PPP and Infrastructure Evaluation and Rating System (PIERS)
An Evaluation Methodology for the SDGs

UNECE
PPP and Infrastructure Evaluation and Rating System (PIERS):
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User's Guide to the Self-Assessment Tool
February 2024

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Introduction

The Self-Assessment Tool is an easy-to-use Excel-based tool that presents the UNECE PPP and Infrastructure Evaluation and Rating System (PIERS) in a simplified format. The Self-Assessment Tool provides an indicative PPP for the Sustainable Development Goals (SDGs) score as well as qualitative feedback to assist projects improve PPP for the SDGs outcomes. The qualitative feedback is generated automatically based on responses provided in the Self-Assessment Tool.

Where does PIERS apply?

PIERS applies to all types, sizes, and Public-Private Partnership (PPP) models,[1] anywhere around the world, in any sector.

A PPP can be defined as:

- A physical infrastructure which is the support of a public service designed, financed, built or rehabilitated and operated by a commercial company selected by way of competitive bidding and operating the service in accordance with the provisions of a contract, entered into with the public authority in charge of delivering such a service.
- The contract, based on functional specifications and performance criteria, provides for a compensation of the company by the public authority or by the end users (or a combination of both). The service is rendered for a time period calculated in such a way that the company may amortize all costs and make a reasonable profit.
- At the expiry of the term, the infrastructure is transferred in good operating conditions to the public authority, generally without compensation unless, such a compensation is provided for the contract.

Example PPPs include:

- Economic infrastructure[2] such as transportation facilities and utility networks (e.g., water, sewage, communications, electricity);
- Social infrastructure such as schools, hospitals, libraries, parks and other amenities, public housing; or
- Green infrastructure / community-based PPPs.

Who should use PIERS?

PIERS is intended to provide a common language for or basis of understanding PPPs for the SDGs. It is intended to be used by governments, the private sector, civil society organisations, academia and international organisations who work together to achieve PPPs for the SDGs.

When to use PIERS?

PIERS can be used early on in project identification through to project development and implementation. Throughout this document, the term “project” is used to refer to future projects being prepared or constructed as well as existing projects in operations.

Project identification refers to the concept stage of the project (that is, the original idea for the project) when pre-feasibility studies are conducted. During this stage of the project, the public partner sets forth its ideas, strategy and objectives for the project.

Project development refers to the stage of the project where the detailed shaping of the project occurs through full feasibility, tendering, technical design, legal and financial structuring up until contract signing and financial close.

[1] For example, traditional PPPs, operations and maintenance PPPs, Design-Build (DB) PPPs, Design-Build-Operate (BDO) PPPs, Design-Build-Finance-Operate (DBFO) PPPs, Build-Transfer-Operate PPPs, Design-Build-Finance-Operate-Maintain (DBFOM) PPPs.

[2] Infrastructure is a general term used to describe the basic physical systems required to operate a region, country, enterprise or society, such as transportation systems, communication networks, buildings, power supplies, sewage and water.

Project implementation refers to the construction, operations and contract management stages of the project over the project lifespan. At this stage of the project, the project design and commitments are crystallised, and the public partner is in the position of monitoring performance and compliance.

The earlier PIERS is applied in a project lifecycle the greater value it can deliver. For example, the ability to make changes to a project and their associated costs is typically much lower during the project implementation phase than in the project identification phase where the ability to make changes to the project is far higher.

Therefore, the potential purpose of applying PIERS and the documentation required at every stage of a project is summarised in table1 below:

Table 1. Applying PIERS

Stage	*Potential purpose of applying PIERS*	*Documentation required*
Project identification	Checklist of issues to consider when preparing heads of terms for the project	Concept note or teaser outlining the proposed project and its objectives
Project development	Detailed design of the project and structuring of the contract	Feasibility study, tender documents, draft contract
Project implementation	Taking stock of the project's effectiveness with a view to drawing lessons learned and improving decision making for future projects	Monitoring or performance reports under the actual contract

Features and characteristics of PIERS

There are many features and characteristics of PIERS, including:

- **Flexible and adaptable:**
    - PIERS is flexible and sufficiently adaptable to be applied to all types and sizes of PPPs and users of the tool have the flexibility to address the criteria in the best, most efficient, and most appropriate ways for the project, taking local context into consideration;
    - PIERS can be applied to PPPs anywhere around the world and can be adapted for use at any stage of a PPP's lifecycle; and
    - PIERS is a reference tool allowing users to develop their projects in line with the PPP for the SDGs approach.
- **Measurable:** PIERS includes both qualitative and quantitative methods for measuring the PPP for the SDGs outcomes. The emphasis of PIERS is not just on value-for-money, but also value-for-people.
- **Comprehensive:** PIERS aims to address the five PPP for the SDGs outcomes. A number of criteria, along with the indicators, are presented as ways to measure a project's contributions to each of these outcomes which align with the SDGs.
- **Applicable:**
    - PIERS is intended to evaluate projects but also addresses issues of relevance for project development. Due to the nature of PPPs and the alignment of this Evaluation Methodology with the SDGs, which have macro implications, PIERS includes a mix of project-specific and more general criteria.

  - PIERS is agnostic in terms of which PPPs can use the tool. Any PPP may use the tool, with the notation that improvements can be made in any sector and in any country.

- **Consistent:** The aim of PIERS is to provide a consistent way of addressing PPPs for the SDGs, provide a "common language" for both governments and the private sector to engage in PPPs for the SDGs, and to enable a consist way in which to evaluate PPPs for their contributions to PPP for the SDGs outcomes.

What is partially covered by PIERS but requires full ex ante assessment

PIERS is intended to assess whether a project would qualify as a PPP for the SDGs and how it would contribute to the SDGs, however it is not sufficient in itself to determine whether a PPP is the optimal procurement model to undertake an infrastructure project. A number of enabling factors would need to be assessed such as the institutional framework, the investment and business climate, and government capacity.[3]

Range of answers for each indicator

The following range of answers – from 1 to 5 – is available to rate each indicator:

- 5-excellent: international best practice and benchmark;
- 4-very good: national best practice and benchmark;
- 3-satisfactory: average performance against other projects in the same country;
- 2-marginal: equals some elements of other projects in the same country; and
- 1-unsatisfactory: below average.

Project information: initial questions

For projects choosing to use the Self-Assessment Tool, the following questions must be answered at the start of the process:

Location of investment

Question: ***Please indicate the country in which the project is located.***

Select the country[4] in which the project is located from the drop-down menu.

[3] The tools and resources that could potentially be referred to for such an assessment include but are not limited to: 1) Laws, regulations and contract: UNCITRAL Legislative Guide on Public-Private Partnerships (2019), UNCITRAL Model Legislative Provisions and the future UNECE Standard on PPP/Concession Model Law under preparation (see online: UNCITRAL Legislative Guide on Public-Private Partnerships, 2019, https://uncitral.un.org/en/lgppp); PPP guiding principles: UNECE 10 Guiding Principles on PPP for the SDGs; Institutional arrangements: Multilateral Development Banks' PPP Knowledge Lab (see online: PPP Knowledge Lab, https://pppknowledgelab.org/countries); Business climate: World Bank Doing Business Index (See online: World Bank, https://www.doingbusiness.org/en/doingbusiness); Investment climate: UNCTAD World Investment Report (See online, UNCTAD, https://unctad.org/topic/investment/world-investment-report); and Integrity and corruption: UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (See online, UNECE, ECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ECE/CECI/WP/PPP/2017/4), 2018, see online https://unece.org/DAM/ceci/ppp/Standards/ECE_CECI_WP_PPP_2017_04-en.pdf).

[4] The list of countries in the dropdown menu is the UN Member States. If the country where the project is located is not listed, please choose "Other".

Environmental setting

Question: ***Please indicate the environmental setting in which the project is located.***

The user must specify the project's environmental setting from one of the following three options:

- Environmentally protected area[5]
- Biodiversity hotspot[6]
- All other environmentally unspecified areas[7]

Project stage

Question: ***Please indicate the stage of the project.***

The user must specify the stage of the project. Three options are provided:

- Project identification
- Project development
- Project implementation

(Definitions for each of the above project stages are provided in the section entitled When to use PIERS?)

Verifiable and measurable data

Question: ***Is the data and information you are providing verifiable and measurable? (Y/N)***

This question is asked to enquire if the answers provided to specific indicators would be supported by documented evidence that is verifiable and measurable. The user needs to answer 'yes' if documented evidence is available (no documented is being required for the Self-Assessment Tool).

Statement of intent

Question: ***Has the project published a Statement of Intent? (Y/N)***

A Statement of Intent would involve the parties (individually or jointly) structuring the project stating explicitly their intention to generate positive social and environmental impacts from the project. This could also be achieved by reference in the statement to the SDGs and/or the PPP for the SDGs model. The Statement of Intent can take many forms: it could take the form of a press release, a statement on the website, an annex to a project document (e.g. the tender document) etc. To answer "yes", there should be a commitment by the user in the Statement of Intent to the PPP for the SDGs outcomes and the SDGs.

[5] Often referred to as a "functional ecosystem" (a habitat capable of supporting the needs/requirements of the species that depend on it during all stages of their lifecycle) or "environmentally sensitive area". Environmentally protected areas are areas which are protected, usually by government, such as reserved forests and national parks (including marine parks).

[6] A region that is considered to be both biologically rich and threatened. Biodiversity hotspots – of which there are 36 around the world – share two common criteria: they must have at least 1,500 vascular plants as endemics, and 30% or less of its original natural vegetation remains. For more information, see the following resources:

- Conservation International's Biodiversity Hotspots, 2020, available here: https://www.conservation.org/priorities/biodiversity-hotspots
- IUCN's Guidelines for Applying Protected Area Management Categories, 2020, available here: https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf

[7] The vast majority of projects are currently in this category.

To achieve “yes (basic statement)” the parties (individually or jointly) need to publicly commit (e.g., on a website) that the project will generate positive social, environmental, and economic impacts.

To achieve “yes (comprehensive statement)” the parties (individually or jointly) need to meet the requirements for “basic statement” and also explicitly reference the SDGs and commit to the PPP for the SDGs model (e.g., through inclusion in legislation/legal provisions, regulations, guidelines and recommendations for civil servants, etc.).

To achieve “yes (comprehensive statement and recognition)” the parties (individually or jointly) need to first meet the requirements for both “basic statement” and “comprehensive statement”. In addition, the parties (individually or jointly) must explicitly commit to pursuing third-party project recognition. This commitment could be included in the statement on a website, and/or included in the PPP development strategy, concept document, prefeasibility study (if the project is in the identification stage) or it could be included in the project feasibility study, tender documents, legal provisions or equivalent documentation (if the project is in the development stage) or included in the PPP contract documents (if the project is in the implementation stage).

At-a-glance: PPP for the SDGs criteria

Access and Equity 5 criteria 13 indicators	AE1 PROVIDE ESSENTIAL SERVICES
	AE2 ADVANCE AFFORDABILITY AND UNIVERSAL ACCESS
	AE3 IMPROVE EQUITY AND SOCIAL JUSTICE
	AE4 PLAN FOR LONG-TERM ACCESS AND EQUITY
	AE5 AVOID/MINIMISE AND MITIGATE PHYSICAL AND ECONOMIC DISPLACEMENT
Economic Effectiveness and Fiscal Sustainability 4 criteria 17 indicators	EE1 AVOID CORRUPTION AND ENCOURAGE TRANSPARENT PROCUREMENT
	EE2 MAXIMISE ECONOMIC VIABILITY AND FISCAL SUSTAINABILITY
	EE3 MAXIMISE LONG-TERM FINANCIAL VIABILITY
	EE4 ENHANCE EMPLOYMENT AND ECONOMIC OPPORTUNITIES
Environmental Sustainability and Resilience 5 criteria 15 indicators	ES1 REDUCE GHG EMISSIONS AND IMPROVE ENERGY EFFICIENCY
	ES2 REDUCE WASTE AND RESTORE DEGRADED LAND
	ES3 WATER CONSUMPTION AND WASTEWATER DISCHARGE
	ES4 PROTECT BIODIVERSITY
	ES5 ASSESS RISK AND PREPARE FOR DISASTER MANAGEMENT
Replicability 4 criteria 11 indicators	RE1 ENCOURAGE REPLICABILITY AND SCALABILITY
	RE2 STANDARDISE PPP PREPARATION AND TENDER
	RE3 ENHANCE GOVERNMENT, INDUSTRY AND COMMUNITY CAPACITY
	RE4 SUPPORT INNOVATION AND TECHNOLOGY TRANSFER
Stakeholder Engagement 4 criteria 12 indicators	SE1 PLAN FOR STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION
	SE2 MAXIMISE STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION
	SE3 PROVIDE TRANSPARENT AND QUALITY PROJECT INFORMATION
	SE4 MANAGE PUBLIC GRIEVANCES AND END USER FEEDBACK

Components of the criteria

Each criterion within the PPP for the SDGs contains the same set of components, which are described below.

Criterion title	Title of the criterion.
Criterion identifier	Two-letter code identifying the PPP for the SDGs outcome and a number identifying the specific criterion. Examples: AE1 denotes the first criterion within Access and Equity; EE2 denotes the second criterion within Economic Effectiveness and Fiscal Sustainability.
Intent	Explains the overall purpose of the criterion in one short statement.
Metric	Articulates how the criterion is measured. Indicates whether the criterion is measured qualitatively, quantitatively, or both.
Description	Explains the specific issue(s) or topic(s) being addressed by the criterion and its importance/significance to PPPs. The description section for many criteria also include definitions and helpful external resources.
Applicability	Provides guidance on determining the applicability of the criterion and/or determining the applicability of one or more indicators within the criterion.
Indicators	The set of indicators the project needs to address in order to meet the requirements of the criterion. In some cases, indicators are considered mandatory. Such indicators are denoted with an asterisk (*). Failing a mandatory indicator (that is replying "1-unsatisfactory" or "2-marginal") would result in attaining a score of 0% for that particular PPP for the SDGs outcome. Each indicator is denoted with the criterion identifier, followed by another number. Examples: RE1.1 denotes the first indicator within the first Replicability criterion; SE2.1 denotes the first indicator within the second Stakeholder Engagement criterion.
Guidance to users when replying to the indicator depending on the stage of the project	The purpose of this guidance is to provide users of the Self-Assessment Tool with as much information as possible to understand the indicator posed and that factors that need to be considered when selecting a response. The guidance is tailored depending on the stage of the project (i.e., identification, development, implementation).

Access and Equity (AE)

Across the 17 SDGs, a key focus is improving access to critical public services[8] for social development and poverty eradication, recognizing that depriving access to one service can have huge negative impacts on people's livelihoods and wellbeing.

Equity could be broadly defined as equal access to the infrastructure and PPP project outputs/services, and that proactive measures are employed, where necessary, to ensure that all citizens interested by the service with due regard to the economically disadvantaged and those who suffer from social exclusion have access to the service in an equitable manner.

Five criteria and 13 related indicators are used to assess project performance against the Access and Equity outcome:

Access and Equity 5 criteria 13 indicators	AE1 PROVIDE ESSENTIAL SERVICES AE2 ADVANCE AFFORDABILITY AND UNIVERSAL ACCESS AE3 IMPROVE EQUITY AND SOCIAL JUSTICE AE4 PLAN FOR LONG-TERM ACCESS AND EQUITY AE5 AVOID/MINIMISE AND MITIGATE PHYSICAL AND ECONOMIC DISPLACEMENT

[8] Access to energy, safe drinking water, healthcare, affordable housing, are among the key public services access which is essential to achieve the SDGs.

AE1 PROVIDE ESSENTIAL SERVICES

Includes mandatory indicators

Rationale

Intent Provide new or improved access to essential services to people.

Metric The extent to which the project provides new or improved access to essential services.

Description The SDGs are first and foremost concerned with improving access to essential services for social economic and environmental development and poverty eradication, recognising that lacking access to such services can have enormous negative impacts on people's livelihoods and wellbeing. In the context of this criterion, essential services include telecommunications and the Internet, education, energy, healthcare, transport (of goods and people), waste, and water.

This criterion encourages projects to articulate and quantify the provision of essential services to people. Where there is potential for the project to negatively impact the provision of existing essential services in terms of access, affordability and/or quality, measures to eliminate/avoid, mitigate and/or offset such impacts are encouraged.

The provision of essential services should be aligned with city, regional and/or community development plans, and should take into account the real needs of the people by reference to their economic and social situation as established through the stakeholder engagement process. Where formal community planning documents do not exist, the project should undertake its own analyses of the real needs of the people– for example, this could be done through a stakeholder engagement and public participation process where stakeholders (including the public) identify and prioritise their real needs for the project to address.

Applicability This criterion is applicable to all projects that provide one or more essential services. As a result, it would be difficult to demonstrate that this criterion is not relevant or applicable to a project seeking to be recognised as a PPP for the SDGs. Therefore, projects seeking to be recognised as PPPs for the SDGs are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and guidance

AE1.1 ***Is the project identifying and taking into account the real needs of the people by reference to their economic and social situation as established through the stakeholder engagement process? (*)***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", a preliminary analysis of people's needs must be done, by reference to their economic and social situation, and how the project intends to address them. There are a number of ways to determine the real needs of the people. For example, this could be done by reviewing the most recent city, regional and/or community development plans or other related reports/plans/studies (e.g., from governmental or non-governmental organisations operating in the area); and/or through a stakeholder engagement and public participation process where stakeholders (including the public) identify and prioritise their needs, by reference to their economic and social situation. Compile any reference or source documents used. This information should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent.
Development stage
To rate this indicator as "5-excellent" the project must incorporate the people's economic and social needs (as identified in the aforementioned identification stage of the project) into the project development process, which will include but not be limited to such activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by requiring feasibility studies and analysis to take into consideration the economic and social needs of the people so that feasibility is not determined solely on the governmental or private sector's respective interests; tendering documents to condition qualification or responsive bidding upon the demonstration of the ability to deliver economic and social benefits; and/or ensuring the project's conceptual technical and physical design is responsive to the people's economic and social needs.

Reference or source documents and/or the identification stage materials identifying the economic and social needs of the people should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.

Implementation stage

To rate this indicator as "5-excellent" the project must incorporate the people's economic and social needs (as identified in identification state and as incorporated into the development stage) into the project implementation which will include but not be limited to such activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done through including grievance mechanisms in the construction of the facility to allow citizens to provide feedback; engaging local business to stimulate employment or provide training opportunities; constructing the infrastructure and/or commissioning the services in such a way that the economic and social needs are being addressed, including project and contract performance indicators that are tied to the desired economic and social benefits, and/or requiring open and transparent communication channels with citizens throughout implementation.

Reference and source documents and/or the identification and development stage materials identifying the economic and social needs of the people should be incorporated into contractual documents and performance requirements in order to ensure the long term provision of social and economic needs.

AE1.2 ***Is the project contributing in an organised manner to the expansion and improvement (for example including but not limited to circular economy processes) of essential services?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to **estimate the number of people** who will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s) it provides. For example, the development of waste management services involving significant recycling and reuse would represent an improvement in services available to the people and communities.
The project should take care to document all assumptions and the methodology(ies) used to calculate the above-mentioned estimates and compile any reference or source documents used. The estimates should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent.

Development stage

To rate this indicator as "5-excellent", the project needs to take concrete steps to **incorporate the number of people** (as estimated in the identification stage) who will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s) into the project development process, which will include but not be limited to including the requirement in such activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by factoring into project feasibility studies and assessments the number of people who will have new or improved access as a result of the project who previously had no access and/or unsatisfactory access; incorporating those numbers into tender documents to condition qualification or responsive bidding upon the demonstration of that new or improved access; and/or ensuring the project's conceptual technical and physical design is responsive to the people's economic and social needs.

Reference or source documents and/or the identification stage materials estimating the number of people who will have new or improved access as a result of the project who previously had no access and/or unsatisfactory access should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.

Implementation stage

To rate this indicator as "5-excellent", the project needs to **incorporate the number of people** (as estimated in the identification stage and incorporated in the development stage) who will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s) into the project implementation which will include but not be limited to including the requirement in such activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that a greater number of people will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s); including new or improved access requirements in project and contract performance indicators that measure and incentivize the delivery of such new or improved access; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure such new or improved access is occurring through project implementation.

Reference and source documents and/or the identification and development stage materials estimating the number of people who will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s) should be incorporated into contractual documents and performance requirements in order to ensure the long term provision of the new or improved access.

AE1.3 ***Is there evidence that stakeholder lives will be / have been / are being transformed as a result of the project providing new or improved access to essential services?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage – define well-being indicators
To rate this indicator as "5-excellent", **well-being indicators** that could be used to measure whether or not stakeholder/people's lives will be transformed as a result of the project providing new or improved access to essential services need to be **defined**. Such indicators will be refined throughout project development (and likely in consultation with the private party or consortium involved in the project and/or with community stakeholders), but initial or draft well-being indicators should be prepared during the project identification stage and included in the project PPP development strategy, concept document, prefeasibility study or equivalent document. Also, any assumptions, methodologies, and research used to develop these initial well-being indicators should be compiled by the user.
Development stage – incorporate the well-being indicators (identified in the identification stage) as they apply to the development stage
To rate this indicator as "5-excellent", the **project needs to incorporate the requirement that the project evidence** that stakeholder lives will be / have been / are being transformed as a result of the project providing new or improved access to essential services into the project development process, which will include but not be limited to including the requirement in such activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by factoring into project feasibility studies and assessments the desired outcome of stakeholder lives will be / have been / are being transformed as a result of the project; incorporating those outcome metrics into tender documents to condition qualification or responsive bidding upon the demonstration of that such outcomes will be achieved; and/or ensuring the project's conceptual technical and physical design is likely to deliver such outcomes. Reference or source documents and/or their identification of the number of people who will be / have been / are being transformed as a result of the project providing such new or improved access to essential services should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.
Implementation stage – further incorporate the well-being indicaators (identified in the identification stage and incorporated in the development stage as applicable)
To rate this indicator as "5-excellent", the project **needs to incorporate the requirement that the project** evidence that stakeholder lives will be / have been / are being transformed as a result of the project providing new or improved access to essential services into the project implementation which will include but not be limited to including the requirement in such activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that a greater number of people will have new or improved access and that stakeholders lives will be / have been/ are being transformed as a result; including these requirements in contract performance indicators that measure and incentivize the delivery of such new or improved access and the desired outcome of stakeholder lives will be / have been / are being transformed as a result of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure such new or improved access and desired outcomes are being met through project implementation.

Reference and source documents and/or their identification of the number of people who will have *new* access to *and/or improvement* of one or more essential services as a result of the project who previously had *no access and/or unsatisfactory access* to the project or the service(s) should be incorporated into contractual documents and performance requirements in order to ensure the long term provision of the new or improved access and support the assessment of whether the project can evidence that stakeholder lives will be / have been / are being transformed as a result of the project providing new or improved access to essential services.

AE1.4 ***Is the project avoiding/eliminating, mitigating, and/or offsetting impacts to existing essential services?***

Applicability: If there is no potential for the project to impact the provision of *existing* essential services, 'not applicable' (N/A) may be selected as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the user needs to first **undertake a preliminary assessment** of potential temporary and permanent impacts (e.g. impacts related to access or affordability) to existing essential services as a result of the project. Then, the user needs to **determine** (e.g., **through research, stakeholder engagement, or another means) how such impacts could be avoided/eliminated)**. For impacts that cannot be completely avoided or eliminated, the project needs to determine how they could be mitigated or offset. Potential strategies to avoid/eliminate, mitigate and/or offset impacts should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The user should take care to compile any reference or source documents used to develop these potential strategies.
Development stage
To rate this indicator as "5-excellent" the project must incorporate the requirement that the project evidence avoiding/eliminating, mitigating, and/or offsetting impacts to existing essential services (as preliminarily assessed and determined in the identification stage of the project) into the project development process, which will include but not be limited to including the requirement in such activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project will avoid/eliminate, mitigate, and/or offset impacts to existing essential services; tender documents to condition qualification or responsive bidding upon the demonstration of the ability to deliver the project such that it will avoid/eliminate, mitigate, and/or offset impacts to existing essential services ; and/or ensuring the project's conceptual technical and physical design is designed in such a way that it is likely to avoid/eliminate, mitigate, and/or offset impacts to existing essential services. Reference or source documents and/or their identification of the project's ability to avoid/eliminate, mitigate, and/or offset impacts to existing essential services should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.
Implementation stage
To rate this indicator as "5-excellent" the project must incorporate the requirement that the project avoid/eliminate, mitigate, and/or offset impacts to existing essential services (as assessed and determined in the identification stage and incorporated in the development stage, as applicable) into the project implementation which will include but not be limited to including the requirement in such activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that the project will avoid/eliminate, mitigate, and/or offset impacts to existing essential services; including these requirements in contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to avoid/eliminate, mitigate, and/or offset impacts to existing essential services; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will avoid/eliminate, mitigate, and/or offset impacts to existing essential services is occurring through project implementation.

Reference and source documents and/or their identification of the project avoiding/eliminating, mitigating, and/or offsetting impacts to existing essential services should be incorporated into contractual documents and performance requirements in order to ensure the long term provision of the avoidance/elimination, mitigation, and/or offsetting of impacts.

AE2 ADVANCE AFFORDABILITY AND UNIVERSAL ACCESS

Includes mandatory indicators

Rationale

Intent

Ensure the service(s) provided by the project are affordable and accessible to all people within the communities it is intended to serve.

Metric

The extent to which the project provides affordable and accessible service(s) to all people within the communities it is intended to serve.

Description

This criterion focuses on two key aspects of PPP service delivery: affordability and accessibility.

It is not sufficient for a project to simply provide a service. The service needs to work (i.e., without unexpected interruption) on a daily basis and over the life of the project, and end users/customers need to be able to both afford and access it. If they cannot afford it, or if features of the project such as its design, location, or quality prevent its use, end users/customers are not benefiting from the service.

Nominal access is a term used to describe whether or not a household is connected to a service (e.g., water, electricity) but it does not account for whether or not this service can be effectively used. It is therefore important not only to measure nominal access, but also effective access which accounts for whether the service works as intended and whether or not it is affordable and able to be used by those it is intended to serve.

Examples illustrating the difference between nominal and effective access:

- Number of people with access to running water (nominal access) compared with the number of people with access to the project but who lack the ability to afford the service (effective access).
- Number of people in close proximity to transit (nominal access) compared with the number of people with proximity to the project but who are unable to use the project due to its design or timing of service delivery (effective access).

Often there is a significant gap between those with nominal access compared with those with effective access.

The following resource pertaining to nominal and effective access may be useful:

(i) Sumila Gulyani's article *Are you being served? The gap between effective and nominal access to infrastructure services*, September 2016, available here: https://blogs.worldbank.org/sustainablecities/are-you-being-served-gap-between-effective-and-nominal-access-infrastructure-services

This criterion encourages projects to consider both affordability and accessibility of the service(s) it provides to the greatest number of people and to explore ways in which to ensure services are affordable and accessible to all people, including those most isolated, disadvantaged and vulnerable, and to close the gap between nominal and effective access.

Affordability analyses, social impact assessments, needs assessments and/or poverty impact assessments are useful approaches to determining user affordability. The following resources pertaining to both affordability analyses and poverty impact assessments may be useful:

(i) The European PPP Expertise Centre's *Guidance on Affordability*, 2015, available here: https://www.eib.org/epec/g2g/i-project-identification/12/121/index.htm

(ii) OECD's *Ex ante Poverty Impact Assessment*, 2007, available here: https://www.oecd-ilibrary.org/docserver/9789264024786-27-en.pdf?expires=1594959245&id=id&accname=guest&checksum=3FAFCB658958DA9C650A179EFB7F33FD

(iii) Penelope Brook and Warrick Smith's paper *Improving Access to Infrastructure Services by the Poor: Institutional and Policy Responses*, October 2001, available here: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/Improving_Access_to-Infrastructure%20Services_by_Poor_2001_EN.pdf

There are many ways to address the issues of affordability and access, both through social policies and/or through the PPP pricing framework, i.e., implementing inclusive, tiered, or income-based pricing structures, and/or through government subsidies. To improve access, PPPs could consider implementing versatile payment options, the timing and flexibility of service delivery, as well as physical design considerations.

Applicability Aspects of this criterion are likely applicable to all PPP projects; as such, it would be difficult to demonstrate this entire criterion is not applicable to a PPP seeking to be recognised as a PPP for the SDGs. However, there may be some circumstances where there are no affordability and/or accessibility concerns whatsoever for any stakeholder that needs to be addressed. In those rare circumstances, projects may respond to the indicators as being not applicable. All projects are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

AE2.1 ***Affordability: Is the level of service provided by the project clearly identifying and addressing in a conservative manner the affordability capacity of the people that the project is intended to serve over the life cycle of the project, such that, inter alia:***

AE2.1.1 for a concessions PPP, the service provided by the project is and can be expected to remain reasonably affordable for the users including if necessary, through special rules for those most vulnerable and disadvantaged? [1] ***(*)***

AE2.1.2 for a government-pay PPP, the costs of the service provided by the project can be accommodated within the available public sector budget? [2] ***(*)***

AE2.1.3 in both cases, there are plans to monitor and regulate (giving due consideration to the maintenance of the project's economic and financial balance) the ongoing effectiveness of the affordability measures put in place by the project and to confirm that the costs of the service provided by the project are lower than the cost of the same service provided by the contracting authority under any other procurement form? [3]

[1] see online: Global Infrastructure Hub, Inclusive Infrastructure and Social Equity Tool, https://inclusiveinfra.gihub.org/action-areas/affordability-and-optimising-finance/

[2] see online: PPP Knowledge Lab, https://pppknowledgelab.org/guide/sections/34-assessing-fiscal-implications-of-a-ppp-project#passage-114

[3] for example, any measures put in place by the PPP to ensure users are able to continue to afford and access the service(s) provided.

Applicability: Projects for which there are no affordability concerns whatsoever may select 'not applicable' (N/A) as the response to this indicator and its sub-indicators.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator and its sub-indicators as "5-excellent", it is first important for the project to understand the concepts of nominal and effective access. Per the description of this criterion, it is not sufficient for a project to simply provide a service. The service needs to work, and end users/customers need to be able to both *afford* it.

"Nominal access" describes whether or not a household is connected to a service (e.g., water, electricity) but it does not account for whether or not this service can be effectively used. It is therefore important not only to measure "nominal access", but also "effective access" which accounts for whether the service works as intended and whether or not it is *affordable* and able to be used by those it is intended to serve.

Since this indicator is concerned primarily with *affordability*, the user needs to do the following:

AE2.1.1 (for a concessions PPP):

1. Undertake a preliminary assessment to understand the affordability issues facing the people that the project is intended to serve over the life cycle of the project so that the project can be structured and implemented in such a way as to be affordable for all, including those who need it the most (i.e., the most vulnerable, marginalised and economically disadvantaged groups). This could be done in a number of ways. For example, affordability issues could be assessed in a "Poverty Impact Assessment" "Affordability Analysis", "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment" that includes social considerations. The focus should not be on the title of the report or assessment, rather, the focus should be on its content, which is understanding the socio-economic factors of the host and affected communities, and how the project could impact these factors either positively or negatively. Socio-economic factors that should be considered include *inter alia*: the number of people who are living in poverty; those most at risk in terms of not being able to afford the service(s) the PPP will provide; and the impact(s) the PPP could have on poverty levels.

2. Develop draft or preliminary strategies, plans, measures or policies could be implemented to address poverty and the affordability needs of the people that the project is intended to serve over the life cycle of the project. Examples include *inter alia* inclusive, tiered, or income-based pricing structures, as well as government subsidies.

AE2.1.2 (for a government-pay PPP):

Assess whether the PPP is affordable, that is whether the costs of the PPP can be accommodated within the budget constraint of the government, based on a review of the primary budget surplus of the government and the aggregate indebtedness and off-budget liabilities. The costs of a PPP include its direct fiscal commitments and contingent liabilities. Useful guidance to assess the affordability of a PPP by the PPP Knowledge Lab can be found here: https://pppknowledgelab.org/guide/sections/34-assessing-fiscal-implications-of-a-ppp-project#passage-114

AE2.1.3 (for both, concessions PPPs and government-pay PPPs):

1. Make clear commitments to monitor and regulate the ongoing effectiveness of the affordability measures that will be put in place for the project (e.g., the measures to ensure users are able to continue to afford the service(s) provided throughout the life cycle of the project). Please note, PPPs are not required to monitor the effectiveness of any social policies that would be put in place by the government to help ensure affordability, rather, they would be required to monitor the effectiveness of the pricing framework put in place by the PPP. Such commitments should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

2. Confirm that the costs of the service provided by the project are lower than the cost of the same service provided by the contracting authority under any other procurement form, such as hybrid contracting modalities, an example being a Design, Build, Operate (DBO) contract.

A few resources were provided in the description section of this criterion which may be helpful when undertaking such an assessment:

(i) The European PPP Expertise Centre's *Guidance on Affordability*, 2015, available here: https://www.eib.org/epec/g2g/i-project-identification/12/121/index.htm

(ii) OECD's *Ex ante Poverty Impact Assessment*, 2007, available here: https://www.oecd-ilibrary.org/docserver/9789264024786-27-en.pdf?expires=1594959245&id=id&accname=guest&checksum=3FAFCB658958DA9C650A179EFB7F33FD

(iii) Penelope Brook and Warrick Smith's paper *Improving Access to Infrastructure Services by the Poor: Institutional and Policy Responses*, October 2001, available here: https://ppp.worldbank.org/public-private-

partnership/sites/ppp.worldbank.org/files/documents/Improving_Access_to-Infrastructure%20Services_by_Poor_2001_EN.pdf

This preliminary assessment and draft strategies/plans/measures/policies should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage

To rate this indicator and its sub-indicators as "5-excellent", the project must incorporate into the development stage the requirement that the project evidence affordability (as preliminarily assessed in the identification stage of the project). This means including the requirement of affordability in such development stage activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. This furthermore means:

AE2.1.1 (for a concessions PPP):

The project must be structured and implemented in such a way as to be affordable for all, including those who need it the most (i.e., the most vulnerable, marginalised and economically disadvantaged groups).

