combining satellite data with vessel tracking data) and information is crucial in order to enable local authorities to take proper action. With regards to IUU fishing, these tools can support monitoring, control and enforcement through existing Regional Seas and IMO agreements, Regional Fisheries Management Organization's processes and implementation of the Port State Measures Agreement (PSMA) fisheries management of catches from the open ocean and port's ability to apply and enforce the Port State measures Agreement. Further, the ongoing negotiations on an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of Areas Beyond National Jurisdiction have touched on the need to enhance national capacity and accession, though the potential role of the GEF, if any, is under negotiation.

591. Ultimately, raising awareness of the ABNJ and the potential value that the ABNJ is representing for the global community as well as national economies, will be essential in a move towards improved management of the shared resources that the ABNJ represents.

592. Under objective 2 the GEF will support actions that:

- Improve access to data and information to improve capacity to implement and enforce PSMA and combat IUU fishing.

- Support national ratification and implementation of the Port State Management Agreement.
- Support regional/global efforts on Monitoring, Control and Surveillance of fishing activities.
- Support opportunities for establishing connections between governance arrangements in LMEs with the ABNJ.
- At the request of the negotiating parties to an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of Areas Beyond National Jurisdiction, once negotiations have concluded, and with the agreement of the GEF Council, support national ratification and implementation of the instrument.
- Advance global buy-in of industry standards and food safety protocols, as key drivers of ocean value chains.
- Consider best practices and lessons learned from appropriate regional and sectoral organizations.

Objective 3: Enhance water security in shared freshwater ecosystems

593. Water is a prerequisite for human, ecosystems survival and directly underpin economic sectoral activities. Transboundary freshwater ecosystems such as iconic river basins, lakes and aquifers are pivotal for development, the rise and fall of cultures, economic activities, and societal and cultural cohesion. Increasing issues related to availability of the needed quantity and quality of water in many regions of the world threatens human prosperity and economic development. Particularly important in this context is the ability to set up governance structures that jointly manage surface and groundwater resources. With a changing climate and poorly managed surface water bodies, communities and countries rely on groundwater extraction to ensure food, water, and ecosystem security.

594. Unfortunately, due to lack of data and knowledge of the connectivity between the water systems, the “hidden” groundwater resources are often thought of as “just there” or “ an “infinite resource”, which complicates management or in worst case scenarios will lead to deepening of the resource constraints already experienced. As indicated, access to data is a prerequisite for informing management and political decision making, especially for aquifer resources. Therefore, combining satellite information with management practices of water resources can lead to transformative changes in the way the shared water resources are managed while maximizing outputs simultaneously.

595. Security of water is essential for cities and towns, agricultural production, energy provision and delivery of a myriad of ecosystem services. Sudden water fluctuations, such as floods and

droughts, increase the risk for destabilization of regions. Deploying a water stewardship approach, will ensure healthy transboundary water ecosystems, not only supporting sub-basins and local water needs, but supporting adequate water for provision of essential societal services. Traditional water infrastructure investments have been focusing on grey infrastructure, which is still prevailing in many countries and lending portfolios. However, due to impacts from a changing climate combined with other local, national and regional human induced stress, Nature-based Solutions coupled with infrastructure investments will be more sustainable and durable solutions.

596. Shared freshwater resources comprise a special case for cooperation with large potential spillover and global impacts. Transboundary river basins cover about 50% of the earth's land surface, therefore cooperation is essential to support water, biodiversity, food & non-food agricultural commodities, energy, and ecosystem security. Strengthened governance of transboundary water systems to manage freshwater connectivity across borders need to be aligned with multi-sectoral and stakeholder-based upstream basin planning. Transboundary priority setting and associated Strategic Action Programmes are vital in the process of identifying key issues that affect national water related stress and how to deal with these stressors through actions in multiple countries at the same time. However, ensuring transboundary environmental and water security starts by strengthening management capacity at the most local level, which among others include land degradation management strategies, climate change impacts, adaptation and generally increasing the land-based activities.

597. Therefore, under this objective, the GEF will support:

- Formulation of, and updates to, Transboundary Diagnostic Analysis and Strategic Action Programmes.
- Implementation of SAP priorities through regional and national actions.
- Policy legal reforms and improved management strategies to address loss of connectivity and freshwater biodiversity and to support sustainably management of freshwater fisheries (including addressing IUU fishing) and aquaculture
- National reform of policies, strategies and regulations in accordance with regional agreements and MEA commitments
- Improved policy formulation processes, IWRM implementation and conjunctive management of surface and groundwater resources
- Build capacity to gather and synthesize scientific, local and people science and mainstream into decision making processes
- Establishment of flood and drought early warning systems and disaster risk management plans

- Nature-based Solutions to improve water quality, freshwater ecosystem health, including wetlands and curb floods, droughts, climate change impacts, river/lake shoreline deterioration and to further aquifer recharge
- Ensure the inclusion of the ecosystem dimension into the water, energy, food nexus, to further environmental and water security
- Testing Paying for Ecosystems Services in transboundary contexts and between ecosystems.
- Supply chain approaches for increased water efficiency and reduction of ecosystems pressures,
- Increase water efficiency, reuse, and reduce point and non-point sources of pollution addressing both primary and emerging pollutants, along the source-to-sea continuum
- De-risking innovation through incremental finance and piloting innovative technologies
- Support fragile and/or conflict affected countries, via a country-based pilot to fully engage in the transboundary process

Key Contributions of Integrated Programs to International Waters Outcomes

598. Shared freshwater and marine ecosystems weave through the different focal areas of the GEF and the Integrated Programs proposed for the GEF-8 Strategy. There will be multiple entry points for obtaining contributions from the IPs to the International Waters focal area, as well as vice versa. Whether it is related to Food Systems Integrated Program, Ecosystem Restoration Integrated Program, Sustainable Cities Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Circular Solutions to Plastic Pollution Integrated Program, Blue and Green Islands Integrated Program, and Clean and Healthy Ocean Integrated Program, there is a myriad of synergies and contributions that can and will be delivered towards the overall goals of the GEF-8 replenishment. This is indeed important, but more important is the fact the combinations of IPs with Focal Area investment strategies will further the opportunities for countries and people to curb environmental stress and expand the opportunities for a decent and healthy future.

Role of the Private Sector in Supporting International Waters Outcomes

599. The engagement of both public and private sectors will be essential towards delivering sustainable, tangible results in transboundary marine and freshwater ecosystems. Therefore, the GEF International Waters Focal area will stimulate private sector engagement along the different supply chains to reduce impacts on the freshwater and marine ecosystem environments. These could entail working with large-scale commercial fishing fleets, development of marine spatial plans to identify investment opportunities for both private and public sector, advance private sector engagement to increase water, food, energy and environmental security, such as through multi-stakeholder platforms, industry roundtables and interest group and increase water efficiency, reuse, and reduce point and non-point sources of pollution addressing both primary and emerging

pollutants, along the source to sea continuum. In short, the IW GEF-8 strategy will be able to support implementation of the GEFs private sector strategy. Moreover, through private sector engagement, the International Waters focal area will be de-risking innovative investments within the freshwater and marine sectors, through utilizing the advances that has been undertaken in the formulation of TDA/SAPs. This will be essential in de-risking investments, but also provide an essential cost-saving factor which will make such investments more viable and durable in the long-run.

Chemicals and Waste Focal Area

Global Context of Chemicals and Waste

600. The GEF serves as the financial mechanism of the Stockholm Convention on Persistent Organic Pollutants, as defined by Articles 13 and 14,[432] and the Minamata Convention on Mercury as defined by Article 13.[433] The chemicals, and topics covered by the focal area are dynamic, as the Stockholm adds chemicals to its annexes on a regular basis and the Minamata Convention has its own process for amending its annexes to include more sectors/products or advance phase out dates. The Stockholm Convention provides guidance on programming priorities to the GEF based on findings of the quadrennial reviews of the GEF and a needs assessment for the Convention. The Minamata Convention has so far provided initial guidance at the first COP that sets priorities for the Convention. In addition, in accordance with Article 9 (b) of the Instrument for the Establishment of the Restructured Global Environment Facility, 2019,[434] the GEF provides funding to support the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer[435] and supports certain strategic objectives under the Strategic Approach to International Chemicals Management (SAICM) that require global action.

Economic Scope of the Global Chemicals Industry

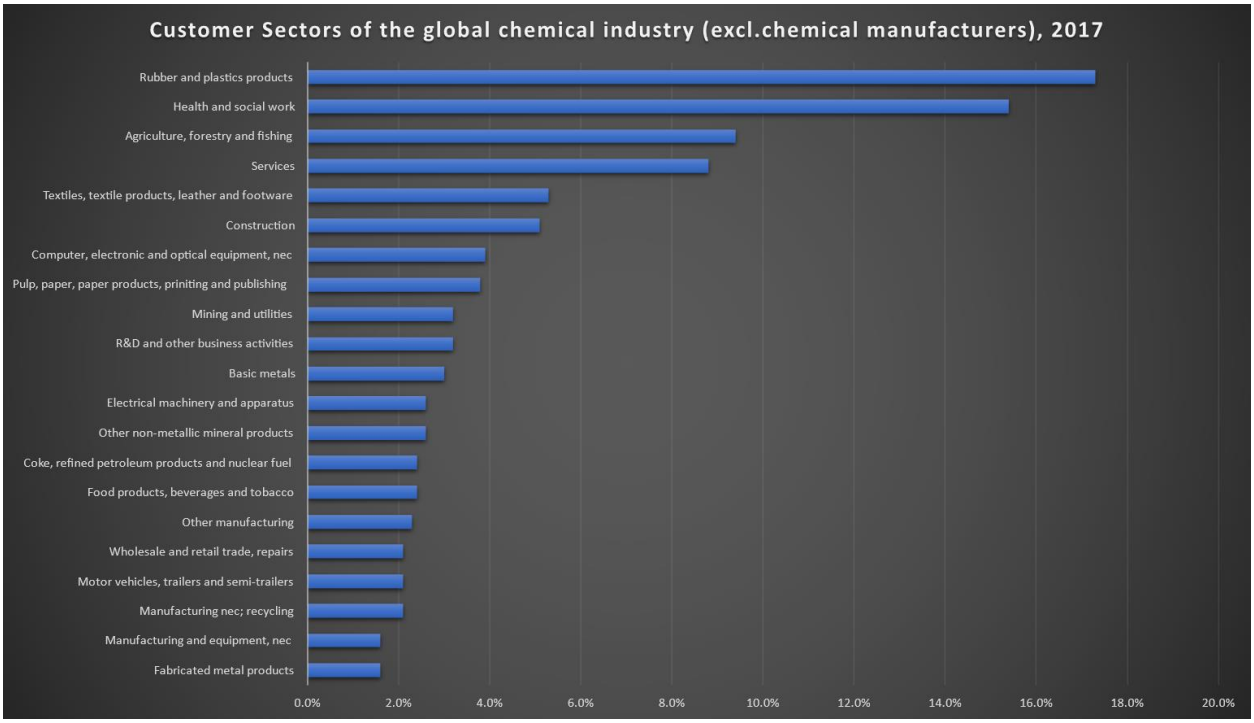
601. The UNEP Global Chemicals Outlook II (GCO II) 2019,[436] estimates that the global chemicals industry has a value of $5 trillion per year and is projected to double in size by 2030. The growth will occur primarily in the developing countries which already accounts for approximately 61% of the chemicals industry by GDP according to an industry report.[437]

602. The economic contribution of the chemicals sector is equivalent to seven percent of the world's GDP that year (equivalent to the combined GDP of India, Brazil and Mexico), while its employment contribution was as large as the population of Mexico and that Asia Pacific has the largest chemical industry by GDP which is twice as large as the next largest region, Europe followed by North America, Africa and the Middle East and Latin America.

603. Most chemicals, when used responsibly, are beneficial for human development and are used in a wide range of sectors as illustrated below in Figure 5.

[432] Stockholm Convention on Persistent Organic Pollutants
[433] Minamata Convention on Mercury
[434] Instrument for the Establishment of the Restructured Global Environment Facility, 2019
[435] In eligible countries with economies in transition
[436] Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development
[437] The Global Chemical Industry: Catalyzing Growth and Addressing Our World's Sustainability Challenges, Oxford Economics, 2019

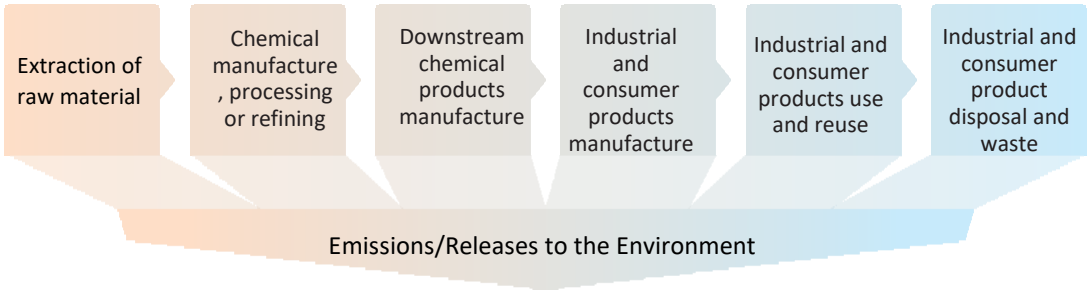
Figure 5: Customer Sector of the Global Chemical Industry[438]



Impact of chemicals on human and ecosystem health:

604. Throughout the supply chain of the chemicals industry there are emissions and releases to the environment as seen in Figure 6.

Figure 6. The supply chain of the chemical industry, with emissions/releases to the environment[439]



[438] The Global Chemical Industry: Catalyzing Growth and Addressing Our World's Sustainability Challenges, Oxford Economics, 2019, Figure 6

[439] Source – Figure 5.1, Pg., 93, Global Chemicals Outlook II - From Legacies to Innovative Solutions: Implementing the 2030 Agenda for Sustainable Development

605. The Stockholm Convention and Minamata Convention highlights the harm to human health caused by the chemicals covered by them.

606. The UNEP GCO II concludes that growth in the industry is driven by global megatrends and by chemical intensive industry sectors including fashion, construction, agriculture, and electronics. The report further concludes that hazardous chemicals and other pollutants such as plastics and pharmaceutical pollutants continue to be released into the global environment in large quantities.

607. Extensive studies, including several recent studies[440,441,442] have confirmed the adverse impacts of hazardous chemicals including some pesticides, endocrine disrupting chemicals, mercury, and other chemicals on ecosystem health and on human health.

608. In addition to these recent publications by the Secretariats of the Basel, Rotterdam, Stockholm Convention and the Minamata Convention[443,444] highlights the clear linkages between the impact of hazardous chemicals and waste and climate change and biodiversity loss. The publications also conclude that working collectively and collaboratively greater positive impact on the environment can be achieved.

609. The Stockholm Convention initially listed twelve chemicals that had documented evidence, including the harmful impacts of a group of persistent made-man chemicals on wildlife.[445] Subsequent studies have confirmed links to adverse impacts on human health including chronic health impacts.[446] The Stockholm Convention has since added an additional eighteen chemicals with several[447] currently proposed to the Conference of the Parties for listing.

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[440] Valery E. Forbes, Steve Railsback, Chiara Accolla, Bjorn Birnir, Randall J.F. Bruins, Virginie Ducrot, Nika Galic, Kristina Garber, Bret C. Harvey, Henriette I. Jager, Andrew Kanarek, Robert Pastorok, Richard Rebarber, Pernille Thorbek, Chris J. Salice, Predicting impacts of chemicals from organisms to ecosystem service delivery: A case study of endocrine disruptor effects on trout, Science of The Total Environment, Volume 649, 2019, Pages 949-959

[441] Ann M. Vuong, Kimberly Yolton, Changchun Xie, Kim N. Dietrich, Joseph M. Braun, Glenys M. Webster, Antonia M. Calafat, Bruce P. Lanphear, Aimin Chen, Prenatal and childhood exposure to poly- and perfluoroalkyl substances (PFAS) and cognitive development in children at age 8 years, Environmental Research, Volume 172, 2019, Pages 242-248

[442] Ito HC, Shiraishi H, Nakagawa M, Takamura N (2020) Combined impact of pesticides and other environmental stressors on animal diversity in irrigation ponds.

[443] Chemicals, Wastes And Climate Change Interlinkages And Potential For Coordinated Action

[444] Interlinkages Between the Chemicals and Waste Mulitlateral Environmental Agreements and Biodiversity: Key Insights

[445] Aaron T. Fisk, Cynthia A. de Wit, Mark Wayland, Zou Zou Kuzyk, Neil Burgess, Robert Letcher, Birgit Braune, Ross Norstrom, Susan Polischuk Blum, Courtney Sandau, Elisabeth Lie, Hans Jørgen S. Larsen, Janneche Utne Skaare, Derek C.G. Muir, An assessment of the toxicological significance of anthropogenic contaminants in Canadian arctic wildlife, Science of The Total Environment, Volumes 351–352, 2005, Pages 57-93

[446] Preambular text of the Stockholm Convention on Persistent Organic Pollutants

[447] Chemicals proposed for listing by the Stockholm Convention

610. In the risk profiles presented for chemicals listed in Annex A and B the Stockholm Convention, there is one prevailing factor; these chemicals have significant impacts to ecosystem and species health and as such threaten and can undermine efforts to preserve nature. In addition, they can have adverse effects in humans.

611. Taken as a whole, hazardous chemicals controlled by the chemicals Conventions and those of global concern create an economic and environmental burden. The UNEP GCO II indicates that the benefits of action to minimize adverse impacts have been estimated in the high tens of billions of United States dollars annually and the World Health Organization estimated the burden of disease from selected chemicals at 1.6 million lives in 2016 (this is likely to be an underestimate according to the report). Further to this, the Stockholm Convention's last needs assessment in 2017[448] estimated that 5.2 billion was needed in the period 2018-2022 to meet the needs of developing country Parties, and the early findings of the 2022-2026 assessment suggest that similar amounts will be required. Additionally, submissions and proposals/requests from developing country parties to the Minamata Convention also indicate substantial and growing implementation needs.

612. While previous GEF strategies have made significant progress in addressing chemical pollution, most recently noted in the effectiveness evaluation decision at the eighth COP of the Stockholm Convention,[449] several gaps need to be addressed as a matter of priority if the upward trend of hazardous chemical pollution is to be reversed to ensure a healthy people and planet including: legislation and technical capacity in developing countries, improving access to knowledge, science and technology, the need for new and innovative financing, lack of awareness of sustainable solutions, lack of consumer demand for sustainable and green solutions, and lack of market penetration of the introduction of sustainable supply chain management.

Role of the Multilateral Environmental Agreements in Addressing Chemicals Pollution

613. The chemicals controlled by the multilateral environmental agreements require global cooperation. To support implementation these conventions, have financial mechanisms which are set up to "support developing country Parties and Parties with economies in transition in implementing their obligations."

614. The GEF operates under the guidance of, and is accountable to, the Conference of the Parties (COP) of the Minamata Convention on Mercury[450] and functions under the authority, as

[448] UNEP/POPS/COP.8/INF/32 – Report on the assessment of funding needs of Parties that are developing countries or countries with economies in transition to implement the Stockholm Convention for the period
[449] SC-8/18: Effectiveness evaluation of the Stockholm Convention
[450] Article 13, Para 7, Minamata Convention on Mercury

appropriate, and guidance of and is accountable to the Conference of the Parties of the Stockholm Convention on Persistent Organic Pollutants.[451]

615. Each COP provides guidance on overall strategies, policy, program priorities and eligibility for access to, and utilization of, financial resources. This is managed in accordance with the respective memorandum of understanding between the GEF Council and the Conference of the Parties of the Stockholm Convention[452] and the Minamata Convention.[453]

616. The Minamata Convention additionally provides guidance on an indicative list of categories of activities that could receive support from the GEF Trust Fund, which it did at COP 1[454] in September 2017.

617. At the online segment of COP 4, the COP articulated ongoing and increasing needs, particularly in light of time bound obligations and the increasing number of Parties to the Convention.

618. Regarding programming, both Conventions have provided guidance on priority areas which primarily refer to legally binding obligations and enabling activities.

619. The Stockholm Convention has provided initial guidance at COP 1 and updated guidance to the GEF since then at each COP based on the findings of the quadrennial review of the GEF and the needs assessment. Guidance on programming priorities include inter alia:

- Reiterate ongoing relevant guidance such as prioritization of meeting the 2025 and 2028 deadlines for PCB, including at the online segment of COP 10 in decision SC-10/3,
- Phase out and elimination of chemicals listed in Annex A of the Convention,
- Management and where possible phase out and elimination of chemicals listed in Annex B of the Convention and,
- Reduction and as far as possible elimination of chemicals listed under Annex C of the Convention,
- Support legal and regulatory frameworks,
- Support of updating of national implementation plans.

[451] Article 13, Para 6, Stockholm Convention on Persistent Organic Pollutants
[452] SC-1/11: Memorandum of understanding between the Conference of the Parties of the Stockholm Convention and the Council of the Global Environment Facility
[453] Memorandum of understanding between the Conference of the Parties of the Minamata Convention and the Council of the Global Environment Facility
[454] Decision MC-1/5 and annex to Decision MC-1/5

620. The Stockholm Convention has also provided guidance of a policy nature including engagement of regional centers of the Convention in programming, increase in private sector engagement in the implementation of the Convention and facilitate cooperation among the chemicals and waste Conventions and with other focal areas and impact programs of the GEF.

