



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Guidelines: **ME/GN/02**

Approved on June 30, 2018

Updated on March 11, 2019

GUIDELINES ON CORE INDICATORS AND SUB-INDICATORS

Guidelines on Indicators (ME/GN/01)

Summary	These Guidelines set out clear technical definitions and methodological guidance for each core indicator and sub-indicator, thereby facilitating their consistent application across all GEF projects and programs, and across the GEF Partnership.
Approved by	GEF CEO
Approval Date	June 30, 2018 (updated on March 11, 2019)
Effective Date	July 1, 2018
Applicability	All GEF-financed projects and programs
Council Document	Updated Results Architecture for GEF-7 (GEF/C.54/11/Rev.02)
Related Documents	Monitoring and Evaluation Policy Project and Program Cycle Policy (OP/PL/01) Guidelines on the Project and Program Cycle Policy (GEF/C.52/Inf.06/Rev.01)
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Introduction

1. The objective of these guidelines is to help ensure consistency in reporting on results across the GEF-7 core indicators and sub-indicators. The guidelines include clear technical definitions and methodological guidance for each core indicator and sub-indicator to facilitate their consistent application and reporting across all GEF projects and programs, and across the GEF Partnership.

Streamlined Monitoring and Reporting Requirements

2. As of July 1, 2018, Agencies, in collaboration with recipient country governments, executing partners and other stakeholders, provide indicative, expected results across applicable core indicators and sub-indicators for all new GEF projects and programs submitted for Work Program entry or MSP PIF Approval. At CEO Endorsement/ Approval, Agencies provide expected results, with adjustments as required reflecting further analysis carried out during project preparation. At project mid-term and completion, Agencies report achieved results against the core indicators and sub-indicators used at CEO Endorsement/ Approval.

3. For projects approved during the GEF-6 period, July 1, 2014 to June 30, 2018, that have not yet been completed, Agencies shift to core indicators and sub-indicators at the next available opportunity in the project cycle and are no longer required to submit tracking tools. For full-sized projects and programs that have received Council Approval during GEF-6, Agencies apply the core indicators and sub-indicators across any requests for CEO Endorsement submitted after July 1, 2018. For projects that have received CEO Endorsement/ Approval during GEF-6, Agencies apply the core indicators and sub-indicators at mid-term – if applicable – or project completion¹.

Table 1: Overview of Monitoring and reporting requirements from July 1, 2018

GEF-5 and earlier	GEF-6	GEF-7
NO CHANGE: Continue to submit tracking Tools at mid-term and completion, if applicable	TRANSITION TO CORE INDICATORS: For projects approved in GEF-6 that have not yet been completed, shift to core indicators and sub-indicators at the next available opportunity in the project cycle (CEO Endorsement/ Approval, mid-term or completion)	CORE INDICATORS: Core indicators and sub-indicators applied to all projects and programs, from concept stage to completion

¹ http://www.thegef.org/sites/default/files/council-meeting-documents/GEF-C.54-11%20Updated%20Results%20Architecture%20for%20GEF-7_06.04_0.pdf

Important Considerations

4. With regards to reporting on the core indicators and associated sub-indicators the following considerations apply:
 - (a) **Only direct** outputs and outcomes would be captured through Core and Sub-Indicators except for the climate change mitigation indicator (Greenhouse Gas Emissions Mitigated).
 - (b) As GEF projects are made up of both GEF financing as well as co-financing, the Results Framework seeks to capture core indicator and sub-indicator values to which the GEF projects have **contributed**. Projects are not required to determine the portion of results **attributed** to GEF financing.
 - (c) There are two types of Sub-Indicators: **component Sub-Indicators**, which sum up to the Core Indicator, while **contextual Sub-Indicators** provide additional context for the Core Indicator. These are differentiated within the guidance that follows and in the GEF Portal.
 - (d) With one exception, expected and achieved values should be based on what is achieved by the end of the project. The only indicator for which a future value is desired is the climate change mitigation indicator (Greenhouse Gas Emissions Mitigated).
 - (e) Precision: GEF Agencies should use three significant figures, at most.
 - (f) Metric tons: Use of metric tons for Core Indicators refers to the unit that is equal to 1,000 kilograms.
 - (g) Component Sub-Indicators are mutually exclusive, meaning that values (e.g., hectares [ha]) reported for one should be separate and different from values reported for others (e.g., Sub-Indicator 3.2, area of forest and forest land restored versus 3.3, area of natural grass and shrublands restored). Also, Core Indicators 5 and 7 have Sub-Indicators that are partially or completely descriptive rather than additive.