For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project will be affordable to the poor or other users and stakeholders; tender documents to condition qualification or responsive bidding upon the demonstration of the ability to deliver and operate the project in an affordable manner; and/or ensuring the project's conceptual technical, physical, and financial design is likely to result in a project that is affordable and usable by all.

Reference or source documents and/or their identification of the project's ability to be affordable over the life cycle of the project should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.

AE2.1.2 (for a government-pay PPP):

The project must be structured and implemented in such a way as to be affordable for all, including those who need it the most (i.e., the most vulnerable, marginalised and economically disadvantaged groups), and within the budget constraints of the government based on the assessment of the primary budget suprlus of the government and the aggregate indebtedness and off-budget liabilities, including the direct fiscal commitments and contingent liabilities.

AE2.1.3 (for both, concessions PPPs and government-pay PPPs):

The project must incorporate in the development stage clear commitments to monitor and regulate the ongoing affordability of the project. Such commitments which will ultimately be carried into contractual commitments and/or KPIs in the project should be included in tender documents, draft agreements, and other project materials.

Implementation stage

To rate this indicator and its sub-indicators as "5-excellent", the project must incorporate into the implementation stage the requirement that the project be implemented in an affordable manner (as preliminarily assessed in the identification stage and incorporated in the development stage of the project). This means including the requirement of affordability in such implementation stage activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. This furthermore means:

AE2.1.1 (for a concessions PPP):

The project must be constructed, operated, and implemented in such a way as to result in a project and service that is affordable for all, including those who need it the most (i.e., the most vulnerable, marginalised and economically disadvantaged groups).

For example, this could be done by requiring designers and contractors to take into consideration construction costs (and periodic changes, scope modifications, technical or equipment choices, etc.) that could impact the overall affordability of the project to users; incorporating affordability requirements into the project's contract performance indicators to measure and incentivize the operation of the facility or services in such a way as to remain affordable; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will remain affordable to all classes of users.

Reference or source documents and/or their identification of the project's ability to be affordable over the life cycle of the project should be incorporated into contractual documents and other performance requirements.

AE2.1.2 (for a government-pay PPP):
The project must be constructed, operated, and implemented in such a way as to be affordable for all, including those who need it the most (i.e., the most vulnerable, marginalised and economically disadvantaged groups), and within the budget constraint of the government based on the assessment and incorporation of the primary budget surplus of the government and the aggregate indebtedness and off-budget liabilities, including the direct fiscal commitments and contingent liabilities.

AE2.1.3 (for both, concessions PPPs and government-pay PPPs):
The project must incorporate the requirement the project have clear commitments to monitor and regulate the ongoing affordability of the project for all classes of users. Such commitments should be included including contractual documents and other performance requirements.

AE2.2 ***Accessibility: Is the level of service provided by the project clearly identifying and addressing the accessibility needs of the people the project is intended to serve over the life cycle of the project and taking into account various economic development scenarios, such that, inter alia:***

AE2.2.1 the service is provided by the project accessible by all users including those most vulnerable and disadvantaged? (*)

AE2.2.2 there are plans to monitor (through indicators and targets for both nominal and effective access) and regulate the ongoing effectiveness of the accessibility measures put in place by the project?

Applicability: Projects for which there are no accessibility concerns whatsoever may select 'not applicable' (N/A) as the response to this indicator and its sub-indicators.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator and its sub-indicators as "5-excellent", it is first important to understand the concepts of nominal and effective access. Per the description of this criterion, it is not sufficient for a project to simply provide a service. The service needs to work, and end users/customers need to be able to and *access* it.

"Nominal access" describes whether or not a household is connected to a service (e.g., water, electricity) but it does not account for whether or not this service can be effectively used. It is therefore important not only to measure "nominal access", but also "effective access" which accounts for whether the service works as intended and whether or not it is affordable and *able to be used* by those it is intended to serve. Since this indicator is concerned with *accessibility*, the user needs to do the following:

AE2.2.1:

1. Undertake a preliminary assessment to understand the accessibility needs and issues facing the people that the project is intended to serve over the life cycle of the project so that the project can be structured and implemented in such a way as to be accessible to all, including the most vulnerable, marginalised, and disadvantaged groups. This could be done in a number of ways. For example, accessibility needs could be ascertained through a "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment" that includes social considerations.

2. Develop draft or preliminary strategies, plans, measures or policies could be implemented to address the accessibility needs of the people that the project is intended to serve over the life cycle of the project. Examples include *inter alia* versatile payment options, the timing and flexibility of service delivery, as well as physical design considerations (e.g., to ensure elderly people, disabled people, and women are able to access the project as easily and effectively as younger people, able-bodied people, and men).

A few resources were provided in the description section of this criterion which may be helpful when undertaking such an assessment:

(i) The European PPP Expertise Centre's *Guidance on Affordability*, 2015, available here: https://www.eib.org/epec/g2g/i-project-identification/12/121/index.htm

(ii) OECD's *Ex ante Poverty Impact Assessment*, 2007, available here: https://www.oecd-ilibrary.org/docserver/9789264024786-27-en.pdf?expires=1594959245&id=id&accname=guest&checksum=3FAFCB658958DA9C650A179EFB7F33FD

(iii) Penelope Brook and Warrick Smith's paper *Improving Access to Infrastructure Services by the Poor: Institutional and Policy Responses*, October 2001, available here: https://ppp.worldbank.org/public-private-partnership/sites/ppp.worldbank.org/files/documents/Improving_Access_to-Infrastructure%20Services_by_Poor_2001_EN.pdf

This preliminary assessment and draft strategies/plans/measures/policies should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

A2.2.2:
As with the previous indicators, it is important to first understand the concepts of nominal and effective access. Below are examples illustrating the difference between nominal and effective access:

- Number of people with access to running water (nominal access) compared with the number of people with access to the project but who lack the ability to afford the service (effective access).
- Number of people in close proximity to transit (nominal access) compared with the number of people with proximity to the project but who are unable to use the project due to its design or timing of service delivery (effective access).

Often there is a significant gap between those with nominal access compared with those with effective access.

The following resource, pertaining to nominal and effective access, was provided in the description section of this criterion and is included again here for reference:

(i) Sumila Gulyani's article *Are you being served? The gap between effective and nominal access to infrastructure services*, September 2016, available here: https://blogs.worldbank.org/sustainablecities/are-you-being-served-gap-between-effective-and-nominal-access-infrastructure-services

To rate this sub-indicator as "5-excellent", the user needs to do the following:

1. Provisional indicators and targets for both nominal and effective access need to be developed based on the assessments conducted. Any assumptions, methodologies, and research used to establish the indicators and targets should be compiled by the user. Provisional indicators and targets, as well as draft strategies the project could implement to close the gap between nominal and effective access should be identified. This information should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

2. Clear commitments need to be made to monitor the ongoing effectiveness of the affordability and accessibility measures that will be put in place for the project (e.g., the measures to ensure users are able to continue to afford and access the service(s) provided throughout the life of the project). Please note, PPPs are not required to monitor the effectiveness of any social policies that would be put in place by the government to help ensure affordability, rather, they would be required to monitor the effectiveness of the pricing framework put in place by the PPP. Such commitments should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage

To rate this indicator and its sub-indicators as "5-excellent", the project must incorporate into the development stage the requirement that the project evidence nominal and effective access as identified in the identification stage of the project. This means including the requirement of accessibility in such development stage activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. This furthermore means:

AE2.2.1:
The project must be developed with the accessibility needs and issues facing the people incorporated into the project and the project developed in such a way as to be accessible to all, including the most vulnerable, marginalised, and disadvantaged groups. For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project will be accessible to the poor or other users and stakeholders, tender documents to condition qualification or responsive bidding upon the demonstration of the ability to deliver and operate the project in an accessible manner; and/or ensuring the project's conceptual technical, physical, and financial design is likely to result in a project that is accessible and usable by all.

Reference or source documents and/or their identification of the project's ability to be accessible to all users over the life cycle of the project should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.

A2.2.2:

The project must be developed with monitoring components that will regulate the ongoing effectiveness of the accessibility measures. For example, this could be done by identifying indicators and targets for both nominal and effective access and including them in feasibility studies and analysis to take into consideration whether the project will be accessible to all users, tender documents to condition qualification or responsive bidding on demonstration of the ability to deliver and operate the project in an accessible manner, and/or ensuring the projects conceptual technical, physical, and financial design is likely to result in a project that is accessible and usable by all.

Any assumptions, methodologies, and research used to establish the indicators and targets should be compiled and incorporated into project documentation, including tender documents, draft agreements, and other project materials.

Implementation stage

To rate this indicator as "5-excellent" the project must incorporate the requirement that the project is accessible into the project implementation which will include but not be limited to including the requirement in such activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

AE2.2.1:

The project must be implemented with the accessibility needs and issues facing the people incorporated into the project and the project implemented in such a way as to be accessible to all, including the most vulnerable, marginalised, and disadvantaged groups. For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that the project will be accessible to all; incorporating accessibility requirements in contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to be accessible and remain accessible; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will remain accessible throughout the project lifecycle.

Reference or source documents and/or their identification of the project's ability to be accessible to all users over the life cycle of the project should be incorporated into project documentation, including contractual documents and other performance requirements.

A2.2.2:

The project must be implemented with monitoring components that will regulate the ongoing effectiveness of the accessibility measures. For example, this could be done by requiring designers and contractors to take into consideration accessibility in the construction and commissioning of the project (and periodic changes, scope modifications, technical or equipment choices, etc.) that could impact the accessibility to all users; incorporating accessibility requirements into the project's contract performance indicators to measure and incentivize the operation of the facility or services in such a way as to remain accessible; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will remain accessible to all classes of users.

Any assumptions, methodologies, and research used to establish the indicators and targets should be compiled and incorporated into project documentation, including contractual documents and other performance requirements.

Reference and source documents and/or their identification of the project's ability to be accessible to all users over the life cycle of the project should be incorporated into contractual documents and performance requirements.

AE3 IMPROVE EQUITY AND SOCIAL JUSTICE

Rationale

Intent Ensure equity and social justice considerations are included within project processes and decision making.

Metric The extent to which social equity and justice considerations are included in project processes and decision making through the project.

Description Equity and social justice considerations include ensuring civil and human rights are respected, preserved, and protected and all persons are treated equally and without prejudice regardless of income, race, religion, gender, gender expression, sexual orientation, age, disability, marital status, etc. Such issues are important in the context of PPPs and infrastructure as projects often involve the provision of service(s), and may also deliver impacts (e.g., cost, pollution, consumption of resources, temporary or permanent disruptions).

Inequality in decision making and the distribution of service(s) and impact(s) can cause conflict, affect a project's social license to operate, and cause projects to fail. Equitable and socially just PPPs (i.e., PPPs that do not create or increase social disparities) are opportunities to enhance social cohesion which can lead to improved community resilience.

This criterion expands on AE2 Advance Affordability and Universal Access as it goes beyond affordability and access considerations to include a thorough examination of the historic context of equity, social justice and environmental justice, and how this context informs project identification, development, and implementation, including stakeholder engagement processes.

The term “affected community” refers to the local communities that are directly affected by the project, whereas the term “host community” refers to the specific community or communities in which the project resides. Together, “host and affected communities” refers to the project’s service area.

Projects that impact or have the potential to impact sovereign or self-governing peoples, need to pay special attention to how impacts might affect their autonomy, authority, and rights.

Applicability This criterion is applicable to all projects unless there are no opportunities to take into account and remedy the historic context of equity and social justice. Therefore, projects seeking to be recognised as PPPs for the SDGs are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

AE3.1 ***Is the historic context of equity and social justice being taken into account and remedied through the project?*** [1]

[1] Examples of a project correcting a historical injustice or imbalance include (but are not limited to): the provision or improvement of services to historically underserved communities; the removal of existing infrastructure that divided or created barriers within a community; correcting historic inequality where one community or sub-group within a community was disproportionately burdened with negative impacts while not receiving its fair share of the benefits; addressing historic socioeconomic trends in PPP development and implementation related to diversity and inclusion (that is, ensuring women are in positions of authority where they historically would have been excluded).

Applicability: Not all projects may have the potential to take into account and remedy the historic context of equity and social justice. If no such opportunities exist for the project, 'not applicable' (N/A) may be selected as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the user needs to undertake a preliminary assessment of the historic context of equity and social justice within the project's host and affected communities (i.e., the project's service area), with special consideration being given to the needs and issues of sovereign peoples, especially indigenous peoples (if applicable). This assessment goes beyond the assessments conducted with respect to affordability and access per criterion AE2 Advance Affordability and Universal Access. This criterion requires the team to consider the historic context of social equity and justice which needs to take into account a wide range of demographic data, gender equality, health data, income rate, education, level of historic infrastructure investment and any other relevant factors. To undertake such an assessment, formal community planning documents, and/or other socio-economic and demographic information/data or other related reports (such as those produced by governmental and/or non-governmental organisations) could be reviewed and analysed. In the absence of the availability of existing documentation, the user could undertake this assessment on their own for the project, in consultation with stakeholders (including the public). Such an assessment of social equity and justice considerations could be done as part of a larger "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment". The focus should not be on the title of the report or assessment, rather, the focus should be on its content, which is understanding the historic context of equity and social justice in the project service area to avoid exacerbating equity and social justice concerns and to identify any potential opportunities to rectify historical injustices. This preliminary assessment should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation. The user should take care to compile any source documents or other reference materials used to undertake this assessment.
Development stage
To rate this indicator as "5-excellent" the project must incorporate the requirement that the project evidence the historical context of equity and social justice in the jurisdiction (as preliminarily assessed and determined in the identification stage of the project) and that it is targeting to remedy such issues in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project addresses the historical context of equity and social justice in the jurisdiction and is targeted to remedy such issues; tender documents conditioning qualification or responsive bidding upon the demonstration of the ability to deliver the project such that it will address the historical context of equity and social justice in the jurisdiction and is targeted to remedy such issues; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way that it is likely to address the historical context of equity and social justice in the jurisdiction and remedy such issues. Reference or source documents and/or their identification of the project's ability to address the historical context of equity and social justice in the jurisdiction and remedy such issues should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.
Implementation stage
To rate this indicator as "5-excellent" the project must incorporate the requirement that the project evidence the historical context of equity and social justice in the jurisdiction (as preliminarily assessed and determined in the identification stage and incorporated in the development stage of the project) and that it is targeting to remedy such issues in such project implementation activities as the construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that the project addresses the historical context of equity and social justice in the jurisdiction and is targeted to remedy such issues; incorporating equity and social justice requirements in contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to address the historical context of equity and social justice in the jurisdiction and to target to remedy such issues; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the

project will address the historical context of equity and social justice in the jurisdiction and to target to remedy such issues.

Reference or source documents and/or their identification of the project's ability to address the historical context of equity and social justice in the jurisdiction and to target to remedy such issues should be incorporated into project documentation, including contractual documents and other performance requirements.

AE3.2 ***Is an Environmental and Social Impact Assessment being conducted notably to assess and mitigate the project's range of direct and indirect social impacts [1] it will have on the citizens and more particularly the host and affected people communities?***

[1] e.g., direct impacts on cultural, historical, recreational, or other resources and services resulting from the project and associated activities (e.g., staging, construction, operation, maintenance); impacts from independent secondary development or actions that may occur as a result of the project (e.g., new temporary or permanent housing developments, new formal or informal business districts, or other developments that occur outside of the PPP but are a result of the PPP being developed); indirect impacts on cultural, historic, recreational, or other resources or services important to the local community as identified through, for example, a stakeholder engagement and public participation process.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

This indicator builds on the previous indicator, AE3.1. To rate this indicator as "5-excellent", the user needs to undertake a an Environmental and Social Impact Assessment to assess and mitigate the project's range of potential direct and indirect social impacts the project could have on the citizens and more particularly the host communities and affected people (i.e., the project service area). This assessment could be done in conjunction with a "Stakeholder Needs Assessment" or "Environmental Impact Assessment" that includes social considerations (as many do, depending on the jurisdiction), or "Social Impact Assessment".

Direct and indirect social impacts include *inter alia*:

- direct impacts on cultural, historical, recreational, or other resources and services resulting from the project and associated activities (e.g., staging, construction, operation, maintenance);
- impacts from independent secondary development or actions that may occur as a result of the project (e.g., new temporary or permanent housing developments, new formal or informal business districts, or other developments that occur outside of the PPP but are a result of the PPP being developed);
- indirect impacts on cultural, historic, recreational, or other resources or services important to the local community as identified through, for example, a stakeholder engagement and public participation process.

The scope and level of effort of the assessment should take into account the type, scale, and location of the project and should be forward-looking to anticipate potential impacts associated with project activities such as staging, construction, operational and maintenance activities. Ideally the assessment will be developed based on a review of existing documents/resources available for the host communities and affected people and through a stakeholder engagement and public participation process.

The assessment should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation. The user should take care to compile any source documents or other reference materials used to undertake this assessment.

Development stage

To rate this indicator as "5-excellent" the project must incorporate the Environmental and Social Impact assessment (as developed in the identification stage of the project) and incorporate the requirement that the project evidence it is targeted to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project is targeted to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area; tender documents

conditioning qualification or responsive bidding upon the demonstration of the ability to deliver the project such that it will mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way that it is likely to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area.

Reference or source documents and/or their identification of the project's ability to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area should be incorporated into project documentation, including tender documents, draft agreements, and other project materials.

Implementation stage

To rate this indicator as "5-excellent" the project must incorporate the Environmental and Social Impact assessment (as developed in the identification stage of the project and incorporated in the development stage) and incorporate the requirement that the project evidence it is targeted to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done through constructing the infrastructure and/or commissioning the services in such a way that the project mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area; incorporating contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to mitigate the project's range of potential direct and indirect social impacts on the citizens; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will mitigate the project's range of potential direct and indirect social impacts on the citizens in the project service area.

Reference or source documents and/or their identification of the project's ability to mitigate the project's range of potential direct and indirect social impacts on the citizens and more particularly the host communities and affected people in the project service area should be incorporated into project documentation, including contractual documents and other performance requirements.

AE4 PLAN FOR LONG-TERM ACCESS AND EQUITY

Rationale

Intent Ensure access and equity is maintained throughout the project lifecycle.

Metric The extent to which impacts and needs to access and equity are evaluated and addressed throughout project identification, development, and implementation.

Description Many projects are planned to deliver services in an affordable, accessible, and equitable fashion but end up failing or falling short of achieving performance goals due to a lack of flexibility and adaptability in project development and implementation to respond to emerging trends, events, and changing socio-economic conditions.

Flexibility and adaptability are critical to a project's long-term success and ability to continue to deliver affordable, accessible, and equitable service over the life of the project. Flexibility and adaptability should be encouraged early on in project identification, and throughout development and implementation. Flexibility and adaptability should be included in project design, operations, and maintenance processes, and impacts on project performance in terms of affordability, accessibility, and equitability should be periodically reviewed and re-evaluated with the intention that the project is useful to successive generations of people.

In the context of this criterion, the terms flexibility and adaptability imply a diversity of potential solutions and the operational capacity and capability to adjust or change from one potential solution or response to another acceptable state in reaction to emerging trends, events, and changes in socio-economic conditions.

PPPs for the SDGs need to anticipate how needs, including changes to socio-economic conditions, could impact project performance in terms of affordability, accessibility, and equitability. It is therefore important that PPPs for the SDGs be structured and contracted in such a way to allow for sufficient flexibility and adaptability to respond to changing conditions such that project performance is not diminished over time.

Applicability This criterion is applicable to all projects seeking to be recognised as a PPP for the SDGs.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

AE4.1 ***Are potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability being evaluated?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the user needs to prepare a preliminary assessment for the project that specifically identifies and examines potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability. Previous assessments/analyses prepared for criteria AE1, AE2 and AE3 (e.g., "Poverty Impact Assessment" "Affordability Analysis", "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment") could be relied upon to inform the preparation of this preliminary "Risk Assessment". The project needs to consider the range of potential impacts to accessibility and equitability over the life of the project, and needs to develop a preliminary set of options, strategies, policies or other measures that could be put in place to eliminate, mitigate, or offset negative impacts. This assessment will be refined during the project development stage; however, it is important that a preliminary assessment be conducted as early on in the project identification stage as possible to gain an understanding of the potential issues that could arise over the life of the project from an accessibility and equitability perspective.

A thorough and comprehensive assessment is required for "4-very good" and "5-excellent", whereas an assessment conducted at a more basic level is required for the "3-satisfactory" rating.

This assessment of the findings contained therein should be included in the project prefeasibility study, PPP development strategy, concept document, or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must incorporate the assessment for the project that specifically identifies and examines potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability (as developed in the identification stage of the project) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project is taking into consideration the potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability; tender documents conditioning qualification or responsive bidding upon the demonstration of the ability to take into consideration the potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way that it is likely to take into consideration the potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability.

Reference or source documents and/or their identification and examination of potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability should be incorporated into project documentation, including tender documents, draft agreements, and other project materials. Previous assessments/analyses prepared for criteria AE1, AE2 and AE3 (e.g., "Poverty Impact Assessment" "Affordability Analysis", "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment") could be relied upon to inform the preparation of this identification and examination.

Implementation stage

To rate this indicator as "5-excellent" the project must incorporate the assessment for the project that specifically identifies and examines potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability t (as developed in the identification stage of the project and incorporated in the development stage) assessment in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to continue to identify and examine potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability; incorporating contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to continues to identify and examine potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project continues to identify and examine potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability .

Reference or source documents and/or their identification and examination of potential impacts to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability should be incorporated into project documentation, including contractual documents and other performance requirements. Previous assessments/analyses prepared for criteria AE1, AE2 and AE3 (e.g., "Poverty Impact Assessment" "Affordability Analysis", "Stakeholder Needs Assessment" or "Environmental and Social Impact Assessment") could be relied upon to inform the preparation of this identification and examination.

AE4.2 ***Is the project being designed, structured, developed, managed, or contracted (based on a contract template included in the tender documents) in such a way to:***

AE4.2.1 be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility, and equitability over the life cycle of the project?

AE4.2.2 share fairly project's benefits among stakeholders (the parties to the PPP contract as well as the users and affected communities) over the life cycle?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

AE4.2.1:

This sub-indicator builds on AE4.1, where the range of potential risks to project performance and economic and financial equilibrium over the project life cycle in terms of accessibility and equitability were identified. To rate this sub-indicator as "5-excellent", the project needs to commit to designing, structuring, developing, managing or contracting (based on a contract template included in the tender documents) the project in such a way to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project. Such commitments need to be made as the potential exists for needs to change over time.

In addition, the project needs to identify, at least at a preliminary level, ways in which the project could be designed, structured, developed, managed or contracted to be able to continue to anticipate needs to project performance in terms of affordability, accessibility, and equitability over the life cycle of the project.

Such commitments and preparatory work to identify ways in which the project could be designed, structured, etc. to anticipate needs should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

AE4.2.2:

To rate this sub-indicator as "5-excellent", the project needs to commit to share its benefits fairly among its stakeholders over its lifecycle.

Benefits can include:

- financial profits of the PPP;
- costs minimisation to the government or affected communities;
- reduction in negative externalities notably on the environment; and
- the measurable improvement of services, businesses, productivity, or efficiency deriving from the project.

The stakeholders of the PPP include the government, project sponsor, project operator, investors, suppliers, contractors, engineers, third parties, as well as the users and affected communities.

This can be achieved, *inter alia*, through the following:

- Ensure a fair and transparent selection process of the parties to the project (project sponsor, project operator, investors, suppliers, contractors, etc) through robust, open and competitive procurement;
- Structure appropriately the project with fair incentives to all parties and fair returns for risk takers through an appropriate contract, based on a contract template included in the tender documents;
- Undertake an *ex ante* evaluation of the expected benefits of the project on users and affected communities, including the most vulnerable.

Development stage

AE 4.2.1:

To rate this indicator as "5-excellent" the project must commit to designing, structuring, developing, managing or contracting the project in such a way to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project (as developed in the identification stage of the project) and include that requirement in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project is commiting to designing, structuring, developing, managing or contracting the project in such a way to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project; tender documents including the requirement that bidders commit to designing, structuring, developing, managing or contracting the project in such a way to be able to continue to anticipate and respond to potential future needs to project performance in

terms of affordability; and/or ensuring the project's conceptual design, structure, development, management or contract approach is developed in such a way to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project.

AE 4.2.2:
To rate this indicator as "5-excellent" the project must commit to commit to share its benefits fairly among its stakeholders over its lifecycle and include that requirement in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by requiring feasibility studies and analysis to take into consideration whether the project is committing to share its benefits fairly among its stakeholders over its lifecycle; tender documents including the requirement that bidders commit to share its benefits fairly among its stakeholders over its lifecycle; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way that it is likely to share its benefits fairly among its stakeholders over its lifecycle

Implementation stage

AE 4.2.1:
To rate this indicator as "5-excellent" the project must commit to designing, structuring, developing, managing or contracting the project in such a way to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project (as developed in the identification stage of the project) and include that requirement in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to be able to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project; incorporating contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to continue to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project continues to anticipate and respond to potential future needs to project performance in terms of affordability, accessibility and equitability over the life of the project.

AE 4.2.2:
To rate this indicator as "5-excellent" the project must commit to share its benefits fairly among its stakeholders over its lifecycle and include that requirement in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to share project benefits fairly among its stakeholders over its lifecycle; incorporating contract performance indicators that measure and incentivize the operation of the facility or services in such a way as to continue to share its benefits fairly among its stakeholders over its lifecycle; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project continues to share its benefits fairly among its stakeholders over its lifecycle.

AE4.3 ***Are monitoring and orderly contract adaptation mechanisms in place to ensure continued service delivery at acceptable performance levels over the life of the project?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to commit to including monitoring and orderly contract adaptation mechanisms as part of the project to ensure continued service delivery at acceptable performance levels over the life of the project.

In addition, the project needs to identify potential ways in which the project could continue to monitor project performance in terms of affordability, access, and equitability over its life or contract duration. In order to monitor whether or not the project is continuing to perform at acceptable levels (in terms of affordability, accessibility, and equitability), the project needs to draft a preliminary set of KPIs (key performance indicators)

with respect to project performance. These KPIs and associated monitoring mechanisms will likely be further refined in later stages of the project (i.e., during project development) but it is important for the project to draft potential KPIs and performance monitoring mechanisms as early on in project identification as possible, to ensure this is accounted for during project development and implementation. This information should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to including monitoring and orderly contract adaptation mechanisms as part of the project to ensure continued service delivery at acceptable performance levels over the life of the project (as identified in the identification stage of the project) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by taking into consideration the project's likely monitoring and adaptation mechanisms in feasibility studies and analysis; tender documents including the requirement that monitoring and orderly contract adaptation mechanisms will be part of the project to ensure continued service delivery at acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way that monitoring and orderly contract adaptation mechanisms may be incorporated into the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to including monitoring and orderly contract adaptation mechanisms as part of the project to ensure continued service delivery at acceptable performance levels over the life of the project (as identified in the identification stage and integrated in the development stage of the project) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to include monitoring and orderly contract adaptation mechanisms; incorporating contract performance indicators that work with the monitoring and orderly contract adaptation mechanisms so that the project can continue service delivery at acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project is monitored and adaptable to ensure continued service delivery at acceptable performance levels over the life of the project.

AE5 AVOID/MINIMISE AND MITIGATE PHYSICAL AND ECONOMIC DISPLACEMENT

Includes mandatory indicators

Rationale

Intent

Guarantee that any impact on people's homes or livelihoods is minimised and adequately compensated.

Metric

The extent to which projects avoid/minimise physical and economic displacement.

Description

Avoiding, minimising and mitigating displacement, whether physical or economic, formal or informal, permanent or temporary, is critical to guarantee human rights of affected people and communities and ultimately to ensure the success of projects.

Economic displacement is defined as displacement with significant social and economic impacts. The following resource pertaining to displacement, including physical and economic, may be useful:

- UNDP Social and Environmental Standards (SES), Standard 5: Displacement and Resettlement: https://info.undp.org/sites/bpps/SES_Toolkit/SitePages/Standard%205.aspx

When land acquisition is unavoidable, the physical and economic displacement process of PPP for the SDGs projects must follow the UN Basic Principles and Guidelines on Development-based Evictions and Displacement (2007):

- UN Basic Principles and Guidelines on Development-based Evictions and Displacement, United Nations Office of the High Commissioner for Human Rights: https://www.ohchr.org/Documents/Issues/Housing/Guidelines_en.pdf

Applicability

This criterion is applicable to all projects entailing any displacement, whether physical or economic, formal or informal, permanent or temporary. Projects seeking to be recognised as a PPP for the SDGs must address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

AE5.1 ***Is the land to be permanently acquired or temporarily used for the project being selected only for the unavoidable, exclusive and necessary needs of the project?***

Applicability: If there is no land acquisition involved as a result of the project, 'not applicable' (N/A) may be selected as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to undertake various planning processes including a census of affected people, inventory and valuation of affected assets, a socio-economic baseline survey, a review of all possible alternatives to site selection and project design. The project also needs to establish a cut-off date for eligibility and must provide affected people with well-documented and disseminated information in relevant local languages. The following resource pertaining to displacement, including physical and economic, may be useful: UNDP Social and Environmental Standards (SES), Standard 5: Displacement and Resettlement: https://info.undp.org/sites/bpps/SES_Toolkit/SitePages/Standard%205.aspx

Such processes should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must incorporate the census of affected people, inventory and valuation of affected assets, the socio-economic baseline survey, and the review of all possible alternatives to site selection and project design and include the information gained from those processes (as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the outcomes of such processes in feasibility studies and analysis; tender documents including the information gained from those processes to highlight that the land being acquired or used is clearly identified and delineated; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to stay within the bounds of land to be acquired or used for the project.
Implementation stage
To rate this indicator as "5-excellent" the project must incorporate the census of affected people, inventory and valuation of affected assets, the socio-economic baseline survey, and the review of all possible alternatives to site selection and project design and include the information gained from those processes (as identified in the identification stage and integrated in the development stage of the project) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur strictly within the identified and delineated land being acquired or used ; incorporating contract performance indicators that reinforce that work will occur strictly within the identified and delineated land being acquired or used; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project will occur strictly within the identified and delineated land being acquired or used.

AE5.2 ***Where land acquisition is unavoidable, is the physical and economic displacement process following the UN Basic Principles and Guidelines on Development-based Evictions and Displacement (2007)?[1] (*)***

[1] See online: United Nations Office of the High Commissioner for Human Rights, https://www.ohchr.org/Documents/Issues/Housing/Guidelines_en.pdf

Applicability: If there is no land acquisition involved as a result of the project, 'not applicable' (N/A) may be selected as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the public party needs to commit to adhering to the UN Basic Principles and Guidelines on Development-based Evictions and Displacement for the physical and economic displacement process resulting from the project. Commitments to adhere to the UN Basic Principles and Guidelines on Development-based Evictions and Displacement should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation. For example, to meet "3-satisfactory" must follow some of the UN Basic Principles and Guidelines on Development-based Evictions and Displacement, to meet "4-very good", the project must generally follow the UN Basic Principles and Guidelines on Development-based Evictions and Displacement, and to meet "5-excellent" the project must strictly follow the UN Basic Principles and Guidelines on Development-based Evictions and Displacement. The UN Basic Principles and Guidelines on Development-based Evictions and Displacement can be accessed online here: https://www.ohchr.org/Documents/Issues/Housing/Guidelines_en.pdf
Development stage

To rate this indicator as "5-excellent" the project must commit strictly to adhering to the UN Basic Principles and Guidelines on Development-based Evictions and Displacement in any physical and economic displacement process resulting from the project (as identified in the identification stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the requirements of the UN Basic Principles and Guidelines on Development-based Evictions and Displacement in feasibility studies and analysis; adding the requirement that physical and economic displacement monitoring will be part of the project's acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to meet the UN Basic Principles and Guidelines on Development-based Evictions and Displacement.
Implementation stage
To rate this indicator as "5-excellent" the project must commit strictly to adhering to the UN Basic Principles and Guidelines on Development-based Evictions and Displacement in any physical and economic displacement process resulting from the project (as identified in the identification stage and integrated in the development stage of the project) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to minimize the physical and economic disruption to citizens and be compliant with UN Basic Principles and Guidelines on Development-based Evictions and Displacement; incorporating contract performance indicators that work with monitoring and evaluation mechanisms and assess compliance with the UN Basic Principles and Guidelines on Development-based Evictions and Displacement; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project is monitored and adaptable to adhere to the UN Basic Principles and Guidelines on Development-based Evictions and Displacement over the life of the project.

Economic Effectiveness and Fiscal Sustainability (EE)

Economic effectiveness and fiscal sustainability refer to the project's contribution to economic growth and quality employment as well as the justification of the choice of a PPP contractual form over other procurement options involving private participation to public service delivery. It also stems from the project's ability to utilize efficiently all economic assets, generate a reasonable level of profitability from affordable tariffs while allowing in particular for government-pay PPPs sustainable budget and debt management by the public party, including off-balance sheet debt and contingent liabilities.

Because corruption is one of the biggest challenges to the achievement of PPPs for the SDGs, the UNECE has developed a Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ECE/CECI/WP/PPP/2017/4) which contains anti-corruption principles and recommendations specifically targeted toward PPPs. By implementing this standard, governments can put procedures and processes in place to lower the risk of corruption taking place, therefore building trust with all stakeholders involved in a project.

Four criteria and 17 related indicators are used to assess project performance against the Economic Effectiveness and Fiscal Sustainability outcome:

Economic Effectiveness and Fiscal Sustainability 4 criteria 17 indicators	EE1 AVOID CORRUPTION AND ENCOURAGE TRANSPARENT PROCUREMENT EE2 MAXIMISE ECONOMIC VIABILITY AND FISCAL SUSTAINABILITY EE3 MAXIMISE LONG-TERM FINANCIAL VIABILITY EE4 ENHANCE EMPLOYMENT AND ECONOMIC OPPORTUNITIES

EE1 AVOID CORRUPTION AND ENCOURAGE TRANSPARENT PROCUREMENT

Includes mandatory indicators

Rationale

Intent Prevent corruption and encourage open and transparent procurement processes.

Metric The extent to which procedures and processes are put in place to lower the risk of corruption and encourage open and transparent procurement.