621. The Minamata Convention has provided guidance that prioritizes activities for funding and a list of indicative activities to be funded which is overall guided by paragraph 8 of Article 13 of the Minamata Convention which directs the GEF to "take into account the potential mercury reductions of a proposed activity relative to its costs."

622. In addition to the legally binding chemicals conventions, the International Conference on Chemicals Management (ICCM) has over four meetings requested the GEF and accepted by the GEF council to include elements of SAICM into GEF programming which has facilitated early action on areas such as e-waste, plastic waste, chemicals of concern including highly hazardous pesticides, pharmaceuticals, and chemicals from other sectors.

623. While the GEF does not receive guidance from the Montreal Protocol, through a memorandum of understanding between the respective Secretariats of the GEF and the Multilateral Fund for the Implementation of the Montreal Protocol, the GEF follows the policy and programming priorities of the Executive Committee of the Multilateral Fund Secretariat.

GEF-8 Chemicals and Waste Focal Area Programming Strategy

624. As noted in the "Report on the Seventh Replenishment of the GEF Trust Fund[455] in the chemicals and waste strategy paragraphs 213 – 218, there is a need to shift from a chemical by chemical-based approach to a sector-based approach. The GEF-7 strategy has yielded significant advances in the work of the focal area which has: facilitated holistic approaches to managing chemicals and waste in SIDS and LDCs, started addressing chemicals in major supply chains including textiles, advancing engagement on the gold supply chain and plastics, and brought in significant engagement of the private sector into supporting implementation of the Conventions, for example the ISLANDS program, and the GOLD+ program.

625. GEF-8 will be structured along four program areas. This builds on the experience from GEF-7 and prior focal area strategies and guidance on programming priorities from the COPs of the Stockholm Convention, the Minamata Convention, and the International Conference on Chemicals Management. It also builds on the growing and converging understanding that supply chains and mega trends are the primary drivers of chemical pollution which have severe consequences for human and environmental health as highlighted in the recommendations from the UNEP Global Chemicals Outlook II.

[455] GEF/A.6/05/Rev.01 - Report on the Seventh Replenishment of the GEF Trust Fund, 2018

626. Objectives 1 – 3 below apply to the Stockholm Convention, the Minamata Convention, relevant objectives for SAICM and the Montreal Protocol.

627. In programming resources to address chemicals and waste priorities, the following principles, in no intentional sequence, will be used in determining the choice of projects in the focal area:

- Directly supports implementation of the Stockholm Convention, Minamata Convention.
- Supports some strategic objectives of SAICM that require global action,
- Supports the Montreal Protocol for the countries supported by the GEF
- Potential to generate multiple global environmental benefits and socioeconomic benefits including facilitating equal access of women and men to financial services and productive assets to boost their livelihoods, e.g., supporting income generating activities for women-owned businesses working in the management of chemicals and waste.
- Facilitates women's participation and decision-making opportunities.
- Facilitates gender sensitive awareness raising and communication.
- Cost Effectiveness - the potential chemicals reductions of a proposed activity relative to its costs will be a major factor in consideration of funding.
- Sustainability – all projects should at a minimum incorporate a pathway to ensure sustainability of the activities as well as contribute to sustained sound management of chemicals and waste. In this regard the proposals will need to demonstrate how the interventions will change the behavior of the private and public sector to ensure sustainability of the intervention.
- Innovation – Projects should seek to develop and scale locally developed technologies and practices particularly in the context of the LDCs and SIDS[456] including in the design of financial mechanisms at the sub-national, national, and regional levels.
- Private Sector Engagement – Projects should seek to create or improve the enabling environments, including through dedicated responsibility, in which the private sector can engage to reduce the use of hazardous chemicals and to prevent the emission of harmful waste.
- Projects/Programs that promote/lead to Resource Efficiency and sustainable consumption and production approaches, like circular economy or sustainable material management.

[456] The promotion of innovation in SIDS is highlighted by the recent SIDS Evaluation by the GEF's Independent Evaluation Office https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.ME_C57_02_IEO_SCCE_SIDS_Dec_2019_F.pdf

- Prioritized in National Implementation Plans, Minamata Initial Assessments, ASGM National Action Plans as well as reviews undertaken by the COPs on effectiveness in respect of the focus of the project/program, and/or in descriptions of challenges noted in national reporting to the Conventions or implementation and compliance deliberations
- Supports policy coherence across national institutions to manage hazardous chemicals and waste.
- Builds on or uses existing networks, regional, national, and sub-national institutions including regional centers set up under the chemicals and waste conventions; and
- Supports the objectives of the Integrated Programs and of other Focal Area strategies, including biodiversity conservation, climate change mitigation and restoration of degraded land.

Objective 1: Creation, strengthening and supporting the enabling environment and policy coherence to transform the manufacture, use and sound management of chemicals and to eliminate waste and chemical pollution.

628. Work under this objective will support the development, strengthening of the enabling conditions and environment for the phase out of hazardous chemicals and waste including in supply chains such as fashion, construction and others that emits and/or uses, or produces these chemicals and waste. The work in this objective will also support the elimination of existing hazardous chemicals in use in industrial sectors and products and present in emissions, waste streams and in the environment and put in place the policy, regulatory environment, and institutional capacity to prevent future buildup of chemicals and waste, including through the development and implementation of financial instruments and mechanisms at nation level. To achieve this, countries will be supported to develop legislation and policies that are coherent across national institutions, based on a review and assessment of existing policy/legislation, and to implement an internationally-harmonized approach to classification and labelling. These reviews will allow deregulating or amend policies and legislation that do not foster a shift towards elimination of hazardous chemicals and waste and waste streams containing or that can emit hazardous chemicals because of mismanagement.

629. Activities can include policy, legislation and capacity and institutional strengthening of the public sector, private sector, CSOs and others to facilitate activities including, but not limited to:

- Investments to eliminate hazardous chemicals, and products containing these chemicals and waste, including in supply chains that emits and/or uses, or produces these chemicals and waste,
- Access to, and transparency of chemical information in products and materials across supply chains.

- Reverse logistics and supply chains to enable recovery of materials and products for reuse, including in supply chains such as fashion, construction and others that emits and/or uses, or produces these chemicals and waste, thereby preventing them from building up in the environment.
- Regenerative design of products and materials across supply chains, which are green and safe, which will facilitate removal of hazardous chemicals from supply chains of materials and products and facilitate more closed loop and circular supply chains.
- Green and sustainable approaches, practices, and safer alternatives to hazardous chemicals.
- Green approaches to managing waste that contains hazardous chemicals, or can emit hazardous chemicals if improperly managed, including supporting enterprises to do this responsibly.
- Green procurement to facilitate elimination of products and materials that contain or can contribute to the emission of hazardous chemicals and a build-up of material that contains hazardous chemicals,
- Participation and incentivization of women in businesses that work in management of chemicals and waste as well as formalization of informal waste management and others engaged in activities related to the management of chemicals and waste.
- Support of financial mechanisms and instruments for innovation in clean and regenerative design of products and materials, particularly those that are developed using indigenous peoples/local communities' knowledge.
- Support to develop and implement financial instruments and mechanisms at national level to allow for access to finance for business to sustain and scale project and program results.
- Policy, legislation, and technical capacity to manage products, materials and chemicals containing hazardous chemicals throughout their lifecycle, including trade.
- Access to consistent and appropriate knowledge and information on chemicals.
- Promotion of biological alternatives to POPS pesticides and HHPs/SHPFs.
- Enabling activities under the Stockholm Convention and Minamata Convention including, national implementation plans and national implementation plan updates, national action plans for the artisanal and small-scale gold mining and Minamata Initial Assessments.
- Global Monitoring Plans under the Stockholm Convention
- Global Monitoring Plans and monitoring activities as, and when guided by, the COP of Minamata Convention.

Objective 2: Prevention of future buildup of hazardous chemicals and waste in the environment

630. Under this objective investment will be made to eliminate hazardous chemicals in use and to safeguard against future regrettable alternatives. Work under this objective will seek as far as possible to leapfrog to green/sustainable alternatives to hazardous chemicals, use regenerative design of products and materials that both eliminate the use hazardous chemicals, and reduce/ eliminate as far as possible the emissions of hazardous chemicals to the environment. This will be achieved by supporting changes in manufacturing, while recognizing that many chemicals will still be in use and in commerce and will require sound management of a traditional, regulatory nature.

631. This area of work will endeavor to support an increase in the market share of industry and enterprises that adopt sustainable and regenerative supply chains. The following priorities will be supported:

- Introduction and use of best available techniques and best environmental practices to minimize and eliminate emissions of unintentionally produced POPs and mercury from major source categories included in the Stockholm and Minamata Conventions.
- Reduction and elimination of mercury from the artisanal and small-scale gold mining sector.
- Elimination of primary mercury mining and associated trade, along with controls on use of mercury from primary mining.
- Phase out and eventual elimination of mercury or mercury compounds used in manufacturing processes contained in Annex B of the Minamata Convention.
- Elimination of the use of mercury and POPs in products, processes and supply chains (including brominated flame retardants, PFOS, PFOA, PFHxS and short chain paraffins) and in sectors and supply chains that use and emit these chemicals as well as the use of mercury in products (as specified in Annex A of the Minamata Convention).
- Phase out of substances controlled by the Montreal Protocol for countries with economies in transition.
- Management of hazardous chemicals and chemicals of concern that require global and coordinated approaches through the SAICM framework.

Objective 3: Elimination of hazardous chemicals and waste

632. Currently there are stockpiles of waste/obsolete hazardous chemicals as well as products and materials that contain POPs, chemicals of concern, HCFCs and HFC and mercury.

633. There are limited options for materials already in landfills, however there are opportunities to implement environmentally sound management technologies and techniques for chemicals that exist in products and materials in a wide range of sectors.

Work under this objective will support implementation of environmentally sound management of stockpiles of waste/obsolete chemicals and products and material that contain or can emit POPs, chemicals of concern, HCFCs and HFC and mercury.

634. The following will be supported inter alia:

- Elimination of the use of polychlorinated biphenyls (PCBs) in equipment by 2025.
- Environmentally sound waste management/disposal of mercury/mercury containing waste or persistent organic pollutants including liquids containing PCBs and equipment contaminated with PCBs having a PCB content above 0.005%, in accordance with paragraph 1 of Article 6 and part II of Annex A of the Convention, as soon as possible and no later than 2028; and
- Prevention of waste/products consisting of, or containing or contaminated with persistent organic pollutants or mercury from entering material recovery supply chains.
- Non-combustion, including green technologies to disposal of materials and products containing POPs, mercury, and chemicals of concern.
- Capacity-building for the development of strategies for identifying and assessing sites contaminated by mercury or mercury compounds and, as appropriate, the remediation of those sites.

Contributions of Integrated Programs to Chemicals and Waste Outcomes

635. With little exception most of the chemicals listed by the Stockholm Convention and Minamata Convention are used in, or emitted from one or more supply chains, including fashion, particularly textiles, electronics, plastics (certain classes), building materials and in major economic sectors including tourism, health care, industrial production and manufacturing, mining, and agriculture. In this regard the chemicals and waste focal area will accrue global environmental benefits and positive outcomes from the following Integrated Programs:

<u>Circular Solutions to Plastic Pollution</u>

636. Certain plastics, particularly those used in the electronics sector and synthetic fibers used in textiles can contain POPs, and for these materials to achieve true circularity the plastics must be designed along regenerative principles and have in place reverse logistics to enable recovery of materials. This IP can achieve some of the outcomes for the chemicals and waste focal area in selected plastic supply chains.

Sustainable Cities

637. The infrastructure of cities uses significant amounts of chemicals, including chemicals controlled by the Stockholm and Minamata Conventions and the Montreal Protocol, and generates waste both during the life of city infrastructure and processes, and at the end of life of products, equipment, materials and the buildings and structures themselves. If the Sustainable Cities IP supports development of building and material standards that require that inputs do not include hazardous chemicals and require green molecules or other means to replace hazardous chemicals, this IP can contribute to the outcomes of the chemicals and wastes focal area. Also, if municipal and urban industrial waste management strategies under the sustainable cities IP include reduction of hazardous chemicals and waste as co-benefits, it can complement chemicals and waste focal area objectives. These two entry points for chemicals and waste reduction will be part of the integrated and circular economy approach of the Sustainable Cities IP.

Amazon, Congo, and Critical Forest Biomes

638. Compared to other land use such as agriculture, pasture, and logging, mining (and especially artisanal and small-scale gold mining) was often considered a small-scale cause of deforestation. Recent research in Amazon and Congo show that the effects of entire mining operations are much broader than the areas cleared for the pit with a cascade of effects responsible for deforestation and forest degradation: creation of transport infrastructures, demand for meat and food, new access to farmers and hunters, in addition to the eventual use of mercury to extract gold from the ore. In these biomes, stopping gold mining in primary forests, particularly those that use mercury, or finding alternative livelihoods for gold miners, will have benefits to the Minamata Convention. Any activity in this direction will need to be articulated to the national action plan for the artisanal and small-scale gold mining sector of the participating countries.

Green and Blue Islands

639. The use of chemicals in key economic sectors in SIDS has had impacts on key ecosystems. Through the SIDS-Nature-based Solutions program, the tourism, urban and food sectors (agriculture and fisheries) will be targeted. Under the food sector the program will seek to address integrated upstream challenges and implement downstream interventions to reduce agrochemical use on agricultural land and utilize Nature-based Solutions to curb sources of land-based hazardous chemicals. This will deliver land-based benefits related to resilience of ecosystems dependent on soil health as well as reduce levels of pollution in marine ecosystems. The program will also support integrated projects that consider co-benefits related to objectives of the Minamata Convention, by reducing the use of mercury containing products - such as lighting and others to be determined based on country level investments - in relevant sectors being addressed by the program. The program will also provide an opportunity to build on elements of the ISLANDS program targeting tourism and agriculture.

Food Systems

640. The use of chemicals in food systems, particularly in agriculture in the form of pesticides, specifically those covered by the Stockholm Convention, has severe impacts on biodiversity in agricultural ecosystems, including in soil, which leads to significant decline ins species and which greatly reduces productivity in food systems and. Phase out of hazardous pesticides and a shift to non-chemical approaches such as restorative and biodiversity-friendly agriculture will both eliminate hazardous chemicals and improve productivity and state of biodiversity per hectare of food systems so that voluntary LDN targets can be achieved.

Net-Zero Nature-Positive Accelerator

641. The use of mercury and POPs in building materials and products used in buildings such as lighting, electrical switches, insulation, air conditioning would be reduced by work in the IP in regard to work to introduce more sustainable products and materials in buildings.

Role of the Private Sector in Supporting Chemicals and Waste Outcomes

642. The chemicals industry and the sectors that use chemicals include the largest global companies with extensive reach into almost every aspect of our lives. As indicated earlier, the size of the chemicals sector in GEF recipient regions is larger than the non-recipient regions. The chemicals and waste strategy specifically will need to build on the major initiatives in the front-runner enterprises that are seeking to build sustainable and green supply chains as well as partner with private sector entities engaged in major chemical use sectors including textiles, construction, and electronics in addition to sectors that contribute significantly to waste such as tourism.

643. As part of the overall strategy to sufficiently cover such a large and diverse industry, the focal area will focus its private sector engagement through multi-stakeholder platforms that can address the goals of the Conventions, concerns of the marketplace, investor mandates and policy makers at the scale required to support systemic transformation. Such platforms can include the GEF planetGOLD initiative, the Global Mercury Partnership, the renewable bioeconomy platforms of the WBCSD and the WEF, and GEF's own opportunities to catalyze or consolidate platforms to better address the marketplace opportunities for better chemicals and waste outcomes.

644. The 2020 GEF Private Sector Engagement strategy further outlines the modalities of the engagement for the private sector to support the delivery of GEBs in the Chemicals and Waste focal area. The PSES will be used as a guideline to deepen engagement of the private sector to influence better chemicals management.

645. The focal area will also help identify, incubate, and accelerate businesses in developing countries that contribute to each of the programs 1-3, particularly those that are led by women and other underrepresented communities including IPLCs.

GLOBAL PROGRAMS

A. Mobilizing Private Investment for Environmental Goals through the Blended Finance Global Program (Non-Grant Instruments)

646. To rapidly scale up investment in the environment and meet the unfolding environmental crises and tipping points, global leaders, the private sector, the financial sector, and CSOs are converging in their calls for action. Blended finance is an effective tool to help mobilize private investment but still represents a small portion of total global investment. A recent report on market trends shows that Blended Finance transactions and annual financing have remained steady, averaging $9 billion per year throughout 2015-2020. Climate change mitigation projects in clean and affordable energy (SDG 7) still dominate, while investments in nature (SDG14 and SDG 15) are less than 1%. With less than 55 blended finance transactions annually in these thematic areas, the GEF Non-Grant Instruments (NGI) window with an average of 3 projects per year, is playing a critical role.

647. Financial institutions investors, and regulators are increasingly seeking to redirect financial flows from environmentally harmful investments to environmentally positive actions. Recent trends in the financial industry are encouraging: ESG investment soared in the last two years and, according to research by PwC, ESG European funds could experience a more than threefold jump reaching EUR 7.6 trillion in assets ($9.2 trillion) by 2025.[457] Green bonds are proliferating and reached a new record in 2020 with more than $300 billion in new issuances. The European Union, central banks and regulators from all over the world are increasingly seeking to set up green investment frameworks and disclose climate risks with the aim of informing investors and shifting investment into climate friendly activities. Nevertheless, most of the initiatives remain in the "green" classification and focus on climate change mitigation investments and climate risks. Attracting private capital to invest in nature is still challenging and the financing gap remains large.

648. Disclosure, metrics, and measurement remain key challenges for investment in the environment at scale, this is particularly relevant in countries with less capacity. The GEF participation and investment in the Taskforce on Nature-related Financial Disclosures (TNFD) supports improving and promoting disclosure of nature-related financial risks and impacts by financial institutions as a necessary first step towards providing investors consistent, comparable and decision-useful information to incorporate nature-related considerations into investment decisions, and ultimately, promoting investments in nature positive activities. More support to the standardization of metrics and financial disclosure requirements will be key to future growth.

649. GEF's STAP recommends a renewed effort in GEF-8 to seek coordinated public and private investment flows, including demonstrating new financing options and the viability of investments, to "crowd-in" greater investment in GEBs. STAP recommends GEF to seek partners

[457] Financial Times. (2020). ESG funds forecast to outnumber conventional funds by 2025. https://www.ft.com/content/5cd6e923-81e0-4557-8cff-a02fb5e01d42

where it can apply its particular integrating leverage between environmental and financial capital systems to greatly magnify total investment across the GEBs.[458] Further, STAP acknowledges the gender aspects of small businesses, encouraging GEF to "foster new entrepreneurship for women and youth, opportunities for enterprises that create value, are restorative, socially-connected, and environmentally-oriented; and create growth through eco-business."[459]

GEF-7 Blended Finance Lessons Learned

650. GEF and its Partner Agencies were among the first international organizations to pioneer the use of blended finance structures for climate change mitigation, validating numerous business models still in use today.[460] The GEF work in blended finance has evolved from the early GEF cycles, resulting in a separate set-aside during the GEF-4 replenishment negotiations. The goal of this separate window of financing was to expand private sector investment in GEF strategic priorities. The use of non-grant instruments such as debt, equity or guarantees at concessional terms offers unique advantages for private sector participation since it enables the GEF to support innovation through patient capital, de-risk financial structures, or lengthen maturities of financing (among other financial enhancements). The GEF-5 replenishment established a similar set-aside for non-grant instruments, followed by the GEF-6 NGI Pilot with US$ 99.5M, and the GEF-7 NGI Program with US$ 136 M. Since GEF-6, the proceeds/reflows generated by projects under this separate window of financing are required to be transferred to the GEF Trust Fund.[461]

651. Throughout, the GEF blended finance initiatives under the several NGI windows have successfully invested in highly innovative projects, generated GEBs, and achieved high co-financing ratios with strong participation of the private sector. During GEF-6 and GEF-7, co-financing for GEF investments is more than double the average co-financing ratio for the GEF portfolio, and participation of private sector co-financing is more than three times higher than in general GEF grant programs/projects.

652. GEF-7 Programming Directions identified several key priorities for improving on prior efforts[462] which were implemented under the GEF-7 NGI Program.[463] Among these, to enhance transparency, the GEF designed a competitive selection process to access the set-aside with clear

[458] GEF/STAP/C.59/Inf.07. STAP's Initial Perspective on GEF-8. https://www.thegef.org/council-meeting-documents/staps-initial-perspective-gef-8
[459] Ibid.
[460] Meltzer, J. P. (2018). Blending Climate Funds to finance low-carbon, climate resilient infrastructure. https://www.brookings.edu/wp-content/uploads/2018/06/Climate-Finance_Working-Paper.pdf
[461] GEF/C.47/06 GEF-6 Non-grant Instrument Pilot and Updated Policy for Non-Grant Instruments
[462] GEF/R.7/19. GEF-7. Replenishment Programming Directions. para 413, p. 135. https://www.thegef.org/council-meeting-documents/gef-7-programming-directions
[463] GEF/C.55/12. GEF-7 Non-Grant Instrument Program. http://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.55.12_NGI.pdf

selection criteria published in calls for proposals.[464] Projects selected are required to be aligned with Programming Directions and generate GEBs; projects are evaluated and selected based on the disclosed criteria in the call for proposals. Additionally, the GEF formalized the collaboration with the Ad-hoc Advisory Group of Financial Experts (AGFE) and expects to further strengthen this collaboration during GEF-8.