Box 1: GEF-7 Core Indicators and Sub-Indicators

1. Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares)

Component Sub-Indicators:

- Terrestrial protected areas newly created
- Terrestrial protected areas under improved management effectiveness

2. Marine protected areas created or under improved management for conservation and sustainable use (hectares)

Component Sub-Indicators:

- Marine protected areas newly created
- Marine protected areas under improved management effectiveness

3. Area of land restored (hectares)

Component Sub-Indicators:

- Area of degraded agricultural lands restored
- Area of forest and forest land restored
- Area of natural grass and shrublands restored
- Area of wetlands (including estuaries and mangroves) restored

4. Area of landscapes under improved practices (hectares; excluding protected areas)

Component Sub-Indicators:

- Area of landscapes under improved management to benefit biodiversity (qualitative assessment, non-certified)
- Area of landscapes that meet national or international third-party certification and that incorporates biodiversity considerations
- Area of landscapes under sustainable land management in production systems
- Area of High Conservation Value forest loss avoided

5. Area of marine habitat under improved practices to benefit biodiversity (hectares; excluding protected areas)

Contextual Sub-Indicators:

- Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations
- Number of Large Marine Ecosystems with reduced pollution and hypoxia
- Amount of Marine Litter Avoided

6. Greenhouse gas emissions mitigated (metric tons of carbon dioxide equivalent)

Component Sub-Indicators:

- Carbon sequestered, or emissions avoided in the sector of Agriculture, Forestry and Other Land Use
- Emissions avoided outside Agriculture, Forestry and Other Land Use (AFOLU) sector

Contextual Sub-Indicators:

- Energy saved
- Increase in installed renewable energy capacity per technology

7. Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

Contextual Sub-Indicators:

- Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation
- Level of regional legal agreements and regional management institution(s) to support its implementation
- Level of national/local reforms and active participation of Inter-Ministerial Committees
- Level of engagement in IW:LEARN through participation and delivery of key products

8. Globally over-exploited fisheries moved to more sustainable levels (metric tons)

9. Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials, and products (metric tons of toxic chemicals reduced)

Component Sub-Indicators:

- Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)
- Quantity of mercury reduced
- Hydrochlorofluorocarbons reduced/phased out

Contextual Sub-Indicators:

- Number of countries with legislation and policy implemented to control chemicals and waste
- Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing, and cities
- Quantity of products/materials containing POPs/Mercury directly avoided

10. Reduction, avoidance of emissions of POPS to air from point and non-point sources (grams of toxic equivalent gTEQ)

Contextual Sub-Indicators:

- Number of countries with legislation and policies implemented to control emissions of POPs to air
- Number of emission control technologies/practices implemented

11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

Core and Sub-Indicators

1. Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares)

This indicator will be reported as the aggregate total of two Sub-Indicators. Guidance is provided below.

1.1. Terrestrial protected areas newly created

Definition: This indicator refers to the area (ha) newly placed under legal protection status as a result of project support, and management to achieve that status.

Details: Terrestrial protected areas are defined as totally or partially protected areas that are newly designated as national parks, natural monuments, nature reserves, or wildlife sanctuaries; protected landscapes; and scientific reserves. The category includes the International Union for the Conservation of Nature's (IUCN) protected area Categories I–VI².

The intent is to capture the hectares of new protected areas resulting from project support that meet key Biodiversity Area criteria (IUCN, 2016), and which were not established before the start of the project. UN Environment World Conservation Monitoring Centre (WCMC) has also used this indicator for several years as part of the Biodiversity Indicators Partnership.³ For projects that expand current protected areas, only the new expanded hectares should be reported. Existing protected areas (i.e., established before the start of the project) in which projects increase the level of protection (e.g., a change in IUCN category) should not be included.

The name and size of the protected area(s) to be created should be indicated at Project Identification Form and CEO Endorsement stages. By mid-term or final evaluation, projects should indicate the IUCN protected area category (Categories I–VI),⁴ as well as the ID number from the World Database of Protected Areas (WDPA) (IUCN, 2018), if available. In cases where the protected area does not fit IUCN criteria (e.g., some Indigenous and Community Conserved Areas [ICCA]), "Other Category" should be selected. For new protected areas that are not captured in the WDPA, projects ideally should provide geographic information system (GIS) files depicting the extent of the protected area.

Protection of new areas implies improved management that accompanies the protection. To avoid double-counting, hectares reported for Sub-Indicator 1.1 should not be reported under Sub-Indicator 1.2.

Type: Outcome indicator

Unit of measurement: Area (ha)

1.2. Terrestrial protected areas under improved management effectiveness

Definition: This indicator refers to the number of hectares of protected area whose management has been improved.

² UN Environment World Conservation Monitoring Centre, as compiled by the World Resources Institute; definition sourced from World Bank (2016). <https://www.iucn.org/theme/protected-areas/about/protected-area-categories>

³ <https://www.bipindicators.net/indicators/protected-area-coverage-of-key-biodiversity-areas>

⁴ Ibid.

Details: Terrestrial protected areas are totally or partially protected areas that are designated as national parks, natural monuments, nature reserves, or wildlife sanctuaries; protected landscapes; and scientific reserves. The category includes IUCN protected area Categories I–VI.⁵

The main data source for this indicator is the Management Effectiveness Tracking Tool (METT) score, which is calculated using the GEF-7 BD tracking tool (<https://www.thegef.org/documents/gef-7-biodiversity-protected-area-tracking-tool>). The METT was originally developed by the World Wildlife Fund and the World Bank Forests Alliance for Forest Conservation and Sustainable Use. It has been applied as the main qualitative measure of management effectiveness at protected areas since 2001 (Protected Planet, 2014; Stolton and Dudley, 2016). If the score increases over the life of the project, the protected area hectares should be counted. Any increase in METT score will satisfy the threshold for this indicator. If the METT score does not change or decreases, then the protected area hectares should not be counted. Additional analysis of increases in METT scores could further characterize these changes. All METT files from projects should be provided to WCMC, which hosts the global database of METTs⁶. Only the overall METT score will be required for GEF indicator reporting.