Description Corruption and closed, non-transparent procurement processes present significant challenges to achieving PPPs for the SDGs. The United Nations Economic Commission for Europe has developed a standard called *UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement* (ZTC) which contains a set of anti-corruption principles and recommendations specifically targeted towards PPPs. The ZTC can be accessed online here: https://wiki.unece.org/display/pppp/Zero+Tolerance+Approach+to+Corruption+in+PPP+Procurement

According to the research presented in the ZTC, massive savings can be achieved by fighting corruption in public procurement processes. Each year, approximately USD 1 trillion is paid in bribes, and corruption in construction can add as much as 50 per cent to the total cost of a project.

Corruption disproportionately impacts the most impoverished and vulnerable people, undermines growth and prosperity, and affects the ability to achieve the SDGs. Therefore, it is imperative that PPPs for the SDGs protect against corruption and advance open and fair procurement throughout PPP project procurement.

There are three stages to PPP project procurement, and there are corruption risks across all three stages which must be addressed by PPPs for the SDGs.

Stage 1 broadly refers to the project identification stage (i.e., early stage in the project definition up to prefeasibility), where the public entity identifies the infrastructure problem to be resolved and determines what needs to be done to address it.

Stage 2 broadly refers to the project development stage (i.e., from feasibility study and tendering to signing and financial close) where the project is put out to tender and private partners have the opportunity to bid on the project.

Stage 3 broadly refers to the project implementation stage (i.e., construction, operations, and contract management over the project lifespan), where the project design and contractual commitments are crystallised, and long-term performance under the contract commences with ongoing contract management including potential penalties and remedies.

Applicability This criterion is applicable to all PPP projects. Any project seeking to be recognised as a PPP for the SDGs must address the mandatory indicators (marked with *) and projects are strongly encouraged to address all indicators included in this criterion. PPPs for the SDGs are encouraged to formally adopt the ZTC. While strict adherence to the ZTC is not required to achieve compliance, the principles contained therein must be generally followed.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

EE1.1 ***Is the project generally following or adhering to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) or the principles contained therein? (*)***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", a local legal regime that is substantially or fully aligned with the principles of the ZTC need to be in place. If such a legal regime is not presently in place, the public party needs to commit to adhering to the principles of the ZTC for project development and implementation. Commitments to adhere to the ZTC should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation. To meet "3-satisfactory" the project must follow some of the ZTC or the principles contained therein, to meet "4-very good", the project must generally follow the ZTC or the principles contained therein, and to meet "5-excellent" the project must strictly follow or formally adopt the ZTC. The ZTC can be accessed online here: https://wiki.unece.org/display/pppp/Zero+Tolerance+Approach+to+Corruption+in+PPP+Procurement
Development stage
To rate this indicator as "5-excellent" the project must follow or adhere to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) or the principles contained therein and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the requirements of the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles in feasibility studies and analysis; adding the requirement that the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein will be part of the project's acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to follow or adhere to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein.
Implementation stage
To rate this indicator as "5-excellent" the project must follow or adhere to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to follow or adhere to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein; incorporating contract performance indicators that follow or adhere to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project follows or adheres to the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) and the principles contained therein over the life of the project.

EE1.2 ***Are approvals of the project, PPP contract and private sponsor/shareholder being processed according to law[9] and in full transparency?***

[1] e.g., government approval under a proven legal framework, or special law enacted by parliament for a one-off project.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the private party needs to commit to processing approvals of the project, PPP contract, and private/sponsor shareholder according to law (e.g., government approval under a proven legal

[9] For example, government approval under a proven PPP legal framework, or special law enacted by parliament for a one-off project. This indicator is not an assessment of legality but rather an indication that the PPP legal framework was duly followed in the PPP approval process.

framework or special law enacted by parliament for a one-off project). Such commitments could be included in a written PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must incorporate and conduct approvals of the project, PPP contract and private sponsor/shareholder in accordance with the law and in full transparency, and incorporate and conduct such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating transparent approval requirements in feasibility studies and analysis; including transparent approval processes as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are approved according to the law and in full transparency.
Implementation stage
To rate this indicator as "5-excellent" the project must incorporate and conduct approvals of the project, PPP contract and private sponsor/shareholder in accordance with the law and in full transparency in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating transparent approval requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include transparent review and approval requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in accordance with the law and in full transparent approval processes over the life of the project.

EE1.3 ***Is the project being awarded transparently, namely:***

EE1.3.1 through an open and transparent competitive tender?

EE1.3.2 in the case of an unsolicited proposal or alternative approach devoid of competition, generally following the safeguards stipulated in the UNECE Standard on a Zero Tolerance Approach to Corruption in PPP Procurement (ZTC) or the principles contained therein?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
EE1.3.1: To rate this sub-indicator as "5-excellent", the project must establish a process for selecting the private party to the PPP that: • demonstrates fairness, transparency and competition, • is free of corruption and in compliance with applicable laws and regulations, and • seeks to guarantee a fair and reasonable outcome in terms of price, quality and risk sharing. **EE1.3.2:** To rate this sub-indicator as "5-excellent", a PPP awards process needs to be in place that follows the safeguards stipulated in the ZTC or the principles contained therein. If such a process is not already in place, the project needs to commit to establishing one. Such a process should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The ZTC can be accessed online here: https://wiki.unece.org/display/pppp/Zero+Tolerance+Approach+to+Corruption+in+PPP+Procurement
Development stage
EE1.3.1 To rate this indicator as "5-excellent" the project must conduct the process for selecting the private party in a way that: • demonstrates fairness, transparency and competition, • is free of corruption and in compliance with applicable laws and regulations, and

- seeks to guarantee a fair and reasonable outcome in terms of price, quality and risk sharing.

For example, this could be done by incorporating the requirement for a competitive process in feasibility studies and analysis and/or in the performance approvals over the life of the project and ensuring that they are free of corruption and in compliance with applicable laws and regulations; and/or ensuring the project's conceptual technical, physical, and financial design are subject to a competitive tender and meet the aforementioned requirements.

EE 1.3.2
To rate this indicator as "5-excellent" the project must establish and conduct a tender for unsolicited proposals according to a process that follows the safeguards stipulated in the ZTC and the principles contained therein. If such a process is not already in place, the project needs to commit to establishing one and conducting the tender in accordance with it.

For example, the project should incorporate a process that controls such project development activities as requiring a tender and competition for all unsolicited proposals, fairly interacting with all bidders both unsolicited and solicited, maintaining confidentiality and protecting intellectual property rights, structuring the legal and financial components fairly, and closing the transaction transparently, free from corruption, and in compliance with applicable laws and regulations.

Implementation stage

EE1.3.1
To rate this indicator as "5-excellent" the project must maintain the tender process and its outcomes throughout the implementation of the project in a way that:

- demonstrates fairness and transparency,
- is free of corruption and in compliance with applicable laws and regulations, and
- seeks to maintain a fair and reasonable outcome in terms of price, quality and risk sharing.

For example, this could be done by incorporating the outcomes of a competitive process in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that reflect the outcomes of the competitive process; and/or conducting periodic review and reasonable calibration of the services in the project agreements in accordance with the outcomes of the competitive process over the life of the project.

EE 1.3.2
To rate this indicator as "5-excellent" the project must maintain the competitive tender process outcomes for unsolicited proposals throughout the project's implementation and follow the safeguards stipulated in the ZTC and the principles contained therein during such project implementation activities as construction, commissioning, and operations and maintenance.

EE1.4 ***Is evidence of corruption or undue influence absent throughout the stages of PPP procurement (identification, development, and implementation)?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to commit to following a PPP procurement process through identification, development and implementation that is free from corruption.

Such commitments should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project needs to commit to following a PPP procurement process that is free from corruption and demonstrate this in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

Implementation stage

To rate this indicator as "5-excellent" the project needs to commit to following a PPP procurement process that is free from corruption and demonstrate this in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

EE1.5 ***Is the PPP the result of a structured negotiation process [1] resulting in a balanced contract (based on a contract template included in the tender documents)? [2]***

[1] e.g., involving experienced advisors.

[2] e.g., reference to UNECE List of Recommended Clauses in Concession Contracts, https://unece.org/fileadmin/DAM/ceci/documents/2018/PPP/WP/ECE_CECI_WP_PPP_2018_11-en.pdf

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to following a structured negotiation process to ensure the PPP results in a balanced contract (based on a contract template included in the tender documents). The use of experienced advisors is one way to ensure a structured process; however, it is not mandatory to use experienced advisors for this purpose, provided the outcome is the same. A "balanced contract" means *inter alia*, tariff affordability, and appropriate risk allocation between the public and private parties. Such commitments should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent", the project needs to commit to following a structured negotiation process in the tender of the project and ensure the PPP results in a balanced contract (based on a contract template included in the tender documents). Such commitments should be included and/or be taken into account in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.
Implementation stage
To rate this indicator as "5-excellent", the project needs to commit to maintain the outcomes of the tender's structured negotiation process during project implementation and ensure the PPP implemented in accordance with the balanced contract entered into in the development stage. . Such negotiation outcomes should be included and/or be taken into account in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

EE2 MAXIMISE ECONOMIC VIABILITY AND FISCAL SUSTAINABILITY

Includes mandatory indicators

Rationale

Intent

Ensuring an appropriate balance between economic growth and effective budget/debt management for the public party.

Metric

Value-for-money (VfM) assessments for the project and cost-benefit analysis for the public party, and "value-for-people" (VfP) assessment.

Description

PPPs for the SDGs need to be able to sustain the complex relationship between the public and private parties during the long-term contractual relationship.

In the context of this criterion, sustainability is a function of how balanced this public-private relationship is, ensuring an equitable allocation of costs/risks and rewards.

This criterion emphasises the need for the public party to derive economic benefits (including any increased tax collection induced by the project) that offset any budgetary burden, over and above what a publicly procured project would afford. It also emphasises the importance to deliver value-for-people by offering benefits to society and generating positive externalities over the life of the project.

Together with Criterion EE3 Maximise Long-term Financial Viability, this criterion represents a "suitability test" of the PPP mode of procurement. Should the evaluation not produce a positive outcome under both EE2 and EE3, the project should be adjusted to make it more suitable for PPP, or it should be executed under a classic public procurement.

For additional information and guidance on VfM and cost-benefit analyses, the following references may be useful:

(i) PPP Knowledge Lab's *Assessing Value for Money of the PPP*, available here: https://pppknowledgelab.org/guide/sections/54-assessing-value-for-money-of-the-ppp

(ii) European PPP Expertise Centre's *Value for Money Assessment: Review of approaches and key concepts*, March 2015, available here: https://www.eib.org/attachments/epec/epec_value_for_money_assessment_en.pdf

(iii) Australian Government's *National Public Private Partnership Guidelines: Volume 4: Public Sector Comparator Guidance*, December 2008, available here: https://www.infrastructure.gov.au/infrastructure/ngpd/files/Volume-4-PSC-Guidance-Dec-2008-FA.pdf

Women's empowerment is another key concept included in this criterion. PPPs for the SDGs should adhere to the following principles of women's empowerment throughout PPP identification, development and implementation:

- **project procurement** by *inter alia* giving preference to bidders who in their corporate policies and employment practices, promote gender quality and women's empowerment both inside and outside the enterprise;
- **project decision-making** by *inter alia* enhancing the role of women at senior decision-making levels inside companies that are undertaking PPPs as well as within the PPPs themselves;
- **entrepreneurship support and capacity building** by *inter alia* supporting women-led companies in the supply chain compete in tenders for projects;
- **occupational training and support** by *inter alia* providing skills development and training programmes to women, including young women, to become the business leaders of the future;
- **work flexibility** by *inter alia* offering women in their jobs flexible working practices such as telecommuting, part-time and/or flexible working hours to empower women to continue their jobs while having sufficient flexibility to attend to a range of other matters they are often required to attend to; and

- **equal pay for equal work** by paying women and men fairly and equally for the work they do.

Applicability This criterion is applicable to all PPP projects. Any project seeking to be recognised as a PPP for the SDGs must address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

EE2.1 ***Is the project delivering "value-for-people" meaning:***

EE2.1.1 the project is offering net tangible and intangible benefits to society by providing services to a consistently and verifiably higher standard? (*)

EE2.1.2 positive externalities are being generated over the life of the project in line with national strategy and programmes?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
EE2.1.1: To rate this sub-indicator as "5-excellent", the project needs to include specific objectives and/or commitments to deliver "value-for-people" related to the provision of tangible and intangible benefits to society, i.e., through the provision of objectively and verifiably high-quality service delivered consistently throughout the life of the contract. In addition, initial or preliminary metrics that will be used to evaluate the quality of the service over the life of the contract need to be developed, noting that such metrics will likely be further refined during the project development stage. When developing objectives/commitments related to the provision of tangible and intangible benefits to society through the provision of high-quality service, consider these examples: school infrastructure that leads to improved educational outcomes, hospital infrastructure and ongoing maintenance that leads to lower in-hospital infection rates, etc. Objectives/commitments need to be specific to the project, and should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation. **EE2.1.2:** To rate this sub-indicator as "5-excellent", the project needs to include specific objectives and/or commitments to deliver "value-for-people" related to the generation of positive externalities over the life of the project in line with national strategy and programmes. In addition, initial or preliminary metrics that will be used to evaluate the quality of the service over the life of the contract need to be developed, noting that such metrics will likely be further refined during the project development stage. A thorough cost benefit analysis including an assessment of positive and negative externalities needs to be developed to help select infrastructure projects and their output specifications that can maximise their intended benefits and that are in line with national strategy and programmes. Objectives/commitments need to be specific to the project, and should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
EE2.1.1: To rate this indicator as "5-excellent" the project must aim to provide tangible and intangible benefits to society and the provision of services at a consistently and verifiably higher standard (as identified in the identification stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating the requirement that the project provide tangible and intangible benefits to society and services at a consistently and verifiably higher standard in feasibility studies and analysis; adding the requirement that tangible and intangible benefits to society and services at a consistently and verifiably higher standard to the project's acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to deliver tangible and intangible benefits to society and services at a consistently and verifiably higher standard.

EE2.1.2:
To rate this indicator as "5-excellent" the project must aim to generate positive externalities over the life of the project in line with national strategy and programmes (as identified in the identification stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating the requirements of the project generating positive externalities over the life of the project in line with national strategy and programmes in feasibility studies and analysis; adding the requirement that the project generate positive externalities over its life as part of the project's acceptable performance levels; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to generate positive externalities over the life of the project in line with national strategy and programmes.

Implementation stage

EE2.1.1:
To rate this indicator as "5-excellent" the project must aim to provide tangible and intangible benefits to society and the provision of services at a consistently and verifiably higher standard (as identified in the identification stage and integrated in the development stage of the project) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to provide tangible and intangible benefits to society and services at a consistently and verifiably higher standard; incorporating contract performance indicators that measure whether the project provides tangible and intangible benefits to society and services at a consistently and verifiably higher standard; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project provides tangible and intangible benefits to society and services at a consistently and verifiably higher standard over the life of the project.

EE2.1.2:
To rate this indicator as "5-excellent" the project must aim to generate positive externalities over the life of the project in line with national strategy and programmes (as identified in the identification stage and integrated in the development stage of the project) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to to generate positive externalities over the life of the project in line with national strategy and programmes ; incorporating contract performance indicators that measure whether the project generates positive externalities over the life of the project in line with national strategy and programmes; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project generates positive externalities in line with national strategy and programmes over the life of the project.

EE2.2 ***Is the project generating positive "value-for-money" [1] meaning:***

EE2.2.1 the costs [2]net of benefits [3] of the selected PPP contractual model are lower vs. a modern public procurement model? [4] (*)

EE2.2.2 the project's cost/benefit analysis is favourable for the public party, comparing the amount of taxpayer's money required for the project and the economic benefits (including any upfront or annual fees from the project) that will accrue from the project's implementation?[10]

[1] value for money means achieving the optimal combination of benefits and costs in delivering services (applying an appropriate discount rate for the country, sector and nature of the project, for example, green infrastructure). See online: PPP Knowledge Lab, https://pppknowledgelab.org/guide/sections/54-assessing-value-for-money-of-the-ppp

[2] e.g., higher cost of funds and other externalities.

[3] e.g., fixed price certainty, shorter implementation period, higher design and technical standards applied, consistent maintenance, whole life costing of the project.

[4] such as Design and Build (DB) or Design, Build, Operate (DBO).

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
EE2.2.1: To rate this sub-indicator as "5-excellent", the project needs to conduct a value-for-money (VfM) analysis or, if such an analysis is unable to be completed during project implementation, the project must then make an explicit commitment to subject the project to a VfM analysis. For more information on VfM and cost-benefit analyses, consult the references included in the description section of the criterion (also included below for ease of reference): (i) PPP Knowledge Lab's *Assessing Value for Money of the PPP*, available here: https://pppknowledgelab.org/guide/sections/54-assessing-value-for-money-of-the-ppp (ii) European PPP Expertise Centre's *Value for Money Assessment: Review of approaches and key concepts*, March 2015, available here: https://www.eib.org/attachments/epec/epec_value_for_money_assessment_en.pdf (iii) Australian Government's *National Public Private Partnership Guidelines: Volume 4: Public Sector Comparator Guidance*, December 2008, available here: https://www.infrastructure.gov.au/infrastructure/ngpd/files/Volume-4-PSC-Guidance-Dec-2008-FA.pdf The completed value-for-money analysis and/or a commitment to subject the project to a value-for-money (VfM) analysis should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. **EE2.2.2:** To rate this sub-indicator as "5-excellent", the project needs to conduct a cost-benefit analysis that is favourable for the public party, which must include a comparison of the amount of taxpayer money required for the project and the economic benefits (including any upfront or annual fees from the project) that will accrue from the project's implementation. If such an analysis is unable to be completed during project implementation, the project must then make an explicit commitment to subject the project to a cost-benefit analysis. For more information on VfM and cost-benefit analyses, consult the references included in the description section of the criterion (also included below for ease of reference): (i) PPP Knowledge Lab's *Assessing Value for Money of the PPP*, available here: https://pppknowledgelab.org/guide/sections/54-assessing-value-for-money-of-the-ppp (ii) European PPP Expertise Centre's *Value for Money Assessment: Review of approaches and key concepts*, March 2015, available here: https://www.eib.org/attachments/epec/epec_value_for_money_assessment_en.pdf (iii) Australian Government's *National Public Private Partnership Guidelines: Volume 4: Public Sector Comparator Guidance*, December 2008, available here:

[10] See online: PPP Knowledge Lab, https://pppknowledgelab.org/guide/sections/55-assessing-fiscal-implications.

https://www.infrastructure.gov.au/infrastructure/ngpd/files/Volume-4-PSC-Guidance-Dec-2008-FA.pdf

The completed cost-benefit analysis and/or a commitment to subject the project to a cost-benefit analysis should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.

Development stage

EE2.2.1 and EE2.2.2

To rate these indicators as "5-excellent" the project must generate positive "value-for-money" meaning (EE2.2.1) the costs net of benefits of the selected PPP contractual model are lower vs. a modern public procurement models and (EE2.2.2) the project's cost/benefit analysis is favourable for the public party, comparing the amount of taxpayer's money required for the project and the economic benefits (including any upfront or annual fees from the project) that will accrue from the project's implementation, and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating the requirement for a value for money assessment assessing whether the PPP model would be lower than modern public procurement models and the cost/benefit analysis being favourable for the public party in feasibility studies and analysis; adding the VFM expectations as part of the project's acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to deliver VFM.

Implementation stage

EE2.2.1 and EE2.2.2

To rate these indicators as "5-excellent" the project must generate positive "value-for-money" meaning (EE2.2.1) the costs net of benefits of the selected PPP contractual model are lower vs. a modern public procurement models and (EE2.2.2) the project's cost/benefit analysis is favourable for the public party, comparing the amount of taxpayer's money required for the project and the economic benefits (including any upfront or annual fees from the project) that will accrue from the project's implementation, and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to deliver a value for money and a project that would be lower than modern public procurement models and the cost/benefit analysis remaining favourable for the public party; adding the VFM expectations as part of the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project deliver value for money and a project that would be lower than modern public procurement models and the cost/benefit analysis remaining favourable for the public party over the life of the project.

EE2.3 ***Are any budgetary impacts or revenues being transparently reflected in public accounts meaning:***

EE2.3.1 the fiscal sustainability of the PPP contract and creditworthiness of the public authority are being positively assessed? [1]

EE2.3.2 the burden of any direct payment, [2] ***the fiscal return to the public authority*** [3] ***and the potential burden of the debt from contingent liabilities are being openly disclosed to interested parties?*** [4]

[1] the multilateral tool "PPP Fiscal Risk Assessment Model – PFRAM" prepared jointly by the IMF and World Bank is designed to help countries enhance their infrastructure fiscal transparency and perform the quantitative assessment of the off-balance sheet sovereign debt resulting from privately financed infrastructure projects, including contingent liabilities. See online https://www.imf.org/external/np/fad/publicinvestment/pdf/PFRAM2.pdf

[2] availability payment or otherwise.

[3] e.g., from upfront and annual fees from the project as well as taxes accrued directly or indirectly from the project.

[4] contingent liabilities are usually involved in the case of sovereign guarantees and PPP contract clauses, such as clauses related to revenue thresholds or termination.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to transparently reflecting any budgetary costs in public accounts, meaning: **EE2.3.1:** a) Assessing the fiscal sustainability of the PPP contract; and b) Assessing the creditworthiness of the public authority; **EE2.3.2:** c) Openly disclosing to interested parties the burden of any direct payment (i.e., the availability payment), the fiscal return to the public authority (e.g., returns from taxes accrued directly or indirectly from the project) and the potential burden of the debt where contingent liabilities are involved in the event of PPP contract termination. Such commitments should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
EE2.3.1 To rate this indicator as "5-excellent" the project must commit to transparently reflecting any budgetary impacts or revenues in public accounts and assessing the fiscal sustainability of the PPP contract and creditworthiness of the public authority and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the requirement that budgetary impacts or revenues in public accounts and assessing the fiscal sustainability of the PPP contract and creditworthiness of the public authority in feasibility studies and project development analysis; adding fiscal sustainability as part of the project's acceptable performance levels over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to support the long term fiscal sustainability of the project should it be awarded. **EE2.3.2** To rate this indicator as "5-excellent" the project must commit to transparently reflecting any budgetary impacts or revenues in public accounts and openly disclosing the burden of any direct payment (i.e., the availability payment), the fiscal return to the public authority (e.g., returns from taxes accrued directly or indirectly from the project) and the potential burden of the debt where contingent liabilities are involved in the event of PPP contract termination. and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the anticipated budgetary impacts or revenues in feasibility studies and project development analysis; assessing and disclosing in feasibility studies the anticipated burden of any direct payment(s), fiscal returns, and contingent liabilities; and/or ensuring the project's conceptual technical, physical, and financial design is designed in such a way as to reflect the desired burden of direct payments, fiscal returns, and contingent liabilities should it be awarded.
Implementation stage
EE2.3.1 To rate this indicator as "5-excellent" the project must commit to transparently reflecting any budgetary impacts or revenues in public accounts and assessing the fiscal sustainability of the PPP contract and creditworthiness of the public authority and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to maintain the anticipated budgetary impacts or revenues and overall fiscal

sustainability of the PPP contract and maintenance of the public authority's creditworthiness; adding the fiscal sustainability to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project remains fiscally sustainable and does not negatively impact the public authority's creditworthiness over the life of the project.

EE2.3.2
To rate this indicator as "5-excellent" the project must commit to transparently reflecting any budgetary impacts or revenues in public accounts and openly disclosing the burden of any direct payment (i.e., the availability payment), the fiscal return to the public authority (e.g., returns from taxes accrued directly or indirectly from the project) and the potential burden of the debt where contingent liabilities are involved in the event of PPP contract termination. and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to openly disclose any contingent liabilities that have arisen; adding disclosure of the burden of any direct payment, fiscal returns, and contingent liabilities to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project maintains acceptable direct payment burdens, fiscal returns, and contingent liabilities over the life of the project.

EE2.4 ***Is the project maximising development impact and facilitating women's empowerment?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to explicitly commit to maximising the development impact of the project and to facilitating women's empowerment throughout the stages of the PPP (identification, development, and implementation). When developing such commitments, the following principles of women's empowerment need to be considered:

- **project procurement** by *inter alia* giving preference to bidders who in their corporate policies and employment practices, promote gender quality and women's empowerment both inside and outside the enterprise;
- **project decision-making** by *inter alia* enhancing the role of women at senior decision-making levels inside companies that are undertaking PPPs as well as within the PPPs themselves;
- **entrepreneurship support and capacity building** by *inter alia* supporting women-led companies in the supply chain compete in tenders for projects;
- **occupational training and support** by *inter alia* providing skills development and training programmes to women, including young women, to become the business leaders of the future;
- **work flexibility** by *inter alia* offering women in their jobs flexible working practices such as telecommuting, part-time and/or flexible working hours to empower women to continue their jobs while having sufficient flexibility to attend to a range of other matters they are often required to attend to; and
- **equal pay for equal work** by paying women and men fairly and equally for the work they do.

In addition to making explicit commitments to women's empowerment, the project needs to draft project objectives specifically related to maximising women's empowerment, noting that such objectives will likely be further refined during project development.

Also, the project needs to prepare a preliminary set of metrics that could be used to measure or evaluate the development impact of the project and the facilitation of women's empowerment, again noting such metrics will likely be further refined through project development.

Commitments, draft project objectives, and preliminary metrics relating to maximising the development impact of the project and the facilitation of women's empowerment should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must commit to commit to maximising the development impact of the project and to facilitating women's empowerment and incorporate such commitments and metrics (as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating women's empowerment requirements in feasibility studies and project development analysis; adding women's empowerment to the tender requirements and giving preference to bidders who in their proposed policies and practices will promote gender equality and women's empowerment; and/or adding women's empowerment requirements to the project's acceptable performance levels over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to commit to maximising the development impact of the project and to facilitating women's empowerment and incorporate such commitments and metrics (as identified in the identification stage and developed in the development stage) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to include the participation of women at acceptable levels; adding women's empowerment and participation to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project promotes gender equality and promotes the participation of women over the life of the project.

EE3 MAXIMISE LONG-TERM FINANCIAL VIABILITY

Rationale

Intent Ensuring the financial viability of the project, including its profitability, over the life of the project for the private party.

Metric Risk-reward analysis for the private party.

Description PPPs for the SDGs need to be able to sustain the inherent tensions between the public and private parties over the course of their long-term contractual relationship.

In the context of this criterion, sustainability is a function of how balanced this public-private relationship is, ensuring an equitable allocation of costs/risks and rewards.

This criterion emphasizes the need for the private party to receive adequate remuneration for its knowledge and capital (including both debt and equity invested) while assuming commensurate operational and investment risks.

There are many types of risks that should be considered in the context of PPPs, many of which may be deemed material risks to the project, including:

- Construction risks (e.g., construction cost overruns)
- Operations and maintenance risks (e.g., higher than expected operations and maintenance costs)
- Demand risks (e.g., the risk that the project will not be used by those it is intended to serve to the extent required)
- Collection risks (e.g., the risk that the project's end users or beneficiaries will not pay or will not be able to pay for the service)
- Inflation, currency, and exchange risks
- Security or other in-country risks that could impact the successful implementation of the project.

In PPPs, risks are either retained by the public party, transferred to the private party, or shared between the two parties. PPPs, especially PPPs for the SDGs, need to appropriately allocate risks between public and private partners. An appropriate risk allocation is when the party (public or private) that is more able to control a specific risk actually bears that risk in the contractual arrangement.

With respect to design risk measures, PPPs can mitigate design risks by specifying clear design requirements during the tender process to ensure the final design of the project meets the expectations of the public party, vs. outlining project objectives in tender documents and allowing the private party to develop a turnkey product at the end of the design process that may or may not be the solution the public party expected or intended.

Applicability This criterion is applicable to all PPP projects. Any project seeking to be recognised as a PPP for the SDGs are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

EE3.1 ***Is the project's private sponsor/shareholder of adequate technical, financial and reputational standing to successfully finance, implement, operate and maintain the project over its life, including having access to necessary resources to fulfil its contractual obligations under various economic scenarios and to adapt the services provided to the potentially evolving needs?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to explicitly commit to ensuring the project's private sponsor/shareholder will be of adequate technical, financial and reputational standing to:

a) successfully finance, implement, operate and maintain the project over its life, including having access to necessary resources to fulfil its contractual obligations under various economic scenarios; and
b) to adapt the services provided to the potentially evolving needs.

In addition, the project must also prepare a draft outline of qualification criteria.

Commitments and draft qualification criteria should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must commit to commit to selecting private sponsor(s)/shareholder(s) of adequate technical, financial and reputational standing to successfully finance, implement, operate and maintain the project over its life, including having access to necessary resources to fulfil its contractual obligations under various economic scenarios and to adapt the services provided to the potentially evolving needs and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating the requirement for adequate technical, financial and reputational standing of the private sponsor(s)/shareholder(s) in feasibility studies and project development analysis; adding adequate technical, financial and reputational standing to the tender requirements and giving preference to bidders who in their qualification and/or proposal materials demonstrate the same; and/or adding adequate technical, financial and reputational standing to the project's acceptable performance levels over the life of the project.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to maintaining private sponsor(s)/shareholder(s) of adequate technical, financial and reputational standing to successfully finance, implement, operate and maintain the project over its life, including having access to necessary resources to fulfil its contractual obligations under various economic scenarios and to adapt the services provided to the potentially evolving needs and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as the private sponsor(s)/shareholder(s) maintain adequate technical, financial and reputational standing; adding the private sponsor(s)/shareholder(s) maintenance of adequate technical, financial and reputational standing to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the private sponsor(s)/shareholder(s) maintain adequate technical, financial and reputational standing over the life of the project.

EE3.2 ***Are the revenues under the PPP contract [1] enabling the private partner to cover during the project life cycle operating and maintenance costs and to repay the capital invested including an agreed target Internal Rate of Return (IRR) commensurate with project's risk and reward profile? [2]***

[1] e.g., from tariffs, availability payments, or other sources.

[2] debt and equity, including interest and shareholder return as applicable.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to commit to ensuring the revenues under the PPP contract (e.g., from tariffs, availability payments, or other sources) will enable the private partner to cover during the project life cycle operating and maintenance costs and repay the capital invested including an agreed target Internal Rate of Return (IRR) commensurate with project's risk and reward profile (debt and equity, including interest and shareholder return as applicable to the project).

In addition, the project needs to identify potential sources of revenue for the private partner and the legal framework in which they will be handled. Examples include tariffs that are secured by an acceptable/credible

regulatory regime; payments made by the public authority are committed or guaranteed by an acceptable/credible counterpart such as a sovereign, special fund, or budget. Commitments, and the identification of potential sources of revenue, and the legal framework in which they will be handled, should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to developing the project so that the revenues under the PPP contract would enable the private partner to cover during the project life cycle operating and maintenance costs and to repay the capital invested including an agreed target Internal Rate of Return (IRR) commensurate with project's risk and reward profile and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating the requirement for adequate revenues and target IRRs under the PPP contract in feasibility studies and project development analysis; adding projected revenues, and estimated operating and maintenance costs to the tender materials; and/or adding projected revenue and IRRs to the project's acceptable performance levels over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to maintaining adequate revenues under the PPP contract such that the private partner can cover during the project life cycle operating and maintenance costs and to repay the capital invested including an agreed target Internal Rate of Return (IRR) commensurate with the project's risk and reward profile and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as manage costs and the investment necessary to ensure future returns will be sufficient to cover the cost of the investment; adding adequate revenues and IRRs to the project's acceptable performance levels over the life of the project to ensure operating and maintenance costs and capital investments are repaid; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure costs are manageable and returns are sufficient over the life of the project.

EE3.3 ***Are material risks [1] and rewards of the PPP being identified and appropriately mitigated,[2] allocated or shared (as the case may be) in the contract or in the underlying regulations for the PPP delivery form selected and sector?***

[1] material risks may include (but are not necessarily limited to):

- Construction risks (e.g., construction cost overruns);
- Operations and maintenance risks (e.g., higher than expected operations and maintenance costs);
- Demand risks (e.g., the risk that the project will not be used by those it is intended to serve to the extent required);
- Collection risks (e.g., the risk that the project's end users or beneficiaries will not pay or will not be able to pay for the service);
- Inflation, currency, and exchange risks; and
- Security or other in-country risks that could impact the successful implementation of the project.

[2] allocation i.e., between the public party, private party (including the engineering, procurement and construction contractor(s), the project sponsors and lenders.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project first needs to identify potential material risks and rewards of the project. Material risks may include *inter alia* construction risks (e.g., construction cost overruns); operations and maintenance risks (e.g., higher than expected operations and maintenance costs); demand risks (e.g., the risk that the project will not be used by those it is intended to serve to the extent required); collection risks (e.g., the risk that the project's end users or beneficiaries will not pay or will not be able to pay for the service); inflation,

currency, and exchange risks; security or other in-country risks that could impact the successful implementation of the project.

Once material risks have been identified, the project then needs to appropriately allocate, mitigate and share (as the case may be) them. In PPPs, risks are either retained by the public party, transferred to the private party, or shared between the two parties. PPPs, especially PPPs for the SDGs, need to appropriately allocate risks between public and private partners. *An appropriate risk allocation is when the party (public or private) that is more able to control a specific risk actually bears that risk in the contractual arrangement.* When allocating risks, it is important for the project to understand the rationale for each risk allocation. Material risks, and how they are allocated and shared, i.e., between the public party, private party (including the engineering, procurement and construction contractor(s)), the project sponsors and lenders (including rationale for each risk allocation) should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.

The project also needs to appropriately share its expected rewards between the project partners notably by offering to the private partner an expected rate of return that covers the cost of capital (both cost of equity and cost of debt raised to finance the project). The allocation of the expected rewards needs to be included the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must commit to developing the project with the material risks and rewards of the PPP (as identified in the identification stage) appropriately mitigated, allocated or shared (as the case may be) in the contract or in the underlying regulations for the PPP delivery form selected and sector and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating the identified risks and anticipated mitigation, allocation, and/or sharing of those risks in feasibility studies and project development analysis; adding the distribution of the risks and anticipated mitigation measures to the tender materials; and/or adding the material risks and rewards and their proposed mitigation, allocation, and/or sharing to the project agreement and acceptable performance levels over the life of the project.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to implementing the project with the material risks and rewards of the PPP (as identified in the identification stage and developed in the development stage) appropriately mitigated, allocated or shared (as the case may be) in the contract or in the underlying regulations for the PPP delivery form selected and sector and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as the risk mitigation, allocation and/or sharing is maintained; adding the risk allocation and mitigation approaches to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure project risk expectations are maintained and respectively mitigated, allocated, and/or shared over the life of the project.