653. In both GEF- 6 and GEF-7, the projects selected have been characterized by increasingly integrating and combining different focal areas and trust funds. Investment in "frontier areas" such as land degradation, international waters or biodiversity went from zero in earlier GEF cycles to about 60% in GEF-6 and GEF-7. Diversifying focal areas in a given project can help multiply the sources of revenue, hence reducing the risk of investment while generating multiple GEBs. Project proposals also presented multiple opportunities across GEF trust funds by combining concepts such as land degradation, climate change, resilience, adaptation, and Nature-based Solutions.

654. GEF flexibility in offering different types of financial instruments to attract private investment under a dedicated set-aside has proven to be key in achieving high co-financing ratios and high private sector participation.

655. Innovation requires flexible terms of financing and new financial products. While equity is the most requested instrument for first-of-a-kind projects and testing new asset classes, investment in frontier areas may require de-risking mechanisms to reach scale and mobilize financing through capital markets transactions. Concessional debt and/or risk sharing mechanisms are also key for investments in LDCs and SIDS, which are underserved by private sector finance. These countries also need support in developing a pipeline of bankable projects and increased focus on investments in MSMEs and women-owned enterprises.[465] In all cases, GEF's ability to provide local currency financing and long maturities were valuable to success.

Box 3. GEF-7 NGI Program Highlights

Several projects in GEF-7 aimed at innovating, creating new asset classes and financial structures that have the potential to transform industries and reach scale through capital markets. GEF flexible terms of financing remains a comparative advantage of the GEF financing.

A - GEF investment in innovative financial structures:

· *The Wildlife Conservation Bond (GEF ID 10330)* combines the use of public, private, and philanthropic resources to create a new type of structured bond that pays the coupon if the black Rhino population in two parks of South Africa increases. The GEF financing will test a new type of asset class with the potential to be replicated with various species.

· *The GEF-EBRD Circular Economy Regional Initiative (GEF ID 10328)* will provide financing that seeks to scale up circular economy initiatives for private sector entities (mostly SMEs) in the Western Balkans and

[464] Call for Proposals GEF-7 Non Grant Instrument. https://www.thegef.org/sites/default/files/documents/GEF_NGI_program_fifth_call_proposals.pdf

[465] OECD/UNCDF (2020), Blended Finance in the Least Developed Countries 2020: Supporting a Resilient COVID-19 Recovery, OECD Publishing, Paris, https://doi.org/10.1787/57620d04-en.

Turkey. The project's innovative financial mechanism will focus on addressing barriers to investments in circular economy technologies and processes by rewarding behavior change with interest rates reduction and technical assistance from EBRD. The GEF concessional loan will allow to reduce interest rates when milestones related to circular economy are achieved.

· The GEF will invest equity in the *Food Securities Fund (GEF ID 10667)* a publicly listed and open-ended investment fund providing loans to local agri-businesses through "aggregators" or companies operating in developing and emerging countries that aggregate agricultural produce from and/or provide goods and services to farmers, in particular smallholder farmers. The financial structure of the fund is designed to reach scale and share risks with value corporate partners that source their supply from the recipients of the financing. This is the first private sector project to be aligned with a GEF Impact Program (FOLUR).

B - GEF investment in de -risking mechanisms to scale up solutions.

· The *COVID-19 Off-Grid Recovery Platform* (GEF ID 10667) will establish an innovative financing mechanism aimed at quickly deploying funds for energy access companies (including SMEs) in their off-grid operations, with a view of addressing the financial distress and short- and medium-term lack of liquidity these companies are facing as a result of the current pandemic. The GEF will provide a concessional loan to ensure a quick deployment of resources; the financing platform leverages on the commercial outreach and existing market knowledge of several competitively selected partner funds under a public-private investment scheme.

656. Additional financial instruments are needed to increase the impact and outreach of this Global Program. Grant funding has been identified as a missing element of GEF's blended finance investments, as it is often needed in the design phase of transactions to cover for technical assistance or structuring costs. Grant financing, on top of the non-grant investment, will be helpful for innovative projects, creating financing platforms or aggregation vehicles and for overall implementation with technical assistance. Additional risk mitigation products can have a catalytic effect in attracting private investment. In SIDs and LDCs especially, but not exclusively, where sovereign credit ratings are below investment grade or where there are high political uncertainties, additional risk mitigation products, such as political risk insurance, may be needed. Also, in countries where the average project size is small, and risks are high, grant-based technical assistance is usually needed to build pipelines and deliver successful results.

657. Disclosure, metrics, and measurement remain key challenges for investment in climate and nature at scale. Harmonized data and standardized metrics and disclosure are necessary for the re-alignment of financial flows toward climate goals and nature positive investments. GEF could invite and work with agencies to apply methodologies such as the Science-Based Targets Network (SBTN) to document alignment of private sector investments with Convention priorities for GEBs.[466] Through GEF continued engagement in the TNFD as part of the TNFD Stewardship Council, the GEF will ensure that the principles and goals established at the onset of this initiative are followed.

[466] See methodologies at: https://sciencebasedtargetsnetwork.org/

658. The standard GEF project cycle and procedures may discourage many private sector project developers from applying for GEF financing. Overall, private investment is sensitive to market conditions, more so when seeking to mobilize financial resources from asset managers and financial intermediaries. In order to work with these partners fast execution and disbursements are needed—an area where GEF needs to improve.

659. MSME financing though local financial intermediaries and corporate value chains can be very effective. Support for small-sized projects could be achieved through local partners such as microfinance institutions (MFIs) or corporate value chains with a mission to support sustainability of their sourcing. Microfinance institutions tend to also be gender inclusive and improve financial literacy and environmental impacts.

660. Agency capacity to design and implement blended finance. Only a subset of GEF agencies has the financial expertise to design complex financial structures or analyze and manage financial products required in Blended Finance projects.

Increasing and Enhancing the Impact of GEF Blended Finance Global Program

661. The first step to increase impact is to grow the resources allocated to the Blended Finance Global Program (NGI set-aside). Expert stakeholders suggest that GEF's resource allocation should increase to US$ 500 million or more. At this resource level, expected co-financing from private sector investment could reach US$ 4-5 billion, replicating the entire GEF-7 replenishment but with private sector funding, thereby helping to significantly reduce the financial gap.

662. The GEF will seek to support innovation at the forefront of investments in nature and climate: biodiversity, land degradation neutrality, sustainable agriculture, and food systems, while integrating resilience, Nature-based Solutions, and adaptation. In cases where private sector risk aversion may still prevent the mobilization of private capital at scale in climate change projects the GEF will provide financing for efforts in climate change mitigation.

663. The GEF will also seek to support de-risking mechanisms for scale-up and mobilizing investment through capital markets. De-risking is also necessary for investments in LDCs and SIDs. To achieve these goals, maintaining GEF flexibility to financially innovate is key. New financial instruments such as convertible grants, performance-based grants, financial instruments linked to environmental performance, and support for new market mechanisms and capital markets transactions could be added to the list of existing eligible products under the NGI Policy. The GEF will continue to support the structuring of new asset classes and issuance of securities linked to nature or climate goals in capital markets.

664. Better information through disclosure, metrics, and measurement also remain a key challenge to scale up private investment in the environment. During GEF-8, additional GEF support will be provided to initiatives such as TNFD or greening the financial system that seek to

provide information on nature and climate related considerations that can support private finance in low carbon and nature positive investments. This support could be delivered through MSPs and with the grant allocation of the Global Blended Finance Program.

665. The GEF will explore the use of thematic calls for proposals to attract more interest in priority areas of investment and look for opportunities in GEF multi-trust fund projects that will deliver expanded private sector engagement for the adaptation and resilience agenda.

Enhancing the GEF Blended Finance Global Program

666. As GEF expands the Blended Finance Global Program, additional steps to streamline the process and improve the selection process through the multiple calls for proposals will be implemented. GEF Agencies are required to inform the relevant GEF OFPs of each proposal in their respective countries ahead of Council approval and maintain OFPs informed of their work with national stakeholders during project development, implementation and monitoring.

667. The combination of grant funding and non-grant instruments in truly "bleeding edge" projects and in projects that benefit LDCs and SIDS is often requested by Agencies. Grant availability under this window is beneficial and even could be necessary for achieving innovation or replication of projects at scale. Additional risk-mitigation instruments can have a catalytic effect in mobilizing private investment and will be added to the list of non-grant instruments in GEF-8.[467]

668. As MSMEs continue to be underserved, GEF proposes to identify mechanisms to enroll financial intermediaries such as local MFIs as executing partners who can expand services to underserved MSMEs/smallholder farmers on the front lines of environmental change. Whenever relevant, lessons learned from GEF SGP with MSME financing can be used to better serve MSMEs.

669. The need to operate at higher speed while maintaining transparency, points to some opportunities for streamlining GEF processes and reducing the amount of time for blended finance projects to be reviewed, approved, and implemented. These include:

- Further streamline call for proposals to enhance transparency and reduce complexity, shortening the time for applications and approval process.
- A bigger resource envelope would also allow the GEF to consider one or more individual projects and investment platforms of significant scale (e.g., $50-75 million) that will enable

[467] The current list of financial products under the NGI Program is provided in FI/PL/02- Policy: Non- Grant instruments. An updated NGI Policy for GEF-8 that includes a list of financial instruments will be provided for Council approval.

projects such as aggregation platforms, securitization, and other special purpose vehicles to mobilize investment through capital markets.

- Invite GEF agencies to solicit innovative proposals from novel executing partners, civil society, MFIs, local banks, entrepreneurs, and the growing blended finance community.
- Work with the subset of agencies that have the technical capacity, and internal procedures to structure blended finance projects for sound management of GEF investments to cut the time for CEO endorsement by 50% through streamlining internal Agency processes.
- Increase outreach to Agencies to encourage SIDS and LDCs have full opportunity to participate in projects accessing the blended finance set-aside.
- Increase MSP submissions that have demonstrated potential for innovation according to the GEF IEO. MSPs can also result in faster approval times which are necessary for private investment.
- Consider increasing the number of medium-sized projects since they have demonstrated potential for innovation according to the GEF IEO.[468]
- Improve knowledge management and learning for GEF blended finance projects. The GEF Blended finance team will work to generate, capture and transfer knowledge to build capacity and foster replication of blended finance structures.

[468] GEF/E/C.59/03, Evaluation of the Role of Medium-Sized Projects in the GEF Partnership, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_03_IEO_MSP_Evaluation_Nov_2020_0.pdf

B. GEF-8 Country Engagement Strategy

670. Country ownership is a core principle of the GEF: 'Activities should be country-driven and country ownership is key to the success of GEF projects'.[469] The GEF's mission is to support developing countries and countries with economies in transition in delivering on their commitments to Multilateral Environmental Agreements and generate global environmental benefits. Under this principle, recipient countries must lead and drive the process of identifying national actions along global environmental domains that are pertinent to the GEF mandate, and that generate global environmental benefits. This lies at the center of GEF programming and delivery.

671. As the GEF's programming moves towards integration in GEF-8, country engagement is critical to delivery. To maximize the impact of GEF resources and to help countries achieve lasting, sustainable and impactful global environmental outcomes, a Country Engagement Strategy is proposed for GEF-8, to be implemented through the following strategic components: (i) upstream high-level technical dialogues on country portfolio programming, (ii) operational capacity-building and outreach for country OFPs and relevant stakeholders, including civil society and the private sector , and (iii) a GEF-wide knowledge and learning strategy.

672. The overarching GEF-8 Country Engagement Strategy (CES) aims at providing an expanded and coordinated approach to the GEF's efforts to empower countries and address critical needs to help them achieve impactful outcomes with GEF resources. At its core, the Strategy will ensure recipient countries have the capacity and knowledge to lead strategic decisions on global environmental priorities. The Country Engagement Strategy is therefore expected to help countries achieve lasting, sustainable and impactful global environmental outcomes.

673. Through a coordinated approach, the CES intends to empower countries in the ownership of their portfolios, and in turn, maximize the impact of GEF resources. Its strategic priorities are:

1. Enhancing the capacity of recipient countries to make informed and impactful strategic decisions on the use of GEF resources, and
2. Sustaining the impact of GEF resources at the country level, towards globally relevant targets, outcomes, impact and sustainability.

Introduction and Context

674. For the last six GEF replenishment cycles, the Country Support Program (CSP) has been providing recipient countries with assistance and capacity building to make better use of the resources available through the GEF, including support for programming. Participants underscored the need for concerted efforts to advance recipient countries' knowledge of the global environment

[469] Instrument for the Establishment of the Restructured Global Environment Facility (Para 4); Policy Recommendations for the Second GEF Replenishment Period, GEF/C.11/6, March 1998

and of the GEF, to facilitate country access to GEF financing and country ownership of GEF-financed projects, to strengthen national focal points, and to facilitate coordination at the country level. To strengthen country-level coordination and to promote genuine country ownership of GEF-financed activities, including the active involvement of recipient countries and stakeholders,[470] including government counterparts and civil society, the Council approved a framework to strengthen country level coordination and ownership,[471] which provided the foundation for the CSP. In May 1999, the Council approved the action plan[472] to operationalize the CSP, which was implemented by the GEF Agencies.

675. A key finding from the OPS-4[473] is that when projects are developed in a strategic context in a country, there are higher success rates in terms of impact. Building on this finding, the Policy Recommendations for the Fifth Replenishment of the GEF Trust Fund[474] included a set of actions to strengthen country ownership, including reforms of the GEF corporate programs. Since 2010, the CSP became a GEF corporate program delivering on its strategic approach –to assist and build the capacity of countries and stakeholders to fully participate in the GEF Partnership and make better use of GEF resources.

676. To complement and enhance the continuous support and assistance provided to countries through the CES, upstream consultation missions are coordinated, at the request of countries, to provide strategic guidance on the use of GEF resources. These missions provide opportunities for GEF Operational Focal Point teams, along with relevant ministries and stakeholders, to engage with technical staff from the Secretariat prior to making important decisions on programming.[475]

677. As part of the OPS-7, an Evaluation of the CSP[476] was undertaken. The evaluation's main findings highlighted: how the CSP has assisted countries with greater access to GEF resources; the effectiveness of the CSP in sharing knowledge on the GEF with stakeholders; the contribution of the CSP to help countries to be more systematic in their planning on GEF resources and advanced country policy planning; and the satisfaction of countries about the quality of CSP support and communications. The evaluation also identified areas to further improve the CSP through six recommendations: (a) build on current efforts to collaborate with other global environmental funds, (b) develop a clear CSP Strategy and an implementation plan with an appropriate budget and resource envelope, (c) strengthen technical expertise in the CSP team and monitoring and

[470] Stakeholders are defined as an individual or group that has an interest in the outcome of a GEF-financed activity or is likely to be affected by it, and include relevant ministries, local governments, and locally-affected people, national and local civil society organizations, community-based organizations, Indigenous Peoples organizations, women's groups, private sector companies, farmers, and research institutions, as defined in the Guidelines on the Implementation of the Policy on Stakeholder Engagement, GEF/C.55/Inf.08, November 2018

[471] Country Ownership of GEF projects: Elements for strengthened country level coordination and ownership and greater outreach and communication**,** GEF/C.12/8, September 1998

[472] Constituencies and Assistance for Country Level Coordination, GEF/C.13/13, May 1999

[473] Fourth Comprehensive Evaluation of the GEF: Progress Toward Impact, GEF IEO, 2010

[474] Policy Recommendations for the Fifth Replenishment of the GEF Trust Fund, GEF/R.5/32, May 2010

[475] GEF Corporate Scorecard June 2021, GEF/C.60/Inf.04

[476] Evaluation of the Country Support Program (CSP), GEF/E/C.60/03, May 2021

reporting systems, (d) revisit the reach and timing of National Dialogues to align them better with country needs for support, (e) enhance inclusiveness, so that inclusiveness at events turns into improved collaboration on the ground, and (f) apply a customized approach to capacity building. These recommendations were synthesized in the OPS-7 as 'The GEF should develop and implement a more strategic and coherent approach to engagement at the country level to better address varying country needs and capacities'.[477]

678. As part of the GEF-7 implementation strategy, the GEF partnership also engaged, at the demand of recipient countries, in upstream country engagements on strategic resource programming to enhance the country's capacity to strategically use the GEF resources in ways that advance national priorities as well as contribute in the most impactful manner to the GEF-7 Programming Directions proposal and the associated Global Environmental Benefits. This upstream country engagement and portfolio analysis has been very successful at the country level and has also translated in GEF-7's targets being fully reached or close to fully reached for most of the core indicators. This upstream engagement is all the more important as the GEF moves towards a more integrated approach and the use of GEF resources in a suite of countries can and should be working in synergy to deliver on the ambitious goals of the Impact Programs.

679. As the GEF's programming moves into more integrated spheres in GEF-8, country engagement is critical to delivery. Integrated programming necessitates an increased coordination within countries to:

(i) Facilitate inclusive and sustained engagement with a wide range of stakeholders, including relevant ministries, civil society organizations, research institutions, and other interested groups,[478]

(ii) Enable coordination at the regional and global levels with stakeholder counterparts, and

(iii) Develop and share best practices to maximize knowledge-sharing, innovations, and scaling up of impact.

The Five Pillars of Country Engagement

680. In order to deliver on its ambitious strategic priorities, the CES is organized around five pillars (Figure 7):

1. Building and Sustaining the Capacity of OFPs and Recipient Countries' Stakeholders

681. Empowering OFPs and recipient countries' stakeholders is at the core of country engagement. In particular, empowering OFPs individually and within their respective governance

[477] Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, GEF IEO, 2021
[478] As defined in the Guidelines on the Implementation of the Policy on Stakeholder Engagement, GEF/C.55/Inf.08, November 2018.

structure, including when supported by National Steering Committees,[479] in their leadership, facilitation, coordination and oversight role is critical to the success of GEF projects and programs in countries. Building the capacity and continuously supporting OFPs will (i) enable OFPs to efficiently manage their GEF portfolio through the project identification, design and execution phases, (ii) enhance policy coherence at the country level, and (iii) play a synergistic role in mainstreaming global environmental considerations through all sectors.

2. Upstream Programming Support

682. At the request of countries, upstream consultation missions will be coordinated. These missions will provide opportunities for OFPs and their teams to engage with the Secretariat's technical staff prior to making decisions on GEF programming using the GEF Trust Fund and using the LDCF/SCCF Trust Funds for activities on adaptation to climate change. The objective of these country-led and demand-driven consultations, both in-person and through follow-up meetings, is (i) to help countries gain an in-depth understanding of the GEF-8 Programming Directions including Integrated Programs and Focal Area strategies, and (ii) to provide strategic guidance on the GEF cycle programming elements and policies, and (iii) to initiate a process of strategic portfolio development and upstream support that will set the foundation for achieving GEF-8 goals. GEF focal area staff will support through upstream portfolio-level review and feedback based on set-criteria per GEF-8 priorities and targets. Engagement and support for GEF portfolio development is aimed at ensuring a strategic, high-impact and cohesive set of GEF investments as opposed to a project-by-project approach that results in the fragmented use of GEF resources and is aligned with OPS7 recommendations. These interactions are geared towards producing a GEF country portfolio of eligible projects that are ambitious, relevant, coherent and impactful.

3. Project Design Review and Support

683. Once the priority projects and programs have been agreed on by countries, the Secretariat will provide support from technical Secretariat staff covering all focal areas to enhance the quality of projects at entry, along with the chosen implementing agencies. From concept development to formal project submission and review/clearance, dedicated staff will work with GEF Agencies and OFP teams on providing (i) guidance on eligibility criteria, scope and impact, and (ii) more detailed comments once the project is submitted for funding consideration. These efforts will improve the overall project review cycle and ensure an efficient overall process, covering all technical, policy, and operational aspect of all projects and programs.

[479] The renewed CSP for GEF-8 envisages broadening countries' engagement by encouraging the establishment of National Steering Committees based on successful experiences.