The name, WDPA ID, size, IUCN protected area category (Categories I–VI),⁷ and METT score should be indicated. The Sub-Indicator will be calculated based on the protected areas that show an increase in METT score. In cases where the protected area does not fit IUCN criteria (e.g., ICCAs), “Other Category” should be noted.

Where the area in question was also newly protected through project implementation, hectares should only be reported under Sub-Indicator 1.1 rather than under Sub-Indicator 1.2.

Type: Outcome indicator

Unit of measurement: Area (ha)

2. Marine protected areas created or under improved management for conservation and sustainable use (hectares)

This indicator will be reported as the aggregate total of two Sub-Indicators. Guidance is provided below.

2.1. Marine protected areas newly created

Definition: This indicator refers to the marine area (ha) newly placed under legal protection status as a result of project support, and the management to achieve that.

Details: Terrestrial protected areas are defined as totally or partially protected areas that are newly designated as national parks, natural monuments, nature reserves, or wildlife sanctuaries; protected landscapes; and scientific reserves. The category includes IUCN protected area categories (Categories I–VI).⁸

⁵ Ibid.

⁶ Agencies should send the files to protectedareas@unep-wcmc.org and marine.deguignet@unep-wcmc.org

⁷ Ibid.

⁸ Ibid.

The intent is to capture the hectares of new protected areas resulting from project support that meet Key Biodiversity Area Criteria (IUCN, 2016), and which were not established before the start of the project. UN Environment and WCMC has also used this indicator for several years as part of their Biodiversity Indicators Partnership.⁹ For projects that expand current protected areas, only the new expanded hectares should be reported. Existing protected areas (i.e., established prior to the start of the project), in which projects increase the level of protection (e.g., a change in IUCN category), should not be included.

The name and size of the protected area(s) to be created should be indicated at the Project Identification Form and CEO Endorsement stages. By mid-term or final evaluation, projects should also indicate the IUCN protected area category (Categories I–VI)¹⁰, as well as the ID number from the WDPA (IUCN, 2018), if available. In cases where the protected area does not fit IUCN criteria (e.g., some Indigenous and ICCAs), “Other Category” should be selected. For new protected areas that are not captured in the WDPA, projects should ideally provide GIS files depicting the extent of the protected area.

Protection of new areas implies improved management that accompanies the protection. To avoid double-counting, hectares reported for Sub-Indicator 2.1 should not be reported under Sub-Indicator 2.2.

Type: Outcome indicator

Unit of measurement: Area (hectares)

2.2. *Marine protected areas under improved management effectiveness*

Definition: This indicator refers to the number of hectares of protected area whose management has improved.

Details: Marine protected areas are those of intertidal or subtidal terrain — and overlying water and associated flora, fauna, and historic and cultural features — that have been reserved by law or other effective means to protect part or all enclosed environment.¹¹

The main data source for this indicator is the METT score, which is calculated using the GEF-7 BD tracking tool (<https://www.thegef.org/documents/gef-7-biodiversity-protected-area-tracking-tool>). The METT was originally developed by World Wildlife Fund and the World Bank Forests Alliance for Forest Conservation and Sustainable Use. It has been applied as the main qualitative measure of management effectiveness at protected areas since 2001 (Protected Planet, 2014; Stolton and Dudley, 2016). If the score increases over the life of the project, then the protected area hectares should be counted. Any increase in METT score will satisfy the threshold for this indicator. If the METT score does not change or decreases, then the protected area hectares should not be counted. Additional analysis may further characterize increases in METT scores. METT files from projects should be provided to WCMC, which

⁹ <https://www.bipindicators.net/indicators/protected-area-coverage-of-key-biodiversity-areas>

¹⁰ Ibid.

¹¹ Ibid.

hosts the global database of METTs¹². For GEF indicator reporting, only the overall METT score is required.

The name, WDPA ID, size, IUCN protected area category (Categories I–VI)¹³ and METT score should be indicated. The Sub-Indicator will be calculated based on the protected areas that show an increase in METT score.

Where the area in question was also newly protected through project implementation, hectares should only be reported under Sub-Indicator 2.1 rather than under Sub-Indicator 2.2.

Type: Outcome indicator

Unit of measurement: Area (hectares)

3. Area of land restored (hectares)

This indicator will be reported as the aggregate total of four Sub-Indicators. To avoid double-counting, the hectares reported under each Sub-Indicator should not overlap. Guidance is provided below.

Definition: This indicator captures the total area of land undergoing restoration in terms of ecosystem function and/or ecology.

Details: Restoration is defined as the process of repairing and/or assisting the recovery of land and ecosystems that have been degraded, damaged, destroyed, or modified to an extent that the land and/or ecosystem cannot fulfil its ecological functions and/or fully deliver environmental services. Activities may include (i) ecosystem restoration that reduces the causes of decline and improves basic functions; and (ii) ecological restoration that enhances native habitats, sustains ecosystem resilience, and conserves biodiversity.

3.1. Area of degraded agricultural lands restored

Definition: This indicator captures the area of agricultural land in a degraded state that is being restored through GEF-funded interventions. These interventions include restoration practices to enhance soil and water conservation, erosion control, groundwater recharge, and improved vegetative cover.