EE4 ENHANCE EMPLOYMENT AND ECONOMIC OPPORTUNITIES

Includes mandatory indicators

Rationale

Intent

Support economic prosperity, including job creation and capacity building for as many local people as possible, including men and women, and in particular the poor and vulnerable.

Metric

The extent of job creation, capacity building, workforce diversity, and quality employment opportunities for local people.

Description

PPPs for the SDGs need to go beyond value-for-money (VfM); they need to include value-for-people (VfP), guaranteeing that benefits are locally accrued and widely shared amongst the local population, not only from a quantitative perspective (e.g., number of direct and indirect jobs created as a result of the project) but also from a qualitative perspective (e.g., capacity building, quality employment opportunities, workforce diversity).

A key characteristic that distinguishes PPPs for the SDGs from traditional PPPs is their ability to deliver VfP in addition to VfM.

This criterion addresses the degree to which the PPP expands employment opportunities; contributes to the knowledge, skills and capacity of the local workforce; improves the diversification of the workforce; and protects workers' rights.

Many concepts are introduced in this criterion which are briefly explored next.

Direct employment refers to jobs created directly by the PPP. This includes all workers directly recruited by the public and private entities to deliver and operate the project.

Indirect employment refers to jobs created throughout the supply chain, e.g., the suppliers of materials, technologies, equipment, tools, etc. to be used on the project.

Induced employment refers to jobs created in the economy as a result of the consumption effects on goods and services generated by households who are benefitting from direct and indirect employment as well as employment created by the economic activity induced by the project's implementation. They spend some of their income on goods and services in the economy, leading to induced economic effects.

Typically, direct, indirect, and induced employment is calculated in Full-Time Equivalent (FTE) or Whole Time Equivalent (WTE) years per million US dollars. FTE (or WTE) is a unit of measure that indicates the workload of a person. In some countries or regions, employees who are scheduled to work 40 hours per week are considered 1.0 FTEs, though the number of hours per week an employee is expected to work to be considered 1.0 FTEs can vary by country or region.

For additional information and guidance on direct, indirect, and induced employment, and how to calculate each, the following references may be useful:

(i) International Labour Office's *Employment Working Paper No. 178 The employment dimension of infrastructure investments: A guide for employment impact assessment*, 2015, available here: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/---invest/documents/publication/wcms_426586.pdf

(ii) International Labour Office's *Employment Policy Brief: Investment in Infrastructure – Assessment of Employment Outcomes Using Macro-Level Analysis: Approaches and Indicators*, 2016, available here: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_575722.pdf

For this criterion, quality jobs are jobs that are in line with the International Labour Office (ILO) Decent Work Indicators, a set of indicators that summarize the aspirations of people in their working lives, such as opportunities for productive work for which workers earn a fair income, workplace security and social protection, personal development opportunities, freedom

to organise and participate in decisions that affect their work, freedom to express concerns, and equal opportunity and treatment for both men and women.

For more information on the decent work indicators that provide a measure for quality jobs, refer to:

(i) International Labour Office's *Decent work indicators*, available here: https://www.ilo.org/integration/themes/mdw/WCMS_189392/lang--en/index.htm

Promoting diversity and inclusion in the workplace has been shown to have a strong impact on a project's (or organisation's) financial performance. Many studies have been undertaken, and reports and guides produced, to demonstrate the importance of diversity and inclusion in the workforce and in PPPs specifically, and how diversity and inclusion can be achieved. The following resources may be useful:

(i) International Labour Organisation's *Promoting diversity and inclusion through workplace adjustments: A practical guide*, November 2016, available here: https://www.ilo.org/global/topics/equality-and-discrimination/WCMS_536630/lang--en/index.htm
(ii) The World Bank's primer on *Gender Equality, Infrastructure and PPPs*, 2019, available here: https://library.pppknowledgelab.org/documents/5720/download
(iii) McKinsey & Company's *Why diversity matters* article, January 2015, available here: https://www.mckinsey.com/business-functions/organisation/our-insights/why-diversity-matters
(iv) McKinsey & Company's *Delivering through diversity* report, January 2018, available here: https://www.mckinsey.com/business-functions/organisation/our-insights/delivering-through-diversity#

Applicability This criterion is applicable to all projects seeking to be recognised as a PPP for the SDGs; therefore, all projects are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

EE4.1 ***Is the project creating a significant [1] number of new local jobs [2] during project identification, development, and implementation? [3] (*)***

[1] determining whether or not a project creates a 'significant' number of new jobs is somewhat subjective; however, significance in this instance is referring not only to the number of jobs directly created by the PPP (direct employment), but also the economic impact the new jobs will likely have on the local economy, and the duration of those new jobs. It also refers to the potential for indirect employment (jobs created throughout the supply chain) and induced employment (jobs created in the economy as a result of the consumption effects on goods and services generated by households who are benefiting from direct and indirect employment induced by the project). Significance should scale relative to the size of the project. (An example: 5 local jobs created during the identification phase, 15 (1:3) during the development phase, and 75 (1:15) during the implementation phase).

[2] local is relative to the project scale, and may be "state / provincial / territorial" or "national" for large projects or may be within the project service area only for smaller projects.

[3] need to take into account the productivity standards that are usually expected in private sector employment when assessing the number of jobs created by the project.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to identify the potential for job creation throughout the life of the project. Employment objectives need to be established for the project, as well as "local content requirements" (i.e., the number or percentage of jobs that have to be created locally, noting the definition of "local" depends on the project type, size and scale.) "Local jobs" could mean jobs created at the "state /

provincial / territorial" or even "national" level for large or very large projects or "local jobs" could mean jobs created within the host and affected communities (i.e., the project service area) for smaller projects.

Job estimates need to be prepared taking into account the productivity standards that are usually expected in private sector employment and should include:

- The number and type(s) of jobs the project expects to create at during each stage of the project (identification, development, implementation)
- Whether the jobs that will be created are considered "local" (based on the definition of "local" for the project) and provide a percentage (for example, of the 100 full-time that will be created during project development, 40 (or 40%) will be created locally)
- Whether the jobs are expected to be created directly or indirectly by the project, or whether they will be induced by the project. (In other words, the project needs to have an understanding of how jobs created will benefit the local economy, and to what extent.)

Key to undertaking this analysis is an understanding of the following terms:

Direct employment refers to jobs created directly by the PPP. This includes all workers directly recruited by the public and private entities to deliver and operate the project.

Indirect employment refers to jobs created throughout the supply chain, e.g., the suppliers of materials, technologies, equipment, tools, etc. to be used on the project.

Induced employment refers to jobs created in the economy as a result of the consumption effects on goods and services generated by households who are benefitting from direct and indirect employment as well as employment created by the economic activity induced by the project's implementation. They spend some of their income on goods and services in the economy, leading to induced economic effects.

When estimating the number of jobs the project will create, it is also important to *only count jobs that are considered "Full-Time Equivalent" or "Whole-Time Equivalent"*. FTE (or WTE) is a unit of measure that indicates the workload of a person. In some countries or regions, employees who are scheduled to work 40 hours per week are considered 1.0 FTEs, though the number of hours per week an employee is expected to work to be considered 1.0 FTEs can vary by country or region.

For additional information and guidance on direct, indirect, and induced employment, and how to calculate each, references were included in the description section for this criterion, and have been included again here for ease of reference:

(i) International Labour Office's *Employment Working Paper No. 178 The employment dimension of infrastructure investments: A guide for employment impact assessment*, 2015, available here: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/---invest/documents/publication/wcms_426586.pdf

(ii) International Labour Office's *Employment Policy Brief: Investment in Infrastructure – Assessment of Employment Outcomes Using Macro-Level Analysis: Approaches and Indicators*, 2016, available here: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_575722.pdf

Preliminary job estimates and their potential to impact the economy should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The project should take care to compile any source documents or reference materials used when preparing these estimates, and should also document any assumptions that were used when preparing the estimates.

Development stage

To rate this indicator as "5-excellent" the project must commit to developing the potential for job creation throughout the life of the project, including employment objectives and local content requirements, and incorporate such commitments and metrics (as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating employment objectives and local content requirements in feasibility studies and project development analysis; adding employment objectives and local content requirements to the tender requirements and giving preference to bidders who in their proposed policies and

practices will promote such job creation; and/or adding employment and local content requirements to the project's acceptable performance levels over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to developing the potential for job creation throughout the life of the project, including employment objectives and local content requirements, and incorporate such commitments and metrics (as identified in the identification stage and developed in the development stage) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as to create jobs and include employment objectives and local content requirements at acceptable levels; adding employment objectives and local content requirements to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project promotes job creation and realizes the employment objectives and local content requirements over the life of the project

EE4.2 ***Are quality jobs being created by the PPP that are in line with the ILO Decent Work Indicators?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the PPP needs to commit to creating quality jobs that are in line with the ILO Decent Work Indicators. In addition, the PPP needs to prepare potential strategies to achieve the Decent Work Indicators. Such commitments and strategies should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. For more information on the decent work indicators that provide a measure for quality jobs, refer to the following resource: (i) International Labour Office's Decent work indicators, available here: https://www.ilo.org/integration/themes/mdw/WCMS_189392/lang--en/index.htm
Development stage
To rate this indicator as "5-excellent" the project must commit to creating quality jobs that are in line with the ILO Decent Work Indicators and incorporate such commitments and metrics (as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating job quality and ILO Decent Work Indicators in feasibility studies and project development analysis; adding job quality and ILO Decent Work Indicators to the tender requirements and giving preference to bidders who in their proposed policies and practices will comply with such requirements; and/or adding job quality and ILO Decent Work Indicators requirements to the project's acceptable performance levels over the life of the project
Implementation stage
To rate this indicator as "5-excellent" the project must commit to creating quality jobs that are in line with the ILO Decent Work Indicators and incorporate such commitments and metrics (as identified in the identification stage and developed in the development stage) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring the construction of the infrastructure and/or commissioning the services to occur in such a way as the job quality and ILO Decent Work Indicators are met at acceptable levels; adding job quality and ILO Decent Work Indicators to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project meets job quality requirements and ILO Decent Work Indicators over the life of the project.

EE4.3 ***Is the project identifying skill or capability gaps in the local workforce and establishing targeted training and capacity building programmes towards groups [1] that face barriers to employment and upward mobility in the workplace?***

[1] e.g., economically depressed, underemployed, or disadvantaged communities, including women, ethnic and racial minorities, and other vulnerable groups that face barriers to employment and upward mobility.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to do the following:

a) Undertake a preliminary analysis of the skill or capability gaps within the local workforce (the same definition of "local" used in indicator EE4.1 should be used here for consistency). This analysis could be undertaken by reviewing the most recent city, regional and/or community development plans or other related reports/plans/studies (e.g., from governmental or non-governmental organisations operating in the area); and/or through a stakeholder engagement and public participation process where stakeholders (including the public) identify skill or capability gaps within the local workforce. (Compile any reference or source documents used when undertaking this analysis).
b) Establish potential training programmes (or ideas for training programmes) that will specifically target the identified skill or capability gaps. (For smaller projects for which it may be impractical to establish independent training programmes to close skill and capability gaps in the local workforce the project should investigate whether the public entity already has extensive or notable training programmes already in place, and/or should identify other organisations (governmental, non-profit, or non-governmental) organisations in the area that could provide the needed training programmes, and demonstrate a commitment to partner with them.)

The preliminary analysis and potential training programmes should be included in the project PPP development strategy, concept document, prefeasibility study or equivalent documentation.

c) Based on the preliminary analysis of the skill or capability gaps within the local workforce and the identification of potential training programmes, the project needs to explicitly commit to providing training, education, or skill development programmes that are specifically targeted towards economically depressed; underemployed or disadvantaged communities, including women, ethnic and racial minorities and other vulnerable groups that face barriers to employment and upward mobility.
d) In addition to making such commitments, the project should begin identifying strategies, plans, policies or other measures that could be implemented to ensure such groups receive training, education or skill development programmes. Preliminary targets should be established by the project as well during the project identification stage (e.g., the project estimates 100 women will participate in training, education or skill development programmes; the project will conduct 10 outreach events targeted towards underemployed persons in the host and affected communities to offer them an opportunity to participate in training, education or skill development programmes).

Commitments, strategies, plans, policies or other measures that could be implemented; and preliminary targets should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The project should take care to document any assumptions that were made, and compile any source documents or reference materials used.

Development stage

To rate this indicator as "5-excellent" the project must commit to developing analysis and potential training programmes and commit to providing training, education, or skill development targeted towards economically depressed, underemployed, and/or disadvantaged communities, including women, ethnic and racial minorities and other vulnerable groups that face barriers to employment and upward mobility (as identified in the identification stage), and include such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating training, education, or skill development requirements or programmes in feasibility studies and project development analysis; adding training, education, or skill

development requirements to the tender materials; and/or adding training, education, or skill development requirements to the project agreement and acceptable performance levels over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to developing analysis and potential training programmes and commit to providing training, education, or skill development targeted towards economically depressed, underemployed, and/or disadvantaged communities, including women, ethnic and racial minorities and other vulnerable groups that face barriers to employment and upward mobility (as identified in the identification stage and developed in the development stage), and include such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by requiring training, education, or skill development as part of the construction of the infrastructure and/or commissioning of the services; adding training, education, or skill development objectives and programme requirements to the project's acceptable performance levels over the life of the project; and/or allowing for periodic review and reasonable calibration of the services in the project agreements to ensure the project delivers training, education, or skill development opportunities over the life of the project

EE4.4 ***Are there plans and programmes, including key performance indicators (KPIs) being put in place to ensure diversity and inclusion in the workforce?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to subjecting the PPP contract to diversity requirements. Draft key performance indicators (KPIs) to measure diversity and inclusion in the workforce also need to be prepared, noting such KPIs will likely be further refined during project development. Commitments and diversity and inclusion KPIs should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. To better understand/appreciate diversity and inclusion, and the impact promoting diversity and inclusion can have on a project's (or organisation's) financial performance, the following resources may be useful: (i) International Labour Organisation's *Promoting diversity and inclusion through workplace adjustments: A practical guide*, November 2016, available here: https://www.ilo.org/global/topics/equality-and-discrimination/WCMS_536630/lang--en/index.htm (ii) The World Bank's primer on *Gender Equality, Infrastructure and PPPs*, 2019, available here: https://library.pppknowledgelab.org/documents/5720/download (iii) McKinsey & Company's *Why diversity matters* article, January 2015, available here: https://www.mckinsey.com/business-functions/organisation/our-insights/why-diversity-matters (iv) McKinsey & Company's *Delivering through diversity* report, January 2018, available here: https://www.mckinsey.com/business-functions/organisation/our-insights/delivering-through-diversity#
Development stage
To rate this indicator as "5-excellent" the project must commit to subjecting the PPP contract to diversity requirements and developing and/or including key performance indicators (KPIs) to measure diversity and inclusion in the workforce (as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to subjecting the PPP contract to diversity requirements and including key performance indicators (KPIs) to measure diversity and inclusion in the workforce (as identified in the identification stage and developed in the development stage) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

EE4.5 ***Are there commitments being made for the protection of workers' rights that include:***

EE4.5.1 women's rights?

EE4.5.2 non-discrimination?

EE4.5.3 prevention of violence and harassment in the workplace?

EE4.5.4 equal pay for equal work?

EE4.5.5 access to education and other essential services?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator and its sub-indicators as "5-excellent", the project needs to commit to subjecting the PPP contract to worker's rights protections (aligned with ILO guidance). "Worker's rights" must include all of the following: • women's rights (EE4.5.1); • non-discrimination (EE4.5.2); • prevention of violence and harassment in the workplace (EE4.5.3); • equal pay for equal work (EE4.5.4); and • access to education and other essential services (EE4.5.5). ILO guidance on this subject is available here: https://www.ilo.org/integration/themes/mdw/WCMS_189392/lang--en/index.htm Such commitments should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to subjecting the PPP contract to worker's rights protections (aligned with ILO guidance and as identified in the identification stage) in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to subjecting the PPP contract to worker's rights protections (aligned with ILO guidance and as identified in the identification stage and developed in the development stage) in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

Environmental Sustainability and Resilience (ES)

Environmental sustainability refers to the protection and preservation of the planet and is a basic requirement of sustainability. Acting to preserve biodiversity and to combat climate change and its impacts is integral to the successful implementation to the SDGs.

Resilience in relation to environmental matters refers to "the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and the restoration of its essential basic structures and functions through risk management" (United Nations International Strategy for Disaster Reduction, 2017).[11]

The UNECE has negotiated five environmental conventions, also known as Multilateral Environmental Agreements (MEAs).[12] Particularly, the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and its Protocol on Strategic Environmental Assessment, set out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. Additionally, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) aims to ensure the sustainable use of transboundary water resources by facilitating cooperation. It is complemented by the UNECE-WHO/Europe Protocol on Water and Health which provides a framework to translate into practice the human rights to water and sanitation and to implement SDG 6. Additionally, the Convention on Long-range Transboundary Air Pollution aims to improve air quality across sectors and national boundaries by providing access to data and information on the effects of air pollution and the Convention on the Transboundary Effects of Industrial Accidents helps Parties to prevent industrial accidents that can have transboundary effects and to prepare for, and respond to, accidents if they occur.

An important set of international references is published under the UNDP Social and Environmental Standards (SES),[13] aiming at determining, assessing and managing environmental and social risks in projects.

Five criteria and 15 related indicators are used to assess project performance against the Environmental Sustainability and Resilience outcome and should be addressed in the Environmental and Social Impact Assessment (ESIA) annexed to the feasibility study:

Environmental Sustainability and Resilience 5 criteria 15 indicators	ES1 REDUCE GHG EMISSIONS AND IMPROVE ENERGY EFFICIENCY ES2 REDUCE WASTE AND RESTORE DEGRADED LAND ES3 WATER CONSUMPTION AND WASTEWATER DISCHARGE ES4 PROTECT BIODIVERSITY ES5 ASSESS RISK AND PREPARE FOR DISASTER MANAGEMENT

[11] The Organization is now called the United Nations Disaster Risk Reduction (UNDRR).
[12] For more information, visit https://www.unece.org/env/treaties/welcome.html
[13] For more information, visit https://www.undp.org/publications/undp-social-and-environmental-standards-ses

ES1 REDUCE GHG EMISSIONS AND IMPROVE ENERGY EFFICIENCY

Includes mandatory indicators

Rationale

Intent

Reduce greenhouse gas (GHG) emissions and improve the energy efficiency of the project.

Metric

Quantitative reductions in greenhouse gas (GHG) emissions (measured in tonnes of carbon dioxide equivalents or tCO_2e), improvements in the energy efficiency of equipment, and improvements in the energy efficiency of any building/facility components.

Description

This criterion addresses the sustainability of the atmospheric environment which covers global warming and its wide-reaching impacts on land and water.

Two key issues are explored in this criterion:

1. Reducing greenhouse gas (GHG) emissions associated with the project
2. Improving the energy efficiency of the project per unit of output/service and the energy efficiency of any buildings/facilities included in the project.

Greenhouse Gas Emissions

Some 70 per cent of global GHG emissions come from infrastructure construction and operations such as energy plants (e.g., flaring gas without energy recovery) or the use of fuels in transport or wastewater treatment plants, solid waste dumps, and buildings. The increased release of CO_2 and other GHGs from these and other sources has caused a significant increase in the concentration of CO_2 in the atmosphere which enhances the greenhouse effect. Subsequent increases in the average temperature of the earth's surface causes a number of cascading effects, including (but not limited to) the loss of arctic sea ice and melting glaciers, sea level rise, increased ocean temperatures and acidification, changing vegetation patterns, desertification, changing precipitation patterns, more intense and frequent storms including flooding, and an increase in the range of disease vectors that have the potential to cause localized epidemics and global pandemics. Therefore, reducing GHGs is paramount to achieving the SDGs, and ensuring quality of life for generations to come.

This criterion encourages PPPs to implement strategies and practices to avoid or reduce greenhouse gas emissions (GHGs) as measured in tonnes of carbon dioxide equivalent (tCO_2e) emissions. In the context of this criterion, GHG emissions include:

- anthropogenic sources of CO_2 emissions such as burning fossil fuels, land use changes via agriculture and livestock, use of aerosols, the production of certain materials used in construction such as cement, etc.;
- methane (CH_4); and
- other GHGs and gases with high global warming potential such as nitrous oxide (N_2O), fluorinated gases (e.g., hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride) and ozone-depleting substances such as chlorofluorocarbons, hydrochlorofluorocarbons, and halons.

There are many ways to reduce GHG emissions, including but not limited to:

- developing low carbon infrastructure;
- the use of clean fuels;
- the use of renewable energy; and
- increasing the energy efficiency of all equipment used in the development and implementation of PPPs, as well as facilities (including buildings).

PPPs for the SDGs are required to measure reductions in GHG emissions (measured in tCO_2e) by comparing emissions to the global industry norm or widely recognised industry standards.

To achieve a reduction in GHG emissions, PPPs should set targets to reduce the use of energy (or fuel) for the same level of output or service at a project level through higher energy

efficiency of equipment and facilities. At a country level, energy intensity measured in terms of primary energy and gross domestic product (GDP) is a good measure.

To further reduce GHG emissions (e.g., unavoidable emissions from the project), projects are encouraged to incorporate a range of mitigation measures such as planting trees or using technologies/products capable of capturing GHG emissions generated by the project. The goal for PPPs for the SDGs is to close the gap as significantly as possible (e.g., getting as close to zero as possible) between the generation of GHG emissions and their capture.

For more information on climate change, analyses of impacts and future risks, options for adaptation and mitigation, and resources on how to calculate GHG emissions, the following resources may be useful:

(i) WRI and WBCSD's *GHG Protocol for Project Accounting (Project Protocol)*, 2004, available here: https://ghgprotocol.org/standards/project-protocol

(ii) UNEP's *The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations*, 2000, available here: https://www.unepfi.org/fileadmin/documents/ghg_indicator_2000.pdf

(iii) Anu Ramaswami's paper *Understanding Urban Infrastructure-Related Greenhouse Gas Emissions and Key Mitigation Strategies*, available here: https://www.lincolninst.edu/sites/default/files/pubfiles/urban-infrastructure-related-greenhouse-gas-emissions-mitigation-strategies_0.pdf

(iv) Asian Development Bank's *Guidelines for Estimating Greenhouse Gas Emissions of Asian Development Bank Projects: Additional Guidance for Transport Projects*, 2016, available here: https://www.adb.org/sites/default/files/institutional-document/219791/guidelines-estimating-ghg-emissions-transport.pdf

(v) Asian Development Bank's *Guidelines for Estimating Greenhouse Gas Emissions of Asian Development Bank Projects: Additional Guidance for Clean Energy Projects*, 2017, available here: https://www.adb.org/sites/default/files/institutional-document/296466/guidelines-estimating-ghg.pdf

(vi) World Bank Group's *Climate-Smart Healthcare: Low-Carbon and Resilience Strategies for the Health Sector*, 2017, available here: http://documents1.worldbank.org/curated/en/322251495434571418/pdf/113572-WP-PUBLIC-FINAL-WBG-Climate-smart-Healthcare-002.pdf

(vii) UCSUSA's *Clean Energy Opportunities in California's Water Sector*, 2015, available here: https://www.ucsusa.org/sites/default/files/attach/2015/04/clean-energy-opportunities-in-california-water-sector.pdf

Energy Efficiency

For facilities (including buildings), the simplest and most relevant way to classify a facility as 'energy efficient', is using the Energy Performance Index (EPI) or Energy Use Index (EUI) which are prevalent worldwide, or by using the Energy Performance of Buildings Directive (EPBD) as adapted in the European Union to member state standards, or other equivalent regulatory standard.

The EPBD is the total energy consumed in a building over a year divided by the total built-up area. It can be used as a better measure across similar classes of buildings, regardless of building size. This metric is preferred over other energy classifications for buildings (e.g., seven classes from A, B to G, with C representing a criterion based on current construction practices in new buildings, A and B representing 50-75% improvement and the remaining classes D to G being used to measure the performance of 'old' buildings that are performing poorer than C. Due to the varying environmental conditions resulting in varying use of energy for building heating, water heating, ventilation, air conditioning and lighting, and the availability of building materials in different countries, national norms for assessing the energy efficiency of different building types should be used.

Please note, in the context of the energy efficient indicators in this criterion, any one of these methods (EPI, EUI, EPBD or other equivalent regulatory standard) is acceptable. The method selected should be applicable/most commonly used in the country of the project location.

For more information on energy efficiency, and specifically EUI, EPI, and EPBD, the following resources may be useful:

(i) UNECE's *Mapping of Existing Technologies to Enhance Energy Efficiency in Buildings in the UNECE Region*, 2019, available here: https://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/study/Final_Master_file_-_March_11_final_submission.pdf

(ii) US Department of Energy's *A Comprehensive System of Energy Intensity Indicators for the U.S.: Methods, Data and Key Trends*, June 2017, available here: https://www.pnnl.gov/main/publications/external/technical_reports/pnnl-22267Rev2.pdf

(iii) Energy Star's *What is energy use intensity (EUI)?*, available here: https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/what-energy

(iv) European Commission's *Energy performance of buildings directive*, June 2020, available here: https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en

(v) International Energy Agency's *Perspectives for the Clean Energy Transition – The Critical Role of Buildings*, 2019, available here: https://webstore.iea.org/download/direct/2496

Applicability All PPPs would benefit from exploring ways in which to reduce GHG emissions and improve energy efficiency. It is unlikely that a PPP would have no impact on or opportunity to reduce GHG emissions from buildings and other facilities, emissions generated during construction and operations, and emissions from the transport of materials, goods and services. It is also unlikely that a PPP would have no impact on or opportunity to improve energy efficiency, whether through improving the energy efficiency of buildings and/or infrastructure such as airports, roads, railways, healthcare facilities, and water and wastewater treatment facilities. Therefore, projects seeking to be recognised as PPPs for the SDGs are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

ES1.1 ***Greenhouse gas emissions:***

ES1.1.1 Are the annual greenhouse gas emissions over the life of the project being calculated?

ES1.1.2 Is the project developing a plan/identifying strategies to reduce or offset greenhouse gas emissions over the life of the project? (*)

ES1.1.3 Is the project implementing measures to reduce (against the baseline) or offset greenhouse gas emissions [1] compared with global norms or widely recognised industry standards (including potentially seeking some form of certification)?

[1] measures to reduce greenhouse gas emissions may include but are not limited to planting trees to absorb CO2 equivalent emissions and/or implementing technologies or materials capable of capturing CO2 equivalent emissions generated by the project; replacing fossil fuels with renewable energy; using more energy efficient processes, technologies, and equipment, etc.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
ES1.1.1: To rate this sub-indicator as "5-excellent", the PPP needs to explicitly commit to calculating annual greenhouse gas (GHG) emissions over the life of the project. The project should also begin to identify relevant methodologies

and assumptions to be used when calculating GHG emissions. Such commitments and preparatory work should be included in the PPP development strategy, concept document or prefeasibility study.

For planning and preparatory purposes, the project needs to consider the full range of GHG emissions, including anthropogenic sources of CO_2 emissions such as burning fossil fuels, land use changes via agriculture and livestock, use of aerosols, the production of certain materials used in construction such as cement, etc.; methane (CH_4); and other GHGs and gases with high global warming potential such as nitrous oxide (N_2O), fluorinated gases (e.g., hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride) and ozone-depleting substances such as chlorofluorocarbons, hydrochlorofluorocarbons, and halons.

ES1.1.2:
To rate this sub-indicator as "5-excellent", the PPP needs to have a preliminary understanding of potential areas/activities to reduce or offset greenhouse gas (GHG) emissions, over the life of the project.

For example, the project could commit to using renewable energy (or increasing the percentage of renewable energy used on the project); planting trees that absorb and use carbon dioxide for their growth to offset emissions generated by the project; increasing the energy efficiency of any buildings/facilities as part of the project; adopting low-carbon purchasing policies that stipulate the use of recycled, reused, low-carbon, local materials; incentivising the use of public or mass transit options and/or carpooling and/or bicycle programmes for on-site workers and maintenance personnel to reduce emissions from automobile travel; etc.

Commitments to reduce or offset GHG emissions and any preparatory work to identify potential areas/activities to reduce GHG emissions, or to capture them over the life of the project should be included in the PPP development strategy, concept document or prefeasibility study.

ES1.1.3:
To rate this sub-indicator as "5-excellent", the PPP needs to have a preliminary understanding of potential areas/activities to reduce (against the baseline) or offset greenhouse gas (GHG) emissions on the project, .

Where possible, preparatory work should be undertaken to not only identify potential GHG reduction measures, but also estimate the reduction potential of each, with the goal being to focus efforts on the strategies that have the greatest potential to reduce emissions over the life of the project. The project must also have identified global norms or widely recognised industry standards (i.e., what are the global norms or industry standards in terms of GHG emissions for the type, size and scale of project). These norms or industry standards need to be investigated as they will be used as the "baseline" from which emissions on the project should be reduced. The project can also commit to seeking some form of environmental certification (e.g., the GHG Protocol Accounting and Reporting Standard, the CEEQUAL (Civil Engineering Environmental Quality Assessment), etc.)

Strategies that the project could commit to implementing to reduce GHG emissions include using renewable energy (or increasing the percentage of renewable energy used on the project); planting trees that absorb and use carbon dioxide for their growth to offset emissions generated by the project; increasing the energy efficiency of any buildings/facilities as part of the project; adopting low-carbon purchasing policies that stipulate the use of recycled, reused, low-carbon, local materials; incentivising the use of public or mass transit options and/or carpooling and/or bicycle programmes for on-site workers and maintenance personnel to reduce emissions from automobile travel; etc.

Commitments to reduce or offset GHG emissions and any preparatory work to identify potential areas/activities to reduce GHG emissions, or to capture them over the life of the project should be included in the PPP development strategy, concept document or prefeasibility study.

Additional resources:
A plethora of resources exist to help projects calculate GHG emissions and identify sector specific and general GHG emissions reductions strategies, including several that were presented in the description section of this criterion and included below for ease of reference:

(i) WRI and WBCSD's *GHG Protocol for Project Accounting (Project Protocol)*, 2004, available here: https://ghgprotocol.org/standards/project-protocol
(ii) UNEP's *The GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organisations*, 2000, available here: https://www.unepfi.org/fileadmin/documents/ghg_indicator_2000.pdf

(iii) Anu Ramaswami's paper *Understanding Urban Infrastructure-Related Greenhouse Gas Emissions and Key Mitigation Strategies*, available here: https://www.lincolninst.edu/sites/default/files/pubfiles/urban-infrastructure-related-greenhouse-gas-emissions-mitigation-strategies_0.pdf

(iv) Asian Development Bank's *Guidelines for Estimating Greenhouse Gas Emissions of Asian Development Bank Projects: Additional Guidance for Transport Projects*, 2016, available here: https://www.adb.org/sites/default/files/institutional-document/219791/guidelines-estimating-ghg-emissions-transport.pdf

(v) Asian Development Bank's *Guidelines for Estimating Greenhouse Gas Emissions of Asian Development Bank Projects: Additional Guidance for Clean Energy Projects*, 2017, available here: https://www.adb.org/sites/default/files/institutional-document/296466/guidelines-estimating-ghg.pdf

(vi) World Bank Group's *Climate-Smart Healthcare: Low-Carbon and Resilience Strategies for the Health Sector*, 2017, available here: http://documents1.worldbank.org/curated/en/322251495434571418/pdf/113572-WP-PUBLIC-FINAL-WBG-Climate-smart-Healthcare-002.pdf

(vii) UCSUSA's *Clean Energy Opportunities in California's Water Sector*, 2015, available here: https://www.ucsusa.org/sites/default/files/attach/2015/04/clean-energy-opportunities-in-california-water-sector.pdf

Development stage

To rate this indicator as "5-excellent" the project must commit to calculating annual greenhouse gas (GHG) emissions of the project over the life of the project (**ES1.1.1)** and having a preliminary understanding of potential areas/activities to reduce or offset GHG emissions of the project, including reducing emissions against the baseline (**ES1.1.2 and ES 1.1.3**) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating a requirement to calculate annual greenhouse gas (GHG) emissions of the project in feasibility studies and analysis and identify areas/activities to reduce or offset those emissions; including emissions reductions and/or offsets in the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed in such a way to reduce or offset GHG emissions.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to calculating annual greenhouse gas (GHG) emissions of the project over the life of the project (**ES1.1.1)** and having a preliminary understanding of potential areas/activities to reduce or offset GHG emissions of the project, including reducing emissions against the baseline (**ES1.1.2 and ES 1.1.3**) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating GHG reduction or offset approaches in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include annual measurement of GHG emissions and calculations of any reduction in emissions against the baseline requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure GHG reductions or offsets against the baseline over the life of the project.

ES1.2 ***Energy efficiency:***

ES1.2.1 Is the annual energy consumption of the project, per unit of output/service, being regularly calculated?

ES1.2.2 Is the project developing a plan/identifying strategies to improve the energy efficiency/reduce energy consumption of the project?

ES1.2.3 Is the project implementing measures to reduce energy consumption per unit of output/service compared to national norms?

ES1.2.4 Is the project improving the Energy Performance Index (EPI), the Energy Use Index (EUI) or meeting the EU Energy performance of buildings directive (EPBD) or other equivalent regulatory

standard of any facilities and/or buildings included in the project, as measured by the total energy consumed in a building/facility over a year divided by the total built-up area compared to national norms?

Applicability:

- Projects with no energy-consuming features (e.g., a park project with no lighting or other energy-consuming features) may select 'not applicable' (N/A) as the response to sub-indicators ES1.2.1 to ES1.2.3.
- Projects that do not include any facilities and/or buildings (e.g., parks with no buildings/facilities, or extensions of underground water conveyance infrastructure) may select 'not applicable' (N/A) as the response to sub-indicator ES1.2.4.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

ES1.2.1:

To rate this sub-indicator as "5-excellent", the PPP needs to explicitly commit to regularly calculating the annual energy consumption of the project, per unit of output/service. The project should also begin to identify relevant methodologies and assumptions to be used when calculating annual energy consumption, noting that any calculations should be presented in total kBTU, GJ, or KwH per unit of output/service and units must remain consistent.