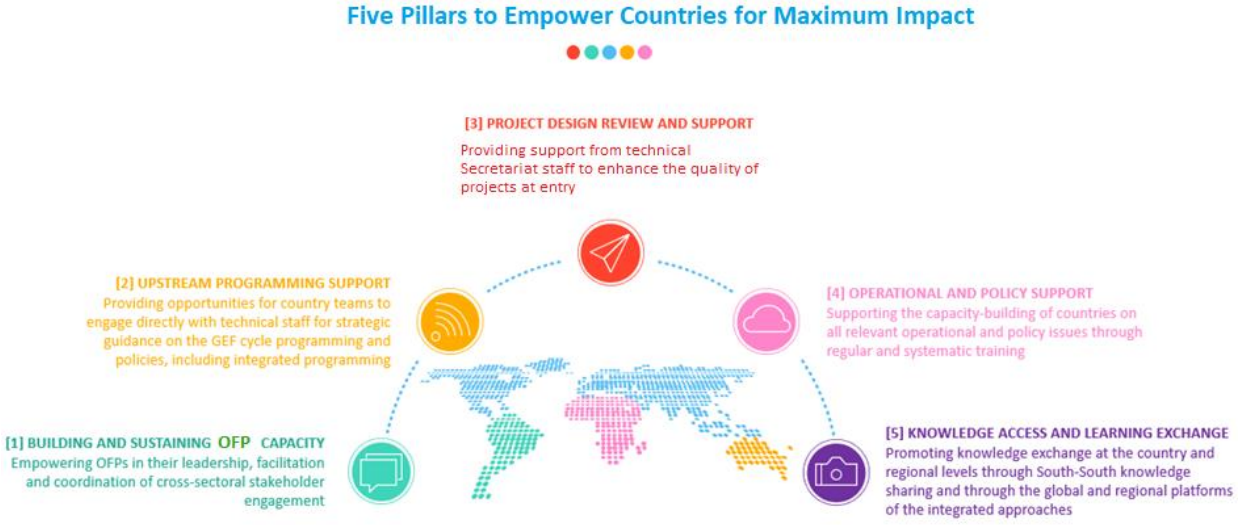
4. Operational and Policy Support

684. As major stakeholders and ultimate beneficiaries of the GEF Partnership, recipient countries must be kept abreast of all operational and policy issues that are relevant to their effective participation throughout the replenishment cycle. Regular and systematic capacity building and support will provide OFPs and countries' stakeholders with the knowledge needed to strengthen their capacity to work with the GEF Agencies and other executing partners during project implementation.

5. Knowledge and Learning Exchange

685. Knowledge sharing is an essential element of country empowerment. To further advance knowledge-sharing and help strengthen partnerships on the ground among stakeholders, the GEF will expand its activities for sharing best practices and lessons learned on relevant topics with key stakeholders engaged in GEF events. OFPs will lie at the center of these exchanges, through a Community of Practice that will enable South-South, trans-continental dialogue, for intensive and strategic knowledge sharing on best practices and challenges, including open exchanges on design, implementation, successes/failures, sustainability, co-financing, specific unplanned issues and their resolutions, any challenges with GEF Agencies, and feedback to the Secretariat. Knowledge and learning exchange will also be promoted through the global and regional platforms of the Integrated Programs. These platforms convene yearly meetings of all practitioners of a particular program to discuss technical issues that advance the goal of the Integrated Program.

Figure 7. The GEF-8 Country Engagement Strategy



Expected Outcomes

686. The CES is expected to deliver the following outcomes:

- **Enhanced Country Ownership and Empowerment**

  Through the CES, the GEF will be in a better position to support recipient countries though regular and strategic interactions with OPFs, GEF Agencies, and other relevant stakeholders, including civil society.

- **Improved Strategic Alignment of GEF Priorities for Higher Overall Impact**

  Through a stronger partnership with countries, GEF programming will ensure that country portfolios are aligned with national priorities and with the ambitious goals of GEF-8 programming to deliver highest impact.

- **Fulfillment of the GEF Visibility Policy**

  Increased engagement with countries' stakeholders is anticipated to also enhance the visibility of the GEF as a strategic partner at county level, in line with the GEF Visibility Policy

- **Improved Country Portfolio Development**

  Through multi-stakeholder consultations and components at the country level, GEF programming will maximize synergies across GEF focal areas, which in turn will improve the development of country portfolios.

- **Improved National Policy Coherence**

  The empowerment of OFPs will mean an increasingly effective coordination of national environmental strategies, objectives, and activities, further strengthening national policy coherence across different sectors of government.

- **Increased Coordination at the Country Level with Other Funds**[480]

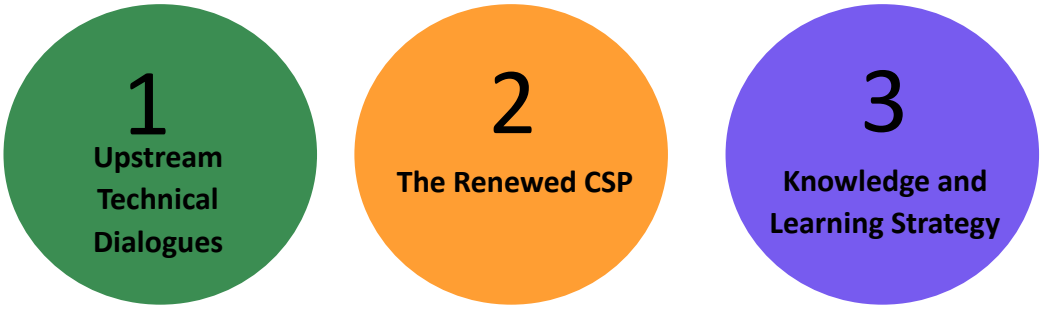
  A better understanding of the potential synergies across different funds, such as the Green Climate Fund, will improve the complementarity of activities and programming at the country level for higher impact.

[480] Long-term Vision on Complementarity, Coherence and Collaboration between the Green Climate Fund and the Global Environment Facility, GEF/C.60/08, May 2021

Implementation Plan

687. The implementation plan for the CES will include three interconnected implementation components (Figure 8).

Figure 8: The CES implementation Components



1. Upstream Technical Dialogues

688. Upstream Technical Dialogues with recipient countries will be further enhanced to better support recipient countries' OFPs and stakeholders. GEF staff is needed to ensure the most strategic use of GEF resources matching country priorities and advancing the GEF-8 Strategy. These strategic engagements will take on a variety of forms, from virtual meetings and workshops to in-country meetings and events, exploring the best use of GEF-8 resources in the national context. Technical staff will be deployed as well as some "regional" GEF staff that will be based in the five GEF regions for a more sustained and real-time engagement and follow-up. The regionally based technical staff will also act as GEF Facilitators for a more sustained and real-time support to the OFP and the recipient countries.

689. GEF Secretariat technical staff with adequate knowledge and understanding of the regions will coordinate and participate in these upstream engagements. This model was developed and tested in a limited set of countries during GEF-7 by regional technical teams that served as a one-stop shop for all technical engagements with countries and agencies. These teams were formed of a variety of technical expertise and focal area background to reflect the more integrated nature of the GEF programming.

690. These regional teams will work with OFPs to support them in the selection of GEF Agencies and executing agencies. The regional teams will be a vital, on-the-ground resource for OFPs throughout the design and execution of their GEF portfolio.

2. The Renewed CSP for GEF-8

691. Incorporating the recommendations of the IEO Evaluation of the CSP, comments from donors, OFPs, GEF Agencies and other stakeholders, the CSP has been renewed and reinforced for GEF-8. Its core activities as well as new activities are being planned for GEF-8.

692. The description of the Renewed CSP for GEF-8 and new components envisaged in response to specific IEO's recommendations and comments received from donors during the First, Second and Third Replenishment Meetings can be found in the next section, which describes the CSP core objectives for GEF-8, and new approaches and activities planned for the 2022-2026 period, including a set of activities focused on OFP empowerment.

3. A GEF-wide Knowledge and Learning Strategy

693. Knowledge sharing is an essential element of country empowerment. The Secretariat is preparing a GEF-wide Knowledge and Learning Strategy.

694. This strategy will aim at further advancing knowledge-sharing and help strengthen partnerships on the ground between stakeholders, and expand the GEF's outreach and support, share best practices and lessons learned on relevant topics with key stakeholders. OFPs will lie at the center of these exchanges, through South-South, trans-continental dialogue, for intensive and strategic knowledge sharing on best practices and challenges, including open exchanges on design, implementation, successes/failures, sustainability, co-financing, specific unplanned issues and their resolutions, any challenges with GEF Agencies, and feedback to the Secretariat. The GEF Knowledge and Learning Strategy will build on several successful initiatives at the GEF over the past replenishments. IW:LEARN is one such example of a program that was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country official, implementing agencies, and other partners. Likewise, many learning and knowledge events have taken place around the different Integrated Approach Pilots (IAPs) in GEF-6, and Impact Programs (IPs) in GEF-7, where advances in program design and implementation and results are assessed and shared among a larger community of practice.

695. Further details on the CES and a budget will be presented to the 62nd GEF Council meeting.

A Renewed Country Support Program for GEF-8

696. For the past three GEF cycles, the Country Support Program (CSP) has successfully provided recipient countries with assistance and capacity building to fully participate in the GEF Partnership and make better use of GEF resources. The goals of the CSP are: (i) to provide flexible support to countries, particularly their Focal Points, to build capacity to work with the GEF Agencies and Secretariat in order to set priorities and to program GEF resources, and (ii) to

enhance inclusive dialogue and improve coordination between ministries and stakeholders at the national level and to facilitate input from key stakeholders.

697. As the key capacity building and outreach vehicle for the GEF, the CSP (Box 4) contributes to enabling a strategic, better-coordinated access to GEF resources by informing, assisting and empowering GEF Operational Focal Points, Political Focal Points, Council Members and Alternates, Convention Focal Points, Civil Society Organizations (CSOs), GEF Agencies and other interested stakeholders. The Program fosters engagement and cooperation between members of the GEF Partnership and it facilitates the dialogue between increasingly diverse stakeholders. The CSP also serves as a knowledge-sharing mechanism for the changing requirements of the GEF and as a feedback-mechanism on GEF policies.

Box 4: An Overview of the CSP

As one of two GEF corporate programs, the CSP is administered and implemented by the GEF Secretariat since 2010. A dedicated country relations team drives the organization of CSP events and activities, continuously informed by demand and feedback from countries and stakeholders. This team is supported by the regional technical teams for the substantive and programming engagement with countries and stakeholders.

CSP core activities include Expanded Constituency Workshops, Constituency Meetings, National Dialogues, other project and program related workshops, meetings of recipient Council Members and Introduction Seminars.

Up to June 30, 2021, the CSP has organized 356 events with more than 17,000 participants, including support for 75 National Portfolio Formulation Exercises (in GEF-5 and GEF-6) as well as targeted capacity building and South-South knowledge-sharing through the Stakeholder Empowerment Series (in GEF-7).

698. The CSP received ample support from donors and participants to the GEF-8 Second Replenishment meeting, GEF Agencies, as well as OFPs and Council Members. Among the reasons for this favorable support is that the CSP and the regional technical teams have gone beyond capacity building and outreach, truly empowering countries and stakeholders to make better decisions on the use of GEF resources. As a result, this approach has enabled recipient countries to achieve greater impact of GEF interventions while further underpinning the key principle of country ownership.[481]

699. An overarching Country Engagement Strategy[482] has been formulated for GEF-8, to further strengthen the GEF's engagement with countries. As a GEF Corporate Program, the CSP will bring one of the components of the Country Engagement Strategy into action.

New Approaches to the CSP in GEF-8

700. In GEF-8, the CSP in collaboration with the regional technical teams will focus on three core objectives:

[481] Instrument for the Establishment of the Restructured Global Environment Facility (Para 4; Annex D, Para 5 and 6)
[482] The GEF-8 Country Engagement Strategy is described in the previous section

1. **Improving collaboration at the country level through inclusiveness**, aimed at i) broadening the engagement of stakeholders at CSP events, and ii) expanding the outreach and support to stakeholders beyond CSP events.
2. **Further increasing country ownership and leadership by empowering Operational Focal Points** (OFPs), focused on i) enabling OFPs to efficiently program and manage their GEF portfolio, and ii) enhancing policy coherence at the country level.
3. **Promoting South-South knowledge-sharing through tailored responsiveness**, targeted to i) customizing the approach to capacity building to the specific needs of stakeholders, and ii) diversifying outreach tools.

701. New approaches and activities are being introduced to the CSP in GEF-8 in response to the recommendations of the IEO Evaluation of the CSP,[483] which are summarized in Table 3:

Table 3: New GEF-8 CSP approaches and activities as a component of the CES

New CSP approaches and activities	In response to IEO recommendations
Renewing and reinforcing the CSP as a dedicated capacity building and outreach vehicle for countries and stakeholders, through its role as one of the implementation arms of the Country Engagement Strategy as described above. The Country Engagement Strategy itself will build an implementation plan, a theory of change, and a monitoring plan.	• **Recommendation (b): Develop a clear CSP Strategy and an implementation plan with an appropriate budget and resource envelope.** The CSP would benefit from developing a comprehensive program strategy for every replenishment cycle, with appropriate activities designed based on country grouping needs, and with proper implementation plans to guide its actions. Such a strategic planning approach should develop a validated theory of change for the program, with clear expected results, milestones, and targets in its main spheres of influence. The CSP has a significant scope and reach and can more proactively strengthen the crucial role it plays moving forward as a one of the entry points in the GEF. dialogue, knowledge sharing and capacity building process with GEF partners at the global, regional and country level.

[483] Evaluation of the Country Support Program (CSP) - GEF/E/C.60/03, May 2021

	• **Recommendation (c): Strengthen technical expertise in the CSP team for monitoring and reporting systems.** CSP should improve the program's dedicated technical capabilities (in part with the support of the regional teams) and its ability to provide more localized support, for monitoring and reporting to meet the high demands placed on the CSP team across countries and regions. In light of the insufficient program data management and reporting, CSP should also put in place results-based data management, monitoring, evaluation, and reporting systems to track the use of resources, as well as activities, outcomes, and impacts. These systems should provide the basis for more systematic and comprehensive reporting at each GEF cycle to both GEF management and the GEF Council.
Improving collaboration at the country level through inclusiveness as one of the strategic pillars of the CSP for core activities, including virtual Stakeholder Empowerment Series, as well as new activities, all designed under the holistic umbrella of the Country Engagement Strategy.	• **Recommendation (e): Enhance inclusiveness, so that inclusiveness at events turns into improved collaboration on the ground.** Though the CSP cannot be held responsible and accountable for how country focal points manage their GEF programs, it is in a unique position to engage regional technical teams in promoting best practices that ensure successful GEF programming in practice. In this context, the CSP could play an important role in ensuring that the inclusiveness they have promoted in their events continues past the CSP activity and results in active and fruitful collaboration. The CSP can be a gateway toward better integration of CSOs and other groups into GEF programming after CSP events.

Further increasing country ownership and leadership by empowering OFPs as the second strategic pillar of the CSP. Promoting South-South knowledge-sharing through tailored responsiveness as the third strategic pillar for the CSP. Customized approach to capacity building for specific stakeholders: 1. OFP Empowerment: • National Steering Committees • Onboarding training for new OFPs • OFPs Community of Practice Platform • Operational support for OFPs • Information management capacity building 2. Building execution capacity of stakeholders: • National Executing Agencies • CSOs 3. Enhancing outreach • Production of tailored outreach products • Organization of knowledge and learning visits by officials across regions.	• **Recommendation (f): Apply a customized approach to capacity building.** Because a one-size-fits-all approach to capacity building limits the number of participants that can be reached, the CSP should develop more customized approaches to capacity building with consideration for more flexibility as to the number of participants from each stakeholder group and their level of capacity. The CSP should also continue to empower OFPs by better informing them on their roles in GEF portfolio management beyond portfolio development. At the same time, it should place emphasis on their crucial facilitation role in keeping an ongoing dialogue with and bringing on board other actors such as line ministries, the private sector, local communities, and CSOs to ensure the mainstreaming and leveraging effect of GEF resources to support national commitments to multilateral environmental agreements.
Disaggregation of the National Dialogues into National Dialogues on portfolio prioritization and programming, and targeted National Dialogues on specific country needs	• **Recommendation (d): Revisit the reach and timing of National Dialogues to align them better with country needs for support.** The CSP should explore ways to improve the timing of the National Dialogue or develop other up-front strategic dialogue mechanisms on the future use of GEF resources. These should be planned as early as possible and should pursue deeper multi-stakeholder engagement in the process.

	Finally, the CSP should examine with GEF technical programming staff how National Dialogues and ECWs could more directly contribute to programming objectives.
Within the framework of the Long-Term Vision of Complementarity, Coherence, and Collaboration between the GCF and GEF, the CSP will explore options to enhance collaboration to build capacities of OFPs and other stakeholders to access GEF resources and to learn about GEF policies and guidelines. The experiences and lessons can serve as guidance for possible collaboration with other global environmental funds as appropriate and relevant. Progress will be reflected in the annual joint progress report to be submitted to the GEF Council and the GCF Board.	• **Recommendation (a): Build on current efforts to collaborate with other global environmental funds.** To help countries to respond better to the commitments of countries vis-à-vis the implementation of the multilateral environmental agreements that the GEF is supporting along with other global funds, CSP should build further on past efforts to collaborate on readiness activities with other funds. Overall, the management of the CSP should continue to monitor developments to identify where substantive opportunities for collaboration can be established beyond the current efforts.

702. For GEF-8, three core objectives as well as relevant principles have been identified to bring selective focus to the Program. These are:

1. Improving collaboration at the country level through inclusiveness.

703. Core CSP events engage diverse stakeholders, including Operational Focal Points (OFPs), Political Focal Points (PFPs), Council Members and Alternates, Convention Focal Points, CSOs, the private sector and other interested stakeholders, such as environmental journalists. While each CSP event has a different target audience, all CSP events are designed to promote open dialogue among diverse stakeholders. As a result, the participation at CSP events encourage knowledge-sharing, collaboration, and partnership-building through inclusive dialogue.

704. The CSP will enhance inclusiveness to improve collaboration at the country level, during and beyond CSP events, focusing on two principles:

1.1. **Broadening the engagement of stakeholders at CSP events.** To further advance inclusiveness at CSP events, the Program will broaden the engagement of stakeholders. For events organized by OFPs, with the support of the CSP, the Program will continue to require the inclusion of all relevant line ministries, Convention Focal Points for the five conventions the GEF serves, as well as other key national stakeholders, including CSOs, the private sector, and including thematically

relevant international organizations that the country is a Party of and the Convention has a partnership agreement with. The Program will compile an updated list of contacts, where necessary, to share with OFPs.

For events organized by the CSP, the Program and the regional technical teams will deliver best practices on the most efficient and streamlined coordination among key partners and stakeholders, for example, how OFPs, GEF Agencies, and executing agencies can work as a team to design, implement and monitor a project, and how they can effectively engage with civil society.

1.2. **Expanding the outreach and support to stakeholders beyond CSP events.** To further advance knowledge-sharing and help strengthen partnerships on the ground between stakeholders, the CSP will expand its outreach and support beyond events. The CSP will share best practices and lessons learned of successful inclusiveness in programming, project preparation and execution as well as portfolio management with key stakeholders engaged in CSP events. When necessary, personalized follow up with stakeholders will be sought.

2. Further increasing country ownership and leadership by empowering OFPs.

705. OFPs are at the core of GEF operations in recipient countries and responsible for coordinating with other relevant ministries and stakeholders. The IEO OPS7 recommends that the GEF should leverage the Country Support Program to enable greater capacity building and strengthening of OFPs and other national institutions to ensure a more coherent delivery of programming. National Steering Committees empower the role and function of the OFP by ensuring they have the necessary support and consensus around the decisions they make. The CSP will further enhance country ownership by promoting National Steering Committees.[484] The strengthening of the role and function of OFPs will focus on two principles:

2.1. **Enabling OFPs to efficiently program and manage their GEF portfolio.** To enable OFPs to efficiently program and manage their GEF portfolio, the CSP will promote and encourage OFPs to set up National Steering Committees. The Program will also train OFPs on portfolio management best practices and techniques. In addition, it will promote dialogue and exchange of experiences among OFPs.

2.2. **Enhancing policy coherence at the country level.** To enhance policy coherence at the country level in support of multilateral environmental agreements, the CSP will strengthen the facilitation role of OFPs to advance dialogue and collaboration with

[484] Out of the 144 recipient countries the CSP assists, about 10 percent have adopted National Steering Committees (NSC): some are more formal, as the examples described in Thailand and Cote d'Ivoire (Box 5 and Box 6), while some function informally. The NSC have the specific mandates to select GEF projects but they are not responsible for project oversight and monitoring or other tasks. The NSC model has been promoted and presented in every ECW. Best practices have been shared by OFPs with participants at ECWs and SESs.

and among line ministries and relevant stakeholders, with the aim of identifying and understanding the effects of policies with contradictory outcomes.

3. Promoting South-South knowledge-sharing through tailored responsiveness.

706. The CSP provides capacity building to a wide range of stakeholders with diverse levels of capacity. Content for CSP events has been developed and regularly updated for the different events. A tailored approach to capacity building will increase the impact of the CSP, by becoming responsive to the specific needs to the various stakeholders it supports. Increased capacity of different stakeholders will, in turn, further advance dialogue and knowledge-sharing among them. The CSP will tailor content for each category of the stakeholders it supports, to further promote South-South exchanges among counterparts from different regions to promote knowledge-sharing and to seek synergies, focusing on the following two principles:

3.1. **Customizing the approach to capacity building to the specific needs of stakeholders.** To customize the approach to capacity building, the CSP will utilize a series of new and complementary activities targeted to different stakeholders, including OFPs, executing agencies, CSOs and journalists; and organize activities focused on specific country needs.