Details: Degraded lands are defined as per the United Nations Convention to Combat Desertification:¹⁴ “reduction or loss [...] of the biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest, and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns...”¹⁵ While not required, projects should ideally provide GIS files showing the extent of the degraded land being restored and also to indicate the relative state of the area prior to GEF activities. In

¹² Agencies should send the files to protectedareas@unep-wcmc.org and marine.deguignet@unep-wcmc.org

¹³ UN Environment World Conservation Monitoring Centre, as compiled by the World Resources Institute; definition sourced from World Bank (2016). <https://www.iucn.org/theme/protected-areas/about/protected-area-categories>

¹⁴ See website at <http://www2.unccd.int/>.

¹⁵ Ibid.

addition, restoration is defined as “the improvement of degraded land on a large scale that rebuilds ecological integrity and enhances people’s lives” (Future Terrains, 2018).

Type: Outcome indicator

Unit of measurement: Area (hectares)

3.2. Area of forest and forest land restored

Definition: This indicator captures the area of forest and forest land that is undergoing ecological restoration through GEF-funded interventions.

Details: The intent of this Sub-Indicator is to capture the area of forest and forest land in which best practices for ecological restoration are being applied. Example interventions that may be included within this indicator are the creation of forest corridors between protected areas and reestablishment of native forests, among others.

Type: Outcome indicator

Unit of measurement: Area (hectares)

3.3. Area of natural grass and shrublands restored

Definition: This indicator captures the area of natural grass and shrublands that is undergoing ecological restoration through GEF-funded interventions.

Details: The intent of this Sub-Indicator is to capture the area of natural grass and shrublands in which best practices for ecological restoration are being applied. Example interventions are the creation of grassland corridors between protected areas and reestablishment of native grassland landscapes, among others.

Type: Outcome indicator

Unit of measurement: Area (hectares)

3.4. Area of wetlands (including estuaries and mangroves) restored

Definition: This indicator captures the area of wetlands, including estuaries and mangroves that is undergoing ecological restoration through GEF-funded interventions.

Details: The intent of this Sub-Indicator is to capture the area of wetlands in which best practices for ecological restoration are being applied. Example interventions that may be included within this indicator are green infrastructure development to provide water to wetlands and erosion control activities, among others.

Type: Outcome indicator

Unit of measurement: Area (hectares)

4. Area of landscapes under improved practices (hectares; excluding protected areas)

This indicator will be reported as the aggregate total of four Sub-Indicators. To avoid double-counting, hectares reported under each Sub-Indicator must not overlap. Guidance is provided below.

Definition: This indicator captures the total area of landscapes under improved practices, including in production sectors (e.g., agriculture, rangeland, forestry, aquaculture, tourism, extractives [oil and gas]) that lead to improved environmental conditions and/or for which management plans have been prepared and endorsed and are under implementation. This indicator is directly related to Aichi Biodiversity Target 7 of the Convention on Biological Diversity, whereby areas under agriculture, aquaculture and forestry, by 2020, are managed sustainably, ensuring conservation of biodiversity (CBD, undated). It is, in addition, directly related to country Land Degradation Neutrality targets under the Convention to Combat Desertification.

4.1. Area of landscapes under improved management to benefit biodiversity (qualitative assessment, non-certified)

Definition: This indicator captures the landscape area being managed to benefit biodiversity, but which is not certified.

Details: The project should qualitatively describe the benefit provided to biodiversity through a change in management. Additionally, while not required, projects should ideally provide GIS files showing the extent of land under this improved management (outside of protected areas).

Type: Outcome indicator

Unit of measurement: Area (hectares)

4.2. Area of landscapes that meets national or international third-party certification and that incorporates biodiversity considerations

Definition: This indicator captures the landscape area that achieves certification that incorporates biodiversity considerations.

Details: The project should indicate the details of third-party certification (e.g., Forest Stewardship Council, Round Table on Responsible Soy, Global Forest Alliance). See Tschardt et al. (2014) for a review of tropical agroforestry certification schemes and UNEP-WCMC (2011) for a general review of biodiversity criteria in various standards and certifications. Furthermore, while not required, it is suggested that projects provide GIS files showing the extent of the land under this improved management (outside of protected areas).

Type: Outcome indicator

Unit of measurement: Area (hectares)

4.3. Area of landscapes under sustainable land management in production systems

Definition: This indicator captures the landscape area that is in production (e.g., agriculture, rangeland, and forests) and whose soil, air, and water are managed in a sustainable manner (CIESIN, 1997–2018).

Details: The project should indicate the details of management practices. Projects should ideally provide GIS files showing the extent of the land under sustainable land management.

This Sub-Indicator is distinguished from Sub-Indicator 4.2 by capturing improved practices that benefit physical improvements in the environment (e.g., soil and soil carbon, nutrient recycling, diversity and functionality of vegetation cover, micro-climates, and water). Biodiversity benefits of global importance are captured by Sub-Indicator 4.2.

Type: Outcome indicator

Unit of measurement: Area (hectares)

4.4. Area of High Conservation Value forest loss avoided

Definition: This indicator captures the amount of High Conservation Value Forest (HCVF)¹⁶ that would be lost without implementation of GEF projects that achieve the conservation of these HCVF areas. This conservation is achieved through reclassification by government policy interventions or through company intervention at the site scale.