Commitments to calculate the annual energy consumption of the project, per unit of output/service and any preparatory work to identify relevant methodologies and assumptions to be used should be included in the PPP development strategy, concept document or prefeasibility study.

ES1.2.2:

To rate this sub-indicator as "5-excellent", the PPP needs to explicitly commit to developing a plan and identifying strategies to improve the energy efficiency/reduce energy consumption of the project. The project must also have a preliminary understanding of strategies to improve the energy efficiency and/or reduce the energy consumption of the project. Where possible, preparatory work should be undertaken to not only identify potential energy efficiency/energy reduction measures, but also to estimate the reduction/efficiency potential of each, with the goal being to focus efforts on the strategies that have the greatest potential to reduce the energy consumption of the project over its life, and/or those strategies that have the greatest potential to improve the energy efficiency of the project over its life.

A plethora of resources are available that could help projects identify energy efficiency/energy reduction measures. Many were included in the description section of this criterion, which have been included below for ease of reference:

(i) UNECE's *Mapping of Existing Technologies to Enhance Energy Efficiency in Buildings in the UNECE Region*, 2019, available here: https://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/study/Final_Master_file_-_March_11_final_submission.pdf

(ii) US Department of Energy's *A Comprehensive System of Energy Intensity Indicators for the U.S.: Methods, Data and Key Trends*, June 2017, available here: https://www.pnnl.gov/main/publications/external/technical_reports/pnnl-22267Rev2.pdf

(iii) Energy Star's *What is energy use intensity (EUI)?*, available here: https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/what-energy

(iv) European Commission's *Energy performance of buildings directive*, June 2020, available here: https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en

(v) International Energy Agency's *Perspectives for the Clean Energy Transition – The Critical Role of Buildings*, 2019, available here: https://webstore.iea.org/download/direct/2496

Commitments to develop a plan and identify strategies to improve the energy efficiency/reduce energy consumption of the project and any preparatory work undertaken to identify potential energy efficiency/energy reduction strategies, along with their efficiency/reduction potential should be included in the PPP development strategy, concept document or prefeasibility study.

ES1.2.3:
To rate this sub-indicator as "5-excellent", the project would first need to meet the requirements of sub-indicators ES1.2.1 and ES1.2.2. In addition, the project needs to identify national norms (i.e., what are the national norms in terms of energy consumption per unit of output/service for the type, size and scale of project). These norms need to be investigated as they will be used as the "baseline" from which the project's energy consumption per unit of output/service shall be compared. This information should be included in the PPP development strategy, concept document or prefeasibility study.

ES1.2.4:
To rate this sub-indicator as "5-excellent", the project needs to do the following:

a) Commit to improving the Energy Performance Index (EPI), the Energy Use Index (EUI) or using the provisions in the EU Energy Performance of Buildings Directive (EPBD) or other equivalent regulatory standard to improve the energy performance of the buildings/facilities included in the project.
b) Undertake preparatory work to ascertain the most appropriate way to measure the energy efficiency of buildings/facilities on the project (i.e., EPI, EUI, EPBD), noting the method selected should be applicable/most commonly used in the country of the project location.
c) Identify the national norms to be used as the basis of comparison.
d) Undertake preparatory work to gain an understanding of some of the ways in which the project could improve the energy efficiency of buildings/facilities included in the project.

For more information on building/facility energy efficiency, several resources were included in the description section of this criterion, which have been included below for ease of reference:

(i) UNECE's *Mapping of Existing Technologies to Enhance Energy Efficiency in Buildings in the UNECE Region*, 2019, available here: https://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/study/Final_Master_file_-_March_11_final_submission.pdf
(ii) US Department of Energy's *A Comprehensive System of Energy Intensity Indicators for the U.S.: Methods, Data and Key Trends*, June 2017, available here: https://www.pnnl.gov/main/publications/external/technical_reports/pnnl-22267Rev2.pdf
(iii) Energy Star's *What is energy use intensity (EUI)?*, available here: https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/understand-metrics/what-energy
(iv) European Commission's *Energy performance of buildings directive*, June 2020, available here: https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en
(v) International Energy Agency's *Perspectives for the Clean Energy Transition – The Critical Role of Buildings*, 2019, available here: https://webstore.iea.org/download/direct/2496

These commitments and preparatory work should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to regularly calculating the annual energy consumption of the project, per unit of output/service (**ES 1.2.1**), developing a plan and identifying strategies to improve the energy efficiency/reduce energy consumption of the project (**ES 1.2.2**), based upon a baseline that reflects the national norms in terms of energy consumption per unit of output/service for the type, size and scale of project (**ES 1.2.3**), and specifically improving the energy performance of the buildings/facilities in the project using a similar methodology of identifying opportunities and setting a baseline against which to work (**ES 1.2.4**) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating baseline energy consumption calculations in feasibility studies and analysis against which the efficiency improvements can be measured; including energy consumption reductions for the project as a whole and/or for individual buildings/facilities as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to improve energy efficiency/reductions in energy consumption.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to regularly calculating the annual energy consumption of the project, per unit of output/service (**ES 1.2.1**), developing a plan and identifying strategies to improve the energy efficiency/reduce energy consumption of the project (**ES 1.2.2**), based upon a baseline that

reflects the national norms in terms of energy consumption per unit of output/service for the type, size and scale of project (**ES 1.2.3**), and specifically improving the energy performance of the buildings/facilities in the project using a similar methodology of identifying opportunities and setting a baseline against which to work (**ES 1.2.4**) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating energy efficiency/energy consumption reduction measures in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include energy efficiency/energy consumption reduction requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure the project meets target energy efficiency/energy consumption reduction over the life of the project.

ES2 REDUCE WASTE AND RESTORE DEGRADED LAND

Includes mandatory indicators

Rationale

Intent

Make use of unwanted waste and/or excess resources to work towards achieving a circular economy; reduce waste generation and safely dispose of all waste generated; and promote the use of degraded land and land restoration.

Metric

Exploration and incorporation of one or more circular economy processes; the reduction and safe disposal of generated solid waste; and the restoration of land equivalent to that degraded by the project within the project boundary.

Description

This criterion addresses the sustainable use of terrestrial (land) ecosystems and subterranean (below the surface of the earth) resources.

Three key concepts are explored in this criterion:

(i) Circular economy (e.g., through the beneficial use/reuse of waste and excess resources);
(ii) Solid (including hazardous) waste generation and disposal (also related to achieving a circular economy); and
(iii) Degraded land restoration.

<u>Circular Economy through the beneficial use/reuse of waste and excess resources</u>

This criterion encourages PPPs to critically reconsider whether unwanted waste or excess resources can be beneficially used/reused. Unwanted waste or excess resources could come in the form of waste materials, energy/heat, gas emissions, and/or effluent. (This concept could also be expanded to consider excess service capacity, workforce/management capacity, financial capacity, and land area/space capacity.).

Projects can work towards achieving a "circular economy" by *inter alia*:

- find and implement opportunities for unwanted waste or excess resources generated by the project to be beneficially used/reused by another project operating in the same (local) service area thereby reducing the quantity of waste disposed on land by the project; and/or
- find and implement opportunities to incorporate unwanted waste or excess resources produced by another project operating in the same (local) service area that could be beneficially used/reused by the project thereby reducing the first-use raw material inputs (material intensity) required by the project; and/or
- evaluate and reduce the material input per unit of service (MIPS) which can be used to measure the efficiency of materials of a product or service and can be applied to a single product to more complex systems.

Unwanted waste or excess resources is inherently inefficient. In a circular economy, everything has value; all excess resources are directed to local beneficial reuse. While true circular economies are very rare, every PPP has the potential to contribute towards the development and growth of circular economies by first investigating the potential for the beneficial reuse of unwanted waste and/or excess resources, and where such opportunities exist, taking advantage of them.

Part of achieving a circular economy is also evaluating the material intensity (MI) of a product or service, which is also referred to as material input per unit of service (MIPS).

The calculation of MIPS takes into account raw materials required to produce a product or provide a service over its whole lifecycle. It is measured in tons/person-kms for passenger transport or ton-kms as in freight transport by railways or roads, or tons/MWh electricity generation etc. This allows comparisons of resource consumption of different solutions to

produce the same output or service and helps to focus efforts on the most significant phases to reduce the environmental burden.

First-use raw material is a term that differentiates (and promotes) the use of recycled and reused materials, which are not considered first-use raw materials. The project's contribution to a positive reduction in raw material intensity will achieve sustainable management and efficient use of natural resources in a country.

For more information on MI and MIPS, and sustainable consumption and production practices, the following resources may be useful:

(i) Dr. H. M. Fani Cahyandito's paper *The MIPS Concept (Material Input Per Unit of Service): A Measure for an Ecological Economy*, January 2009, available here: https://www.researchgate.net/publication/242744964_The_MIPS_Concept_Material_Input_Per_Unit_of_Service_A_Measure_for_an_Ecological_Economy

(ii) Michael Ritthoff, Holger Rohn, and Christa Liedtke's paper *Calculating MIPS: Resource productivity of products and services*, 2002, available here: https://epub.wupperinst.org/frontdoor/deliver/index/docId/1577/file/WS27e.pdf

(iii) Christa Liedke, *et al* article *Resource Use in the Production and Consumption System—The MIPS Approach*, July 2014, available here: https://www.mdpi.com/2079-9276/3/3/544

(iv) Hui Li, *et al Environmental Impact Assessment of Transportation Infrastructure in the Life Cycle: Case Study of a Fast Track Transportation Project in China*, January 2019, available here: https://www.mdpi.com/1996-1073/12/6/1015

(v) UNEP's *Global Outlook on Sustainable Consumption and Production Policies*, 2012, available here: https://sustainabledevelopment.un.org/content/documents/559Global%20Outlook%20on%20SCP%20Policies_full_final.pdf

(vi) A. Gomes Correia, M.G. Winter and A.J. Puppala's *A review of sustainable approaches in transport infrastructure geotechnics*, 2016, available here: https://www.sciencedirect.com/science/article/pii/S221439121600012X

Waste (including Hazardous Waste) Generation and Disposal

This criterion encourages PPPs to identify waste streams or byproducts that will occur as a result of project operations and explore ways to first reduce the generation of such waste, and, for any waste that cannot be eliminated from project operations, work to divert it from landfill (or from disposal in water or air). Waste streams include solid waste (hazardous and non-hazardous), liquid waste (hazardous and non-hazardous) and particle and evaporated waste (hazardous and non-hazardous).

For solid waste, acceptable means of waste diversion include:

- Reducing the production of waste;
- Reusing or recycling materials on the project;
- Sending materials to recycling or reclamation facilities;
- Composting materials on site or sending materials to a composting facility;
- Applying biosolids on land (e.g., for agriculture); and
- Using materials, as appropriate, for infill.

Undesirable means of waste diversion include:

- Burning waste, unless it is sent to a reputable and certified high-efficiency waste-to-energy facility; and
- Burying waste in landfill.

Projects are first and foremost encouraged to reduce waste (including hazardous waste) generated per unit of output or service per year. For any waste that is generated, the PPP should then look for ways to divert waste from landfill using one or more acceptable means of waste diversion as specified above.

Please note that many of the waste diversion measures listed above may also count as "circular economy" processes.

Disposing of waste through environmentally sound management practices throughout the project lifecycle, can prevent land degradation, leachate run off to underground freshwater aquifers, and solid waste reaching surface water bodies.

Degraded Land Restoration

Land acquisition is a major requirement for many PPPs, including infrastructure projects. Where possible, PPPs should be located on previously developed land, ideally on land that is significantly degraded or considered to be a "brownfield". Greenfields (land not previously developed, or in their natural state) and areas of prime farmland should be avoided. This is because among other project activities, projects related to urbanisation and infrastructure development contribute to land degradation. This results in a decrease in the provision of terrestrial ecosystem services with far-reaching socioeconomic consequences, in terms of food and water insecurity and malnutrition. Therefore, to ensure food security and build resilience to drought and water stress, protection, restoration and sustainable management of land and soils is essential from a PPP for the SDGs perspective. SDG 15.3 focuses on the restoration of degraded land within the project area, therefore, for projects that have the opportunity to restore degraded lands, they should do so.

Two concepts are widely encouraged and adopted. The first is Land Degradation Neutrality (LDN) which refers to "a state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems". The second relates to Forest Land Restoration (FLR) which is the process of regaining ecological functionality and enhancing human well-being across deforested or degraded landscapes.

For more information on LDN, FLR and brownfields, the following resource may be useful:

(i) IUCN's publication *Reviving land and restoring landscapes - Policy convergence between forest landscape restoration and land degradation neutrality*, 2019, available here: https://portals.iucn.org/library/sites/library/files/documents/2019-028-En.pdf

(ii) The World Bank's guidance note *The Management of Brownfields Redevelopment*, March 2010, available here: http://documents1.worldbank.org/curated/en/754171468295822120/pdf/550090WP0P118011PUBLIC10brownfields.pdf

Applicability All PPPs would benefit from exploring ways in which to beneficially reuse unwanted waste and/or excess resources, reduce solid waste generation and disposal, and utilise previously developed land (or barren or degraded land that is unfit as farmland). Therefore, projects seeking to be recognised as PPPs for the SDGs are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

ES2.1 ***Circular economy:*** [1]

ES2.1.1 Is the project investigating the potential to utilise unwanted waste and/or excess resources from another local project [2] ***or by finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources?*** [3] ***(*)***

ES2.1.2 Is the material input per unit of service (MIPS) for the project being calculated, and is the project reducing the raw material intensity of materials compared to national norms?

ES2.1.3 Is the project preparing an operational waste management plan, which addresses the reduction of waste [4] ***(including hazardous waste) over the life of the project?***

ES2.1.4 Is the project reducing waste generation (including hazardous waste) per unit of output or service per year compared to the national industry norm?

ES2.1.5 For any waste generated by the project (after reduction measures have been incorporated), is the project reducing the diversion of waste (including hazardous waste) to a landfill per unit of output or service per year compared to the national industry norm?

[1] in the context of this indicator, circular economy processes include the beneficial use/reuse of "unwanted waste" or "excess resources". Unwanted waste or excess resources include waste or excess materials, energy/heat, gas emissions, and/or effluent (and could also be expanded to consider excess service capacity, workforce/management capacity, financial capacity, and land area/space capacity). A circular economy can be achieved, at least in part, by finding a beneficial use/reuse for the project's waste or excess resources and/or the project's beneficial use/reuse of external waste or excess resources (that is, from another project operating in the same (local) service area).

[2] for example, within the project's service area.

[3] projects whereby all or the majority of unwanted waste and/or excess resources are beneficially used/reused (for example, a fully integrated closed-loop organics waste management system that processes unwanted garden/yard and home/industrial kitchen waste from a city into biomethane gas which is then used to fuel the city's fleet of service and waste collection vehicles, and a compost product suitable for agricultural and/or landscaping purposes) would be considered true "circular economy" projects, compared with projects that contribute to a circular economy through the short-term or one-time use of unwanted "waste" materials, (for example, a project that incorporates fly ash from a nearby coal-fired plant into concrete used during its construction).

[4] that is, the reduction of solid waste generation and disposal on land, the reduction of particle and evaporated waste generation and disposal in air, and the reduction of liquid waste generation and disposal in water. In all instances, "waste" refers to both hazardous and non-hazardous waste.

Applicability:

- If the project does not produce waste, the project may select 'not applicable' (N/A) as the response to sub-indicator ES2.1.1; however, a response of "N/A" for this sub-indicator is anticipated to be rare or extremely unlikely, given that most if not all projects use materials/resources and produce waste.
- Healthcare projects are exempt from responding to sub-indicator ES2.1.2 and may therefore select 'not applicable' (N/A) as the response. However, this indicator is applicable to all other projects that include buildings (e.g., offices, homes, schools, etc.) and/or infrastructure components (e.g., roads, railways, ports, water/wastewater treatment facilities, etc.).
- Projects that do not directly generate solid waste and/or hazardous waste during operations and maintenance may select 'not applicable' (N/A) as the response to sub-indicators ES2.1.3 to ES2.1.5. Please note, these sub-indicators are focused on operational and maintenance waste only.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
ES2.1.1: To rate this sub-indicator as "5-excellent", the project needs to commit to investigating the potential to utilise unwanted waste and/or excess resources from another local project or to finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources. In addition, the project should begin to undertake preparatory work/analyses to begin identifying and investigating any potential opportunity for the above-mentioned. In the context of this sub-indicator, the beneficial use/reuse of "unwanted waste" or "excess resources" which can include any or all of the following: • waste or excess materials, • waste or excess energy/heat, • waste or excess gas emissions, • waste or excess effluent, • excess service capacity (i.e., within the project's service area),

- excess workforce/management capacity (i.e., within the project's service area)
- excess financial capacity, and
- excess land area/space capacity.

Projects wishing to achieve a higher rating (i.e., "5-excellent" or "4-very good") need to ensure their commitments lead to a *comprehensive investigation*, rather than basic or high-level or more general commitments that would lead to a more *basic or preliminary investigation*.

(A basic or preliminary investigation might mean exploring only one or two options to utilise unwanted waste and/or excess resources from another local project or to finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources and/or for a short period of time (e.g., using waste or excess materials during construction only). A more comprehensive investigation of circular economy processes might mean exploring a range of options (i.e., looking at the potential for using waste or excess materials, as well as exploring the potential to use excess service capacity, workforce and management capacity, financial capacity, etc.) and/or over the life of the project (i.e., waste from a nearby facility is used throughout project operations).

If the project is being *conceived as a true circular economy project*, whereby all or the majority of unwanted waste and/or excess resources shall be beneficially used/reused, the project is in a position to achieve the "5-excellent" rating and should respond to this indicator accordingly.

Commitments to investigate the potential to utilise unwanted waste and/or excess resources from another local project or to finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources, should be included in the PPP development strategy, concept document or prefeasibility study.

ES2.1.2:
To rate this sub-indicator as "5-excellent", the project needs to commit to calculating the material input per unit of service (MIPS) for the project. Committing to undertaking this calculation is an important first step for the project to be able to reduce the raw material intensity of materials on the project compared to national norms. Committing to undertaking this calculation is commensurate with the "4-very good" rating. For most projects in the identification stage, "4-very good" is likely the highest rating possible, since "5-excellent" requires an actual reduction of the raw material intensity of materials on the project compared to national norms.

However, if the project is able to complete a preliminary calculation of MIPS for the project during the identification stage, and if it is able to identify opportunities to reduce the raw material intensity of materials on the project compared to national norms, then "5-excellent" can be achieved during this stage of the project and the project should respond to this indicator accordingly.

A number of resources pertaining to material intensity (MI) and material input per unit of service (MIPS) were included in the description section of this criterion, and are included again here for ease of reference:

(i) Dr. H. M. Fani Cahyandito's paper *The MIPS Concept (Material Input Per Unit of Service): A Measure for an Ecological Economy*, January 2009, available here: https://www.researchgate.net/publication/242744964_The_MIPS_Concept_Material_Input_Per_Unit_of_Service_A_Measure_for_an_Ecological_Economy

(ii) Michael Ritthoff, Holger Rohn, and Christa Liedtke's paper *Calculating MIPS: Resource productivity of products and services*, 2002, available here: https://epub.wupperinst.org/frontdoor/deliver/index/docId/1577/file/WS27e.pdf

(iii) Christa Liedke, *et al* article *Resource Use in the Production and Consumption System—The MIPS Approach*, July 2014, available here: https://www.mdpi.com/2079-9276/3/3/544

(iv) Hui Li, *et al Environmental Impact Assessment of Transportation Infrastructure in the Life Cycle: Case Study of a Fast Track Transportation Project in China*, January 2019, available here: https://www.mdpi.com/1996-1073/12/6/1015

(v) UNEP's *Global Outlook on Sustainable Consumption and Production Policies*, 2012, available here: https://sustainabledevelopment.un.org/content/documents/559Global%20Outlook%20on%20SCP%20Policies_full_final.pdf

(vi) A. Gomes Correia, M.G. Winter and A.J. Puppala's *A review of sustainable approaches in transport infrastructure geotechnics*, 2016, available here: https://www.sciencedirect.com/science/article/pii/S221439121600012X

Commitments to calculate MIPS and any work completed to calculate MIPS and reduce the raw material intensity of materials on the project should be included in the PPP development strategy, concept document or prefeasibility study.

ES2.1.3:
To rate this sub-indicator as "5-excellent", the project needs to commit to developing an operational waste management and reduction plan which addresses the reduction of waste (including hazardous waste) over the life of the project.

When preparing commitments to develop such a plan, the project needs to consider the comprehensiveness of the plan it aims to develop and implement during the life of the project. The *detail and comprehensiveness of the plan* is what distinguishes different rating options of this indicator.

A *detailed/comprehensive plan* would, for instance, be *at least* compliant with the national environmental regulations but ideally go beyond such regulations, especially if national regulations are weak or not enforced as well as they could or should be. Furthermore, a *detailed/comprehensive plan* would also address the full range of waste streams generated by the project over its life (e.g., waste generated as a result of project operations and maintenance) such as:

- solid waste generation (including hazardous solid waste generation) and disposal on land,
- particle and evaporated waste generation (including hazardous particle and evaporated waste generation) and disposal in air, and
- liquid waste generation (including hazardous liquid waste generation) and disposal in water.

Such a plan would also articulate how such waste streams are to be reduced and should specifically address how any remaining waste will be captured and diverted from landfill and diverted from disposal in air and water. Waste reduction and diversion targets should also be included in such a plan, and ways in which such targets will be measured and evaluated over time would also be in a *detailed/comprehensive plan*.

A plan that falls short of addressing all of the above would be considered a more basic plan which is commensurate with a "2-marginal" or "3-satisfactory" ratings.

Commitments to develop an operational waste management and reduction plan which addresses the reduction of waste (including hazardous waste) over the life of the project should be included in the PPP development strategy, concept document or prefeasibility study.

ES2.1.4:
To rate this sub-indicator as "5-excellent", the project would first need to meet the requirements for ES2.1.3 at least at the "3-satisfactory" rating. In other words, if the project has committed to preparing a *detailed/comprehensive operational waste management and reduction plan* which addresses the reduction of waste (including hazardous waste) over the life of the project (and includes all of the other elements that would constitute a "4-very good" or "5-excellent" plan as described in the guidance for ES2.1.3), the project should be well positioned to be able to reduce waste generation (including hazardous waste generation) per unit of output or service per year.

In addition to meeting the requirements for ES2.1.3, the project also needs to *identify the national industry norm* to be used as the basis of comparison. The project should take care to compile any source or reference documents used, and/or any assumptions made to arrive at the "national industry norm".

Finally, during the identification stage, the project should begin to *identify potential strategies to reduce solid and hazardous waste generation per unit of output or service per year and estimate the reduction potential for each* (in tons per year). All assumptions used to arrive at the calculations should be compiled.

Commitments and preparatory work should be included in the PPP development strategy, concept document or prefeasibility study.

ES2.1.5:
To rate this sub-indicator as "5-excellent", the project would first need to:

a) Meet the requirements for ES2.1.3 at the "4-very good" or "5-excellent" ratings. In other words, if the project has committed to preparing a *detailed/comprehensive operational waste management and reduction plan* which addresses the reduction of waste (including hazardous waste) over the life of the

project (and includes all of the other elements that would constitute a "4-very good" or "5-excellent" plan as described in the guidance for ES2.1.3), the project should be well positioned to be able to reduce waste generation (including hazardous waste generation) per unit of output or service per year.

b) Meet the additional requirements for ES2.1.4 (i.e., *identify the national industry norm* to be used as the basis of comparison and *identify potential strategies to reduce solid and hazardous waste generation per unit of output or service per year and estimate the reduction potential for each* (in tons per year).

In addition, the project needs to identify specific locations/facilities where any remaining solid waste (including hazardous waste) could be sent and/or identify other means in which to properly dispose of waste. For example:

- Reusing or recycling materials on the project
- Sending materials to recycling or reclamation facilities
- Composting materials on site or sending materials to a composting facility
- Applying biosolids on land (e.g., for agriculture)
- Using materials, as appropriate, for infill.

Undesirable means of waste diversion include:

- Burning waste, unless it is sent to a reputable and certified high-efficiency waste-to-energy facility
- Burying waste in landfill

All of the above (commitments and preparatory work) should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to investigating the potential to utilise unwanted waste and/or excess resources from another local project or to finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources (**ES 2.1.1**), calculating the material input per unit of service (MIPS) for the project (**ES 2.1.2**), developing an operational waste management and reduction plan which addresses the reduction of waste (including hazardous waste) over the life of the project (**ES 2.1.3**), identify the national industry norm to be used as the basis of comparison and identify potential strategies to reduce solid and hazardous waste generation per unit of output or service per year and estimate the reduction potential for each (in tons per year) (**ES 2.1.4**), and identify specific locations/facilities where any remaining solid waste (including hazardous waste) could be sent and/or identify other means in which to properly dispose of waste (**ES 2.1.5**) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating assumptions on the potential to utilise unwanted waste and/or excess resources from other local projects in feasibility studies and analysis; including calculations and assumptions of the material input per unit of services as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed in such a way as to reduce operational waste (including hazardous waste) in accordance with the overall management and reduction plan for the project.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to investigating the potential to utilise unwanted waste and/or excess resources from another local project or to finding local destinations for the beneficial use/reuse of its unwanted waste and/or excess resources (**ES 2.1.1**), calculating the material input per unit of service (MIPS) for the project (**ES 2.1.2**), developing an operational waste management and reduction plan which addresses the reduction of waste (including hazardous waste) over the life of the project (**ES 2.1.3**), identify the national industry norm to be used as the basis of comparison and identify potential strategies to reduce solid and hazardous waste generation per unit of output or service per year and estimate the reduction potential for each (in tons per year) (**ES 2.1.4**), and identify specific locations/facilities where any remaining solid waste (including hazardous waste) could be sent and/or identify other means in which to properly dispose of waste (**ES 2.1.5**) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by identify specific locations/facilities where any construction/commissioning waste may be properly disposed of and incorporating the operational waste management and reduction plan in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include proper waste handling, disposal, and reduction requirements; and/or conducting periodic

review and reasonable calibration of the services in the project agreements in order to reduce the use of resources over the life of the project.

ES2.2 ***Is the project located on previously developed land or barren or degraded land unfit as farmland?***

Applicability: Only projects for which no land acquisition whatsoever is involved may select 'not applicable' (N/A) as the response to this indicator. For all other projects that do involve land acquisition, the inability to locate the project on previously developed land is not a justification for selecting not applicable for this indicator. All efforts should be made to locate projects on previously developed land or barren or degraded land unfit as farmland. Also, projects that have no opportunities to make siting decisions, or no reasonable opportunities to avoid development on previously developed land would not be able to select 'not applicable' (N/A) as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to locating all or a portion of the project on previously developed land or barren or degraded land unfit as farmland. In addition, the project should identify specific locations for the project, and for each potential location, calculate the anticipated number of hectares/acres of each type of land on which the project could be built (staging areas and any other land areas that could be impacted by the project need to be included in the calculations), as well as the total estimated land acquisition needed for the project. Commitments to site the project on previously developed, barren or degraded land unfit as farmland; potential siting options; and land acquisition (in hectares or acres) should be included in the PPP development strategy, concept document or prefeasibility study.
Development stage
To rate this indicator as "5-excellent" the project must commit to locating all or a portion of the project on previously developed land or barren or degraded land unfit as farmland, including identifying the specific locations for the project and calculating the total estimated land to be used/acquired for the project (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating land identification and calculation requirements in feasibility studies and analysis; including the use or expansion of land and project location in the project approvals; and/or ensuring the project's conceptual technical, physical, and financial design are developed in such a way to mitigate land usage and impact.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to locating all or a portion of the project on previously developed land or barren or degraded land unfit as farmland, including identifying the specific locations for the project and calculating the total estimated land to be used/acquired for the project (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by locating the project and/or mitigating the impact on the land of construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that require location of the project in previously developed land or barren or degraded land unfit as farmland; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to maintain the total estimated land usage over the life of the project.

ES2.3 ***Is the project restoring (compensating) [1] equivalent degraded land in the project footprint at a location outside the project boundary, but within the impact area of the project?***

[1] the project restores degraded land within the project area (could be outside the project footprint but within the project impact area) to a condition that supports natural open space, habitat, or natural hydrology and/or the project reclaims brownfields (based on national classifications of brownfields) through passive and/or active remediation.

Applicability: Only projects for which no land acquisition whatsoever is involved may select 'not applicable' (N/A) as the response to this indicator. However, projects that do not require additional land but make efforts to restore degraded land may pursue this indicator and are encouraged to do so.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to first meet the requirements for ES2.3. If there is potential to restore land as part of the project, the project also needs to explicitly commit to doing so. In addition, the project needs to have a plan (at least a preliminary one) to restore degraded land based on sound environmental practices. • "3-satisfactory" requires the project commit to restoring (compensating) up to 50% of degraded land used in the project, at a location outside of the project boundary, but within the project impact area; • "4-very good" requires the project commit to restoring (compensating) more than 50% up to 75% of degraded land used in the project, at a location outside of the project boundary, but within the project impact area. • "5-excellent" requires the project commit to restoring (compensating) more than 75% up to 100% of degraded land used in the project, at a location outside of the project boundary, but within the project impact area. Commitments to restore land and the preliminary plan on how land shall be restored (and how much) as part of this project should be included in the PPP development strategy, concept document or prefeasibility study.
Development stage
To rate this indicator as "5-excellent" the project must commit to determining if there is a potential to restore land as part of the project and if so explicitly commit to doing so (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by including an evaluation of whether there is a potential to restore land as part of the project in feasibility studies and analysis; including land use approvals that measure whether there is the potential to restore land over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed so that potential land restoration occurs.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to determining if there is a potential to restore land as part of the project and if so explicitly commit to doing so (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating land restoration requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include land restoration requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to facilitate land restoration over the life of the project.

ES3 WATER CONSUMPTION AND WASTEWATER DISCHARGE

Rationale

Intent Reduce overall water consumption and protect the quantity and availability of fresh surface water and groundwater supplies.

Metric Quantitative reductions in the use of freshwater per unit of output/service and strategies employed to minimise the negative impacts of water usage and/or watershed-scale issues.

Description Globally, the demand for freshwater for agricultural, municipal and industrial uses is increasing exponentially and at an unsustainable pace. Water is at the core of sustainable development and is critical for socio-economic development, energy and food production, healthy ecosystems, and for human survival. SDG6 focuses on ensuring availability and the sustainable management of water and sanitation for all.

To learn more about global water-related challenges and some of the work being undertaken to address water challenges globally, please refer to the following sources:

(i) United Nations' *Global Issues: Water* page, available here: https://www.un.org/en/sections/issues-depth/water/

(ii) UNEP's *Fresh Water for the future: A synopsis of UNEP activities in water*, June 2012, available here: https://wedocs.unep.org/bitstream/handle/20.500.11822/8096/-Fresh%20Water%20for%20the%20future_%20%20A%20synopsis%20of%20UNEP%20activities%20in%20water-20121114.pdf?sequence=3&isAllowed=y

(iii) UN Water's *World Water Development Report 2020*, March 2020, available here: https://www.unwater.org/publications/world-water-development-report-2020

This criterion addresses two key aspects of water sustainability: reducing freshwater consumption/use by PPPs, and PPPs' potential polluted wastewater discharge contributing to broader watershed-scale issues (i.e., the quantity and availability of fresh surface water and groundwater supplies). SDG 6 also talks about sanitation, and the inextricable link between water and sanitation. The provision of essential services, including sanitation, is addressed in the Access and Equity portion of PIERS.

The criterion encourages PPPs to identify and evaluate strategies to reduce freshwater consumption, and ultimately to reduce the amount of freshwater used by the project throughout its life compared to national norms. This criterion also recognises that even projects that do not directly consume freshwater can still have an impact by way of discharged polluted wastewater on the quantity and availability of fresh surface water and groundwater supplies, therefore, efforts should be taken to minimise the negative impacts of water usage and/or address watershed-scale issues.

Applicability This criterion is applicable to all PPPs that use or impact water resources. Therefore, projects seeking to be recognised as PPPs for the SDGs are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

ES3.1 ***Is the project meeting the statutory wastewater discharge norms after treatment and including features to minimise the negative impacts of water usage, and/or watershed-scale issues?***

Applicability: This indicator is applicable to all projects that consume water OR impact receiving waters. Projects that have no impacts whatsoever on water quantity or quality may select 'not applicable' (N/A) as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to do the following: a) identify general wastewater characteristics and required treatment to meet the statutory wastewater discharge norms, b) identify and analyse potential project features that could reduce the impacts of water usage and/or watershed-scale issues, and c) consider the indirect ways the project might impact water resources from both a quality and quantity perspective The above work should be included in the PPP development strategy, concept document or prefeasibility study.
Development
To rate this indicator as "5-excellent" the project must commit to identifying general wastewater characteristics and required treatment to meet the statutory wastewater discharge norms, identifying and analysing potential project features that could reduce the impacts of water usage and/or watershed-scale issues, and considering the indirect ways the project might impact water resources from both a quality and quantity perspective (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating an assessment of indirect water impacts and wastewater generation, discharge, and treatment requirements of the project in feasibility studies and analysis; including wastewater generation, discharge, and treatment requirements as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to reduce the impacts of water usage over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to identifying general wastewater characteristics and required treatment to meet the statutory wastewater discharge norms, identifying and analysing potential project features that could reduce the impacts of water usage and/or watershed-scale issues, and considering the indirect ways the project might impact water resources from both a quality and quantity perspective (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating water usage reduction requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure the indirect impacts on water resources arising from the project; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure the project meets wastewater discharge norms over the life of the project.

ES3.2 ***Is the project identifying and implementing strategies to reduce the amount of freshwater consumed/used by the project per unit of output/service compared to national norms?***

Applicability: Projects that consume no water during operations and maintenance and contain no water consuming features may select 'not applicable' (N/A) as the response to this indicator. Also, healthcare projects of the nature of outpatient departments or small hospitals, where reuse/recycle is impractical and may be impossible due to regulatory requirements, are exempt and may also select 'not applicable' (N/A) as the response to this indicator.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project first needs to *identify the national norm* to be used as the basis of comparison. The project should take care to compile any source or reference documents used, and/or any assumptions made to arrive at the "national norm".