3.2. **Diversifying outreach tools.** Additional outreach tools will be introduced to diversify and enhance CSP activities, with a view to promoting increased dialogue and knowledge-sharing among stakeholders.

CSP Activities in GEF-8

707. A set of complementary core activities and new components will be implemented by the CSP in GEF-8, using a mix of in-person and virtual delivery modalities to further expand the Program's reach. These are:

1) Core CSP Activities:

- **GEF Workshops:** The CSP will organize two types of GEF workshops, aimed at keeping stakeholders up to date with GEF policies and procedures:

  a) Expanded Constituency Workshops (ECWs). The CSP will organize, on average, 11 in-person ECWs a year in recipient constituencies, starting in 2023. These workshops are inclusive, engaging OFPs, PFPs, Convention Focal Points, CSOs, Agencies and other interested stakeholders. Up to ten participants per country will be financed by the CSP to take part of these workshops. Content for ECWs will be updated annually, focusing on GEF-8 policies and procedures, as well as new modules tailored to specific needs of each constituency.

b) **Thematic Workshops.** The CSP will continue to organize thematic workshops on specific issues of interest to countries, constituencies, or group of countries, at the demand of OFPs.[485]

- **Stakeholder Empowerment Series** (SESs).[486] Responding to the request for training on specific issues as well as for promoting South-South knowledge-sharing, virtual SESs will be organized. These targeted sessions will bring together stakeholders from different regions, enabling feedback and exchange of good practices and lessons learned across countries and constituencies. Specialized themes will include, for example, GEF-8 new strategies and policies, how to manage portfolios, how to analyze project implementation reports and financial closure reports, benefits of National Steering Committees. The CSP will organize, on average, 9 virtual SESs a year throughout the cycle, starting in mid-2022.

- **National Dialogues.** In order to facilitate GEF programming and to promote policy coherence within each country, the CSP will reinforce efforts to encourage OFPs in all recipient countries to organize National Dialogues. These dialogues are a strategic tool for convening all relevant national stakeholders to discuss and embrace the protection of the global environment as essential to their national interests, to promote policy coherence as well as to mainstream global environment issues into their daily work. In GEF-8, National Dialogues will be disaggregated into:

  a) National Dialogues on portfolio prioritization and programming.[487] These multi-stakeholder dialogues enable recipient countries to discuss and better decide how to make best use of the resources available through the GEF for the entire cycle. These priority setting dialogues also allow for discussion and agreement on the most appropriate national agencies and partners for the execution of projects prioritized by the country, as well as the most suitable GEF Agency for each project. National Dialogues on programming will be encouraged as soon as the GEF -8 Programming Directions and STAR country allocations are approved in July 2022. These National Dialogues on programming will complement the Upstream Technical Dialogues, as necessary.

  b) Targeted National Dialogues throughout the entire cycle focusing on specific issues of interest to the country. These dialogues are intended to help all relevant line ministries and stakeholders jointly discuss and decide on the most appropriate strategies to enhance the use of GEF resources in order to maximize results. National

[485] Thematic Workshops have been organized on, for example, Non-Grant Instruments, Regional Projects under implementation (Guarani Aquifer and Congo Basin), among others.
[486] SESs are proposed as a CSP core activity in GEF-8, to be added to those executed in previous cycles. SESs were the result of the need to adapt ECWs to a virtual format due to travel restrictions since 2020 (GEF-7).
[487] In GEF-5 and GEF-6, dialogues on programming were referred to as National Portfolio Formulation Exercises (NPFEs), which were merged with National Dialogues in GEF-7

Dialogues can be organized on various issues, such as on policy coherence to promote the integration of global environment concepts into national strategy and policy formulation, on strengthening collaboration with civil society or on increasing the engagement of the private sector.

708. As in past cycles, National Dialogues will continue to be fully demand-driven at the request of OFPs.

- **Introduction Seminars.** In past cycles, only one annual in-person Introduction Seminar was organized in Washington DC, with about 80 participants. The 2021 Introduction Seminar engaged more than 500 participants in a virtual training. Building on this experience and on increased stakeholders' demand, the CSP will organize two Introduction Seminar every year, to be held virtually. These training sessions target new Agency staff, OFPs, and selected stakeholders. Convention Secretariat staff will also be invited to take part of these seminars, since new staff could greatly benefit from a better understanding of the GEF its policies and operations.

- **Constituency Meetings**. At the request of Council Members, the CSP will organize Constituency Meetings for every constituency, to support the coordination and preparation for decision-making before every bi-annual GEF Council meeting. The most suitable platform will be utilized depending on the needs and preferences of countries in each constituency.

- **Pre-Council meetings of Recipient Council Members. The CSP will continue to support** meetings of Council Members and Alternates of recipient countries prior to each Council meeting to enhance their dialogue and coordination.

709. In addition, the CSP will continue producing **Country Factsheets** –an information tool to foster greater accountability and ownership of GEF resources by countries. These two-page summaries provide OFPs with consolidated and concise analytical data on country programming. Country Factsheets facilitate evidence-based decision making to OFPs by presenting a customized analysis aggregating data and metrics, including the list of projects in the country.

2) New CSP Activities

710. The new CSP activities in GEF-8 are closely inter-linked with the core CSP activities. These include a set of complementary components to provide a customized approach to capacity building for specific stakeholders. These are:

1. OFP Empowerment

711. CSP activities will further strengthen the role of OFPs, taking into account the different institutional organization, technical capacity and needs of each country. The CSP will continue

supporting OFPs in developing a systematic decision-making process for improved policy coherence among relevant ministries. Building on the successful work in the previous replenishment cycles, the CSP will continue strengthening OFPs' capacity to exercise country ownership in the identification, development and monitoring of GEF projects by leading and facilitating project management processes and effectively coordinating with GEF Agencies, executing agencies, and other stakeholders. Based on the GEF business model and limitations to transferring direct support to OFPs, the renewed CSP will provide OFPs institutional capacity building and project-related operational support through the following interlinked activities:

- **National Steering Committees**. In some countries, OFPs carry out their responsibilities supported only by a small number of staff in their ministries, while in other cases OFPs have the institutional support of a National Steering Committee, which include representatives from relevant line ministries, Convention Focal Points and key stakeholders, including CSOs, and are chaired by the OFP. Through meaningful dialogue with all relevant stakeholders, National Steering Committees support the OFPs in their decision-making related to the use of GEF resources in a participatory way.

  The CSP will work closely with OFPs to encourage recipient countries to adopt this governance model, for the selection of projects and for a more efficient management and monitoring of the GEF portfolio. National Steering Committees can also serve as a forum to promote policy coherence, by convening all relevant line ministries and key stakeholders in the country. Lessons and experiences from countries with successful National Steering Committees, such as Thailand (Box 5), Brazil and Cote d'Ivoire (Box 6), will be shared through the OPF Community of Practice platform to further encourage countries to adopt this model.

Box 5: Thailand's National Steering Committee

The GEF National Steering Committee in Thailand was launched during the GEF-7 National Dialogue. It is chaired by the OFP and comprised of members from all relevant ministries, including the PFP. The Committee is responsible for determining policies and guidelines on the selection and implementation of GEF projects.

The prioritization of projects is supported and guided by six independent Focal Area Technical Working Groups, consisting of members from relevant government agencies, CSOs, academic institutions and the private sector, responsible for the preliminary screening project proposals, before submitting to the GEF Steering Committee for consideration and endorsement. Project proponents present the project concepts demonstrating ownership during the Technical Working Group meeting as well as the Steering Committee meeting. Upon the Technical Working Group's recommendation and the Steering Committee endorsement, the OFP issues the letter of endorsement.

The monitoring of projects under execution is done on a regular basis. The OFP convenes a meeting of the Committee, the Focal Area Technical Working Groups, beneficiaries, and stakeholders. GEF Agencies are invited to these meeting to respond to questions from participants. These meetings enable all national stakeholders to be regularly informed on progress and, when necessary, jointly address challenges.

Box 6: Cote d'Ivoire's National Steering Committee

The GEF National Committee in Côte D'Ivoire was created by decree on February 9, 2012. It is a national framework for consultation and coordination of GEF activities, focused on promoting environmental protection and sustainability.

The National Committee is composed of 16 members and chaired by Ministry of Economy and Finance, which serves as the OFP. The Ministry of Environment and Sustainable Development, which serves as the PFP, is the first Vice-president and the Minister of Foreign Affairs is the second Vice-president. Its work and decisions are supported by a Technical Committee, composed of 12 members, which is responsible for overseeing the project cycle.

The OFP is the Permanent Secretary of the National Committee and is responsible for its administrative and financial management. The OFP also serves as the contact point for the coordination of activities. The Government provides an annual budget to support the administrative cost of the office of the Permanent Secretary.

- **Onboarding training for new OFPs**. The CSP will continue providing personalized training for new OFPs to empower them to fulfill their responsibilities. Continuous support and assistance will continue to be provided as needed, following current practice.
- **OFP Community of Practice Platform.** Many OFPs deal with similar challenges in the design and implementation of projects and can learn from each other's experiences. The CSP will create and moderate a knowledge-sharing and learning platform customized to OFPs. Knowledge-sharing and exchange among OPFs facilitates the capture, synthesis, transfer and uptake of experiences within and beyond the GEF Partnership, in support of innovation and scale-up of effective solutions.

  The Community of Practice platform will enable OFPs and their staff to have easier access to knowledge, learning and mentoring resources from the CSP. Through an interactive forum, OFPs will be able to share experiences and learn from each other by accessing online courses and tutorials, uploading and downloading documents, creating and posting blogs, articles and other materials of interest to other OFPs. The platform will also showcase highlights and lessons from strategic visits to selected countries for a group of OFPs to further promote South-South knowledge-sharing and exchange of best practices in project design and execution.

  The development of the platform, the Knowledge and Collaboration Platform (KCP), is well under way with the following countries taking part of its pilot: Cote d'Ivoire, Fiji, Liberia, Maldives, Peru, Philippines and Turkey.
- **Operational support to OFPs.** The CSP will continue to build the capacity of OFPs to manage their GEF portfolio. In addition, it is proposed to include a procedure that will allow OFPs to access dedicated funds that will enable them to effectively oversee and monitor their GEF portfolio for the entire GEF-8 cycle. This dedicated support will cover the costs of field visits facilitating OFPs to perform their responsibilities in overseeing project execution

during the whole four-year cycle. The utilization of this procedure is optional and flexible, if and when OFPs require access to this additional support.

- **Information management capacity building.** The CSP will build and strengthen the capacity of OFPs' offices to create institutional memory within relevant government agencies and to ensure continuity of GEF's work in a country, regardless of changing political circumstances. Targeted support will include, among others, the creation and upkeep of filing systems for global environmental activities, projects and relevant national policies, the organization and update of database of relevant national contacts.

712. In all the activities described above, OFPs from LDCs and SIDSs in all constituencies will be given priority, to further strengthen their ownership and capacities, by tailoring activities to their specific needs.

713. In addition, the CSP will assess ways to complement and collaborate with the capacity building efforts by other environmental funds, such as the Green Climate Fund[488] and the Adaptation Fund. The GEF and GCF Secretariats have agreed on an overarching framework for deeper cooperation between the two funds.

2. Building execution capacity of stakeholders

714. Executing agencies are responsible for projects on the ground. From inception, design and formulation of activities to the execution, monitoring and evaluation of a project, executing agencies can gain knowledge and experience to enhance country ownership. The CSP will adopt a tailored approach to build the execution capacity of stakeholders through the following activities:

- **National executing agencies**. The CSP will provide targeted capacity building to national executing agencies, including line ministries and other stakeholders. Tools and methods will be tailored to train stakeholders on the entire project cycle. The creation of a community of practice for national executing agencies and other stakeholders will further promote learning, knowledge-sharing, coordination and exchange of experiences. The training to national executing agencies will be piloted in Latin America and the Caribbean region, in collaboration with the Organization of American States, and gradually expanded to other regions.
- **CSOs**. The CSP will partner with experienced CSOs which have successfully executed GEF projects to mentor and train other CSOs so that they can become partners in project execution. The transfer of knowledge, experience and lessons from CSOs mentors will build the capacity of additional CSOs to encourage new and additional partnerships. In coordination and close consultation with CSOs mentors, the CSP will develop content for

[488] The GEF and GCF Secretariats agreed on a Long-Term Vision on Complementarity, Coherence and Collaboration (GEF/C.60/08) to build on and enhance collaboration and cooperation between the two funds

the training, examples of successful projects engaging CSOs and other relevant information materials.

- **Thematically relevant international organizations**. Many recipient countries are Parties to thematically focused international environment/sustainability-related organizations. In line with relevant COP guidance and as appropriate, CSP engagement can be extended to those organizations executing thematically/geographically relevant projects that are in synergy with implementation of the Conventions that the GEF serves.

3. Enhancing outreach

715. OFPs and stakeholders can greatly benefit from a more targeted outreach to increase knowledge-sharing. The CSP will enhance outreach through **tailored outreach products.**

716. These outreach products will provide easier access to OFPs, PFPs and other interested stakeholders to resources and tools, including the calendar of CSP events, tailored information for constituencies and recipient countries, good practices and case studies, reports, as well as a regular newsletter for OFPs and articles and interviews of interest for stakeholders, among others.

717. These information tools will facilitate and strengthen communication and exchanges among OFPs, PFPs, Council Members and other interested stakeholders, further enhancing South-South knowledge-sharing by documenting on-the-ground experiences, as well as featuring successful practices, for example on National Steering Committees, that can be adapted and replicated in countries.

718. Articles and updates on the CSP will also be produced for the GEF newsletter, as a contribution to the work led by the GEF's Communications Team.

C. Maximizing the Contribution of Local Actions, Civil Society, and the GEF Corporate Program for the Small Grants Programme to Support the GEF Ambition in GEF-8 and Beyond

Introduction

The Imperative Role of Local Action and Civil Society for Delivering Global Environmental Commitments

719. Civil society makes a vital contribution to all areas of sustainable development, human rights, policy making and social services. An important characteristic of a well-functioning state is synergy between government, civil society and the private sector. Empowered civil society groups play important roles influencing and setting national and global agendas, delivering conservation outcomes, as well as supporting domestic policy coherence and sustainability. They bring citizens' voices to national and international debates, initiate and implement local solutions, and elevate local needs in national and global strategies. Local actions conceived and executed by civil society organizations (CSOs) and community-based organizations (CBOs) provide bottom-up approaches critical to conserving and restoring the environment. They generate a sound complement to government and private sector actions while enhancing well-being and livelihoods at the community level and beyond.

720. Findings of the recent IPCC Report (2021)[489] underscore the mounting risks to those "on the front lines" of the climate crisis and that this is not the time for inaction or status quo; now is the time for governments and investors to step up their action to match the scale of the crisis. Guidance from the MEAs, further, continues to stress the critical need for translating global agreements into effective action at local, national and sectoral levels. The Post-2020 Global Biodiversity Framework as well as the UN Decade on Ecosystem Restoration also highlight the key roles of civil society and community-based organizations in implementing the ambitious goals and objectives. Moreover, many global MEA as well as local decisions related to climate, biodiversity, land degradation and chemicals and waste are already instigated and delivered by non-state actors that are pushing forward with the critical bottom-up actions, initiatives and coalitions needed.

721. This is happening at the same time as communities are experiencing a disproportionate burden of adverse environmental decisions and impacts resulting from top-down planning and decision-making processes. As outlined in the GEF-8 Programming Directions, the needed actions and investments must include both global "top down" and "bottom-up" dimensions. The GEF-8 Strategy and Programming Directions emphasize barriers, opportunities, and solutions at the country and local levels that must be taken into consideration. This includes recognizing better the

[489] https://www.ipcc.ch/report/ar6/wg1/

key roles of non-state actors, in particular civil society and a call for a "whole of government" approach in GEF engagement with recipient countries.

Building a Bottom-up Approach for the GEF to Amplify Impact on the Global Environment

722. In line with the vision of the IPCC Report, the GEF-8 Strategy highlights the centrality of local innovation and civil society actions and coalitions in meeting global sustainability and climate goals, as well as SDGs and poverty alleviation priorities. Delivering on GEF's ambition to contribute to a green and blue recovery and a healthier, more productive and resilient planet necessitates a groundbreaking effort from the GEF to maximize engagement of non-state actors and strategically engage new organizations and partners at the global and local levels.

723. It will require dedicated measures to advance more inclusive and integrated approaches and strategic efforts and investments to ensure that all actors - government, private sector and civil society – are mobilized and engaged in transforming social and economic systems for a sustainable future. It will also require that local actions and innovations carried out by civil society actors, through the GEF Small Grant Program (SGP) and by other GEF-Financed projects and programs, play an increasing role in supporting GEF's ambition to contribute to a green and blue recovery and a healthier, more productive and resilient planet.

724. As such, the GEF is seeking to increase the scale and scope of financing for civil society and elevate the SGP as the premier GEF grant mechanism and platform for civil society and local communities for the global environment. This includes the launch of the SGP 2.0 in GEF-8 with the overall objective to:

> *Catalyze and mobilize civil society actors and local actions needed to address major drivers of environmental degradation and help deliver multiple benefits across the GEF's mandated thematic dimensions, while promoting sustainable development and improved livelihoods.*

725. The launch of SGP 2.0 will help the GEF to contribute to global and national aspirations for development pathways that are nature-positive, climate-neutral and pollution free.

Background

726. The GEF SGP has played, during the last 30 years, an important role supporting local actions and civil society actors to influence and deliver on national and global sustainable development and environmental goals and commitments.

Box 7. A Snapshot of the GEF Small Grants Program

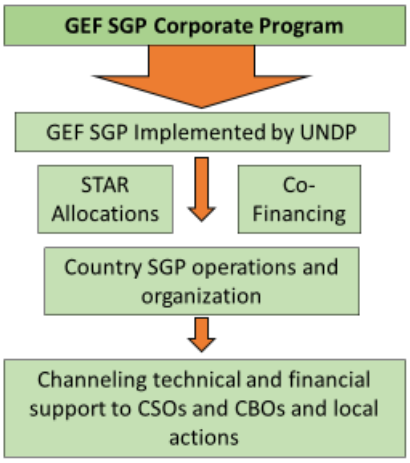
- Serving, since 1992, as GEF's unique Corporate Program that provides direct financing and capacity development to CSOs and CBOs, generating global environmental benefits and critically important local conservation, development, and livelihoods results.
- Providing a demand-driven grant mechanism for local actions and support to local communities and marginalized groups that typically lack technical/institutional capacity to address environmental challenges and access to needed financial resources.
- Offering small grants up to US$50,000 and strategic project window for grantmaking up to US$150,000 for scaling up and supporting initiatives that cover many communities, critical landscapes/seascapes or thematic priorities.
- Channeling over US$600 million grant funding to CSO and CBOs, since its inception, with over 25,000 grants to CSOs and CBOs in 135 developing countries and economies in transition.

727. The Third Joint GEF-UNDP Evaluation of the SGP (2021) (hereafter referred to as the Third Joint SGP Evaluation)[490] corroborates findings from previous Joint Evaluations[491] that the SGP continues to be relevant to evolving environmental priorities at all levels as well as delivering high levels of coherence with the GEF programmatic framework. The Evaluation further suggests that "this relevance extends to SGP as an operational modality within the GEF family and as a financing mechanism that channels funds to civil society organizations".[492]

728. Since its establishment in 1992, the SGP has been implemented solely by UNDP on behalf of the GEF Partnership (see Figure 9 below).

[490] GEF/E/C.60/01 Joint Evaluation of the GEF Small Grants Programme (2021) para 23
[491] Joint Evaluation of the GEF Small Grants Programme (2008), GEF and UNDP Independent Evaluation Offices, p. 7 and Joint Evaluation of the Small Grants Programme, March 2015, GEF and UNDP Independent Evaluation Offices, Executive Summary (page 24
[492] GEF/E/C.60/01 Joint Evaluation of the GEF Small Grants Programme (2021) Para 29

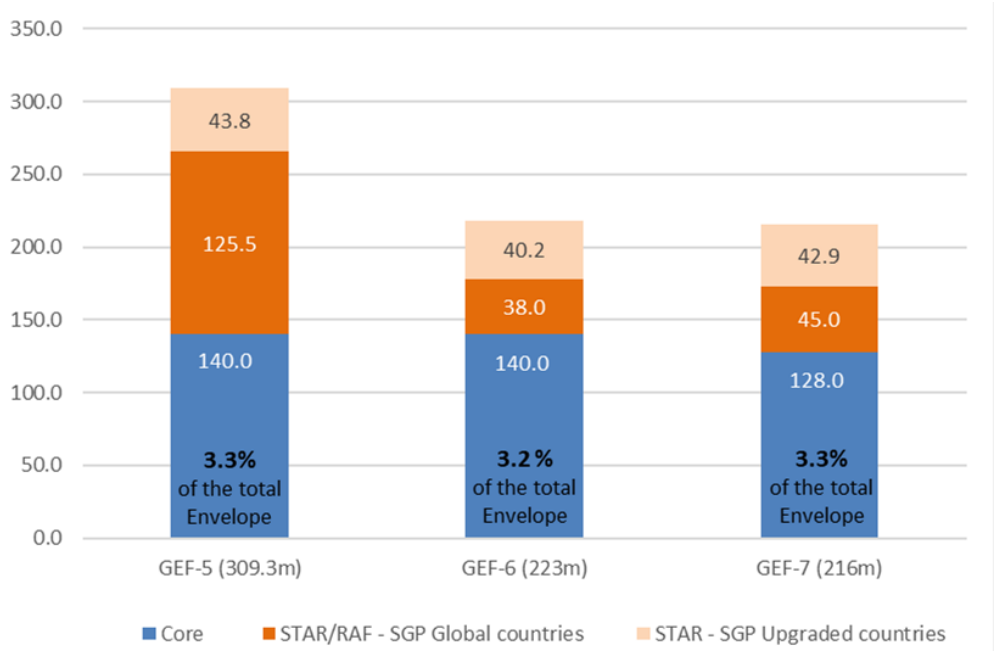
Figure 9. Schematic overview of past GEF SGP Model



729. While the Third Joint SGP Evaluation concluded that SGP has been consistent in its delivery of environmental results at local, national, and global levels and in generating economic and social benefits, it also highlighted a set of important challenges and opportunities that suggest careful review and updates across key existing SGP financing modalities.