Details: Projects must first indicate the names and areas of HCVF that are targeted (GIS files depicting these areas would ideally be submitted). A counterfactual is needed to estimate or calculate the loss avoided. The counterfactual could compare to the baseline or to the “business as usual” scenario. If not already recognized by the HCV network, projects should submit documentation that the forests targeted meet one or more of the HCV criteria (HCV Resource Network, 2005–18).

Type: Outcome indicator

Unit of measurement: Area (hectares)

5. Area of marine habitat under improved practices to benefit biodiversity (hectares; excluding protected areas)

Definition: This indicator captures the area of marine habitat under improved management to benefit biodiversity and/or for which management plans have been prepared and endorsed and are under implementation.

Details: For the purpose of the indicators, the GEF defines marine area as the living resources, natural infrastructure, and a range of important habitats such as mangroves, coral reefs, seagrass beds, coastal tidal marshes, seamounts, thermal vents, and cold water corals that are crucial for human well-being and sustainable development. This indicator can include implementation of one or more of the following approaches: marine habitat under Integrated Coastal Management, Locally Managed Marine Area, Marine Spatial Plan, and/or Large Marine Ecosystem (LME). The project should also qualitatively describe the benefits provided to biodiversity through change in management. Finally, while not required, projects should ideally provide GIS files showing the extent of the ocean under this improved management.

Three additional Sub-Indicators are available to provide context in case they are relevant to the project.

¹⁶ <https://www.hcvnetwork.org/>

Type: Outcome indicator

Unit of measurement: Area (hectares)

5.1. Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations

Definition: This indicator captures the number of fisheries that are managed to benefit biodiversity, and which are certified through a third-party.

Details: The project should indicate the names of the fisheries and the details of third-party certification (e.g., Marine Stewardship Council, Global Aquaculture Alliance) (UNEP-WCMC, 2011) for a general review of biodiversity criteria in various standards and certifications.

Type: Outcome indicator

Unit of measurement: Quantity (Number of fisheries and/or aquaculture operations)

5.2. Number of Large Marine Ecosystems with reduced pollution and hypoxia

Definition: This indicator captures the total number of LMEs that have reduced pollution, including from nutrient loading that would otherwise lead to hypoxia, defined as a state in the oceans where oxygen levels are depleted to less than 2–3 parts per million (USEPA, 2017).

Details: Projects should indicate the names of the LMEs, as well as the type and extent (qualitative or quantitative) of pollution reduction achieved through policy and infrastructure investments to address point and non-point sources (STAP, 2011a, 2011b).

Type: Outcome indicator

Unit of measurement: Quantity (number LMEs)

5.3. Amount of Marine Litter Avoided

Definition: This sub-indicator captures the amount of debris, including plastic, prevented from entering the ocean as a result of the GEF project interventions. Marine debris is defined as manufactured or processed material discarded, disposed of or abandoned in the marine environment. It consists of items made or used by humans that enter the sea, whether deliberately or unintentionally, including transport of these materials to the ocean by rivers, drainage, sewage systems or by wind (STAP 2011b).

Details: Projects should indicate the type (e.g. plastic, metal, etc) and amount of debris that was prevented from entering the ocean due to GEF project interventions. They should also explain the measures employed by the GEF project that resulted in that reduction and how they led to those reductions.

Type: output indicator

Unit of measurement: metric tons

6. Greenhouse Gas Emissions Mitigated (metric tons of carbon dioxide equivalent)

This indicator refers to the total reduction of GHG emissions and enhancement of sinks and reservoirs reported in tons of carbon dioxide equivalent (CO₂e). As such, it is reported as the aggregate of the first two Sub-Indicators.

The mitigation of GHG emissions is defined as a human intervention to reduce the sources, or enhance the sinks, of GHG (IPCC, 2012).

Using the methodologies of the GEF and its Scientific and Technical Advisory Panel, noted below, two values will be reported for the Core Indicator: (i) lifetime direct GHG emissions mitigated, and (ii) lifetime indirect GHG emissions mitigated.

- Lifetime direct project GHG emissions mitigated are attributable to investments either during the project's supervised implementation period or after it, but supported by financial facilities or regulatory interventions by the GEF project, totaled over the respective lifetime of the investments. For example, financial facilities such as partial credit guarantee facilities, risk mitigation facilities, or revolving funds will remain in operation after the project ends.
- Lifetime indirect GHG emissions mitigated are those attributable to the long-term outcomes of GEF activities that remove barriers, such as capacity building, innovation, and catalytic action for replication.

6.1. Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry, and Other Land Use

Regarding the Agriculture, Forestry, and Land Use Change Lifetime, the length of time is defined as 20 years, unless an alternative number of years is deemed appropriate. For emission or removal factors (tons of CO₂e per hectare per annum), the defaults to be applied are those of the Intergovernmental Panel on Climate Change (IPCC) or country-specific factors. The GEF recommends its Agencies apply the Ex-Ante Carbon-balance Tool (EX-ACT) of the Food and Agriculture Organization of the United Nations (FAO) or the GEF's Carbon Benefits Project tools for estimating benefits. It also suggests providing strong justification on the use of an equivalent tool based on IPCC guidelines. The GEF will be further developing guidelines on methodologies for this sector.

Definition: Carbon sequestration is defined as the process of increasing the carbon content of a reservoir/pool other than the atmosphere (IPCC, 2012). Avoided emissions refers to reduced emissions due to avoided deforestation or forest degradation, sustainable forest management, and improved practices on other land uses such as in agriculture.