The project then needs to commit to reducing freshwater consumption during the life of the project. In addition, the project needs to identify – at least preliminarily – strategies to reduce freshwater consumption compared to the "national norm". In other words, it is not enough to commit to reducing freshwater consumption, the project also has to have a preliminary idea of how it could do so. The project should identify strategies and begin prioritising them in terms of their reduction potential. The project should take care to compile any source or reference documents used and assumptions made.

Projects should aim for as *comprehensive an approach* to identifying and evaluating strategies to reduce freshwater consumption compared to the "national norm" as possible (i.e., exploring a wide range of both conventional and non-conventional approaches to reducing freshwater consumption, and exploring these options and their reduction potential thoroughly). Undertaking such a comprehensive assessment may not be possible for many projects during the identification stage; however, strong commitments to reducing freshwater consumption over the life of the project, coupled with at least a preliminary analysis of strategies to reduce consumption would help set the project up to achieve a higher level of performance during project development and implementation.

During the identification stage, the project should calculate the water reduction potential (in cubic meters or gallons per year, per freshwater reduction strategy and for the project as a whole) per unit of expected output/service. If these calculations result in the potential to reduce freshwater consumption by at least 5% up to 15% compared to national norms, this would be commensurate with a "4-very good" rating and the project should respond to this indicator accordingly. If these calculations result in the potential to reduce freshwater consumption by 15% or more compared to national norms, this would be commensurate with a "5-excellent" rating.

Commitments to reduce freshwater consumption over the life of the project, the national norm as the basis of comparison, the potential strategies that could be implemented to reduce freshwater consumption, and any other preparatory work undertaken for this indicator should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to reducing freshwater consumption during the life of the project (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating an assessment of the project's anticipated freshwater consumption in feasibility studies and analysis; including freshwater consumption reduction requirements as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to reduce the freshwater consumption over the life of the project.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to reducing freshwater consumption during the life of the project (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating freshwater consumption reduction requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure the freshwater consumption reduction arising from the project; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure the project reduces freshwater consumption over the life of the project.

ES3.3 *Is the project having a net-zero impact on the quantity and availability of fresh surface water and groundwater supplies?*

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project would first need to meet the requirements for ES3.1 at the "4-very good" or "5-excellent" ratings, and meet the requirements for ES3.2, and ES3.3.

The project's preliminary calculations (for the aforementioned indicators) need to demonstrate that it will have no expected impact on the quantity and availability of fresh surface water and groundwater supplies. Preparatory work undertaken for this indicator should be included in the PPP development strategy, concept document or prefeasibility study.
Development stage
To rate this indicator as "5-excellent" the project must commit to demonstrating that it will have no expected impact on the quantity and availability of fresh surface water and groundwater supplies (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating an assessment of the project's anticipated impact on the quantity and availability of fresh surface water and groundwater supplies in feasibility studies and analysis; including the quantity and availability of fresh surface water and groundwater supplies as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to eliminate any impact on the quantity and availability of fresh surface water and groundwater supplies over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to demonstrating that it will have no expected impact on the quantity and availability of fresh surface water and groundwater supplies (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating quantity and availability of fresh surface water and groundwater supplies requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure the quantity and availability of fresh surface water and groundwater supplies in relation to the project; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure the quantity and availability of fresh surface water and groundwater supplies over the life of the project is unchanged.

ES4 PROTECT BIODIVERSITY

Includes mandatory indicators

Rationale

Intent Halt biodiversity loss through conservation, environmental restoration and the use of sustainable management practices.

Metric The extent to which the project addresses biodiversity loss through conservation, restoration and/or the use of sustainable management practices.

Description This criterion addresses biodiversity conservation. PPPs for the SDGs in renewable energy, roads, railways and water (to name a few examples) have the potential to impact biodiversity (flora and fauna) in forests, wetlands, mountains and drylands, and terrestrial and inland freshwater ecosystems.

This criterion encourages PPPs to first understand the potential environmental impacts they could have on local biodiversity. This is done through an Environmental and Social Impact Assessment (EIA). An ESIA requires an evaluation of the likely environmental impacts of a project, taking into account interrelated socio-economic, cultural and human-health impacts. An EIA is relevant for all environmental criteria in PIERS. In the context of this criterion, it must include *inter alia* an examination of the potential project impacts on biodiversity.

Environmental Management Plans detail mitigation measures, monitoring and reporting requirements, procedures, and other best management practices to ensure the project is developed in an environmentally responsible manner. A project may require multiple EMPs, each addressing a specific environmental issue, or a single, comprehensive EMP could be developed for the project. EMPs are relevant for all environmental criteria in PIERS. In the context of this criterion, it must include *inter alia* the identification and quantification (where possible) of the biodiversity in the project impact area (typically a radius of 10-25 kilometres depending of the nature of the project or defined by the local/national authorities) and include mitigation measures to protect this biodiversity.

EIAs are required for Category A projects (projects that are likely to have long-term significant adverse environmental impacts that are irreversible, diverse or unprecedented). Examples of Category A projects include polluting industries and infrastructure projects such as roads, water, and power. ESIAs are not necessarily required for Category B and Category C projects, however these projects require different studies. Category B projects (projects that pose short-term moderate, site-specific risks of which few if any are irreversible) are required to provide an initial environmental examination (IEE), including an EMP. Category C projects (projects that are likely to have minimal or no adverse environmental impacts) are not required to prepare an ESIA or IEE, but must provide a review of environmental implications.

For more information on ESIA requirements and categories of projects, please refer to the following resources:

(i) International Finance Corporation's *Policy on Environmental and Social Sustainability*, 2012, available here: https://www.ifc.org/wps/wcm/connect/7141585d-c6fa-490b-a812-2ba87245115b/SP_English_2012.pdf?MOD=AJPERES&CVID=kiIrw0g

(ii) European Commission, Environmental Impact Assessment Directive, 2014, available here: https://ec.europa.eu/environment/eia/eia-legalcontext.htm

Functional ecosystems that needs to be protected is another key concept introduced in this criterion. A functional ecosystem is, fundamentally, a habitat capable of supporting the needs/requirements of the species that depend on it during all stages of their lifecycle. Development often fragments and shrinks areas of habitat, leading to loss of biodiversity. Preserving and ensuring sufficient linkages between habitats is important for many reasons, including preserving ecosystem functions, providing habitat for large-range species (species that require a lot of land on which to roam), and promoting genetic diversity required to

maintain healthy populations of plants and animals. Preserving and protecting functional habitats can also add a lot of value to people, and communities and regions more broadly. Functional habitats make areas more desirable places to live, and visit, for example, and can support a range of activities important to humans, such as sustainable fisheries, and eco-tourism. Such functional ecosystems tend to be designated as environmentally protected areas e.g., reserved forests, national parks (including marine parks).

The last concept introduced in this criterion is the concept of biodiversity hotspots. Avoiding development in and around such areas should always be prioritised; however, some projects may have the opportunity to permanently protect or restore such areas. When presented with this opportunity, PPPs for the SDGs should endeavour to do so.

For more information on biodiversity hotspots and protected area management, how they are identified and where they are located, please refer to the following resources:

(i) Conservation International's *Biodiversity Hotspots*, 2020, available here: https://www.conservation.org/priorities/biodiversity-hotspots

(ii) IUCN's *Guidelines for Applying Protected Area Management Categories*, 2020, available here: https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf

Applicability It is likely that all PPPs have the potential to directly or indirectly impact biodiversity. Therefore, projects seeking to be recognised as PPPs for the SDGs are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

ES4.1 ***Is the project conducting an ESIA?*** [1] [2] ***(*)***

[1] Category A projects are required to conduct an ESIA. Category B projects may provide an IEE (initial environmental assessment). Category C projects may respond to this indicator as not applicable, if a review of environmental implications reveals there are none.

[2] An ESIA requires an evaluation of the likely environmental impacts of a project, taking into account interrelated socio-economic, cultural and human-health impacts. An ESIA is relevant for all environmental criteria in PIERS. In the context of this criterion, it must include *inter alia* an examination of the potential project impacts on biodiversity.

Applicability: Category C projects may respond to this indicator as 'not applicable' (N/A), provided a review of environmental implications reveal there are none.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to conduct an environmental and social impact assessment (ESIA). The ESIA process should be done as early on in project identification as possible, to ensure environmental and social issues are raised when a project is first being discussed or conceived. The ESIA process will require further refinements as the project moves from the identification stage to development but it's important the ESIA be started during project identification. The ESIA *must, inter alia*, include an examination of potential biodiversity impacts. (Please note, the ESIA is an extremely useful assessment for many of the environmental indicators included in PIERS.) ESIAs are a process involving multiple steps, from screening (a process which often results in the classification of a project – i.e., category A, B or C), to scoping (a process of determining the critical issues to study, which should involve community stakeholders), to conducting detailed prediction and mitigation studies to developing a

plan for managing and monitoring environmental impacts throughout the life of the project. ESIAs should also include periodic audits which serve as a feedback and learning function.

The *comprehensiveness of the ESIA* (taking into account the stage of the project) is what distinguishes "3-satisfactory" from "4-very good" and "5-excellent".

The ESIA conducted during the project identification stage should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to conducting an environmental and social impact assessment (ESIA) of the project that includes an examination of potential biodiversity impacts (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating an ESIA assessment in feasibility studies and analysis; including ESIA compliance as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed after assessment of the ESIA.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to conducting an environmental and social impact assessment (ESIA) of the project that includes an examination of potential biodiversity impacts (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating ESIA consideration in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include ESIA consideration over the life of the project; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure ESIA consideration is maintained over the life of the project.

ES4.2 ***Is the project developing and implementing an environmental management plan (EMP) to avoid, mitigate impacts to, or restore the impact area?*** [1]

[1] Environmental Management Plans detail mitigation measures, monitoring and reporting requirements, procedures, and other best management practices to ensure the project is developed in an environmentally responsible manner. EMPs are relevant for all environmental criteria in PIERS. In the context of this criterion, an EMP must include *inter alia* the identification and quantification (where possible) of the biodiversity in the project impact area (typically a radius of 10-25 kilometres depending of the nature of the project or defined by the local/national authorities) and include mitigation measures to protect this biodiversity.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to first meet the requirements for ES4.1. Based on the environmental impact assessment developed for ES4.1, the project needs to prepare a draft/initial environmental management plan (EMP) which *must, inter alia*, include potential measures to protect the impact area (avoid the area, mitigate impacts to the area, restore the area).

The *comprehensiveness of the EMP* (taking into account the stage of the project) is what distinguishes "3-satisfactory" from "4-very good" and "5-excellent".

The EMP should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to preparing a draft/initial environmental management plan (EMP) for the project which must, inter alia, include potential measures to protect the impacted area (avoid the area, mitigate impacts to the area, restore the area) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility,

tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating a requirement that a an EMP be included in feasibility studies and analysis; including consideration of the EMP in the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design take into consideration the draft/initial EMP.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to preparing a draft/initial environmental management plan (EMP) for the project which must, inter alia, include potential measures to protect the impacted area (avoid the area, mitigate impacts to the area, restore the area) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating compliance with the draft/initial EMP requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include compliance with the EMP requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure compliance with the EMP over the life of the project.

ES4.3 ***Is the project preserving and/or improving the functionality of habitats (terrestrial and/or aquatic)*** [1] ***in partnership with local authorities*** [2] ***(for example, local conservation authorities) or internationally recognised conservation initiatives?***

[1] improving the functionality of habitats can be measured in a number of ways, including improving or preserving the quality of existing habitats, improving or preserving the quantity of available habitats and/or improving or protecting the connectivity of habitat. This can be done for projects located in or near environmentally protected areas (e.g., land-based or marine parks), biodiversity hotspots, or anywhere were habitat has the potential to be protected or improved

[2] local authorities may include formally established or informally recognised local conservation authorities, or other governmental or non-governmental organisations working to protect, preserve, or improve habitat

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to identify potential strategies to preserve and/or improve the functionality of habitats (terrestrial and/or aquatic).

Improving the functionality of habitats can be achieved in many ways such as improving or preserving the *quality* of existing habitats, improving or preserving the *quantity* of available habitats and/or improving or protecting the *connectivity* of habitat. This can be done for projects located in or near environmentally protected areas (e.g., land-based or marine parks), biodiversity hotspots, or anywhere were habitat has the potential to be protected or improved.

Identifying potential strategies to preserve and/or improve the functionality of habitats could be done in conjunction with the development of the ESIA and EMP per indicators ES4.1 and ES4.2.

In addition, the project needs to identify potential local authorities (i.e., authorities in the project's impact area such as formally established or informally recognised local conservation authorities, other governmental or non-governmental organisations working to protect, preserve, or improve habitat) or internationally recognised conservation initiatives with whom partnerships could potentially be established to ensure the ongoing protection and improvement of habitats.

Strategies and potential partner organisations or initiatives should be included in the PPP development strategy, concept document or prefeasibility study.

Development stage

To rate this indicator as "5-excellent" the project must commit to identifying potential strategies to preserve and/or improve the functionality of habitats (terrestrial and/or aquatic), including potential local authorities or internationally recognised conservation initiatives with whom to partner to protect and improve habitats (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating identification of potential strategies to preserve and/or improve the functionality of habitats (terrestrial and/or aquatic) in feasibility studies and analysis; including identifying potential strategies to preserve and/or improve the functionality of habitats as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed in consideration of potential strategies to preserve and/or improve the functionality of habitats.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to identifying potential strategies to preserve and/or improve the functionality of habitats (terrestrial and/or aquatic), including potential local authorities or internationally recognised conservation initiatives with whom to partner to protect and improve habitats (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating strategies to preserve and/or improve the functionality of habitats (terrestrial and/or aquatic) in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure improvements to the functionality of habitats; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure preservation and/or improvement to the functionality of habitats over the life of the project.

ES5 ASSESS RISK AND PREPARE FOR DISASTER MANAGEMENT

Includes mandatory indicators

Rationale

Intent

Conduct a multi-hazard risk and resilience evaluation, including climate change threats, acute shocks, and chronic stressors, ensure sufficient funds are allocated for project and community-scale resilience and disaster management, and develop a community-driven development programme.

Metric

The scope and comprehensiveness of the multi-hazard risk and resilience evaluation, the extent to which funds are identified and allocated to support research, innovation, capacity building and awareness programmes to improve resilience and disaster management efforts, and the extent to which the PPP has developed a community-driven development programme aligned with the national disaster mitigation legal framework.

Description

Understanding the range of potential risks to the project, system, and wider community is an important component of disaster management and recovery and overall resilience planning. Therefore, the project needs to have an understanding of the range of potential risks, and make suitable enabling provisions in the project which are complementary to those of the government. (The government plays a major – and crucial – role during disasters and epidemics.). This criterion encourages PPPs to explore multi-hazard risk scenarios to the project.

This criterion also focuses on ensuring adequate funds are available so that the PPP is able to respond to risks, and to ensure broader community preparedness. PPPs for the SDGs should also allocate funds to support disaster research, innovation, capacity-building and community awareness programmes.

The criterion also focuses on developing a community-driven development (CDD) programmes implement disaster recovery and reconstruction actions, during and after a disaster. This is an essential component of PPPs for the SDGs. Preferably, community-driven development programmes should be aligned with the national disaster mitigation legal framework and should be initiated by government under a Disaster Mitigation Law.

PPP should focus on the following aspects which are applicable before, during and after a disaster:

A. Risk Reduction and Mitigation

Risk reduction and mitigation includes:

- Identifying measures in the project design and surrounding areas (where possible) to reduce stressors, shocks, and exposure and vulnerability to disaster events such as severe winds, landslides, floods, volcanic eruptions and earthquakes and droughts;
- Integrating disaster and climate risk reduction and mitigation planning and strategies into public and private sector investment decisions;
- Strengthening project design and area planning, including support for research and innovation in design using the natural environment to mitigate the risks; and
- Encouraging/seeking political commitment from both the central and regional levels to recommend policies, regulations and action plans to reduce the impact of disasters on the economy and livelihoods.

B. Response and Recovery Coordination

Experiences show that the functions of local government are among the first to collapse due to unpreparedness and slow, uncoordinated emergency response. Preventive measures and the critical initial response in the first few hours when a disaster strikes is crucial in saving lives and preventing further asset losses. Political commitment to disaster response and recovery

needs to be internalised from the central to the regional level with appropriate linkages to the project management. Coordination and integration need to be addressed all levels between stakeholders, civil society organisations, government leaders, relevant ministries/institutions, grassroots leaders, non-governmental organisations, multi-fund donors, and the private sector.

Disaster recovery requires prompt coordination, communication, and action plans through digital technology applications, legal, insurance and financial strategies, local government and community development programmes, and international support. Government-initiated Community Driven Development Programmes have proven to be effective in delivering reconstruction.

C. Fund for asset losses and well-being losses

Asset Losses: Traditional risk assessments use asset losses (property and ecosystem restoration) as the main metric to measure the severity of a disaster. Identifying and securing funds from different sources is an important part of post-disaster recovery. Asset losses inevitably favour central business districts and other areas with a higher concentration of valuable assets and ecosystems such as tree plantations, gardens, water bodies, etc. leaving the most poor and vulnerable people in society to resort to humanitarian assistance when disasters inevitably occur. After most disasters, the poor and vulnerable are more likely to go without food, health, education and other essential services, and these groups take much longer to recover after a disaster.

Well-being Losses: Well-being losses is a measurement that offers a more equitable and balanced metric to measure the severity of a disaster. Well-being focused strategies utilise a wider set of available measures such as financial inclusion, private and public insurance, disaster-responsive social safety nets, macro fiscal policies, and disaster preparedness and contingency planning. Well-being losses facilitate a quantification of the benefits of intervention such as rapid post-disaster support by way of adaptive social protection systems, resulting in exposed and vulnerable populations being more able to cope with and recover from asset losses. This takes into account (i) their ability to maintain their consumption for the duration of their recovery; (ii) their ability to utilise public emergency grands or borrow to rebuild their assets; and (iii) decreasing returns in consumption, that is people who live on $2 per day are much more affected by a $1 loss than are better-off individuals.

Typically, the funds to be set up and accessed include:

- Emergency Funds: funds must be made available annually through the central and regional government budgets and National Disaster Mitigation Agency. Readiness of funds in emergencies in one of the main pillars of disaster finance. A roadmap for implementing disaster risk insurance and financing strategies such as the formation of natural disaster pooling funding or increasing insurance for state property in disaster prone areas needs to be in place.
- Disaster Financial Instruments: such instruments include insurance and catastrophic bonds which can facilitate the transfer of risks. Insurance coverage allows for standby funds to be available in emergencies and the project should be insured against natural disasters other shocks. Catastrophic Bonds allow the government to immediately obtain funding in the event of disasters and the triggering event must be defined to ensure that money will be transferred to specific disaster budget escrow accounts.

D. Allocation of funds to support research, innovation, capacity building and awareness

Setting aside funds from the project to support research, innovation, capacity building and awareness programmes is a crucial component for ensuring the PPP is responsive to community needs, and able to adapt and respond to disasters as they inevitably occur.

Funds can be used to train and/or deploy qualified staff who are responsible for monitoring environmental sustainability and resilience indicators, the development and deployment of pre-disaster warning systems and sensors, developing technology-based solutions to involve local stakeholders/community groups to propagate confirmed hazard information on a real-time basis, e.g., through social media platforms. (Local people are often great sources of information

and can help to predict threats and provide early warning signs of threats – particularly acute shocks – to the PPP.)

Funds can also be allocated to a range of design solutions such as sustainable construction methods and materials to address climate change threats and vulnerabilities such as floods and sea level rise. Often, research into innovative/unique technologies, processes, materials, and methods is required, and without adequate funding being allocated towards these activities, the PPP will likely miss out on excellent opportunities to improve resilience and overall environmental performance.

Funds can also be allocated towards community awareness programmes, and community capacity building programmes. PPPs that work with local communities earn a social license to operate, and can benefit tremendously from local knowledge, skills, and resources. PPPs should in turn work to build greater community awareness of disaster management and resilience planning and contribute to community capacity building to strengthen the community's ability to respond, recover and adapt after a disaster.

For more information on innovative planning using natural-based solutions for disaster mitigation, the following resource may be useful:

(i) World Bank's blog post *What if we could use nature to prevent disasters?*, 2019, available here: https://blogs.worldbank.org/sustainablecities/what-if-we-could-use-nature-prevent-disasters

E. Community-driven development (CDD) programmes

The benefits of a CDD programme are significant and include empowering the local communities with greater capacities to deliver quality reconstruction in a cost-effective, equitable, and sustainable manner for local level recovery.

In order to formulate an effective CDD programme, two metrics need to be established.

First, poverty related measures need to be assessed, such as poverty headcount and poverty gap which highlights the experience of the poor and near poor in a disaster. These form an input to financial inclusion, social protection, and support to affected households. Such support includes fund assistance, public and private insurance, and access to credit for the duration of the recovery and reconstruction period. Without timely assistance, chronic poverty will result due to impact disasters have on low income groups.

Second, socio-economic resilience needs to be assessed. This is an indicator that measures the ability of the population to cope with and recover from asset losses. This includes their ability to maintain their consumption for the duration of their recovery, their ability to utilise public emergency grants or borrow to rebuild their asset base recognizing the decreasing returns in consumption, i.e., people who live on $2 per day are more affected by a $1 loss than are better-off individuals.

A CDD programme should ideally be aligned with the national Disaster Mitigation Law, or legal framework which includes policies and regulations, and must include:

(a) Legal and financing provisions to improve effectiveness of emergency response. This requires a thorough examination of the institutional set-up and financial instrument readiness within existing framework of disaster mitigation. Provision for setting up a fund or recurring budget in the law for developing a national plan for warning and managing natural disasters is essential.

(b) A regulatory framework that can facilitate a community-driven development programme, set targets, identify opportunities, specify standards and best practices in order to enhance disaster mitigation, and response and recovery programmes. The effectiveness and accountability of disaster budget expenditures should be regulated to ensure prompt claim payments and sound data management and disbursement of emergency funds to designated disaster recovery accounts.

This Disaster Mitigation Law needs to define the role that the government should play, for example:

- coordinating closely with local key stakeholders, non-governmental organisations (NGOs), local community leaders, and residents;
- facilitating the role of local government to translate the national plan to local plans, focusing on people working together to implement disaster management plans; and
- promoting people-focused policies for a strong foundation on which residents are able to maintain cooperation in difficult times and also shape their perceptions of risk for better preparedness. Local residents after massive earthquakes and floods, for example, have benefitted from community closeness, or strong social capital, which has enabled the prompter and more efficient rebuilding of homes, and led to strong support networks in post disaster recovery and rehabilitation.

Some preliminary assessment is suggested before answering the indicators posed in this benchmark:

- Does planned action or policies benefit the community or affected citizens?
- Is the response effective? Does it expedite recovery from disaster events?
- Are Legal and Regulatory Acts or Decrees responsive enough for disbursement of emergency and/or insurance funds to affected areas to speed up post disaster recovery?
- Is disaster response sufficient and quick enough to save lives, build shelters, homes, restore electricity, and local infrastructure, to promote community resilience?
- Have national agencies and community assessed poverty-related measures and assessed socio-economic resilience indicators, and developed needed infrastructure and preventive measures for preparedness of future disaster events?

For more information on integrating the community in disaster management planning, the following resource may be useful:

(i) US Federal Emergency Management Agency's *Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials*, March 2013, available here: https://www.fema.gov/media-library-data/20130726-1908-25045-0016/integrating_hazmit.pdf

Applicability This criterion is applicable to all PPPs because all of them face some threats due to climate change and other factors and can face a range of acute shocks or chronic stressors. Therefore, projects seeking to be recognised as PPPs for the SDGs are required to address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

ES5.1 ***Is the project developing a well-articulated risk reduction and mitigation strategy for the project involving a response and recovery coordination mechanism being put in place with the host and the affected communities? (*)***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to prepare an initial risk reduction and mitigation strategy, based on the assessment of risks. This initial risk reduction and mitigation strategy should include as much of the following as possible (recognising further refinements shall be made during project development and implementation): • Identifying measures in the project design and surrounding areas (where possible) to reduce stressors, shocks, and exposure and vulnerability to disaster events such as severe winds, landslides, floods, volcanic eruptions and earthquakes and droughts; • Integrating disaster and climate risk reduction and mitigation planning and strategies into public and private sector investment decisions;

- Strengthening project design and area planning, including support for research and innovation in design using the natural environment to mitigate the risks; and
- Encouraging/seeking political commitment from both the central and regional levels to recommend policies, regulations and action plans to reduce the impact of disasters on the economy and livelihoods.

This initial risk reduction and mitigation strategy should also include an initial (or identify an existing) response and recovery coordination mechanism. Also, the project needs to identify potential stakeholders (including project stakeholders, and stakeholders from the project service area) to involve in the development and/or implementation of this mechanism.

More information about the need for such a response and recovery coordination mechanism is provided in the description section for this criterion, but is included again here for ease of reference:

Experiences show that the functions of local government are among the first to collapse due to unpreparedness and slow, uncoordinated emergency response. Preventive measures and the critical initial response in the first few hours when a disaster strikes is crucial in saving lives and preventing further asset losses. Political commitment to disaster response and recovery needs to be internalised from the central to the regional level with appropriate linkages to the project management. Coordination and integration need to be addressed all levels between stakeholders, civil society organisations, government leaders, relevant ministries/institutions, grassroots leaders, non-governmental organisations, multi-fund donors, and the private sector.

Disaster recovery requires prompt coordination, communication, and action plans through digital technology applications, legal, insurance and financial strategies, local government and community development programmes, and international support. Government-initiated Community Driven Development Programmes have proven to be effective in delivering reconstruction.

The initial risk reduction and mitigation strategy, and the initial response and recovery mechanism for the project, as well as potential stakeholders to involve in the development and/or implementation of this mechanism, should be included in the PPP development strategy, concept document or prefeasibility study. The user should take care to compile any source or reference documents used, and should document any assumptions made when undertaking this work.

Development stage

To rate this indicator as "5-excellent" the project must commit to preparing an initial risk reduction and mitigation strategy, based on an assessment of risks, including measures to reduce the risk from disaster events, integrates disaster and climate risk planning and strategy, strengthen planning and supporting innovation in reducing risks, and encouraging political commitment to reduce the impact of disasters (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating disaster and climate risk factors and mitigation strategies in feasibility studies and analysis; including climate and disaster risk mitigation as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design is responsive to identified risks and is in accord with climate and disaster risk planning and strategy.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to preparing an initial risk reduction and mitigation strategy, based on an assessment of risks, including measures to reduce the risk from disaster events, integrates disaster and climate risk planning and strategy, strengthen planning and supporting innovation in reducing risks, and encouraging political commitment to reduce the impact of disasters (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating climate and disaster risk mitigation measures in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include risk identification, planning, and mitigation requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure existing and emerging risks are addressed and a sound plan and strategy is in place over the life of the project.

ES5.2 ***Is the project identifying funds from different sources and/or providing a budget for:***

ES5.2.1 asset losses?

ES5.2.2 well-being losses?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

ES5.2.1:
To rate this sub-indicator as "5-excellent", the project needs to identify potential funds from different sources and develop an initial complimentary budget for asset losses in the project, which also takes into account asset losses for the surrounding areas (if possible).

Traditional risk assessments use asset losses (property and ecosystem restoration) as the main metric to measure the severity of a disaster. Identifying and securing funds from different sources is an important part of post-disaster recovery. Asset losses inevitably favour central business districts and other areas with a higher concentration of valuable assets and ecosystems such as tree plantations, gardens, water bodies, etc. leaving the most poor and vulnerable people in society to resort to humanitarian assistance when disasters inevitably occur. After most disasters, the poor and vulnerable are more likely to go without food, health, education and other essential services, and these groups take much longer to recover after a disaster.

The identification of funds, sources of funds, and an initial complimentary budget for asset losses should be included in the PPP development strategy, concept document or prefeasibility study. The user should take care to compile any source or reference documents used and document any assumptions made.

ES5.2.2:
To rate this sub-indicator as "5-excellent", the project needs to identify potential funds from different sources and develop an initial complimentary budget to mitigate wellbeing losses of people in the surrounding communities (i.e., the project service area).

"Wellbeing losses" is a measurement that offers a more equitable and balanced metric to measure the severity of a disaster. Wellbeing focused strategies utilise a wider set of available measures such as financial inclusion, private and public insurance, disaster-responsive social safety nets, macro fiscal policies, and disaster preparedness and contingency planning. Wellbeing losses facilitate a quantification of the benefits of intervention such as rapid post-disaster support by way of adaptive social protection systems, resulting in exposed and vulnerable populations being more able to cope with and recover from asset losses. This takes into account (i) their ability to maintain their consumption for the duration of their recovery; (ii) their ability to utilise public emergency grands or borrow to rebuild their assets; and (iii) decreasing returns in consumption, that is people who live on $2 per day are much more affected by a $1 loss than are better-off individuals.

Typically, the funds to be set up and accessed include:

- Emergency Funds: funds must be made available annually through the central and regional government budgets and National Disaster Mitigation Agency. Readiness of funds in emergencies in one of the main pillars of disaster finance. A roadmap for implementing disaster risk insurance and financing strategies such as the formation of natural disaster pooling funding or increasing insurance for state property in disaster prone areas needs to be in place.

- Disaster Financial Instruments: such instruments include insurance and catastrophic bonds which can facilitate the transfer of risks. Insurance coverage allows for standby funds to be available in emergencies and the project should be insured against natural disasters other shocks. Catastrophic Bonds allow the government to immediately obtain funding in the event of disasters and the triggering event must be defined to ensure that money will be transferred to specific disaster budget escrow accounts.

The identification of funds, sources of funds, and an initial complimentary budget to mitigate wellbeing losses of the people in the surrounding communities (i.e., the project service area) should be included in the PPP development strategy, concept document or prefeasibility study. The user should take care to compile any source or reference documents used and document any assumptions made.

Development stage

To rate this indicator as "5-excellent" the project must commit to identifying potential funds from different sources and develop an initial complimentary budget for asset losses in the project, which also takes into account asset losses for the surrounding areas (**ES 5.2.1**) and mitigates wellbeing losses of people in the surrounding communities (i.e., the project service area) (**ES 5.2.2**) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating potential asset and wellbeing losses and corresponding funds to cover such risks in feasibility studies and analysis; including maintenance of these contingency funds as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design support the risk of potential asset and wellbeing losses in the surrounding communities.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to identifying potential funds from different sources and develop an initial complimentary budget for asset losses in the project, which also takes into account asset losses for the surrounding areas (**ES 5.2.1**) and mitigates wellbeing losses of people in the surrounding communities (i.e., the project service area) (**ES 5.2.2**) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating risk of asset and/or wellbeing loss funding requirements in the construction budgets of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include the maintenance of long term budgets to cover potential asset and/or wellbeing losses in the surrounding communities; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to maintain sufficient budgetary coverage for asset and/or wellbeing losses in the surrounding communities over the life of the project.

ES5.3 ***Is the project allocating funds to support research, innovation, capacity building and/or awareness programmes?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to allocating funds to support research, innovation, capacity building and/or awareness programmes. Commitments should include clearly defined targets. Setting aside funds from the project to support research, innovation, capacity building and awareness programmes is a crucial component for ensuring the PPP is responsive to community needs, and able to adapt and respond to disasters as they inevitably occur. Funds can be used to train and/or deploy qualified staff who are responsible for monitoring environmental sustainability and resilience indicators, the development and deployment of pre-disaster warning systems and sensors, developing technology-based solutions to involve local stakeholders/community groups to propagate confirmed hazard information on a real-time basis, e.g., through social media platforms. (Local people are often great sources of information and can help to predict threats and provide early warning signs of threats – particularly acute shocks – to the PPP.) Funds can also be allocated to a range of design solutions such as sustainable construction methods and materials to address climate change threats and vulnerabilities such as floods and sea level rise. Often, research into innovative/unique technologies, processes, materials, and methods is required, and without adequate funding being allocated towards these activities, the PPP will likely miss out on excellent opportunities to improve resilience and overall environmental performance. Funds can also be allocated towards community awareness programmes, and community capacity building programmes. PPPs that work with local communities earn a social license to operate, and can benefit tremendously from local knowledge, skills, and resources. PPPs should in turn work to build greater community

awareness of disaster management and resilience planning and contribute to community capacity building to strengthen the community's ability to respond, recover and adapt after a disaster.

Commitments to allocating funds to support research, innovation, capacity building and/or awareness programmes, as well as clearly defined targets should be included in the PPP development strategy, concept document or prefeasibility study. The user should take care to compile any source or reference documents used and document any assumptions made.

Development stage

To rate this indicator as "5-excellent" the project must commit to identifying clearly defined targets and allocating funds to support research, innovation, capacity building and/or awareness programmes (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating clearly defined targets and funding requirements for such activities in feasibility studies and analysis; including targets and research, innovation, capacity building and/or awareness programmes as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate opportunities and funding for research, innovation, capacity building and/or awareness programmes.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to identifying clearly defined targets and allocating funds to support research, innovation, capacity building and/or awareness programmes (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating targets and funding for research, innovation, capacity building and/or awareness programmes in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure opportunities and funding for research, innovation, capacity building and/or awareness programmes; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure funding and opportunities are created for research, innovation, capacity building and/or awareness programmes over the life of the project.

ES5.4 ***Is there a defined community driven development (CDD) programme being put in place:***

ES5.4.1 identifying preventive measures and preparatory actions before, emergency actions during, and recovery and resilience actions after natural and human induced disasters?

ES5.4.2 making a plan to assess poverty related measures to support the development of the CDD programme?

ES5.4.3 establishing a community socio-economic resilience indicator to support the development of the CDD programme?

ES5.4.4 being aligned with the Disaster Mitigation Law with respect to CDD programme targets, opportunities, standards and best practices, with appropriate institutional set-up?