730. In past replenishment periods, the SGP core financing envelope (in relation to the share of the total GEF financing envelope) has amounted to slightly above 3% (not including set asides provided through the GEF System of Transparent Allocation Resources (STAR) or co-financing secured through CSOs/NGOs, bilateral and multilateral donors, foundations, private sector, governments) as illustrated in the graph below (Figure 10).

Figure 10. Resource allocations to the GEF SGP across recent GEF Replenishment periods (in millions)



731. In GEF-7, the core resource allocation to participating countries for the grant component to CSOs (70M), (excluding STAR and co-financing resources managed by SGP) was on average around 700,000 USD per country. GEF recognizes that not only has this allocation remained rather stagnant over the last couple of replenishment periods but also that a lot has changed since SGP was established in 1992.

732. Looking forward, GEF is convinced that it needs an increased ambition and a contemporary approach to better align SGP with the evolving socio-political environment at national and global levels. This approach will need to be designed to help boost GEF's ability to support and engage civil society actors and organizations, taking into account their evolving challenges and important roles. Since the SGP was established, development prospects for local communities and their livelihoods are increasingly threatened by climate change, biodiversity loss, chemical pollution, and pressure on forests, oceans, landscapes, and wildlife. Just in the last two years, moreover, the impact of the COVID-19 pandemic has dramatically changed the context and opportunities for local communities and vulnerable populations around the world facing massive job losses, shrinking economies and loss of livelihoods. This has negatively impacted women,[493] as well as other marginalized groups and local communities around the world.

[493] https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/gender-equality-in-the-wake-of-covid-19-en.pdf?la=en&vs=5142

SGP Thematic Priorities in GEF-8

733. Considering the critically important role that non-state actors and civil society must play moving forward to arrest environment degradation and climate change, the knowledge, skills and partnerships with civil society and community-based organizations need to be mobilized at an unprecedented scale. In GEF-8, the GEF partnership will build on past successes of the SGP as well as on additional mechanisms to engage and leverage experiences and engagement with more GEF Agencies. The goal will be to accompany the most vulnerable and hard-hit populations (particularly women, indigenous peoples and youth) and to support their efforts to influence and amplify country responses towards green recovery solutions.

734. GEF recognizes that introducing this enhanced ambition for engagement of civil society must build on lessons learned from nearly 30 years of SGP experience. This is comprised of the long history of financing to civil society, including community-based and multi-stakeholder governance approaches and efforts that harness traditional knowledge, support local innovation and share knowledge at landscape and seascape levels. As such, and as further detailed below, GEF's ambition for SGP moving forward is to:

i. Further strengthen its alignment with the GEF-8 strategy and focal area priorities;
ii. Support delivery of the Integrated Programs proposed for GEF-8;
iii. Enhance its already important role in supporting and delivering on MEA and SDG commitments; and
iv. Extend SGP implementation roles to other GEF Agencies and explore new partnerships.

735. Moving forward in this direction will help position the GEF in GEF-8 and beyond to further its ambition to facilitate and boost civil society engagement, local actions and innovations to support global and national sustainable development commitments, including the Paris Agreement, the Post-2020 Global Biodiversity Framework, Land Degradation Neutrality targets, the UN Decade on Ecosystem Restoration, and other relevant global initiatives

736. As an overarching approach, GEF has strived, over the last two replenishment periods to direct its SGP core financing to priority geographical areas. These investments at the landscape and seascape level have promoted community-based and multi-stakeholder governance approaches and efforts that harnessed traditional knowledge, supported innovation, and opportunities for constructive knowledge sharing. The Third Joint SGP Evaluation highlighted the value of this approach to grant-making. At the same time, it also informed that the ways that SGP

has been delivered could be simplified and more consistent across its operational phases.[494] Moving forward, building on findings from the Third Joint SGP Evaluation and broader lessons learned in GEF-7, the following five strategic initiatives - consistent with GEF-7 efforts– are envisaged to be strengthened and further developed in GEF-8:

1) ***Community-based management of threatened ecosystems and species:*** SGP would continue to support conservation and sustainable use, including engaging and supporting local CSOs and CBOs in the management of protected areas and corridors, forest landscapes, integrated river-basins, and large marine ecosystems, as well as mainstreaming biodiversity in key production sectors. This would include support to territories and areas conserved by indigenous peoples and local communities and to CSOs and CBOs in the management and co-management of other private and public protected areas. These priorities are consistent with the GEF-8 ambition and proposed Integrated Programs outlined in the GEF-8 strategy.

2) ***Sustainable agriculture and fisheries, and food security****:* SGP would continue to support community-driven initiatives across production landscapes/seascapes to enhance the sustainability and productivity of priority socio-ecological systems, with a focus on food staples and commodities, livestock, and aquaculture. These initiatives could support the application of agroecological, regenerative, and biodiversity friendly principles and practices based on traditional knowledge and agronomic/agro-ecological science. SGP would also continue to support community-based efforts to achieve national and local voluntary Land Degradation Neutrality targets. These priorities are consistent with the GEF-8 Strategy and many proposed Integrated Programs, including the Food Systems Integrated Program and the Ecosystem Restoration Integrated Program where livelihood and food security benefits are explicitly linked.

3) ***Low-Carbon Energy Access and Co-Benefits****:* Building on SGP experience in supporting affordable clean energy in remote areas and vulnerable communities, SGP would seek to scale- up low carbon transformation by de-risking private sector investment and supporting innovation and adoption of cutting-edge technologies relevant to the community context, including energy access for health services and digital technologies. These priorities are consistent with the GEF-8 Strategy and proposed Integrated Programs such as the Net-Zero Nature-Positive Accelerator Integrated Program and with potential to scale-up adoption of technologies.

[494] GEF/E/C.60/09: stated that “The ways that SGP interventions are packaged, such as strategic initiatives, focal area results, innovation programmes and Grantmakers Plus initiatives, should be simplified” and further concluded that “a small number of thematic frameworks (e.g., landscape/seascape approach) may be adopted to steer or shape programming, incentivize innovation or address urgent and emerging issues, but the pace of change should be slow enough to allow for local adoption and internalization by local communities.”

4) ***Local to Global Coalitions for Chemicals and Waste Management:*** SGP would continue to support actions to benefit local communities in rural and urban areas enduring threats from chemicals and waste, either as users or consumers, through innovative, affordable and practical solutions to chemical and waste management, including plastics and e-waste management, supported by existing multi-stakeholder platforms and partners. These priorities are consistent with the GEF-8 Strategy and proposed Integrated Programs on Circular Solutions to Plastic Pollution, and on Elimination of Harmful Chemicals from Supply Chains.

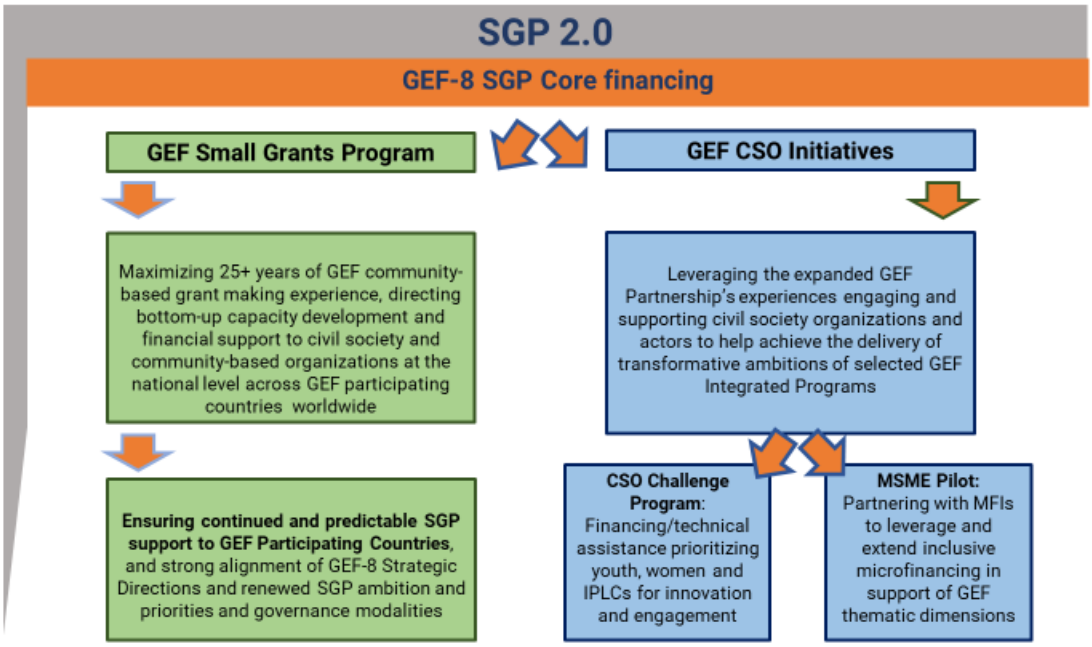
5) ***Catalyzing Sustainable Urban Solutions:*** SGP would continue to pilot activities to target vulnerable people and communities in the urban context, promoting an integrated management approach through public-private partnerships. This would include support to low-emission and resilient urban development such as waste and chemical management, energy, transport, watershed protection in rural hinterlands through compensatory ecosystem services arrangements, restoration corridors, and biodiversity conservation. These priorities are consistent with the GEF-8 Strategy and the proposed Sustainable Cities Integrated Program.

SGP 2.0: Expansion of the GEF SGP Model to Maximize the role of Civil Society in GEF-8 and beyond

737. The SGP 2.0 is first and foremost about the need for the GEF to institutionalize a contemporary and comprehensive bottom-up approach needed to accelerate GEF's impact on global environmental. It is also about (i) leveraging the diversity of comparative advantage of other GEF Agencies (opening up new opportunities for them to access GEF SGP resources and deploy their varied institutional potential, technical specialization/knowhow and network of stakeholders and partners); (ii) introducing important elements of competition (therefore addressing issues of concentration as well as harnessing potential opportunities to further optimize the impact of GEF SGP core financing); and (iii) piloting new modalities to explore and leverage new partnerships strategically important for the GEF to further maximize the contribution of local Actions, Civil Society to support the GEF Ambition in GEF-8 and Beyond.

738. As further outlined in the sections below, SGP 2.0. incorporates GEF's ambition to expand, diversity, innovate and optimize the SGP model and approach in GEF-8.

Figure 11. Schematic overview of the SGP 2.0 and the new GEF SGP Corporate Model



739. As illustrated in Figure 11 above, SGP 2.0 outlines a new model for the GEF SGP Corporate Program in GEF-8. The key elements of the approach include:

1. ***Extend SGP financing modalities to additional GEF Agencies.*** This will help GEF to increase its ability to further catalyze the critical engagement, actions, and sustainable innovations of civil society actors to support the delivery of MEA decisions and the different GEF's mandated thematic dimensions in GEF 8 and beyond.

2. ***Continue to support and finance access to small grant resources by all eligible countries, in line with GEF partnership's past commitments, in full strategic alignment to GEF-8 priorities.*** Increased SGP Core Financing and competition will help furthering GEF's ambition to pursuing universal access/opportunity and eliminating the SGP Upgrading Policy,[495] in line with the findings Third Join Evaluation of the SGP.[496] In addition, SGP strategic initiatives and cross-cutting priorities will be further aligned and enhanced to support GEF-8 focal area priorities and the proposed Integrated Programs for GEF-8.

[495] The term "upgrading" refers to the transition of the longest standing and most mature SGP country programmes (excluding LDCs and SIDS) to a new funding regime reliant on access to country STAR resources.
[496] GEF/E/C.60/01 Joint Evaluation of the GEF Small Grants Programme (2021)

3. ***Establish innovative CSO Initiatives that will*** help the GEF partnership to further mobilize, engage and support civil society organizations and actors needed to leverage the transformational change proposed in the GEF-8 Strategy and beyond.

740. The new competitive CSO Initiatives will prioritize youth and youth-led civil society organizations, women and women groups, Indigenous Peoples and local community organizations (IPLCs) in LDCs and SIDS. The Initiatives will be comprised of two distinct but complementary components, including (i) a CSO Challenge Program and (ii) a Micro-, Small and Medium-sized Enterprises (MSME) Pilot. Both initiatives will be pegged to support the transformative approach of a selected number of relevant GEF Integrated Programs.

741. **The CSO Challenge Program** will provide an opportunity for competitive access to resources by civil society actors and will specifically prioritize youth and youth-led civil society organizations, women and women groups as well as Indigenous Peoples and Local Communities (IPLC's). Youth, women and IPLCs often lack opportunity to participate in decision-making processes and women and youth entrepreneurs are more likely to be constrained by access to technical assistance and finance. The transformative potential of effectively engaging and supporting youth, women and IPLC's stems not only from the opportunity to engage more people in environmental efforts in terms of absolute numbers, but also from (i) the inclusion of their unique skills, knowledge, and experiences, including their roles as primary users and stewards of many natural resources; and (ii) their important role in changing the causal chain of environmental degradation through their involvement in governance and the public and private sectors, as well as their choices as consumers in the global market, to investment choices. The Program will build on proven GEF models such as the GEF Challenge Program for Adaptation Innovation[497] and draw on the learning, knowledge and good practices from other GEF projects and partnerships such as the Adaptation SME Accelerator project[498] and partnerships.[499] It will include strong components to foster knowledge sharing and collaboration across GEF thematic dimensions, countries as well as with the SGP, implemented by the UNDP. The CSO Challenge Program will be open to all existing GEF Agencies (including UNDP) as well as to any newly accredited GEF Agencies.[500] It

[497] GEF Challenge Program for Adaptation Innovation was introduced in the Programming Strategy for the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) in 2018. The program is designed to identify, test and highlight innovative adaptation approaches with potential to be replicated and scaled up through cooperation with institutional investors, bilateral or multilateral providers of climate finance, and other sources. It also aims to promote innovation in adaptation technologies and techniques by supporting sustainable innovation ecosystems for micro, small, and medium enterprises (MSMEs).

[498] The Adaptation SME Accelerator Project is a grant-funded initiative that seeks to build an ecosystem for small- to medium-sized companies in emerging markets that have technologies, products, and services that can be used to build resilience to the impacts of climate change ("Adaptation SMEs").

[499] E.g GEF's involvement in the European Inclusive Finance Network https://www.european-microfinance.org/).

[500] Policy Recommendations doc para IV (i.x): [Participants request the Secretariat to prepare a proposal for Council to include the modalities to invite additional GEF Agencies to the Partnership to address specific gaps in thematic and geographic coverage]

will provide opportunities for youth, women and IPCLs to, through a competitive process, access flexible technical assistance and financial resources. The program will be designed to support of innovative environmental solutions and or processes that would strengthen their voices and participation in decision-making processes and important advocacy priorities to support the delivery of the GEF-8 Strategy and or one or more of the GEF Integrated Programs.

742. **The MSME Pilot** will explore new opportunities to strategically leverage GEF Agencies' existing partnerships and projects with local financial intermediaries and micro financing institutions (MFIs) to provide technical assistance and financing to MSMEs. It will have a special focus on women, youth and IPLC entrepreneurs to support their important role contributing to climate and conservation outcomes and will include a pilot initiative to improve access to finance for MSMEs. GEF Agencies and/or qualified MFI's that have the proven capacity and ability to collaborate with a GEF Agency, will respond to a call for "expressions of interest" to implement this MSME Pilot. The expression of interest will seek proposals that deploy financial solutions (including both technical assistance and financial products) for MSMEs in support of GEF focal areas and/or relevant GEF Integrated Program. The proposals will be requested to elaborate on the needed innovations and design of sustainable financial products for MSMEs, and more specifically for women, youth and IPLC. Blended finance structures that could attract additional private sector investment could also be proposed. Since the Pilot seeks to support MSMEs at any stage in their business life cycle and other innovative solutions to assist MSME development, support for incubators or accelerators could be included. Proposals will be required to demonstrate consistency with the GEF's mandate and the GEF-8 strategy and to be in compliance with GEF policies and operational policies.

743. The new GEF CSO initiatives will have multiple benefits. They will in particular:

- Capitalize on the expertise of the GEF expanded Agency network, including their diverse institutional set-up, partnerships as well innovative practices engaging, supporting and financing civil society actors and stakeholder, including youth, women and Indigenous Peoples.
- Allow the GEF Partnership to more strategically and effectively engage non-state actors to support the GEF mission and mandated thematic dimensions in line with MEA decisions and guidance.
- Address the interest and needs of civil society organizations and actors in LDCs and SIDs, and as a result contributing to their important role in safeguarding the planet.
- Leverage learning and collaboration across the GEF Partnership on civil society and community-based grant making.

744. As part of the launch of the new CSO Initiatives, the GEF Secretariat will conduct outreach to countries, through GEF Workshops, GEF Dialogues and GEF Constituency Meetings, to raise awareness about the synergies and differences between the programs and initiatives. The Secretariat will also: (i) seek to identify opportunities for coordination and scaling-up; and (ii) share experiences and lessons learned, as part of the longer-term consultative visioning exercise, in order to build the knowledge base needed to further support CSO and CBO stakeholders and actors in GEF 8 and beyond.

Monitoring progress and results

745. A robust results framework for the SGP 2.0 will be critically important to help measure results and to inform further GEF replenishment periods. Throughout its operational phases, GEF has aimed to broadly align SGP strategy with its corresponding focal area programming directions and bring the SGP results framework in line with the GEF's Results Framework.[501] In GEF-7, SGP's results framework and indicators were adopted to monitor, measure and report on relevant GEF-7 Core Indicators outlined in the updated results architecture.[502] In GEF-8, efforts will be made to continue aligning the SGP's monitoring framework and methodology with the proposed GEF-8 Results Measurement Framework. It will build on lessons learned to strengthen socio-economic measurements and indicators in GEF-7 to better account for the full scope of SGP's results and impacts. This may include, also, a few performance measurements to help monitor cost efficiency.

Principles and Criteria for SGP 2.0

746. As mentioned above, the Third Joint SGP Evaluation highlighted a set of important areas for improvements. In response to these recommendations, important updates and revisions to some key modalities and principles will be incorporated in SGP 2.0. In line with GEF's Management Response to the Joint Evaluation,[503] the below highlights some guiding principles. Further details on these principles and criteria will be incorporated in the GEF-8 SGP Implementation Arrangements, to be presented to the GEF Council at the onset of GEF-8 in June 2022.

- *Facilitate Universal Opportunity:* During GEF-8, efforts will be extended to further facilitate opportunities to all eligible and interested countries to participate in line with the SGP approach and programming directions. Any efforts to expand universal opportunity will take into account the overall resource envelope for the SGP and to be assessed in connection with the

[501] In GEF-7, SGP's indicators were established, and its methodology adjusted to monitor, measure and report its contribution in alignment with 5 of the 11 most relevant GEF-7 Core Indicators.
[502] GEF/C.54/11/Rev.02: UPDATED RESULTS ARCHITECTURE FOR GEF-7 (https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.11.Rev_.02_Results.pdf)
[503] The term "upgrading" refers to the transition of the longest standing and most mature SGP country programmes (excluding LDCs and SIDS) to a new funding regime reliant on access to country STAR resources

proposed process to eliminate the SGP Upgrading Policy.

- *Eliminate the SGP Upgrading Policy.*[504] During GEF-8, efforts will be made to increase flexibility of the use of SGP Core resources and to eliminate the Upgrading policy. Efforts to eliminate the Upgrading Policy will take into account the overall resource envelope for SGP, taking into account also issues of continuity of resource flows to countries as well as capacity, opportunities and other factors.