Details: This element requires information on the quantity of carbon (tons CO₂e) stored or not emitted in forests and soils as a result of the project, the duration of accounting period, and the anticipated start year of accounting. By definition, the benefits should be measured above a baseline value. The estimate must be based on widely recognized methodology to be clearly presented in the project document.

Type: Outcome indicator

Unit of measurement: metric tons of CO₂e

6.2. Emissions avoided

Definition: This indicator captures the amount of GHG emissions expected to be avoided through the interventions of the GEF project in sectors other than the Agriculture, Forestry, and Other Land Use sector. These therefore may include GHG benefits from energy efficiency, renewable energy, transportation, and urban projects or project components. These benefits should be measured above a baseline value.

Details: Calculating GHG emissions avoided from GEF projects has several steps, depending on project complexity and the components. Some project components contain investments as an output that lead to direct GHG emission reductions. Other components (e.g., revolving funds) typically lead to both direct and indirect GHG emission reductions. A third group, such as regulatory and policy reform, might lead — first and foremost if not exclusively — to indirect GHG emission reductions.

To calculate total emissions avoided, baseline emissions of the scenario without a GEF contribution to the project are first calculated. Subsequently, emissions for the GEF alternative are calculated, including investments that are tracked in the log frame during project implementation. The difference between this number and the baseline emissions equals the direct emission reductions of the project. If, for the post-project period, a project-sponsored (financial) mechanism will remain in place and continue to provide support for GHG-reducing investments — which would not happen in the baseline case — the direct post-project emission reductions for these investments should be calculated. Finally, for emission reductions in the post-project period that will have a causal link to GEF intervention, indirect emission reductions should be calculated.

Data and assumptions for this indicator are project- or component-specific. Some general assumptions, however, include the following: all analyses are in tons of CO₂e; avoided emissions reported are cumulative reductions, calculated for the lifetimes of the investments; there is no discounting for future GHG emission reductions; IPCC global warming potentials of non-CO₂ GHG with a 100-year horizon should be used; and emissions factors for the baseline and the GEF alternative should be as specific as possible.

For specific guidelines, various methodologies and manuals are available at GEF (2008); STAP (2013); and ITDP (undated).

Type: Outcome indicator

Unit of measurement: metric tons of CO₂e

6.3. Energy saved (megajoules)

Definition: This contextual Sub-Indicator should be used if a project aims to achieve energy savings. It is calculated as the amount of energy use avoided by the intervention over the lifetime of the investment.

Details: Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system. These energy savings are then totaled over the respective lifetime of the investments (IEA, 2018).

Type: Outcome indicator

Unit of measurement: megajoule (MJ)

6.4. Increase in installed renewable energy capacity per technology (megawatts). Repeat for each technology (drop-down list)

Definition: This Sub-Indicator should be reported on if a project aims to increase renewable energy generation or storage capacity. It refers to the rated capacity of a heat or power generating plant or the aggregate potential output of a collection of such. The Sub-Indicator will also account for projects that increase energy storage capacity of grid power for load shifting and variable renewable energy integration or storage of self-generated renewable power for later use. Among others, energy storage capacity may refer to pumped storage; home-, commercial- or grid-scale batteries; and thermal storage.

Details: Disaggregate by type of renewable energy technology (biomass, geothermal, ocean, small hydro, solar photovoltaic, solar thermal, wind power, and storage).

Type: Outcome indicator

Unit of measurement: megawatt (MW)

7. Number of shared water ecosystems (fresh or marine) under new or improved cooperative management

Definition: This indicator captures the commitment of countries to cooperatively manage a shared water system (e.g., river, lake, groundwater, or large marine ecosystem). Projects may cover one or more shared water systems.

Details: The approach has been to count (i) foundational/first International Waters projects that provide support to catalyze a cooperative agenda; and (ii) Strategic Action Plan (SAP)/Transboundary Diagnostic Analysis (TDA) implementation projects, given the guidance on the GEF-6 template (Tables E and F). The proposed indicator in GEF-7 will span shared freshwater and coastal/marine projects. The indicator will not adequately apply to the open oceans/Areas Beyond National Jurisdiction. The names of the shared water systems should be included as per the picklist, which is taken from UNEP-DHI and UNEP (2016).

For each shared water ecosystem, projects should report current scores for each of the four sub-indicators (see below) at each stage of the project reporting cycle (PIF, CEO Endorsement, Mid-Term Review, and Terminal Evaluation). If the score increases over the life of the project, the shared water ecosystem should be counted. Any increase in any of the sub-indicator scores will satisfy the threshold for this indicator.

Type: Outcome indicator

Unit of measurement: Quantity (number of shared water systems)

There are four additional contextual Sub-indicators for Core Indicator 7, as described below.

7.1. Level of Transboundary Diagnostic Analysis and Strategic Action Program formulation and implementation

Definition: This indicator is based on a rating for the level of TDA or SAP formulation and implementation.

Details: Projects provide a rating on a scale of 1 to 4:

- 1 = No TDA/SAP developed
- 2 = TDA finalized
- 3 = SAP ministerially endorsed
- 4 = SAP under implementation.

Type: Output Indicator

Unit of measurement: Rating scale

7.2. Level of Regional Legal Agreements and Regional Management Institution(s) to support its implementation

Definition: This indicator is based on a rating for the level of Regional Legal Agreements or Regional Management Institution(s) (RMI) formulation and implementation.