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

ES5.4.1:

To rate this sub-indicator as "5-excellent", the project needs to commit to developing a community driven development (CDD) programme that identifies preparatory actions before, emergency actions during, and recovery and resilience actions after natural and human induced disasters.

For reference: CDD programmes implement disaster recovery and reconstruction actions, during and after a disaster. Such programmes should ideally be aligned with the national disaster mitigation legal framework and should be initiated by government under a Disaster Mitigation Law.

At the project level, the underlying national legal/policy framework under which either the project authorities can take action needs to be identified. However, in the absence of a such a law, the project can take the recommended preparatory actions before a natural disaster, emergency actions during a disaster, and recovery and reconstruction actions after a disaster.

The benefits of a CDD programme are significant and include empowering the local communities with greater capacities to deliver quality reconstruction in a cost-effective, equitable, and sustainable manner for local level recovery.

Commitments to develop a CDD programme should be included in the PPP development strategy, concept document or prefeasibility study.

ES5.4.2:
This sub-indicator builds on the one prior (ES5.4.1). To rate this sub-indicator as "5-excellent", the project needs to commit to developing a plan to assess poverty related measures to support the development of the community driven development (CDD) programme.

As outlined in the description section for this criterion (and again here for ease of reference), in order to formulate an effective CDD programme, two metrics need to be established: #1. Poverty related measures need to be assessed (this is what this indicator is specifically referring to) and #2. Socio-economic resilience needs to be assessed (this is what indicator ES7.3 specifically refers to). Therefore, for this indicator which is related to #1: poverty related measures need to be assessed, such as poverty headcount and poverty gap which highlights the experience of the poor and near poor in a disaster. These form an input to financial inclusion, social protection, and support to affected households. Such support includes fund assistance, public and private insurance, and access to credit for the duration of the recovery and reconstruction period. Without timely assistance, chronic poverty will result due to impact disasters have on low income groups.

Commitments to develop a plan to assess poverty related measures to support the development of the CDD programme should be included in the PPP development strategy, concept document or prefeasibility study.

ES5.4.3:
This sub-indicator builds on the two prior sub-indicators (ES5.4.1 and ES5.4.2). To rate this sub-indicator as "5-excellent", the project needs to commit to developing a community socio-economic resilience indicator to support the development of the driven development (CDD) programme.

As outlined in the description section for this criterion (and again here for ease of reference), in order to formulate an effective CDD programme, two metrics need to be established: #1. Poverty related measures need to be assessed (this is what indicator ES5.47.2 specifically refers to) and #2. Socio-economic resilience needs to be assessed (this is what this indicator is referring to). Therefore, for this indicator which is related to #2: socio-economic resilience needs to be assessed. This is an indicator that measures the ability of the population to cope with and recover from asset losses. This includes their ability to maintain their consumption for the duration of their recovery, their ability to utilise public emergency grants or borrow to rebuild their asset base recognizing the decreasing returns in consumption, i.e., people who live on $2 per day are more affected by a $1 loss than are better-off individuals.

Commitments develop a community socio-economic resilience indicator to support the development of the CDD programme should be included in the PPP development strategy, concept document or prefeasibility study.

ES5.4.4:
This sub-indicator builds on the previous sub-indicators (ES5.4.1 to ES5.4.3). To rate this sub-indicator as "5-excellent", the project and its community driven development (CDD) programme and related targets, opportunities, standards, and best practices need to be aligned with the national Disaster Mitigation Law or another legal framework. Therefore, the project needs to identify the Disaster Mitigation Law or legal framework and develop clear commitments stating how the development of the CDD program shall be aligned with this legal framework.

As discussed in the description section for this criterion and included again here for reference, a CDD programme should ideally be aligned with the national Disaster Mitigation Law or legal framework which includes policies and regulations, and must include:

(a) Legal and financing provisions to improve effectiveness of emergency response. This requires a thorough examination of the institutional set-up and financial instrument readiness within existing framework of disaster mitigation. Provision for setting up a fund or recurring budget in the law for developing a national plan for warning and managing natural disasters is essential.

(b) A regulatory framework that can facilitate a community-driven development programme, set targets, identify opportunities, specify standards and best practices in order to enhance disaster mitigation, and response and recovery programmes. The effectiveness and accountability of disaster budget expenditures should be regulated to ensure prompt claim payments and sound data management and disbursement of emergency funds to designated disaster recovery accounts.

This Disaster Mitigation Law needs to define the role that the government should play, for example:

- coordinating closely with local key stakeholders, non-governmental organisations (NGOs), local community leaders, and residents;
- facilitating the role of local government to translate the national plan to local plans, focusing on people working together to implement disaster management plans; and
- promoting people-focused policies for a strong foundation on which residents are able to maintain cooperation in difficult times and also shape their perceptions of risk for better preparedness. Local residents after massive earthquakes and floods, for example, have benefitted from community closeness, or strong social capital, which has enabled the prompter and more efficient rebuilding of homes, and led to strong support networks in post disaster recovery and rehabilitation.

The identification of the Disaster Mitigation Law or legal framework and the commitments stating how the development of the CDD program shall be aligned with this legal framework should be included in the PPP development strategy, concept document or prefeasibility study. The user should take care to compile any source or reference documents used, and note any assumptions made when undertaking this preparatory work.

Development stage

To rate this indicator as "5-excellent" the project must commit to commit to developing a community driven development (CDD) programme that identifies preparatory actions before, emergency actions during, and recovery and resilience actions after natural and human induced disasters (**ES 5.4.1**) including poverty related measures (**ES 5.4.2**) and an indicator measuring socio-economic resilience and ability to cope with and recover from asset losses (**ES 5.4.3**) that all in line with the national Disaster Mitigation Law or other applicable legal framework (**ES 5.4.4**) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating CDD programme requirements in feasibility studies and analysis; including required preparatory actions before, emergency actions during, and recovery and resilience actions after natural and human induced disasters as part of the project's performance approvals; and/or ensuring the project's conceptual technical, physical, and financial design enable CDD programme requirements.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to developing a community driven development (CDD) programme that identifies preparatory actions before, emergency actions during, and recovery and resilience actions after natural and human induced disasters (**ES 5.4.1**) including poverty related measures (**ES 5.4.2**) and an indicator measuring socio-economic resilience and ability to cope with and recover from asset losses (**ES 5.4.3**) that all in line with the national Disaster Mitigation Law or other applicable legal framework (**ES 5.4.4**) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating CDD programme requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure compliance with the CDD programme; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure the CDD programme, poverty measures, and socio-economic resilience is maintained over the life of the project and in accordance with all applicable law.

Replicability (RE)

The concept of replicability will be primarily derived from the demonstration effect of successful projects or of a substantial part thereof undertaken and implemented in line with international best practice and complying with the SDGs.

Success in achieving the SDGs through implementing the Guiding Principles will be a function of improving the institutional, regulatory and contractual framework as well as scaling up programmes and projects. This will require a huge number of PPPs for the SDGs. Such scalability can be achieved if the project is replicable. Replicability is the way in which a project, or part of it, can be used as a precedent for the development of other projects. This can be done by including in an enabling framework practical solutions to resolve common issues to several projects and by standardising project preparation (such as standard tender documents and template contracts) as well as the related training and capacity-building of local staff and public administrations.

Training provided or arranged by the private partner contributes to the better development of the project itself as enhanced local skills lead to a higher quality of project in so far as the staff is better qualified. Training provided or arranged by the private firm also enhances global partnerships (SDG target 17.16 “enhance the global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge expertise and technology and financial resources, to support the achievements of the SDGs in all countries, particularly developing countries”) and promotes regional cooperation (SDG target 17.6 “enhance North South, South-South and triangular regional and international cooperation on and access to science and technology and innovation to enhance knowledge sharing”).

In addition, the training might be dedicated towards local personnel, which represents an increase in their capabilities to do similar projects themselves leading to scalability from the project itself. This is furthermore related to SDG target 4.7 “by 2030, ensure that all learners acquire the knowledge needed to promote sustainable development, including among others through education for sustainable development”.

Four criteria and 11 related indicators are used to assess project performance against the Replicability outcome area:

Replicability 4 criteria 11 indicators	RE1 ENCOURAGE REPLICABILITY AND SCALABILITY
	RE2 STANDARDISE PPP PREPARATION AND TENDER
	RE3 ENHANCE GOVERNMENT, INDUSTRY AND COMMUNITY CAPACITY
	RE4 SUPPORT INNOVATION AND TECHNOLOGY TRANSFER

RE1 ENCOURAGE REPLICABILITY AND SCALABILITY

Rationale

Intent Assess the replicability and scalability of the project to increase the number of people served, the number of successfully PPPs globally, and to improve economies of scale.

Metric The extent to which the PPP can be scaled and/or replicated.

Description Two main concepts are presented in this criterion: replicability and scalability. In the context of this criterion, both concepts go hand-in-hand.

Replicability

If a project has proven to work in one country, region, or sector, it is a potential candidate to be exported to other countries, regions, or sectors. While differences, often significant, between countries exist, and differences can and do exist between different parts of the same country, effective, proven PPPs will often be capable of being replicated elsewhere and could even be replicated in other sectors. Replicability is an important concept in PPPs as many pitfalls can be avoided, and many positive outcomes achieved, as a direct result of looking elsewhere to see if a solution to a particular problem has been successfully implemented elsewhere. Looking first to see if a solution exists that might be replicable in a given country, region, or sector can save time and money, and can help PPPs avoid problems in project development and implementation that have been solved elsewhere.

Scalability

Projects that impact a few thousand people are positive and should be encouraged; however, PPPs that are capable of being scaled to benefit hundreds of thousands or more is preferred, especially given the significant infrastructure and public service gaps that exist globally. Scalability is not always possible or as easy for smaller organisations compared with larger, well-funded ones; however, looking for ways to scale a project so that it will impact more people is desirable. The size of a project should also be suitable in the context of the host and affected communities.

Achieving replicability and scalability of PPPs for the SDGs will help to exponentially advance successes in achieving the SDGs.

Applicability All PPPs for the SDGs should look for ways in which to replicate and/or scale ideas, concepts, and projects that have been proven elsewhere, and/or contribute knowledge such that they can be replicated and scaled elsewhere. Projects seeking to be recognised as PPPs for the SDGs are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

RE1.1 ***Is the PPP designed by reference to lessons learnt on common issues and solutions for PPP projects in general?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to begin conducting a preliminary assessment of any lessons learnt on common issues and solutions for PPP projects in general, noting that the assessment will be further refined during the development stage of the project. If a project has proven to work in one country, region, or sector, it is a potential candidate to be exported to other countries, regions, or sectors. Lessons learnt on common issues for PPP projects in general are important in PPPs

as many pitfalls can be avoided, and many positive outcomes achieved, as a direct result of looking elsewhere to see if a solution to a particular problem has been successfully implemented elsewhere. Looking first to see if a solution exists that might be replicable in a given country, region, or sector can save time and money, and can help PPPs avoid problems in project development and implementation that have been solved elsewhere.

Preliminary assessment of lessons learnt on common issues and solutions for PPP projects in general should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The project should take care to compile and source materials or reference documents used, and document any assumptions that were used.

Development stage

To rate this indicator as "5-excellent" the project must commit to being designed by reference to lessons learnt on common issues and solutions for PPP projects in general (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating lessons learnt from other projects in feasibility studies and analysis; including lessons learnt in the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed by reference to lessons learnt on common issues and solutions for PPP projects.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to being designed by reference to lessons learnt on common issues and solutions for PPP projects in general (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating transparent approval requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include transparent review and approval requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in accordance with the law and in full transparent approval processes over the life of the project.

RE1.2 ***Is the project replicable and/or scalable, allowing for potential economies of scale and affording wider benefits across the economy such as, but not limited to, the development of the circular economy?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to explicitly commit to taking advantage of any opportunities for replicability and/or scalability that could allow for potential economies of scale and the provision of wider benefits across the economy.

The terms replicability and scalability are explained in the description section of this criterion, and below for ease of reference:

Replicability: If a project has proven to work in one country, region, or sector, it is a potential candidate to be exported to other countries, regions, or sectors. Replicability is an important concept in PPPs as many pitfalls can be avoided, and many positive outcomes achieved, as a direct result of looking elsewhere to see if a solution to a particular problem has been successfully implemented elsewhere. Looking first to see if a solution exists that might be replicable in a given country, region, or sector can save time and money, and can help PPPs avoid problems in project development and implementation that have been solved elsewhere.

Scalability: Projects that impact a few thousand people are positive and should be encouraged; however, PPPs that are capable of being scaled to benefit hundreds of thousands or more is preferred, especially given the significant infrastructure and public service gaps that exist globally. Scalability is not always possible or as easy for smaller organisations compared with larger, well-funded ones; however, looking for ways to scale a project so that it will impact more people is desirable. Care should be taken to ensure that project scalability does not come

at the expense of higher environmental costs, such as increased waste; air, water, and soil pollution; and noise. The size of a project should also be suitable in the context of the host and affected communities. Such commitments should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to taking advantage of any opportunities for replicability and/or scalability that could allow for potential economies of scale and the provision of wider benefits across the economy (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by assessing the project with an eye toward opportunities for replicability and/or scalability in feasibility studies and analysis; including the provision of wider benefits across the economy as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design allow for any opportunities for replicability and/or scalability.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to taking advantage of any opportunities for replicability and/or scalability that could allow for potential economies of scale and the provision of wider benefits across the economy (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating any opportunities for replicability and/or scalability in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include the provision of wider benefits across the economy; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure wide benefits across the economy arising from replicability and/or scalability are realized over the life of the project.

RE1.3 ***Is the project increasing revenue and/or reducing costs over its life cycle through optimised design, resource efficiency, appropriate commercialisation and/or an innovative business model?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to taking advantage of any viable opportunities to increase revenues and/or reduce costs over the life of the project through *inter alia* an optimised project design, more efficient use of resources, ensuring an appropriate commercial model for the project, and/or implementing an innovative business model for the project. (The latter – implementing an innovative business model – may also qualify for criterion RE4). Any commitments made must explicitly acknowledge that taking advantage of such opportunities cannot be done at the expense of the environment or the community without adequate compensation or mitigation (i.e., they cannot lead to greater environmental or social impacts). In addition to making commitments to take advantage of viable opportunities to increase revenues and/or reduce costs over the life of the project, the project also to begin identifying and analysing any currently identified opportunities to increase revenue and/or reduce costs over its lifecycle. Such commitments and preliminary analyses (if able to be conducted at this stage of the project) should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to taking advantage of any viable opportunities to increase revenues and/or reduce costs over the life of the project through *inter alia* an optimised project design, more efficient use of resources, ensuring an appropriate commercial model for the project, and/or implementing an innovative business model for the project (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by assessing viable opportunities for increased revenues and/or reduced costs in feasibility studies and analysis; including efficient use of resources and/or optimized business model as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design take advantage of viable opportunities to increase revenues and/or reduce costs over the life of the project.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to taking advantage of any viable opportunities to increase revenues and/or reduce costs over the life of the project through *inter alia* an optimised project design, more efficient use of resources, ensuring an appropriate commercial model for the project, and/or implementing an innovative business model for the project (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating approaches to reduce costs in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that incentivize efficient use of resources and/or optimization of the business model; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to allow for innovation in the business model over the life of the project.

RE2 STANDARDISE PPP PREPARATION AND TENDER

Rationale

Intent Promote ease of replication and capacity building through the development of templates reflecting lessons learned from the project under review.

Metric Whether template contracts are being developed.

Description Template contracts are essential to standardise PPP preparation and tender and promote the replication of further projects based on lessons learned from the project.

Template contracts could refer to the List of recommended clauses in concession contracts in Public-Private Partnerships in support of the United Nations Sustainable Development Goals, UNECE, 2018 (ECE/CECI/WP/PPP/2018/11), and ought to address the financial and economic equilibrium during the project life cycle, and to provide special rights of the public contractor to adapt the service provision when public interest justifies (together with special compensation rights for the private partner).

Applicability This criterion is applicable to all projects unless intended as a national one-off due to country size and sector specifics.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

RE2.1 ***Are template contracts being developed within the country providing for inter alia, financial and economic equilibrium during the project life cycle, special rights of the public contractor to adapt the service provision when public interest justifies together with special compensation rights for the private partner?*** [1]

[1] See List of recommended clauses in concession contracts in Public-Private Partnerships in support of the United Nations Sustainable Development Goals, UNECE, 2018 (ECE/CECI/WP/PPP/2018/11): https://unece.org/fileadmin/DAM/ceci/documents/2018/PPP/WP/ECE_CECI_WP_PPP_2018_11-en.pdf

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
See the List of recommended clauses in concession contracts in Public-Private Partnerships in support of the United Nations Sustainable Development Goals, UNECE, 2018 (ECE/CECI/WP/PPP/2018/11): https://unece.org/fileadmin/DAM/ceci/documents/2018/PPP/WP/ECE_CECI_WP_PPP_2018_11-en.pdf To meet "3-satisfactory" the project must follow some of the List of recommended clauses, to meet "4-very good", the project must generally follow the List of recommended clauses, and to meet "5-excellent" the project must strictly follow the List of recommended clauses.
Development stage
To rate this indicator as "5-excellent" the project must commit to incorporating template contract provisions that provide for inter alia, financial and economic equilibrium during the project life cycle, special rights of the public contractor to adapt the service provision when public interest justifies together with special compensation rights for the private partner (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by taking into consideration template contract provisions in feasibility studies and analysis; including template contract provisions in the project's performance regime; and/or ensuring the project's conceptual technical, physical, and financial design are developed to reflect template contract provisions.

Implementation stage
To rate this indicator as "5-excellent" the project must commit to incorporating template contract provisions that provide for inter alia, financial and economic equilibrium during the project life cycle, special rights of the public contractor to adapt the service provision when public interest justifies together with special compensation rights for the private partner (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by relying on template contract provisions to govern aspects of the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that are based on template contract provisions and requirements; and/or incorporating template contract provisions that allow for conducting periodic reviews and reasonable calibration of the services over the life of the project.

RE3 ENHANCE GOVERNMENT, INDUSTRY AND COMMUNITY CAPACITY

Includes mandatory indicators

Rationale

Intent

Ensuring that, beyond quantitative economic benefits, the project, government and local community will benefit from the transfer of proven technologies, skills, and/or knowledge/know-how as a result of the PPP.

Metric

The extent to which the project, government and local community benefits from the transfer of proven technologies, skills, and/or knowledge/know-how as a result of the project.

Description

The involvement of the private sector in public service and infrastructure delivery is an excellent opportunity to import proven technologies, skills, knowledge/know-how that has been successfully implemented elsewhere.

PPPs are mechanisms to leverage and enable the use of, *inter alia* private sector expertise, resources, and technologies, leading to the potential for development and crucial advancements within the host country that may otherwise not be achieved.

For additional information and guidance on PPPs and how they enable technology transfer, or the transfer of skills, and/or knowledge/know-how, the following references may be useful:

(i) Fanny Saruchera and Maxwell A Phiri's *Technological Innovation Performance and Public-Private Partnerships* paper, 2016, available here: https://pdfs.semanticscholar.org/98e2/e036e3d69c0940960fbd4c0ab4b005ed8a10.pdf

(ii) Albena Vutsova and Olga Ignatova's *The role of public-private partnership for effective technology transfer* article, October 2013, available here: https://academicpublishingplatforms.com/downloads/pdfs/picp/volume3/201403040441_02_PICP_Vol2_Issue2_Vutsova_and_Ignatova_Role_public-private_partnership_technology_transfer_pp.11-18.pdf

Capacity building is a key concept explored in this criterion. Well-structured PPPs for the SDGs should include mechanisms to ensure capacity is built at the government level, project/industry level, and at the community level.

Some examples:

- **Government capacity building:** the project has resulted in the private party obtaining access to capacity building programmes, training, transfer of skills and technology or other educational activities from donors, third-parties, or gaining technical assistance from another government or international agency that leads to an increase in capacity (e.g., within PPP units) and government effectiveness to deliver future projects. Projects that include training and the transfer of skills/know-how or other capacity building measures can enhance government effectiveness, transparency and local capacity and/or regulatory quality; and enables the replicability of PPP projects within an industry or across sectors.
- **Project/industry capacity building:** the private party and/or project financiers provide or facilitate the transfer of skills, technology and training to the public party, independent professionals and local businesses that result in: increased project or industry capacity (that is, the service/works will be able to be delivered by local personnel without foreign assistance or personnel); new or enhanced industry/sectoral standards; enhanced or new regulatory frameworks, etc., therefore enabling potential replicability or scalability of PPP projects.
- **Community capacity building:** the project contributes knowledge, skills, technical expertise, know-how and improves access to opportunities for local people, including women, marginalised and vulnerable groups, local non-profit and/or non-governmental organisations, formal and informal community associations, etc., which enhances community capacity and enables the replicability and/or scalability of PPP projects.

Applicability Since PPPs typically involve the transfer of technologies, skills, or other knowledge/know-how that contributes to government, project/industry and/or community capacity and leads to improved efficiencies and capacity of all partners and stakeholders, this criterion is applicable to all PPPs. Projects seeking to be recognised as PPPs for the SDGs must address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

RE3.1 ***Are opportunities for the transfer of knowledge/know-how, technologies and skills from the private party to the public party and/or local community stakeholders [1] being assessed and/or successfully implemented? (*)***

[1] e.g., local private sector businesses and industry groups, women, marginalised and vulnerable groups, local non-profit and/or non-governmental organisations, formal and informal community associations, etc.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the public party needs to: a) Develop clear stated objectives pertaining to the transfer of knowledge/know-how, technologies and skills from the private party to the public party and/or local community stakeholders (e.g., local private sector businesses and industry groups, women, marginalised and vulnerable groups, local NGOs, formal and informal community associations) b) If it is possible to do so during project identification, the project also needs to conduct an initial/preliminary assessment of any opportunities for knowledge/know-how, technologies and skills transfer (e.g., to determine the actual need for them, and their importance or viability). "3-satisfactory" rating requires commitments and/or an initial assessment of opportunities only. "4-very good" and "5-excellent" requires the actual implementation of knowledge/know-how, technology transfer, and/or skills transfer from the private party to the public party and/or community stakeholders which may be difficult if not impossible to demonstrate at the identification stage, unless an initial/preliminary assessment of such opportunities results in some that are extremely likely to be implemented on the project, in which case, the project may be able to select "4-very good" and "5-excellent" for this indicator. Stated objectives and any initial/preliminary assessments should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to developing opportunities for the transfer of knowledge/know-how, technologies and skills from the private party to the public party and/or local community stakeholders (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating transfer of knowledge and know-how requirements in feasibility studies and analysis; including transfer of knowledge and know-how as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design include opportunities for the transfer of knowledge and know-how.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to creating opportunities for the transfer of knowledge/know-how, technologies and skills from the private party to the public party and/or local community stakeholders (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating transfer of knowledge and know-how requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include transfer of knowledge and know-how requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure transfer of knowledge and know-how over the life of the project.

RE3.2 ***Is the PPP increasing government capacity [1] and/or project/industry capacity? [2]***

[1] i.e., enhancing institutional efficiency and government effectiveness and/or regulatory quality.

[2] i.e., enhancing project or industry efficiency; regulatory quality; transparency; and the removal of regulatory, policy, or other barriers that have the potential to inhibit the project and/or industry to thrive.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the public party needs to have conducted an initial/preliminary assessment of any opportunities for knowledge/know-how, technologies and skills transfer (e.g., to determine the actual need for them, and their importance or viability) per RE3.1. In addition, the project needs to identify whether any of these opportunities have the potential to increase government capacity and/or project/industry capacity. Examples of "government capacity" include but are not limited to enhancing the institutional efficiency and government effectiveness; and enhancing the regulatory quality. Examples of "project/industry capacity" include enhancing project or industry efficiency, regulatory quality, transparency, and/or the removal of barriers that had the potential to inhibit the project and/or industry to thrive. This preliminary assessment should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to increasing government capacity and/or project/industry capacity (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating increases to government capacity and/or project/industry capacity requirements in feasibility studies and analysis; including improvements to government capacity and/or project/industry capacity as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design foster increases in government capacity and/or project/industry capacity.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to increasing government capacity and/or project/industry capacity (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating increases to government capacity and/or project/industry capacity requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include increases to government capacity and/or project/industry capacity requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in in order to ensure there are increases to government capacity and/or project/industry capacity over the life of the project.

RE3.3 ***Is the PPP increasing local community capacity? [1]***

[1] e.g. local community capacity in terms of improved transparency, public participation, equality, regulatory quality, human rights, etc.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the public party needs to have conducted an initial/preliminary assessment of any opportunities for knowledge/know-how, technologies and skills transfer (e.g., to determine the actual need for them, and their importance or viability) per RE3.1. In addition, the project needs to identify whether any of these opportunities have the potential to increase local community capacity. Examples of "community capacity" include but are not limited to improved transparency, public participation, quality, regulatory quality, human rights, etc. This preliminary assessment should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to increasing local community capacity (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating increases to local community capacity requirements in feasibility studies and analysis; including improvements to local community capacity as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design foster increases in local community capacity.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to increasing local community capacity (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating increases to local community capacity requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include increases to local community capacity requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in in order to ensure there are increases to local community capacity over the life of the project.

RE4 SUPPORT INNOVATION AND TECHNOLOGY TRANSFER

Rationale

Intent

To recognise and reward projects that implement innovative methods, technologies, or processes; and/or include technology transfer; and/or are able to take advantage of other opportunities to more broadly enhance capacity, efficiency and effectiveness; and/or pursue third-party verification to validate sustainability and resilience achievements.

Metric

Whether or not (and the extent to which) the project implements innovative methods, technologies, or processes; and/or includes technology transfer in the PPP contract and/or is able to take advantage of other opportunities to enhance capacity, efficiency and effectiveness; and/or pursues third-party verification to validate sustainability and resilience achievements..

Description

There are four specific ways in which PPPs are able to comply with this criterion (each of which is described in the following paragraphs):

1. Demonstrating innovation;
2. Including a transfer of technology from the private party to the public party;
3. Pursuing third-party verification to validate sustainability and resilience achievements; and
4. Making the most of previously unforeseen or unanticipated opportunities to enhance the capacity, efficiency and effectiveness.

Demonstrating Innovation

PPPs for the SDGs provide excellent opportunities to explore the development and implementation of innovative methods, technologies and/or processes.

Innovation can lead to improved project outcomes; help projects overcome significant problems, barriers, or limitations; and/or create scalable and transferrable solutions that will benefit others and spur much needed advancements in a given country/region or sector.

Innovation in the context of this criterion refers to the implementation of methods, technologies and processes that are novel in their use, application, or within the local regulatory, political, cultural, or sectoral context of the project.

Projects may demonstrate innovation in several ways including:

(i) The project is an early adopter of new technologies or methods that demonstrably improve project outcomes without negative trade-offs; and/or

(ii) The project implements methods, technologies, or processes that may be commonly used and/or considered best practice in other countries or regions but within the context of the project (e.g., regulatory, political, cultural and/or sectoral) have not gained acceptance or wide-spread use and therefore provide a precedent for future adoption; and/or

(iii) The project includes research and the dissemination of knowledge as key goals/objectives.

Innovation for the sake of innovation is not sufficient in the context of this criterion; innovation must also serve a purpose. To that end, projects must also demonstrate that the implementation of innovative methods, technologies, and processes accomplishes one or both of the following:

(i) Eliminates or substantially reduces significant problems, barriers and/or limitations that previously hampered the use of the new methods, technologies and/or processes implemented on the project;

(ii) Creates scalable and transferrable solutions that will benefit other projects and/or spur advancements in the country/region or sector.

Including a transfer of technology from the private party to the public party

In addition to supporting innovation, this criterion also encourages PPPs to include a transfer of technology from the private party to the public party to contribute to more inclusive growth sustainability, and replicability.

Making the most of previously unforeseen or unanticipated opportunities to enhance the capacity, efficiency and effectiveness

This criterion also encourages PPPs to recognise and take advantage of opportunities to enhance the capacity, efficiency and effectiveness of the public and private sectors and/or the local community that may have been previously unforeseen or unanticipated during project identification but become apparent later on during project development and/or implementation. For example: using a PPP to initiate whole sector transformations such as:

- new or improved customer service/service delivery standards;
- new or improved health care standards;
- new or improved worker and/or public safety standards;
- implementing broad policy changes; and/or
- incorporating PPP for the SDGs principles into PPP legislation.

Applicability This criterion may not be relevant or applicable to all PPP projects. In such cases, projects shall not be penalised for not pursuing this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

RE4.1 ***Is the project implementing one or more innovative methods, technologies, or processes that eliminate or substantially reduce significant problems, barriers or limitations, and/or create scalable and transferrable solutions?***

Applicability: This indicator may not be relevant or applicable to all PPP projects. In such cases, the project may respond to this indicator as 'not applicable' (N/A).

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to have identified one or more innovative methods, technologies and/or processes that could be included in the project. To determine if something can qualify as "innovation", the following guidance must be adhered to: Innovation in the context of this criterion refers to the implementation of methods, technologies and processes that are novel in their use, application, or within the local regulatory, political, cultural, or sectoral context of the project. Innovation can be demonstrated in several ways including the project being an early adopter of new technologies or methods that demonstrably improve project outcomes without negative trade-offs; and/or implementing methods, technologies, or processes that may be commonly used and/or considered best practice in other countries or regions but within the context of the project (e.g., regulatory, political, cultural and/or sectoral) have not gained acceptance or wide-spread use and therefore provide a precedent for future adoption; and/or including research and the dissemination of knowledge as key goals/objectives in the project. In addition to identifying one or more innovative methods, technologies and/or processes that could be included in the project, the project needs to develop preliminary metrics that will be used to evaluate the contribution of the innovation to project outcomes. Identified opportunities and proposed metrics should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to identifying one or more innovative methods, technologies and/or processes that could be included in the project (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating one or more innovative methods, technologies and/or processes in feasibility studies and analysis; including one or more innovative methods, technologies and/or processes as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed with one or more innovative methods, technologies and/or processes.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to incorporating one or more innovative methods, technologies and/or processes that could be included in the project (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating one or more innovative methods, technologies and/or processes in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include one or more innovative methods, technologies and/or processes requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure one or more innovative methods, technologies and/or processes are implemented over the life of the project.

RE4.2 ***Is the PPP including a transfer of technology (e.g. to enable a circular economy) or know-how that contributes to inclusive growth, service quality, sustainability and replicability?***

Applicability: This indicator may not be relevant or applicable to all PPP projects. In such cases, the project may respond to this indicator as 'not applicable' (N/A).

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to have identified one or more opportunities to include in the project a transfer of technology (e.g. to enable a circular economy) or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability. In addition to identifying one or more opportunities to include technology transfer as part of the project, the project needs to develop preliminary metrics that will be used to evaluate the contribution of the technology transfer to inclusive growth, service quality, sustainability and replicability need to be developed. Identified opportunities and proposed metrics should be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to identifying one or more opportunities to include a transfer of technology or know-how in the project that has the potential to contribute to inclusive growth, service quality, sustainability and replicability (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability in feasibility studies and analysis; including a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to promote a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to identifying one or more opportunities to include a transfer of technology or know-how in the project that has the potential to contribute to inclusive growth, service quality, sustainability and replicability (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure a transfer of technology or know-how that has the potential to contribute to inclusive growth, service quality, sustainability and replicability occurs over the life of the project.

RE4.3 ***Is the project pursuing or intending to pursue recognition [1] so that the project be recognised [2] for its contributions to sustainability and resiliency?***

[1] i.e., through a credible, globally and/or industry recognised organisation that provides a project verification and/or certification programme, such as rating systems, and/or third-party evaluation methodologies that have been used to validate or verify the sustainability and resiliency of infrastructure and/or buildings (material specific or process based certifications do not qualify).

[2] i.e., a formal "award", "certification", "verification" or equivalent designation.

Applicability: This indicator may not be relevant or applicable to all PPP projects. In such cases, the project may respond to this indicator as 'not applicable' (N/A).

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to publicly commit to pursing recognition for sustainability and resiliency (i.e., a formal "award", "certification", "verification" or equivalent designation) from a credible, globally and/or industry recognised organisation (including organisations with comprehensive frameworks, rating systems or evaluation methodologies that have been used to validate or verify the sustainability and resiliency of infrastructure and/or buildings, noting that material-specific or process-based certifications do not qualify for this indicator). Public commitments to pursuing recognition for sustainability and resiliency should be on the project's website or other publicly available document or website, and/or included in the project's Statement of Intent, and should also be included in the PPP development strategy, concept document, prefeasibility study, or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to pursing recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating a requirement to pursue recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation in feasibility studies and analysis; including recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to allow for the pursuit of recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to pursing recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating the pursuit of recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that the pursuit of recognition for sustainability and resiliency from a credible, globally and/or industry recognised organisation requirements;

and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure recognition or maintenance of sustainability and resiliency from a credible, globally and/or industry recognised organisation over the life of the project.

RE4.4 ***Are other opportunities arising from the PPP [1] to enhance the capacity, efficiency and effectiveness of public and private sector and/or the local community being initiated or implemented?***

[1] "other opportunities" include those that may have been previously unforeseen or unanticipated during project identification but become apparent later on during project development and/or implementation. For example: using a PPP to initiate whole sector transformations such as new or improved customer service or service delivery standards; new or improved health care standards and/or regulations; new or improved worker/labour, social protection, equality, women empowerment, and/or public safety standards and/or regulations; implementing broad policy changes; and/or incorporating PPP for the SDGs principles into PPP legislation.

Applicability: This indicator may not be relevant or applicable to all PPP projects. In such cases, the project may respond to this indicator as 'not applicable' (N/A).

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to, or explicitly convey its willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community. In the context of this indicator, "other opportunities" include those that may not be anticipated or able to be anticipated during project identification but could become apparent later on during project development and/or implementation. For example: using a PPP to initiate whole sector transformations such as new or improved customer service or service delivery standards; new or improved health care standards and/or regulations; new or improved worker/labour, social protection, equality, women empowerment, and/or public safety standards and/or regulations; implementing broad policy changes; and/or incorporating PPP for the SDGs principles into PPP legislation. Such commitments should be included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to explicitly conveying its willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating a willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community in feasibility studies and analysis; including a willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community as part of the project's performance approvals over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design are developed to ensure a willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to explicitly conveying its willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating a willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include a review process for any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to maintain a willingness to, review any opportunities as they arise that could enhance the capacity, efficiency and effectiveness of the public and private sector and/or the local community over the life of the project.