- *Optimize the proportion/ratio of SGP core financing for CSOs and CBOs:* SGP serves as GEF's only dedicated funding mechanism for civil society. In the past, the Secretariat has tracked the proportion of SGP financing allocated to CSOs and CBOs.[505] This allocation remains a valuable marker for future SGP models and operations and the Secretariat's will seek to maximize the GEF financing directly flowing to CSOs and CBOs. This proportion will be defined in relation to the overall resource envelope and strategy of the SGP and will be incorporated in the GEF-8 SGP Implementation Arrangements submitted to the approval of the GEF Council. This ratio should both reflect the funding need for important functions of SGP, such as capacity building, knowledge management, monitoring and evaluation and technical assistance and communication components, as well as create a clear efficiency benchmark

- *Leverage opportunities for innovation, scaling up and replication:* SGP has a proven track record of financing and testing innovative ideas, tools and methods at the local level. In GEF-8 additional efforts will be made to further identify, monitor and learn from factors that facilitate opportunities to scale them up through: (i) partnerships and multi-stakeholder alliances and facilitating broad-based engagement across relevant stakeholder groups to mobilize CSO participation with a view to building, strengthening and catalyzing diverse coalitions of actors; (ii) fostering scalable digital partnerships at a suitable level for small-scale actors (such approaches have linked smaller businesses to larger entities and provided safer, more efficient and accurate solutions); and (iii) targeted support towards scaling up finance for community-based environmental actions, including businesses and enterprises.

[504] At the onset of GEF-7, there were 23 eligible countries that were not receiving funds from the SGP, of which only two (Nicaragua and Chile), had ever received SGP funds previously. (Further note that Malaysia is in the process of transitioning to UCP, while Angola, Bangladesh, Eswatini and Gabon joined as new country programs under the SGP core/ Global Programme in GEF-7. Also note that Pakistan and Thailand are UCPs that have not received any STAR funding in GEF7.)

[505] Using the methodology defined and calculated in the First Joint SGP Evaluation in 2008 (https://www.gefieo.org/sites/default/files/documents/reports/sgp-2008.pdf)

- *Advance private sector and business-oriented approaches:* In alignment with the GEF's Private Sector Engagement Strategy (GEF PSES 2020),[506] SGP will advance its efforts to strategically support multi-stakeholder platforms and dialogues to seek greater scale and impact as well as identifying private sector entry points at the global and local levels. Based on UNDP experiences and on its SGP's guidance note on Private Sector Engagement, this will include further efforts to leverage entry points for Private Sector Engagement and mechanisms to work at the micro, small, and medium enterprise (MSME) level.[507]

Pathways for further defining and informing a longer-term vision and modalities for the GEF SGP Corporate Program in GEF-8 and beyond.

747. The Secretariat will invest in early outreach to make GEF Agencies, countries and civil society actors aware of the proposed new approach to expand the GEF SGP Corporate Program and provide further clarification of the ambition, approach and operational parameters to help facilitate their participation and its effective implementation.

748. The proposed new and more ambitious agenda to expand the GEF SGP Corporate Program and move towards SGP 2.0 in GEF-8 incorporates findings from the Third Joint SGP Evaluation, including the recommendation that the GEF should conduct a consultative process towards the formulation of an updated long-term vision for the SGP. Early steps have been taken to initiate this process and it is envisaged that this consultative stocktaking exercise will help guide and inform GEF's broader longer-term vision and strategic directions for mobilizing and supporting civil society organizations and actors in GEF-8 and beyond. Some early findings of the stocktaking and consultative exercise are expected to be incorporated in the planned SGP Implementation Arrangements for GEF-8 (to be prepared for the June 2022 GEF Council meeting).

[506] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF_C.58_05_GEFs%20Private%20Sector%20Engagement%20Strategy_0.pdf

[507] A recent GEF IEO evaluation on the MSME sector (https://www.gefieo.org/sites/default/files/documents/council-documents/c-60-e-05.pdf) showed that MSME projects typically involved more types (scales and legal structures) of private sector actors, suggesting that these projects engage a wider spectrum of private sector actors across the value chain. More than half of MSME projects involved at least three types of private sector actors.

D. Innovations Window

Introduction

749. Since its inception, the Global Environment Facility (GEF) was intended to become an innovative mechanism leading the way in the development of solutions that can deliver global environmental benefits at scale. In recent years, however, the state of the global environment has deteriorated further and was aggravated by the COVID-19 pandemic, making innovation in the GEF more important than ever. The demand for new tools, practices, and innovative solutions to global environmental challenges is growing rapidly. The GEF needs to remain well positioned to contribute towards helping countries develop greener pathways to recovery, find new and innovative solutions to global environmental problems, and help guide the world towards some transformative changes in key economic systems.

750. Innovation has been defined by STAP as *"… an idea, embodied in a technology, product, or process, which is new and creates value. To be impactful, innovations must also be scalable, not merely one-off novelties*".[508] Discussions of innovation are frequently accompanied by statements about the greater associated risks. In the same STAP report: *"…the key issue for innovation in the GEF is risk… it is therefore important to question and assess at the strategic level what would be a desirable and acceptable levels of risk in different areas of the investment portfolio. This could involve setting targets for success, recognizing that some innovations will fail.*" Also, risk was identified as one of the major impediments to innovation by the IEO[509] and it recommended in that study that "*The GEF Council, together with the GEF Secretariat and STAP, should, based on such assessment, identify an acceptable risk tolerance level for the GEF portfolio*" presumably to foster more innovation in parts of its portfolio.

751. A recent review of the role of GEF and other donor–supported climate finance in World Bank operations concluded that resources aimed at innovation have been critical enablers of risk-taking, piloting and innovating. Some GEF projects approved as demonstrations or pilots were understood to have higher risks; the objective was to test concepts for possible replication and scaling, or, if unsuccessful, to learn from failure.

752. Over the past decade specifically, the GEF 2020 Vision highlighted a greater need for the GEF to support innovative and scalable activities to address the drivers of environmental degradation. The strategy suggested several models for GEF projects, including demonstrating innovative approaches and deploying innovative financial instruments to help derisk investments

[508] Toth, F., 2018. Innovation and the GEF: Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC. https://stapgef.org/resources/advisory-documents/innovation-and-gef
[509] GEF/E/C.60/02, GEF Support to Innovation – Findings and Lessons, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_02_GEF_Support_to_Innovation.pdf

by others. In this period, innovation also included the deployment of the Integrated Approach Pilots as an innovative modality to identify the most effective ways to reach a higher impact and scale while addressing the drivers of environmental degradation.

753. The recent OPS-7 Evaluation[510] conducted by the Independent Evaluation Office (IEO) documented very well the GEF's past record on innovation at the strategic level, at the institutional level, and through projects and programs. Also, in the recent IEO report on Innovation,[511] the findings clearly indicate that innovation has been a defining element of GEF's comparative advantage and has transcended GEF's investments. The recent IEO study on Medium-Sized Projects[512] found the MSP modality to be particularly effective for piloting new approaches for scaling up and enhancing knowledge sharing, for testing out new ideas, and for applying new concepts or proof-of-concept in a pilot setting. However, MSPs may not have achieved their highest potential in terms of innovation due to a lack of a specific innovative focus as its primary objective, and a defined and accepted higher tolerance for risk.

754. The overall OPS-7 analysis found that the GEF supports innovation across its portfolio in all focal areas, project sizes, regions, and trust funds, with an increasing trend in innovative projects over the GEF replenishment periods. One of the conclusions of the OPS-7 is that the GEF is recognized as more innovative than other environmental funding institutions, balancing the pursuit of innovation with risk and performance considerations in its programming, and thereby also preparing the groundwork for other donors to scale up its successful pilots.

755. In projects, innovations have spanned several dimensions, and are often aimed to achieve value added and transformational change. The Integrated Approach Pilots and Impact Programs are characterized by multiple aspects of innovation. At the strategic level, these programs are innovative in their approach to addressing the drivers of environmental degradation and driving transformational change at large scale involving multiple agencies based on their comparative advantage, countries based on relevance and ownership, and a broad spectrum of stakeholders that offer diverse expertise. These programs define management innovations due to their scale and complexity of partners and stakeholders, and also governance innovations due to their efforts to increase policy coherence and private sector engagement. Technological advances have been mainly introduced for renewable energies and methods for nature-based solutions. Projects of different sizes – including SGP projects and MSPs – also advance technical, institutional, and

[510] GEF/E/C.61/inf.01, Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C61_Inf.01_OPS7_Final_Report.pdf

[511] GEF/E/C.60/02, GEF Support to Innovation – Findings and Lessons, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C60_02_GEF_Support_to_Innovation.pdf

[512] GEF/E/C.59/03, Evaluation of the Role of Medium Size Projects (MSP) in the GEF Partnership, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C59_03_IEO_MSP_Evaluation_Nov_2020_0.pdf

social innovations. In addition to projects, GEF processes at the institutional level have proven to be innovative – for example, GEF safeguard policies were instrumental in influencing GEF Agencies in the improvement of their own policies, and the Indigenous Peoples Advisory Group (IPAG) was a novel approach. All of these aspects for innovation are being further and explicitly strengthened through the proposed GEF-8 Programming Directions.[513]

756. The GEF7 Strategies and Programming Directions (2018–2022) refers to the GEF's comparative advantage in being an innovator, incubator, and catalyst while actively seeking to effect transformational change. The focal area strategies include their own plans to foster innovation, and the Impact Programs were also designed to promote innovation, achieve breakthroughs, and emphasize the importance of knowledge sharing and cross learning through various stakeholder platforms.

757. As we move forward towards 2030, the GEF aspires to continue as a beacon of innovation in the global environment finance space, making it one of its key comparative advantages and value additions among other funds. This involves the pursuit and testing of novel ideas and solutions, managing risk, and keeping good standards of performance in its selection and design of projects. The GEF as an institution must continue to build on its innovation approach because it occupies a unique position in the environmental governance space, being the only institution that simultaneously serves several major multilateral environmental conventions. Capitalizing on this ability to synergize between the conventions is where the GEF can innovate and support transformational change.

758. A keynote recommendation that emerged from the OPS-7 Report states that "*[t]he GEF should continue to pursue innovative projects to advance transformational change*".[514] To this end, among other things, the IEO recommends that *"[t]he GEF could consider establishing a specific window for financing innovation with a higher risk tolerance*".[515] Relatedly, the IEO's Innovation study itself recommends that the GEF consider *"…a separate funding window for innovative projects…*". The GEF Secretariat has fully embraced this recommendation and, to this end, the following section describes a proposal for a new *Innovation Window*.

Goal of Innovations Window

759. As the financial mechanism of multilateral environmental agreements and with its programming portfolio that is increasingly targeted to integrated solutions, the GEF must play a central role over the next decade in the needed global systems-change towards a society that is

[513] GEF/R.8/05, GEF-8 Programming Directions, https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-8%20Programming%20Directions_0.pdf

[514] GEF/E/C.61/inf.01, Global Environment Facility Independent Evaluation Office (GEF IEO), Seventh Comprehensive
Evaluation of the GEF: Working Toward a Greener Global Recovery, Washington, DC: GEF IEO, 2021, https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.E_C61_Inf.01_OPS7_Final_Report.pdf

[515] Ibid.

increasingly nature-positive, carbon neutral, rights-based, and with reduced pollution. The leadership role of the GEF in the environmental space, the strategic direction of its next two replenishment cycles, and the continued impact of its portfolio of ongoing projects are all critical parameters to the future of the planet. Importantly, the GEF must explore new ways to prioritize and maximize the efficient use and impact of the limited resources that are made available at every funding cycle in pursuit of maximum impact.

760. To this end, the goal of this Innovation funding window is to invest in innovation activities that will both directly and indirectly support and enhance the impact of its funding by providing information, analyses, knowledge, and tools that improve the quality, design, implementation, effectiveness and impact of ongoing and future GEF programming. GEF financed innovation is particularly justified when there is evidence that the absence of tools and solutions to address environmental issues has hampered the development and implementation of GEF projects and programs. Similarly, it is highly relevant when there is a need to adjust the GEF strategy in the light of the evolving guidance of the Conventions. It is envisioned that the role of GEF in the field of innovation would be in testing and piloting new models, tools, and solutions to global environmental problems. This would also entail a focus on the generation of knowledge aimed at improving the effectiveness of GEF's core activity.

761. Investment in innovation should produce knowledge that (1) investigates specific GEF project and/or program development challenges, and offers proposed solutions where relevant, (2) compiles and disseminates GEF experiences of “best practices” and “lessons learned” across project modalities, thematic areas, countries, country groups, and regions, (3) provides guidance on replication and scaling up, (4) links the GEF to the larger international conversations and initiatives that are focusing on the global needs of the next decade to 2030, contributing to the discourse on over-arching methodological topics and providing on-the-ground experience and analyses, and (5) positions the GEF as the thought-leader on a particular topic.

Principles of Investment and Eligibility

762. GEF investments in innovation projects will follow key principles and eligibility criteria for relevance to GEF’s strategic role as an environmental funder, as follows:

- *Convention Guidance*. Innovation activities must be consistent with the guidance approved by the different MEAs for which the GEF serves as a financial mechanism.
- *Consistent with the GEF mandate, objectives and strategy*. Investments in innovation should focus on one or more elements that are relevant to the GEF Programming Directions Strategy. This includes, the Global Environmental Benefits, the Integrated Programs, the Focal Area Strategies, among others.
- *Strategically Deployed*. It is envisioned that with relatively small amounts of money the GEF could produce a wealth of cutting-edge knowledge and experience that can be either

scaled up in the case of successful outcomes or serve as lessons learned to be built on in the case of failures.

- *Scientific Soundness*. Research and innovation activities should be based on sound research techniques and approaches in the fields of natural, social and economic sciences.

Investment in Innovation

Following STAP's guidance[516] we envision 5 areas of investment where innovation can be critical to the success of future GEF investments. The following is an indicative list of these areas for potential investment.

1. Technological Innovation

   Provide key funding to "game-changing" investment in technology to help cross the "valley of death" that many new technologies face.

2. Innovative financing

   Test new funding vehicles and blended finance models for larger impact.

3. Business model innovation

   Deepen the engagement with the Private Sector.

4. Policy Innovation

   Support GEF's innovation and impact in policy areas.

5. Institutional innovation

   GEF projects could foster changes in institutional conditions to reverse resource degradation and to increase the efficiency of investments in the natural resource base with environmental benefits far beyond the intended scale.

Role of STAP

763. The Scientific and Technical Advisory Panel (STAP) will play an important and key role in providing guidance for investments of this new funding window. First, STAP will help identify potential topics of investment that are relevant to the goals as stated above. STAP will also review all submissions and provide detailed comments to be addressed before project approval and during its implementation. Additionally, STAP will also participate in the final evaluation of these investments to provide context and added value to help strengthen this funding window in GEF-8 and beyond. Finally, as an overarching guiding principle, the GEF will be working together with STAP and the GEF Council to examine the tradeoffs of risk versus innovation, with an aim to establishing parameters for risk assessment, risk acceptance, and risk tolerance in programming.

[516] Toth, F., 2018. Innovation and the GEF: Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.

PRIVATE SECTOR ENGAGEMENT

The Private Sector Engagement Imperative

764. As documented in the succession of WEF Global Risks Reports,[517] environmental risk has been well acknowledged by political and business leaders with the level of concern rising steadily throughout the last two decades. In 2022, the WEF Global Risks Report showed that the highest ranked global risks by impact and by likelihood were all environmental, including extreme weather events, human-made environmental damage and disasters and major biodiversity loss.

765. There is no doubt that the transformational changes needed in the coming decade will not take place at the scale or the speed required without the full engagement of the private sector. It requires broad coalitions of governments, both national and sub-national, the private sector at all scales, citizens (as consumers and investors) and academia to work together in support of a transformational agenda

766. Business responses to these challenges and the COVID 19 pandemic are driving business action in the "Decade of Delivery" and to realize these goals, the private sector has developed many new initiatives and commitments:

- Net zero GHG emissions goals
- Land, forest and ecosystem restoration targets (Bonn Challenge)
- Biodiversity targets (21 Action Targets of the post-2020 Global biodiversity framework)
- Reporting against key SDG goals and targets
- Creating circular economy systems and a renewables-based bioeconomy
- A reduction in the use of hazardous chemicals
- Water use efficiency, wastewater management and water stewardship
- Certification, standards, traceability and reporting protocols
- Build back greener/better programs
- Food Systems Summit recommendations
- WBCSD Vision 2050[518] – Time to Transform

767. The collective message of these global initiatives points to the need for systems transformation; be it what we eat and how food is produced (food systems), how we live (city

[517] The World Economic Forum 2021 The Global Risks Report
[518] The World Business Council For Sustainable Development 2021, Vision 2050

systems), how we move and power the economy (energy transition), and how we produce and consume goods and services (circular economy) and manage water and biodiversity (natural systems).

768. The GEF places high priority on the need effectively engage with the private sector if we are to succeed in our mission and deliver lasting global environmental benefits at a faster rate, with a broader scale, and more efficiently than could be achieved without partnerships with the private sector. Actions under GEF-8 programming directions support a vision in which the GEF acts as a catalyst and enables the private sector, at all scales, to tackle the key drivers of environmental degradation, to reverse unsustainable global trends and to extend the delivery of global environmental benefits so that they:

- Occur faster and at a larger scale;
- Are delivered more efficiently; and,
- Are more durable than could otherwise be achieved.

769. Investors are increasingly considering ESG issues in their investment decision-making and are demanding firms provide consistent, comparable, and reliable information on environmental topics. A number of jurisdictions have also adopted, or are in the process of developing, reporting requirements for companies to provide detailed information on a wide range of sustainability issues. The recommendations of the Task Force on Climate Related Financial Disclosures (TCFD)[519] provide firms with a voluntary framework that they can use to disclose how climate-related risks and opportunities are integrated into governance, strategy, risk management, metrics and targets. The Task Force on Nature Related Financial Disclosures (TNFD),[520] will similarly develop a framework to assess, manage and report on their dependencies and impacts on nature.

770. It is against this background that the private sector is driven to act, invest and ultimately transform economic systems that reward sustainability performance.

771. Measures to engage the private sector, through the Integrated Programs, blended finance and other entry points to the GEF portfolio, must take into account the longer-term vision championed by private sector leaders and provide pathways for engagement that are compatible with a long-term vision.

772. Many private sector focused initiatives have set targets for 2030 or 2050 timeframes. The WBCSD Vision 2050 (Version I in 2011, Version II 2021) outlines societal must-haves for a sustainable world, the SDGs set targets and metrics for 2030, Net Zero commitments that align to the Paris Agreement, as does the CBD 2050 Vision for Biodiversity.

[519] The Taskforce on Climate-Related Financial Disclosures
[520] The Taskforce on Nature-Related Financial Disclosures

773. GEF-8 should therefore be considered as a foundation to enable longer term systemic transformation with consideration and planning for private sector engagement that incorporates concomitant time horizons, which can also build robust and durable project outcomes into the next two GEF investment rounds, from 2022-2026 (GEF-8) to 2026-2030 (GEF-9) and beyond the GEF funding horizons.

GEF-8 Strategy – Integration to Support Transformation

774. The defining feature of the GEF-8 private sector engagement is the opportunity to leverage private sector integrated approaches.[521] Systemic transformation is best addressed through integrated approaches that deliver global environmental benefits across a range of focal areas relevant to each geography and IP context.

775. Each IP incorporates its own set of private sector objectives, identifying the major platforms for engagement, key entry points the and expected modalities of engagement that can optimize the contribution made by the private sector to integrated approaches in delivering durable GEBs beyond the GEF-8 cycle.

776. In the 2021 review of GEF-6 Integrated Approach Pilot (IAP) Programs,[522] the private sector, as an actor in the transformation of markets, is noted as a critical stakeholder group across all three IAP programs:

"Across all three programs, the integrated approach created opportunities for a range of options to crowd-in the private sector, from co-financing and parallel financing to the creation of institutional platforms for catalyzing change. The IAP program design activities involved a wide range of private sector entities at national, regional and global levels."

777. The review also found that IAPs demonstrated a higher level of private sector engagement by operating at global, regional and local scales thus providing multiple entry points for the private sector with solutions and contributions relevant at each level. This approach supports more systemic transformation across sectors and reaches into markets and demand centers.

778. As identified in GEF IEO OPS6, the dominant focal areas for private sector engagement have been in Climate Change and in Chemicals and Waste. In GEF-8, the contribution of the private sector will be better leveraged through integrated approaches across multiple focal areas with a predicted strong rise in support for biodiversity outcomes coupled to land, forest and ecosystem restoration.

[521] The GEF 2020 Strategy 2015, p21-23
[522] The GEF IEO Formative Evaluation of the GEF Integrated Approach to address the Drivers of Environmental Degradation, 2021

779. New initiatives that support integrated approaches (Business for Nature (BfN) and One Planet for Business and Biodiversity (OP2B)), can build stronger linkages across focal areas and between human and environmental health under the *Healthy Planet, Healthy People*[523] approach. It is through positioning the GEF as the *"hub for integration"* that the private sector can be best engaged.

Working with Multi-stakeholder Platforms

780. GEF needs to maximize its engagement with the broad range of private sector actors that are critical for systems change. In line with the proposed programming directions for GEF-8 and GEF's revised PSES, GEF will develop extensive and broad-based engagement across relevant stakeholder groups, including the private sector and CSOs, with a view to building, strengthening and catalyzing diverse coalitions of actors that can meaningfully contribute towards transforming the key economic systems that threaten the global environment.