Details: Projects provide a rating on a scale of 1 to 4:

- 1 = No regional legal agreement, or neither institutional framework nor RMI in place
- 2 = Regional legal agreement under development
- 3 = Regional legal agreement signed and RMI in place
- 4 = Regional legal agreement ratified and RMI functional

Type: Output Indicator

Unit of measurement: Rating scale (1 to 4)

7.3. Level of national/local reforms and active participation of Inter-Ministerial Committees

Definition: This indicator is based on a rating for the level of national or local reforms and participation in inter-ministerial committees (IMC).

Details: Projects provide a rating on a scale of 1 to 4:

- 1 = Neither national/local reforms nor IMCs
- 2 = National/local reforms in preparation, IMCs functional
- 3 = National/local reforms and IMCs in place

4 = National/local reforms/policies implemented, supported by IMCs.

Type: Output Indicator

Unit of measurement: Rating scale (1 to 4)

7.4. Level of engagement in IW: Learn through participation and delivery of key products

Definition: This indicator is based on a rating for the level of engagement in International Waters Learning Exchange and Resource Network (IW:LEARN).

Details: Projects provide a rating on a scale of 1 to 4:

1 = No participation

2 = Website in line with IW:LEARN guidance active

3 = As above, plus strong participation in training/twinning events and production of at least one experience note and one results note

4 = As above, plus active participation of project staff and country representatives at International Waters conferences and the provision of spatial data and other data points via project website.

Type: Output Indicator

Unit of measurement: Rating scale

8. Globally over-exploited fisheries moved to more sustainable levels (metric tons)

Definition: This indicator refers to globally over-exploited fisheries having been moved to more sustainable levels (FAO, 2012). Overexploited (FAO, undated) is defined as follows: "The fishery is being exploited above a level that is believed to be unsustainable in the long term, with no potential room for further expansion and a higher risk of stock depletion/collapse."

There is no strict relationship between Sub-Indicator 5.1 related to certified fisheries and this Core Indicator. Certification is only one of several activities that may address over-exploitation of fisheries.

Details: Based on data from FAO (2016), 31.4 percent (25.6 million metric tons) of marine capture fisheries is overexploited/overfished. GEF-7 investments plan to address at least 3.8 million tons of these fisheries.

The name of the fishery targeted, the source for the estimate of tonnage, and the initial justification for considering the fishery to be overexploited should be provided.

Type: Outcome Indicator

Unit of measurement: Volume (metric tons)

9. Reduction, disposal/destruction, phase out, elimination, and avoidance of chemicals of global concern and their waste in the environment and in processes, materials, and products (metric tons of toxic chemicals reduced)

This indicator will be reported as the aggregate total (in metric tons) of three Sub-Indicators (9.1, 9.2, and 9.3). Three additional Sub-Indicators (9.4, 9.5 and 9.6) are available to provide additional context. Guidance is provided in Section 9.1 to Section 9.6.

9.1. Solid and liquid persistent organic pollutants (POPs) removed or disposed (POPs type)¹⁷

Definition: This indicator tracks the progress in the elimination or disposal of persistent organic pollutants (POPs).

Details: Projects should report the amount of POP eliminated or reduced, broken down by type of POP. For disposal projects, information on the technology for and location of disposal should also be included. Finally, project leads should provide details on the methodology used to calculate the quantities of POP.

Type: Outcome Indicator

Unit of measurement: Weight (metric tons)

9.2. Quantity of mercury reduced

Definition: This indicator captures the amount of mercury¹⁸ reduced.

Details: Projects should report the amount of mercury, together with details of the approach and the scale at which the figure is reported (e.g., project site, city, province). Project leads should provide disaggregated information on the reduced amount of emissions from different sources or activities.

Type: Outcome Indicator

Unit of measurement: Weight (metric tons)

9.3. Hydrochlorofluorocarbons reduced/phased out

Definition: This indicator captures the amount of ozone depletion potential (ODP) and hydrochlorofluorocarbons (HCFC) (SEPA, undated) reduced/phased out. The final ODP (UNEP, undated) figure at project completion should be subtracted from the baseline ODP figure to determine the reduction.

Details: Project leads should report the amount of ODP HCFCs reduced/phased out, together with the details of the approach and the scale at which the figure is reported (e.g., project site, city, province).

¹⁷ For POPs, the following websites provide further information:

<http://web.unep.org/chemicalsandwaste/persistent-organic-pollutants-pops><http://www.who.int/ceh/capacity/POPs.pdf>

<http://web.unep.org/chemicalsandwaste/what-we-do/science-and-knowledge/persistent-organic-pollutants-pops/pops-monitoring><http://chm.pops.int/Convention/Media/Factsheets/tabid/527/language/en-US/Default.aspx>

¹⁸ For further reference: UNEP's global mercury assessment <http://web.unep.org/chemicalsandwaste/what-we-do/technology-and-metals/mercury/global-mercury-assessment>

Project leads should provide disaggregated information on the amount of reduction in emissions from different sources or from various activities. Common HCFCs includes HCFC-22, HCFC-141b, HCFC-142b, HCFC-123, HCFC-124, HCFC-225ca and 225cb, and HCFC-21.