781. Multi-stakeholder platforms for sustainability provide the GEF with the opportunity to scale private sector partnerships vertically, comprehensively through value chains and horizontally, through landscapes, cities, countries and regions. This horizontal and vertical interconnectivity offered through platforms can extend the reach and influence of GEF funding well beyond specific geographies and bring a wider range of resources and solutions from all levels of the private sector.

782. The Good Growth Partnership, the FOLUR and Sustainable Cities Impact Programs, GEF GOLD, GPAP, E-waste, EE Accelerators, the 3% Club and E-Mobility are all prime examples of multi-stakeholder platform effectiveness championed by the GEF.

783. Each IP will engage existing leading platforms or co-create with the private sector a multi-stakeholder platform to drive the systemic changes needed across the networks of actors in economic sectors and support the delivery of environmental benefits on-the ground in an integrated manner.

784. To foster engagement of the private sector, the IPs will convene private sector working groups as needed to support the development of initiatives, to make program adjustments in response to changing conditions and to maintain connectivity with the leading private sector actors to foster a collaborative working environment and exchange of ideas.

785. In line with the GEF PSES goal to support the engagement of entrepreneurs and the GEF IEO recommendations to engage MSMEs,[524] each IP will include flexible approaches that can target specific desired outcomes or address key systemic challenges within each societal or geographic context. These flexible approaches may include challenge programs, competitions

[523] https://www.unep.org/resources/report/our-planet-healthy-planet-healthy-people
[524] GEF IEO Evaluation of GEF Engagement with Micro, Small, and Medium Enterprises (MSMEs) 2021

and coopertitions, innovation hubs and awards that do not require extended planning periods or complex administration that could deter this segment of the private sector from participation.

The GEF as the Private Sector Partner of Choice

786. The GEF seeks to become a partner of choice for the private sector, however in OPS6,[525] less than half (43%) of the private sector respondents interviewed agreed that GEF's ability to engage the private sector was a comparative advantage and highlighted a lack of awareness in the broader engagement opportunities with the private sector beyond financing.

787. There is a need for greater understanding of the respective roles of both the private and the public sectors in the actions of delivery and modalities of engagement. GEF-8 will support approaches that define where the public and private sectors can best work collaboratively in the pursuit of global environmental benefits. The capacities of the private sector, above and beyond financial resources, include a wide range of engagement modalities that optimize the contributions of the private sector to the transformational agenda and are documented in the 2020 GEF Private Sector Engagement Strategy.[526]

Recognizing the Contribution of the Private Sector

788. The GEF will permit private sector actors that are actively engaged in GEF IPs and initiatives to use the GEF logo for marketing and awareness purposes, subject to prior written approval from GEF communications with expressly defined and timebound usage parameters. The application of the GEF logo may feature on company websites, annual integrated and sustainability reporting, social media and events banners which have a direct reference to the company's partnership activities in the GEF IPs. Private sector actors engaged in the GEF partnership will be invited to GEF events, such as the private sector COP days, to the GEF Assembly and other relevant meetings to highlight the impact and benefit of private sector engagement and to raise awareness of GEF's work with the private sector.

Investing in Integrated Approaches

789. New and innovative approaches for the private sector to support the goals of systemic transformation and integration in GEF-8 have been identified as part of the IP development and TAG process with private sector and multi-stakeholder groups.

[525] GEF IEO Sixth Comprehensive Evaluation of the GEF: Update and Synthesis, 2018
[526] The GEF Private Sector Engagement Strategy 2020, table 1, p17.

Valuing and Monetizing Nature-based Solutions (NbS).

790. Through new NbS financial instruments and blended finance, additional private sector investments can bolster the country STAR allocations, driving more market-based finance into countries with the potential to well exceed current GEF investment levels.

791. In 2019, US$45 billion was raised through carbon pricing revenues and more than 14,500 crediting projects have been registered, generating almost 4 billion tCO2e of cumulative carbon credits with the forestry sector credits representing 42% of all credits issued in last five years. Modelling from IETA estimates the value of prospective investments in NDC implementation through NbS at US$ 250 billion.[527]

792. GEF's NbS private sector engagement will work to support countries in their endeavors to access finance and e relevant IPs will work to address the structural and technical challenges in the countries seeking to advance NbS. Relevant IPs will aim at building national capacity for countries to undertake NbS where the private sector is increasingly recognizing that by including NbS in their decisions and investments, they can create greater value for themselves and protect the natural capital upon which they are dependent. In addition, investments undertaken at national and regional levels will provide the opportunity to share best practice and information between the public and private sector and harmonize their NbS approaches and to further facilitate private sector finance.

793. The WEF report Nature and Net Zero[528] identifies opportunities to realize Net Zero emissions targets and other corporate climate mitigation commitments on the ground through GEF projects. The GEF, as the "hub of integration" is well positioned to direct investment into national level priorities through the NbS approach. In line with the GEF PSES to work with multi-stakeholder platforms, emerging initiative such as the Taskforce on Scaling Voluntary Carbon Markets (TSVCM) or the Voluntary Carbon Markets Integrity Initiative (VCMI) can be engaged to support these processes and align private sector efforts with the country level priorities.

794. While about 130 NDCs include the use of nature for climate mitigation and adaptation purposes, further work is needed to translate commitments into policy certainty for investors and project proponents. Through the IPs in the GEF portfolio, opportunities for the private sector to invest upstream in countries seeking investment to support their Nationally Determined Contributions, targets under the global post 2020 biodiversity framework and land degradation neutrality goals can be facilitated by investments in the enabling environment and national level capacity.

[527] International Emissions Trading Association 2019 The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges

[528] World Economic Forum 2021, Nature and Net Zero

GEF Digital Platform - Creating the Digital to Environmental Dividend.

795. The technologies of the Forth Industrial Revolution (4IR) offer the opportunity to create wide-reaching environmental benefits through the application of data, the connectivity of devices through the IOT, artificial intelligence and machine learning.

796. The scale and cost effectiveness of these technologies can help countries move away from manual, labor intensive analog processes to automated and real-time digital applications that save time and money while supporting the delivery of GEBs.

797. Although the private sector is active across the deployment of 4IR in the global North, closing the digital divide with recipient countries in the global South can also support a wide range of environmental benefits delivered through systems improvements with more equitable access to economic opportunities, socio-economic benefits and jobs creation.

798. A new GEF Digital to Environmental Dividend (D2ED) program will support countries develop their capacity through direct engagement with the private sector across the key thematic areas that have been identified as needs in the GEF portfolio.

Monitoring and Evaluation

799. Where Earth observations through remote sensing and satellite data can be deployed to assess and monitor areas of many millions of hectares that would otherwise be impossible to manage with manual or land-based systems. Machine learning and artificial intelligence can be used to augment observations and link data sets to refine integrated spatial planning baseline setting, prioritization, monitoring, evaluation, and modelling in key IPs:

- In the Ecosystem Restoration IP, the use of a Planetary Computer, Trends Earth for both defining and monitoring land restoration activities funded under GEF-8 and linked to spatially explicit and geo-referenced voluntary LDN targets and related implementation efforts. This would benefit future monitoring and national reporting of both LDN and ecosystem restoration efforts to implement targets set under the MEAs at national level.
- In the Circular Solutions to Plastic Pollution IP machine learning can be used to identify plastic production and consumption patterns and prioritize key intervention points. For example, machine learning and block chain can also be used to connect businesses along the plastics value chain from manufacturers to consumers to recycling facilities. These insights could also power passive cleanup systems to help remove plastic pollution that is already impacting our marine ecosystems.
- In the Wildlife Conservation for Development IP cloud computing analytics and AI video recognition applications can automatically identify animals in videos, making it easier,

more affordable, and faster for researchers and conservationists to study camera trap footage.

- In the International Waters focal area satellite data and machine learning capabilities can develop approaches that include both field-scale and watershed-scale data to make recommendations based on program goals such as reducing groundwater demand, improving irrigation, reducing nutrient runoff, or building vegetation buffers. The result is both a region-wide and field-specific plan that identifies specific actions, ranked in order of cost-efficiency for achieving conservation and water resources management goals.

Climate, Water and Biodiversity Fintech

800. Climate, water and biodiversity fintech approaches use digital financial technology to catalyze decarbonization and boost biodiversity through big data, deep learning and AI. GEF's support for climate, water and biodiversity fintech will explore how 4IR technologies such as AI and blockchain can help intermediaries mobilize capital towards decarbonization and investments that are net positives for biodiversity. Disclosure frameworks for climate-related and nature-related financial risks create a supportive environment to address the drivers of environmental degradation and achieve scale and impact across multiple industry sectors. Importantly, banks and investors can use these technologies to drive scope III emissions reductions into their customers' supply chains.

801. From waste sorting, to crop protection, the management of renewable energy systems, soil carbon measurements and water monitoring, the use of the IOT to increase both automation and precision is a valuable tool in delivering a reduction in the use of chemicals, more efficient water allocations (environmental flows, water trading) and the optimal distribution or storage of renewable energy.

802. Both the quality and the volume of accurate data needed to make decisions on resource allocation and environmental planning can be bolstered through big data, AI and deep learning. Through networks of advanced sensors and observations in land, climate, oceans and embedded with software, network connectivity and computing capability, decision makers can collect and exchange data over the internet and enable automated solutions to multiple problem sets. Such access to information can also build more resilience into landscape action plans and optimally direct investment to maximize GEBs.

803. The GEF digital consortium will co-create or strengthen technology platforms comprised of leading firms and ICT providers to accelerate efforts across GEF's Integrated Programs to deliver GEBs. GEF will provide support for shared, open-access and standardized systems that can be readily deployed in the context of the recipient countries. The creation of a digital fabric as a common thread throughout the GEF Integrated Programs will further support integration and scale in line with the GEF vision for private sector engagement outcomes.

804. In addition to the GEBs, significant co-benefits aligned to the SDG targets could also be expected, including better access and use of technologies that support gender equality, reductions in child labor, enhanced livelihoods, improved worker safety, reduced exposure to hazardous chemicals and improvements in skills and training.

805. The GEF will build on the efforts of existing platforms (WEF Fourth Industrial Revolution for the Earth Initiative, Harnessing the Fourth Industrial Revolution for Oceans and Harnessing the Fourth Industrial Revolution for Sustainable Emerging Cities and The Coalition for Digital Environmental Sustainability (CODES)[529]) and advance the solutions selected and developed with interventions at the global, regional, and country level. Proposed interventions include:

- The GEF will use its convening power to co-create or support coalitions and platforms with private sector partners that seek to develop and deploy technology that can deliver the environmental dividend, close the digital divide and help countries achieve their MEA objectives. Private sector engagement from global technology leaders in platforms will be critical, along with other stakeholders, CSOs and NGOs.
- Build country capacity for digital engagement (environmental, agricultural, telecommunications, education, energy, transport and planning ministries). Countries must have expanded capacity, training, and expertise to benefit from the full suite of opportunities under the 4IR. The GEF will support specific country projects, guided by global coordination and best practices, with a focus on countries that risk missing out due to a digital divide. Private sector resources can also support research capacities of countries in genomics and bioinformatics in relation to the Earth Bio-Genome Project (EBP) that aims to sequence all the plants, animals and single-celled organisms on Earth within 10 years, to help unlock the vast potential of our biodiversity and provide new resources to cope with the rapid loss of biodiversity and habitat changes that are primarily due to human activities and climate change. Regional hubs of best practice will also be considered to achieve scale and optimize data use.
- Engage with private sector actors that are already leaders in sustainability and technology to further accelerate adoption through knowledge exchanges and development hubs. Leading developers that seek to support agile approaches into project design will be encouraged to join the initiative and develop new opportunities in new markets.

[529] CODES is a global multi-stakeholder initiative established in 2021 in support of the UN Secretary-General's Roadmap on Digital Cooperation, co-championed by the United Nations Environment Programme, the United Nations Development Programme, the German Environment Agency, the Government of Kenya, the International Science Council, and Sustainability in the Digital Age.

- Build and advance tools for methodologies, tracking, and reporting. The coalition of willing partners will work on both voluntary and regulatory standards, backstopped by stakeholder consultations and strong analysis.

806. Dialogues and partnerships that bring technology developers and providers together with environmental experts to co-develop these innovations will ensure they are developed for the public good, to maximize GEBs while minimizing risks of unintended social or environmental consequences and target solutions for the MSME sector.

Resourcing and Supporting Private Sector Engagement in GEF-8

807. The broad implementation of GEF-8 private sector engagement will require additional resourcing to maximally benefit from the engagement with the private sector and to service the growing requirements for knowledge resources, reporting and coordination. Each Agency should appoint a lead for private sector engagement that will also be the representative on the GEF Agency Private Sector Working Group.

808. In GEF-7, many Agencies created specific private sector roles as part of their programs dedicated to supporting the engagement of the private sector, including at the country-project level to drive local private sector engagement. Where needed, Agencies should consider project support with dedicated resources assigned to private sector with responsibilities for convening, planning, sharing information, developing knowledge resources and applying reporting metrics.

809. As a continuation of the activities under the PSES, the GEF Agency private sector working group will function under member-determined priorities with agenda points and actions that can support the effectiveness of private sector engagement across the portfolio, foster knowledge exchange and the development of resources. The working group will meet four times per annum and at least once in a face-to-face or hybrid setting aligned to the GEF Agency retreat.

810. As part of Integrated Program implementation planning, especially in the formative stages of programme design where important decisions on co-finance, modalities of engagement, partnership formation and platform engagement are made, an allocation for technical assistance can be made to Agencies under prescribed criteria to enhance the overall effectiveness of the IP's work with the private sector.

811. GEF Secretariat resources will be bolstered to include a resource dedicated to the management of information, reporting and knowledge resources and the further development and use of the Management Information System across the GEF Partnership.

812. As part of the overall deepening of private sector participation in the GEF, private sector secondments and interns can be engaged to support both general and targeted engagement in IPs

and enhance the understanding of GEF's operating environment and modalities among private sector actors.

Private Sector and Gender equality and Inclusivity

813. As an agent of transformative change, the private sector can play a critical role in supporting gender equality and through fostering inclusive approaches, especially working through the private sector in the decision-making processes and resources allocations that can improve women's access, use, and control of resources, including land, water, forest, and fisheries.

814. Women make up a large percentage of participation in many key industries relevant to the GEF-8 portfolio, especially in agriculture and textiles, and specific private sector programs can be developed that support women's private sector activities, economic empowerment and the delivery of global environmental benefits.

Metrics and Reporting

815. Metrics developed through the actions documented in the GEF PSES implementation plan will be further tested and refined to create a more complete picture of the GEF's work with the private sector, including metrics for integration (*Healthy Planet, Healthy People* metrics) and private sector additionality.

ANNEX 1. GEF BIODIVERSITY FOCAL AREA AND ASSOCIATED PROGRAMMING INVESTMENTS THAT CONTRIBUTE TO ACHIEVING THE GLOBAL BIODIVERSITY FRAMEWORK ACTION TARGETS

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
Target 1. Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas.	Biodiversity Focal Area, International Waters Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Greening Transportation Infrastructure Development Integrated Program, Wildlife Conservation for Development Integrated Program, Blue and Green Islands Integrated Program, Net-Zero Nature-Positive Accelerator Integrated Program
Target 2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems.	Biodiversity Focal Area, Ecosystem Restoration Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Wildlife Conservation for Development Integrated Program
Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	Biodiversity Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, International Waters Focal Area, Blue and Green Islands Integrated Program, Net-Zero Nature-Positive Accelerator Integrated Program
Target 4. Ensure active management actions to enable the recovery and conservation of species and the genetic diversity of wild and domesticated species, including through ex situ conservation, and effectively manage human-wildlife interactions to avoid or reduce human-wildlife conflict.	Biodiversity Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program
Target 5. Ensure that the harvesting, trade and use of wild species is sustainable, legal, and safe for human health.	Biodiversity Focal Area, International Waters Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program
Target 6. Manage pathways for the introduction of invasive alien species, preventing, or reducing their rate of introduction and establishment by at least 50 per cent, and control or eradicate invasive alien species to eliminate or reduce their impacts, focusing on priority species and priority sites.	Biodiversity Focal Area
Target 7. Reduce pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and human health, including by reducing nutrients lost to the environment by at least half, and pesticides by at least two thirds and eliminating the discharge of plastic waste.	Chemicals and Waste Focal Area, Circular Solutions to Plastic Pollution Integrated Program, Clean and Healthy Ocean Integrated Program, Sustainable Cities Integrated Program
Target 8. Minimize the impact of climate change on biodiversity, contribute to mitigation and adaptation through	Climate Change Mitigation Focal Area, Greening Transportation Infrastructure Development

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
ecosystem-based approaches, contributing at least 10 $GtCO_2e$ per year to global mitigation efforts, and ensure that all mitigation and adaptation efforts avoid negative impacts on biodiversity.	Integrated Program, Food System Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Biodiversity Focal Area, Sustainable Cities Integrated Program, Net-Zero Nature-Positive Accelerator Integrated Program
Target 9. Ensure benefits, including nutrition, food security, medicines, and livelihoods for people especially for the most vulnerable through sustainable management of wild terrestrial, freshwater and marine species and protecting customary sustainable use by indigenous peoples and local communities.	Biodiversity Focal Area, International Waters Focal Area, Wildlife Conservation for Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Inclusive Conservation Initiative
Target 10. Ensure all areas under agriculture, aquaculture and forestry are managed sustainably, in particular through the conservation and sustainable use of biodiversity, increasing the productivity and resilience of these production systems.	Food Systems Integrated Program, International Waters Focal Area, Biodiversity Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Wildlife Conservation for Development Integrated Program
Target 11. Maintain and enhance nature's contributions to regulation of air quality, quality and quantity of water, and protection from hazards and extreme events for all people.	Greening Transportation Infrastructure Development Integrated Program, Amazon, Congo, and Critical Forest Biomes Integrated Program, Clean and Healthy Ocean Integrated Program, Blue and Green Islands Integrated Program, Net-Zero Nature-Positive Accelerator Integrated Program
Target 12. Increase the area of, access to, and benefits from green and blue spaces, for human health and well-being in urban areas and other densely populated areas.	Sustainable Cities Integrated Program
Target 13. Implement measures at global level and in all countries to facilitate access to genetic resources and to ensure the fair and equitable sharing of benefits arising from the use of genetic resources, and as relevant, of associated traditional knowledge, including through mutually agreed terms and prior and informed consent.	Biodiversity Focal Area
Target 14. Fully integrate biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies, accounts, and assessments of environmental impacts at all levels of government and across all sectors of the economy, ensuring that all activities and financial flows are aligned with biodiversity values.	Biodiversity Focal Area, Greening Transportation Infrastructure Development Integrated Program, Blue and Green Islands Integrated Program, Net-Zero Nature-Positive Accelerator Integrated Program
Target 15. All businesses (public and private, large, medium and small) assess and report on their dependencies and impacts on biodiversity, from local to global, and progressively reduce negative impacts, by at least half and increase positive impacts, reducing biodiversity-related risks to businesses and moving towards the full sustainability of extraction and production practices, sourcing and supply chains, and use and disposal.	Biodiversity Focal Area, Amazon, Congo, and Critical Forest Biomes Integrated Program, Food Systems Integrated Program, Greening Transportation Infrastructure Development Integrated Program, Clean and Healthy Ocean

Global Biodiversity Framework Action Targets	GEF Biodiversity Focal Area and Associated Programming Investments that Contribute to Achieving the GBF Action Targets
	Integrated Program, Circular Solutions to Plastic Pollution Integrated Program[530]
Target 16. Ensure that people are encouraged and enabled to make responsible choices and have access to relevant information and alternatives, taking into account cultural preferences, to reduce by at least half the waste and, where relevant the overconsumption, of food and other materials.	Food Systems Integrated Program
Target 17. Establish, strengthen capacity for, and implement measures in all countries to prevent, manage or control potential adverse impacts of biotechnology on biodiversity and human health, reducing the risk of these impacts.	Biodiversity Focal Area, Food Systems Integrated Program
Target 18. Redirect, repurpose, reform or eliminate incentives harmful for biodiversity, in a just and equitable way, reducing them by at least US$ 500 billion per year, including all of the most harmful subsidies, and ensure that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity.	Biodiversity Focal Area
Target 19. Increase financial resources from all sources to at least US$ 200 billion per year, including new, additional and effective financial resources, increasing by at least US$ 10 billion per year international financial flows to developing countries, leveraging private finance, and increasing domestic resource mobilization, taking into account national biodiversity finance planning, and strengthen capacity-building and technology transfer and scientific cooperation, to meet the needs for implementation, commensurate with the ambition of the goals and targets of the framework.	Biodiversity Focal Area
Target 20. Ensure that relevant knowledge, including the traditional knowledge, innovations and practices of indigenous peoples and local communities with their free, prior, and informed consent, guides decision-making for the effective management of biodiversity, enabling monitoring, and by promoting awareness, education and research.	Biodiversity Focal Area and Inclusive Conservation Initiative
Target 21. Ensure equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories, and resources, as well as by women and girls, and youth.	Biodiversity Focal Area and Inclusive Conservation Initiative

[530] The Private Sector Engagement Strategy will serve a cross-cutting function supporting actions that will contribute to this target as well.