Type: Outcome Indicator

Unit of measure: Weight (metric tons)

9.4. Number of countries with legislation and policy implemented to control chemicals and waste

Definition: This indicator seeks to count the number of countries that are targeting the development of new or improved legislation and policies relating to the control of chemicals and waste because of GEF support.

Details: In projects that are developing new or improved legislation to control GEF-relevant chemicals and their waste, the project leads should indicate legislation being contemplated and its intended impact.

Type: Output Indicator

Unit of measure: Quantity (number of countries) and descriptive text on the type of legislation being developed or improved

9.5. Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing, and cities

Definition: This indicator captures the number of low-chemical or non-chemical systems/technologies implemented as a direct result of the GEF project.

Details: In projects phasing out GEF-relevant chemicals, the project proponents will provide information on the type and number of proposed technologies in the project and the expected impact. These could include use of non-chemical or low-chemicals technologies or techniques such as replacement of POPs pesticides by integrated pesticide management or elimination of POPs by substitution by green chemicals.

Type: Output Indicator

Unit of measure: Quantity (number of systems/technologies) and a description of the technologies or techniques.

9.6 Quantity of POPs/Mercury containing materials and products directly avoided

Definition: This indicator captures the amount of materials and/or products containing POPs/Mercury that has been avoided as a direct result of the GEF project.

Details: This sub-indicator should be used in projects where the reduction of the POPs/Mercury results in the direct avoidance of a product or material that would have contained the POP/Mercury in the absence of the project.

Type: Output Indicator

Unit of measure: Weight (metric tons).

10. Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)

Definition: This indicator captures the reduction in emissions of POPs to air. An estimated reduction target is required at the time the project is proposed. The target is based on the baseline calculation of the emissions against the expected reductions that will result from the implementation of the project. At project completion, a final emissions number — in grams of toxic equivalent (gTEQ) — should be subtracted from the baseline emissions number to determine the reduction.

Details: Projects should report the amount of emissions of POPs to air, together with details of the approach used to calculate the figure and the scale at which the figure is reported (e.g., project site, city, province). Project leads should provide information on the amount of emissions from different chemicals listed in Annex C of the Stockholm Convention, as well as an aggregate figure of overall POPs gTEQ reduced.

Note that two additional Sub-Indicators are available to provide context in case they are relevant to the project.

Type: Outcome Indicator

Unit of measurement: Weight (grams of toxic equivalent [gTEQ])

10.1. Number of countries with legislation and policy implemented to control emissions of POPs to air

Definition: This indicator captures the number of countries targeted in the project that have legislation and policies implemented to control emissions of POPs to air.

Details: In projects that are developing new or improved legislation to control POPs emissions to air from unintentional sources, the project leads should indicate legislation being contemplated and its intended impact.

Type: Output Indicator

Unit of measure: Quantity (number of countries) and description of the legislation.

10.2. Number of emission control technologies/practices implemented

Definition: This indicator captures the number of emission control technologies or practices implemented as a direct result of the GEF project.

Details: In projects that are reducing POPs emissions to air through implementation of best available techniques (BAT)/best environmental practices (BEP), the project proponents will provide information on the type and number of these technologies or practices proposed in the project and the expected impact.

Type: Output Indicator

Unit of measure: Quantity (number of technologies or practices) and description of the technologies or practices.

11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

Definition: This indicator captures the total number of direct beneficiaries including the proportion of women beneficiaries.

Details: This indicator captures the number of individual people who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance from the project/activity. Direct beneficiaries are all individuals receiving **targeted support** from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.

Beneficiaries may receive **monetary and nonmonetary benefits**.

Examples of monetary benefits may include, but are not limited to, increased income due to government policies relating to climate change mitigation, such as tax benefits or access to loans, payments for avoided emissions or carbon sequestration, job creation, and payment by local governments for other ecosystem services that also achieve climate change mitigation results (e.g., implementation of a specific activity).

Examples of nonmonetary benefits may include, but are not limited to, access to programs, services, or education; infrastructure development; health benefits; access to markets; preferential investment or finance terms; land titling or registration; increased access to environmental services; newly defined rights or authorities; protection of traditional livelihoods and customary rights; and environmental and other benefits from avoided deforestation and degradation, improved afforestation, or increased productivity from climate-smart agricultural practices. Individuals receiving benefits from more than one sustainable landscapes activity, or receiving multiple benefits from a single activity, should be counted once per fiscal year.

Examples in the GEF context include:

- A project facilitates access to credit to fund operations of organic coffee farmers: support targets participating farmers, who are **direct** beneficiaries.
- A protected area (PA) project strengthens institutional capacity of a national PA system, improving human resource management, creating incentive mechanisms for staff and ensuring adequate budget for operation: support is targeted at all relevant staff within the PA agency, who are **direct** beneficiaries.
- A project facilitates transition to low carbon urban development through capacity building of municipality managers and workers, as well as improving access to innovative finance options for participating municipalities: staff participating in training within the municipal agency and end users who benefit from a lower utility bill are **direct** beneficiaries.

Gender: Reporting disaggregated by sex (male, female) is mandatory. This may be estimated using the best available data on the composition of sex for the relevant population.

Guidelines on Indicators (ME/GN/01)

Type: Cumulative, annual in-year total number of beneficiaries summed to total over the project/program implementation period.

Unit of measure: The indicator is expressed in absolute numbers of direct beneficiaries.

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