Stakeholder Engagement (SE)

Effective and inclusive stakeholder engagement and public participation in decision-making processes and throughout the life of the PPP is an important ingredient for successful project delivery, and yet is often regarded as a fringe activity or one that can be outsourced to business-as-usual functions. "Public participation" is an inclusive concept that covers all stakeholders, including natural or legal persons who are interested or potentially interested in the project and its outcomes, non-governmental organisations (NGOs), local communities, women, vulnerable people, and others.

Project managers depend on people to respond to the outputs and benefits that they deliver. People will respond better if they are engaged. Thus, best practice in stakeholder engagement and public participation is typically about how the government and private sector reach out to all stakeholders (including the public) to make them feel part of the project.

Stakeholder engagement and public participation in PPPs for the SDGs is widely considered to be more than this. It means creating an enabling framework of regulations, procedures, and contractual provisions, as well as incentivising contracting authorities and private partners to recognise the value of effective and inclusive stakeholder engagement and public participation. One significant form of stakeholder engagement and public participation that is well in tune with the ethos of "PPPs for the SDGs" is to engage directly with the citizens and communities affected by the projects and sometimes to mobilise them through a collective body. The latter can be a conduit for affected people and future beneficiaries' views on the project and these views can then be addressed together by the contracting authority and the private partner in open and transparent dialogues.

The UNECE has negotiated the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention[14]) and its Protocol on Pollutant Release and Transfer Registers (Kyiv Protocol[15]), which empower people with the rights to access information, participate in decision-making in environmental matters and to seek justice.

Four criteria and 12 related indicators are used to assess project performance against the Stakeholder Engagement outcome area:

Stakeholder Engagement

4 criteria
12 indicators

SE1 PLAN FOR STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION

SE2 MAXIMISE STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION

SE3 PROVIDE TRANSPARENT AND QUALITY PROJECT INFORMATION

SE4 MANAGE PUBLIC GRIEVANCES AND END USER FEEDBACK

[14] UNECE's *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, June 1998, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

[15] UNECE's *Kyiv Protocol on Pollutant Release and Transfer Registers*, October 2009, available online: https://www.unece.org/env/pp/prtr.html

SE1 PLAN FOR STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION

Includes mandatory indicators

Rationale

Intent To identify stakeholders, and plan for stakeholder engagement and public participation throughout the life of the project.

Metric The identification of stakeholders (including the public), and the establishment of sound and meaningful stakeholder engagement and public participation plans.

Description PPPs involve an array of stakeholders and interconnected relationships. For example, the public party, or procuring authority, will have a relationship with the private party (or consortium of private firms) involved in project development and implementation. Close collaboration and effective engagement between these parties is essential; however, stakeholder engagement in the context of this criterion goes well beyond this relationship and includes an array of other stakeholders, including the public that need to be adequately informed about the project and involved in project decision-making.

The focus of this criterion is on planning for effective and meaningful stakeholder engagement and public participation (subsequent criteria address the implementation of stakeholder engagement and public participation plans, and the outcomes from stakeholder engagement and public participation).

The starting point for effective and meaningful stakeholder engagement and public participation is the development of a stakeholder engagement and public participation plan that takes into account the array of stakeholders who could be affected/impacted by the project either directly or indirectly, and establishing plans to effectively engage them, taking into account their particular needs, goals, and issues. Effective and meaningful stakeholder engagement and public participation should also be done early on in project identification and planning, and continued throughout project development, and implementation. Stakeholder engagement and public participation plans should, therefore, consider stakeholders (including the public) during each stage of the project's lifecycle, and should consider how stakeholder engagement processes and public participation might shift during each project stage.

Relationship building is a key component of stakeholder engagement and public participation and is crucial to the success of PPPs for the SDGs. While many PPPs include some form of stakeholder engagement and public participation, this criterion encourages PPPs for the SDGs to go above and beyond minimal requirements and explore ways to more meaningfully engage a wider variety of stakeholders, including the public. PPPs that fail to meaningfully engage stakeholders and encourage public participation risk project failures – for example, they may fail to notice demographic, cultural, socioeconomic, environmental, political and other shifts within the community that may impact the overall success of the PPP.

Proactive, early, and sustained stakeholder engagement and public participation throughout the project's lifecycle helps the private and public sector parties responsible for developing and implementing the PPP earn a social license to operate (SLO). SLO refers to the ongoing acceptance of the PPP by stakeholders (e.g., the community, the general public) which is developed through a process of mutual respect and trust. This can be accomplished effective and meaningful stakeholder engagement and public participation.

Key concepts explored in this criterion include stakeholders and stakeholder mapping (noting that in the context of this criterion, "the public" is considered a stakeholder); different types of engagement, moving from more passive forms of engagement to more active forms, depending on the needs of the stakeholder and the stage of the project; and the establishment of an independent oversight committee to monitor the effectiveness of the stakeholder engagement and public participation over the life of the project. Each of these concepts is explained in the following paragraphs.

Stakeholders and Stakeholder Mapping

In order to ensure stakeholder engagement and public participation is fair, inclusive, and equitable, it is important for PPPs for the SDGs to identify all stakeholders, including the public, so they can be given the opportunity to participate effectively in project decision making. Stakeholders include but are not limited to:

- End users/direct customers of the PPP;
- Lenders, equity investors, other shareholders;
- Technical, legal, financial, and other advisors;
- Local business and community stakeholders;
- Other private parties and government agencies involved in or affected by the project (e.g., operations and maintenance contractors, construction contractors);
- Non-governmental organisations;
- Formal and informal community-based associations (e.g., neighbourhood associations, local conservation authorities, others);
- Media and the general public;
- Indigenous, sovereign, and self-governing peoples; and
- People from marginalised and vulnerable groups, including women.

All stakeholders must be identified, classified (e.g., primary or secondary stakeholders), and prioritised in a fair and equitable fashion. This is an essential component of stakeholder mapping, a process of laying out all of the stakeholders of the PPP—including women, marginalised and vulnerable groups and the general public who could be affected by or interested the project— to get a representation of how they are connected to the project and each other, and the degree to which they can influence project outcomes or be affected by/interested in the project.

For additional information and guidance on identifying, classifying and prioritising stakeholders, and the importance of stakeholder engagement and public participation in PPPs, the following references may be useful:

(i) UNECE's *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, June 1998, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf
(ii) UNDP's Guidance Note: UNDP Social and Environmental Standards: Stakeholder Engagement, October 2017, available here: https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/Final%20UNDP%20SES%20Stakeholder%20Engagement%20GN_Oct2017.pdf
(iii) APMG International *Who are the Stakeholders* guidance, available here: https://ppp-certification.com/ppp-certification-guide/121-who-are-stakeholders
(iv) International Finance Corporation's *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business and Emerging Markets*, May 2007, available here: https://library.pppknowledgelab.org/d/2282/download
(v) World Bank Group's *Stakeholder Communication and Engagement* guidance, available here: https://pppknowledgelab.org/guide/sections/39-stakeholder-communication-and-engagement
(vi) Anna Wojewnik-Filipkowska and Joanna Wegrzyn's *Understanding of Public-Private Partnership Stakeholders as a Condition of Sustainable Development* scholarly article, January 2019, available here: https://www.mdpi.com/2071-1050/11/4/1194/htm

Stakeholder Engagement and Public Participation Plan

Once stakeholders are identified, a stakeholder engagement plan (including public participation) needs to be developed for the PPP. A stakeholder engagement plan is a formal strategy to communicate with project stakeholders (including the public) to achieve their support and buy-in for the project, and to ensure stakeholders and the public are able to effectively participate in project decision-making. Such a plan will specify how, when and where stakeholders will be engaged and the type(s) of information that will be shared with and/or solicited from stakeholders. Principles of effective stakeholder engagement planning include *inter alia*:

- Taking into account the different needs, goals, and issues of each identified stakeholder (including the public);
- Taking into account the different stages of the project's lifecycle to ensure early and sustained engagement with stakeholders, and how stakeholder needs, goals, issues and requirements for information may change as the project progresses;
- Taking into account the broad range of issues the PPP needs to address through stakeholder engagement and public participation (e.g., social, cultural, economic, and/or environmental);
- Ensuring different forms of engagement/communications are considered for each stakeholder, where proactive approaches to engagement and participation are duly considered (e.g., active outreach and a determined approach to reach stakeholders, rather than passive invitations to participation such as public notices with little to no follow up to ensure a robust interaction with stakeholders);
- Ensuring stakeholder engagement and public participation strategies move beyond one-way communications (e.g., telling stakeholders/the public about the project) to more active forms of dialogue, where stakeholders (including the public) have opportunities to provide input about the project that could influence outcomes;
- Ensuring stakeholders have sufficient opportunities to be involved in project decision-making; and
- Ensuring stakeholders are able to access information and participate in decision-making including in matters pertaining to the environment (e.g., per the Aarhus Convention[16] and Kyiv Protocol[17]).

Establishment of an independent oversight committee

This criterion also talks about the establishment of an independent oversight committee as part of planning for effective and meaningful stakeholder engagement. In the context of this criterion, an independent oversight committee is a committee responsible for overseeing and monitoring the effectiveness of the stakeholder engagement process, and the publication and dissemination of project information especially as related to the PPP for the SDGs outcomes (access and equity, economic effectiveness and fiscal sustainability, environmental sustainability and resilience, replicability, and stakeholder engagement). Establishing such a committee may not be realistic or necessary for all PPPs, but may be necessary for some (e.g., larger, potentially more contentious projects, or more complex projects). An independent oversight committee needs to have clear roles and responsibilities, established term limits, should make decisions by consensus. Members of the independent oversight committee need to be free from real or perceived conflicts of interest and committee representation should be made up of local stakeholders and women (i.e., 50% or more and 40% or more respectively).

Applicability This criterion is applicable to all PPPs; therefore, all projects seeking to be recognised as a PPP for the SDGs must respond to the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion (unless indicators included in this criterion are determined to be not applicable).

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

SE1.1 ***Is a stakeholder mapping exercise being undertaken to determine all stakeholders[18] directly and indirectly affected by and/or interested in the project?***

[16] UNECE's *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* (Aarhus Convention), June 1998, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

[17] UNECE's *Kyiv Protocol on Pollutant Release and Transfer Registers* (Kyiv Protocol), October 2009, available online: https://www.unece.org/env/pp/prtr.html

[18] In the context of this indicator, stakeholder identification must be as inclusive as possible. Stakeholders should include end users/direct customers of the PPP; lenders, equity investors, other shareholders; technical, legal, financial, and other advisors; local business and

[1] in the context of this indicator, stakeholder identification must be as inclusive as possible. Stakeholders should include end users/direct customers of the PPP; lenders, equity investors, other shareholders; technical, legal, financial, and other advisors; local business and community stakeholders; other private parties and government agencies involved in or affected by the project (e.g., operations and maintenance contractors, construction contractors); non-governmental organisations; formal and informal community-based associations (e.g., neighbourhood associations, local conservation authorities, others); media and the general public; indigenous peoples; people from marginalised and vulnerable groups, including women.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to identify all stakeholders that have the potential to be directly and indirectly affected by and/or interested in in the project. This initial identification of stakeholders needs to be *inclusive*, noting that as the project progresses through development and implementation the list of stakeholders will likely be further refined and/or expanded upon.

Projects are expected to identify a wide range of stakeholders, including:

- End users/direct customers of the PPP;
- Lenders, equity investors, other shareholders;
- Technical, legal, financial, and other advisors;
- Local business and community stakeholders;
- Other private parties and government agencies involved in or affected by the project (e.g., operations and maintenance contractors, construction contractors);
- Non-governmental organisations;
- Formal and informal community-based associations (e.g., neighbourhood associations, local conservation authorities, others);
- Media and the general public;
- Indigenous, sovereign, and self-governing peoples; and
- People from marginalised and vulnerable groups, including women.

In addition to developing an inclusive list of stakeholders, the project needs to consider how to classify them and ensure they, and their needs, are *prioritised in a fair and equitable fashion*. This is an essential component of stakeholder mapping, a process of laying out all of the stakeholders of the PPP—including women, marginalised and vulnerable groups and the general public who could be affected by or interested in the project—to get a representation of how they are connected to the project and each other, and the degree to which they can influence project outcomes or be affected by/interested in the project.

A number of resources were included in the description section for this criterion, which have been included again here for ease of reference. These resources provide additional guidance on identifying, classifying and prioritising stakeholders, and the importance of stakeholder engagement and public participation in PPPs:

(i) UNECE's *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, June 1998, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf
(ii) UNDP's Guidance Note: UNDP Social and Environmental Standards: Stakeholder Engagement, October 2017, available here: https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/Final%20UNDP%20SES%20Stakeholder%20Engagement%20GN_Oct2017.pdf
(iii) APMG International *Who are the Stakeholders* guidance, available here: https://ppp-certification.com/ppp-certification-guide/121-who-are-stakeholders

community stakeholders; other private parties and government agencies involved in or affected by the project (for example, operations and maintenance contractors, construction contractors); non-governmental organisations; formal and informal community-based associations (for example, neighbourhood associations, local conservation authorities, others); media and the general public; indigenous peoples; people from marginalized and vulnerable groups, including women.

(iv) International Finance Corporation's *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business and Emerging Markets*, May 2007, available here: https://library.pppknowledgelab.org/d/2282/download
(v) World Bank Group's *Stakeholder Communication and Engagement* guidance, available here: https://pppknowledgelab.org/guide/sections/39-stakeholder-communication-and-engagement
(vi) Anna Wojewnik-Filipkowska and Joanna Wegrzyn's *Understanding of Public-Private Partnership Stakeholders as a Condition of Sustainable Development* scholarly article, January 2019, available here: https://www.mdpi.com/2071-1050/11/4/1194/htm

This stakeholder mapping exercise should be undertaken as part of and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must identify all stakeholders that have the potential to be directly and indirectly affected by and/or interested in in the project and consider how to classify them and ensure they, and their needs, are prioritised in a fair and equitable fashion (as identified in the project Identification Stage) and include those commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating stakeholder identification and prioritization in feasibility studies and analysis, or including stakeholder identification and prioritization as part of the project's performance metrics over the life of the project.

Implementation stage

To rate this indicator as "5-excellent" the project must identify all stakeholders that have the potential to be directly and indirectly affected by and/or interested in in the project and consider how to classify them and ensure they, and their needs, are prioritised in a fair and equitable fashion (as identified in the project Identification Stage and developed in the project Development stage) and include those commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating stakeholder identification and prioritization in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include stakeholder identification and prioritization requirements; and/or conducting periodic review and reasonable calibration of the services in the project to ensure stakeholder identification and prioritization over the life of the project.

SE1.2 ***Is a stakeholder engagement plan (including public participation) being developed, that takes into account the specific needs of each stakeholder, [1] and considers the broad range of project issues that need to be addressed? [2] (*)***

[1] this indicator builds on SE1.1. All stakeholders (including the public) identified in SE1.1 must be accounted for within the stakeholder engagement and public participation plan.

[2] project issues to be accounted for include the merits and demerits to undertake a project under a PPP model and the social, cultural, economic, environmental, as well as all other issues related to the PPP for the SDGs outcomes.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

This indicator builds on SE1.1. To rate this indicator as "5-excellent", requirements outlined in SE1.1 must first be achieved.

Once a stakeholder mapping exercise has been completed, the project then needs to develop a stakeholder engagement and public participation plan.

During the project identification stage, this could be a preliminary or basic plan, noting that such a plan will need to be further refined and/or expanded upon during project development. However, an initial plan must be established as stakeholder engagement and public participation is important during all stages of a project,

including during the identification stage, where stakeholder needs, interests, and issues need to be thoroughly and properly taken into account.

A stakeholder engagement plan is a formal strategy to communicate with project stakeholders (including the public) to achieve their support and buy-in for the project, and to ensure stakeholders and the public are able to effectively participate in project decision-making. Such a plan will specify how, when and where stakeholders will be engaged and the type(s) of information that will be shared with and/or solicited from stakeholders.

Principles of effective stakeholder engagement planning include *inter alia*:

- Taking into account the different needs, goals, and issues of each identified stakeholder (including the public);
- Taking into account the different stages of the project's lifecycle to ensure early and sustained engagement with stakeholders, and how stakeholder needs, goals, issues and requirements for information may change as the project progresses;
- Taking into account the broad range of issues the PPP needs to address through stakeholder engagement and public participation (e.g., social, cultural, economic, and/or environmental);
- Ensuring different forms of engagement/communications are considered for each stakeholder, where proactive approaches to engagement and participation are duly considered (e.g., active outreach and a determined approach to reach stakeholders, rather than passive invitations to participation such as public notices with little to no follow up to ensure a robust interaction with stakeholders);
- Ensuring stakeholder engagement and public participation strategies move beyond one-way communications (e.g., telling stakeholders/the public about the project) to more active forms of dialogue, where stakeholders (including the public) have opportunities to provide input about the project that could influence outcomes;
- Ensuring stakeholders have sufficient opportunities to be involved in project decision-making; and
- Ensuring stakeholders are able to access information and participate in decision-making including in matters pertaining to the environment.

The stakeholder engagement and public participation plan should be undertaken as part of and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation. The robustness and detail included in the plan is what distinguishes "3-satisfactory" from "4-very good" and "5-excellent" ratings. "3-satisfactory" requires a basic or initial plan, whereas "4-very good" and "5-excellent" requires a more robust/detailed plan.

Development stage

To rate this indicator as "5-excellent" the project must commit to developing a stakeholder engagement and public participation plan (as identified in the project Identification Stage) and include such a commitment in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by developing and incorporating a stakeholder engagement and public participation plan as part of the development of feasibility studies and analysis, including a stakeholder engagement and public participation plan as part of the project's performance metrics over the life of the project, and/or ensuring the development of the project's conceptual technical, physical, and financial design include the use of the stakeholder and public participation plan.

Implementation stage

To rate this indicator as "5-excellent" the project must incorporate a stakeholder engagement and public participation plan (as identified in the project Identification Stage and developed in the project Development Stage) and include such plan in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating a stakeholder engagement and public participation plan in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include stakeholder engagement and public participation in accordance with the plan ; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure the stakeholder engagement and public participation plan is incorporated over the life of the project.

SE1.3 ***Are stakeholder engagement and public participation metrics [1] being established to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process and metrics, and to measure the specific outcomes achieved as a result of the process?***

[1] e.g., number of women/women's groups and people from marginalised communities to be included in project decision-making processes; number of meetings and attendees each month; number of survey responses obtained; response times for follow up tasks and assignments; satisfaction rating from stakeholders (including the public) involved in and/or interested in the project; social, cultural, economic, environmental outcomes achieved as a direct of stakeholder and public feedback.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

To rate this indicator as "5-excellent", the project needs to commit to establishing metrics to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process throughout the life of the project. In addition to making explicit commitments, the project also needs to prepare draft metrics that could be used to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process during development and implementation, noting these metrics will likely be further refined in later stages of project development. Since stakeholder engagement and public participation is essential to be conducted during all stages of the project, including the identification stage, projects are also expected to have metrics in place to measure the effectiveness and inclusiveness of stakeholder engagement and public participation during the identification stage of the project.

In summary, projects are required to:

a) Commit to establishing metrics;
b) Draft metrics to measure the effectiveness and inclusiveness of stakeholder engagement and public participation during project development and implementation; and
c) Develop metrics to measure the effectiveness and inclusiveness of stakeholder engagement and public participation during project identification stage.

Metrics to measure the effectiveness and inclusiveness of stakeholder engagement and public participation should be included in the stakeholder engagement and public participation plan (per indicator SE1.2) and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Example metrics include but are not limited to:

- The number of women or women's groups and people from marginalised communities included in project decision-making processes;
- Number of meetings and attendees each month;
- Number of survey responses obtained;
- Response times for follow up tasks and assignments;
- Satisfaction rating from stakeholders, including the public, involved in and/or interested in the project; and/or
- Social, cultural, economic, environmental outcomes achieved as a direct result of stakeholder and public feedback.

Metrics should be both quantitative and qualitative and need to be developed to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation. For example, "number of meetings" or "number of attendees at each meeting" on their own are insufficient to gauge the effectiveness and inclusiveness of the stakeholder engagement and public participation but are acceptable metrics if they are part of a broader set of metrics.

Development stage

To rate this indicator as "5-excellent" the project must commit to developing metrics to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process throughout the life of the project (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating metrics in feasibility studies and analysis; or, including metrics as part of the project's performance approvals over the life of the project.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to developing metrics to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process throughout the life of the

project (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating metrics that measure stakeholder engagement and public participation in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that measure stakeholder engagement and public participation; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure measurement of stakeholder engagement and public participation over the life of the project.

SE1.4 ***Is an independent oversight committee responsible for overseeing and monitoring the effectiveness of the stakeholder engagement and public participation process, and the publication and dissemination of project information being established?***

Applicability: In some rare cases, projects may consider this indicator to be "not applicable" (N/A) (i.e., smaller, social PPPs) but for most PPPs, especially larger, more contentious and/or more complex infrastructure projects this indictor is applicable.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to establishing an independent oversight committee and propose an initial structure or terms of reference for this committee, including defining roles and responsibilities, term limits, potential members and/or make-up of the committee (e.g., percentage of women, percentage of local stakeholders, etc.). An independent oversight committee is an important part of effective stakeholder engagement and public participation. Such a committee is responsible for overseeing and monitoring the effectiveness of the stakeholder engagement process, and the publication and dissemination of project information, especially as related to the PPP for the SDGs outcomes (access and equity, economic effectiveness and fiscal sustainability, environmental sustainability and resilience, replicability, and stakeholder engagement). Commitments, and a draft structure or initial terms of reference for an independent oversight committee should be included in the stakeholder engagement and public participation plan (per SE1.2) and included in in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to establishing an independent oversight committee and its terms of reference (as identified in the project Identification Stage) and ensure the committee has a stakeholder engagement and public participation oversight role in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to ensuring the independent oversight committee (as identified in the project Identification Stage and developed in the project Development Stage) has a stakeholder engagement and public participation oversight role in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

SE2 MAXIMISE STAKEHOLDER ENGAGEMENT AND PUBLIC PARTICIPATION

Rationale

Intent Early and sustained stakeholder engagement and public participation, and involvement in project decision-making.

Metric The implementation of sound, meaningful, and inclusive stakeholder engagement and public participation throughout the life of the project.

Description This criterion builds on SE1 Plan for Stakeholder Engagement and Public Participation. Whereas SE1 focused on planning for effective and meaningful stakeholder engagement and public participation, the focus of this criterion is on the *implementation of effective and meaningful stakeholder engagement and public participation and the specific outcomes resulting from this process.*

Applicability This criterion is applicable to all PPPs; therefore, all projects seeking to be recognised as a PPP for the SDGs are encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

SE2.1 ***Are the stakeholder engagement and public participation plan(s) [1] throughout the project's lifecycle, in an effective, timely and inclusive fashion being in place and implemented?***

[1] the development of a stakeholder engagement (including public participation) plan was addressed in criterion SE1 Plan for Stakeholder Engagement and Public Participation. This indicator builds on criterion SE1 as it is focused on the *implementation* of the plan.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project first needs to satisfy the requirements for the mandatory indicators in SE1, namely, indicators SE1.1 (stakeholder identification and mapping), SE1.2 (developing a stakeholder engagement and public participation plan) and SE1.3 (developing metrics to measure the effectiveness and inclusiveness of the stakeholder engagement and public participation process). In addition, the project needs to: a) Explicitly commit to engaging stakeholders, including the public, throughout the life of the project, as per the stakeholder engagement and public participation plan developed in SE1; and b) Already be implementing (or planning to implement) the stakeholder engagement and public participation plan during the project identification stage, recognising the importance of stakeholder engagement as a crucial aspect of PPPs for the SDGs. The above elements should be included in the stakeholder engagement and public participation plan, and/or PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to engaging stakeholders, including the public, throughout the life of the project, as per the stakeholder engagement and public participation plan (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating stakeholder engagement and public participation in the development of feasibility studies and analysis; including stakeholder engagement and public participation as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate stakeholder engagement and public participation.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to engaging stakeholders, including the public, throughout the life of the project, as per the stakeholder engagement and public participation plan (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating transparent approval requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include transparent review and approval requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in accordance with the law and in full transparent approval processes over the life of the project.

SE2.2 ***Are members of the public, including environmental defenders, able to express their views and participate freely without fear of being penalised, persecuted or harassed for their involvement?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to commit to ensuring members of the public, and indeed all stakeholders (including environmental defenders) are able to express their views and participate freely without fear of being penalised, persecuted, or harassed for their involvement. In addition to making such commitments, the project also needs to draft a set of measures, policies, strategies, or plans to ensure stakeholders are able to freely participate in the project without fear of penalisation, persecution, or harassment. Commitments, and draft measures, policies, strategies or plans should be included in the stakeholder engagement and public participation plan (per SE1), and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to ensuring members of the public, including environmental defenders, are able to express their views and participate freely without fear of being penalised, persecute, or harassed for their involvement, and measures, policies, strategies, or plans to ensure the same (as identified in the project Identification Stage) are incorporated in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating open participation measures, policies, strategies, or plans in the development of feasibility studies and analysis; including open participation measures, policies, strategies, or plans in the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate open public participation.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to ensuring members of the public, including environmental defenders, are able to express their views and participate freely without fear of being penalised, persecute, or harassed for their involvement, and measures, policies, strategies, or plans to ensure the same (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating open participation measures, policies, strategies, or plans in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include open participation measures, policies, strategies, or plans requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure open participation over the life of the project.

SE2.3 ***Is stakeholder feedback being:***

SE2.3.1 incorporated [1] into project plans, designs, processes and/or influenced decision-making?

SE2.3.2 treated fairly and equitably, and according to the principles of social and environmental justice?

SE2.3.3 sought from stakeholders as to their satisfaction with the engagement and public participation process(es) [2] and the resulting decisions made based on their feedback?

[1] the focus of this indicator is to ascertain whether or not the stakeholder engagement process(es) actually resulted in any changes to the project and/or influenced decision-making. In some cases, demonstrating that stakeholder feedback changed one or more aspects of the project may not be possible as there are some situations where feedback from stakeholders cannot be incorporated for technical or other valid reasons, or stakeholder feedback suggests alignment with project plans, designs, processes.

[2] engaging stakeholders and encouraging public participation is a critical aspect of PPPs for the SDGs and the stakeholder engagement and public participation process(es) should also include mechanisms to actively seek feedback from stakeholders (including the public) on the engagement/public participation process(es) themselves, and whether or not stakeholders felt they were being treated fairly and equitably. This is an important aspect of continuous learning – learning how to improve future stakeholder engagement and public participation processes by making them more effective, meaningful, fair, inclusive and equitable.

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage

SE2.3.1:
To rate this sub-indicator as "5-excellent", the project needs to commit to incorporate stakeholder feedback into project plans, designs, processes and/or decision-making.

In some cases, there are some situations where feedback from stakeholders cannot be incorporated for technical or other valid reasons, or stakeholder feedback suggests alignment with project plans, designs, processes.

Since stakeholder engagement and public participation should be occurring at the outset of the project, i.e., during the identification stage of the project, it is possible that feedback received from stakeholders is already being incorporated into project plans, designs, processes and/or decision-making during this stage of the project. The user should carefully document all stakeholder engagement processes, feedback received, and feedback incorporated.

SE2.3.2:
To rate this sub-indicator as "5-excellent", the project needs to commit to treating stakeholder feedback (including feedback from the public) fairly and equitably throughout the life of the project. In addition, the project needs to develop an initial plan that conveys *how* feedback received from stakeholders will be treated in a fair and equitable fashion.

Commitments and an initial plan should be included in the stakeholder engagement and public participation plan (per SE1), and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

SE2.3.3:
To rate this sub-indicator as "5-excellent", the project needs to explicitly commit to seeking feedback from stakeholders *about the stakeholder engagement process(es) used on the project* and needs to commit to seeking feedback from stakeholders *about decisions made based on their feedback*. Such commitments should be included as part of the stakeholder engagement and public participation plan (per criterion SE1), and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Since stakeholder engagement and public participation should be occurring at the outset of the project, i.e., during the identification stage of the project, it is possible that the project will already be receiving feedback from stakeholders about the engagement processes and/or decisions made based on their feedback. The user should carefully document all stakeholder engagement processes, feedback received, and how feedback received is leading to changes on the project and resulting in an improved engagement process.
Development stage
To rate this indicator as "5-excellent" the project must commit to incorporating stakeholder feedback into project plans, designs, processes and/or decision-making (SE 2.3.1), treating stakeholder feedback (including feedback from the public) fairly and equitably (SE 2.3.2), and seeking feedback from stakeholders and the public *about the stakeholder engagement process(es) used on the project* and *about decisions made based on their feedback* (SE 2.3.3) (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by treating stakeholder feedback fairly and equitably and incorporating such feedback in the development of feasibility studies and analysis; including a requirement that the project seek feedback from stakeholders and the public about the stakeholder engagement process as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate stakeholder engagement and public participation.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to incorporating stakeholder feedback into project plans, designs, processes and/or decision-making (SE 2.3.1), treating stakeholder feedback (including feedback from the public) fairly and equitably (SE 2.3.2), and seeking feedback from stakeholders and the public *about the stakeholder engagement process(es) used on the project* and *about decisions made based on their feedback* (SE 2.3.3) (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating stakeholder feedback in the construction of the infrastructure and/or commissioning the services; incorporating stakeholder feedback in the performance review and approval requirements; and/or ensuring the project seeks feedback from stakeholders and the public *about the stakeholder engagement process(es) used on the project* and *about decisions made based on their feedback* over the life of the project.

SE3 PROVIDE TRANSPARENT AND QUALITY PROJECT INFORMATION

Includes mandatory indicators

Rationale

Intent Provide transparent, timely, understandable, accessible, and quality information about the PPP throughout the project's lifecycle.

Metric The extent to which the PPP shares quality information about the project in a transparent, timely, understandable and accessible fashion.

Description This criterion builds on SE1 Plan for Stakeholder Engagement and Public Participation and SE2 Maximise Stakeholder Engagement and Public Participation. Whereas SE1 Plan for Stakeholder Engagement & Public Participation focused on planning for effective and meaningful stakeholder engagement and public participation and SE2 Maximise Stakeholder Engagement and Public Participation focused on the implementation of effective and meaningful stakeholder engagement and public participation based on the stakeholder engagement and public engagement plan(s), the focus of this criterion is on ensuring the PPP provides transparent, timely, understandable, accessible, and quality information about the project throughout the life of the project.

Specifically, PPPs for the SDGs need to provide pertinent project information related to PPP for the SDGs outcomes (access and equity, economic effectiveness and fiscal responsibility, environmental sustainability and resilience, replicability, and stakeholder engagement) to stakeholders (including the public). With respect to environmental information, this is in line with the Aarhus Convention and Kyiv Protocol, which empower people with the rights to access information, participate in decision-making in environmental matters and to seek justice:

(i) UNECE's Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), June 1998, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

(ii) UNECE's Kyiv Protocol on Pollutant Release and Transfer Registers (Kyiv Protocol), October 2009, available online: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf

In addition to sharing pertinent information about the project related to PPP for the SDGs outcomes, PPPs need to consider sharing other information with stakeholders throughout the project's lifecycle, including:

- updates about the project's design and development, including changes to project scope, timelines, physical design characteristics, etc.;
- temporary service interruptions/disruptions;
- maintenance updates; and
- changes to service delivery (e.g., schedule changes, fee changes, etc.)

Information must be shared in a way that can be easily understood and accessed by stakeholders, and serve to inform, and empower stakeholders to make decisions and participate in PPP decision-making processes.

Applicability All PPPs for the SDGs should provide transparent, timely, accessible, understandable and quality information about the PPP throughout the project's lifecycle. Therefore, all projects seeking to be recognised as PPPs for the SDGs must address the mandatory indicators (marked with *) and are strongly encouraged to address all indicators included in this criterion.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

SE3.1 ***Is quality and pertinent information about the project relative to the PPP for the SDGs outcomes being made readily available to all stakeholders, including members of the public, and being***

provided in a transparent, timely, understandable and accessible fashion, and incorporated in the PPP contract? (*)

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to explicitly commit to the following: (a) Providing quality and pertinent project information relative to the PPP for the SDGs outcomes in a transparent, timely, understandable and accessible fashion; (b) Developing plans on how project information will be shared (e.g., updates via social media, news reports, notices being mailed to households, door-to-door engagement, newspapers, radio, meeting minutes, project website) and in what language(s) which *must* be based on the analysis of project stakeholders per criterion SE1 (e.g., language requirements, accessibility needs, etc.); (c) Incorporating project information in the PPP contract; and (d) Monitoring outcomes to ensure all stakeholders are able to access pertinent information about the project. Such commitments, draft plans, and monitoring mechanisms should be included as part of the stakeholder engagement and public participation plan (per criterion SE1), and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to making quality and pertinent information about the project relative to the PPP for the SDGs outcomes readily available to all stakeholders, including members of the public, and provide such information in a transparent, timely, understandable and accessible fashion (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating requirements to provide transparent, timely, understandable and accessible project information in the development of feasibility studies and analysis; including quality and pertinent project information disclosure requirements as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate information sharing requirements.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to making quality and pertinent information about the project relative to the PPP for the SDGs outcomes readily available to all stakeholders, including members of the public, and provide such information in a transparent, timely, understandable and accessible fashion (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating requirements to provide transparent, timely, understandable and accessible project information in the construction of the infrastructure and/or commissioning the services; incorporating quality and pertinent project information disclosure requirements in the project performance review and approval requirements; and/or conducting periodic review and reasonable calibration of the services in the project agreements to ensure transparent, timely, understandable and accessible project information is being provided over the life of the project.

SE3.2 ***Are regular reports summarising the substantial outcome of general stakeholder engagement meetings being published and are they accessible to all stakeholders, including members of the public?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to explicitly commit to publishing/making available regular reports summarising the substantial outcomes of general stakeholder engagement meetings, including those that take place during the project identification stage of the project. When publishing reports/providing updates summarising the substantial outcomes of stakeholder engagement meetings, the user needs to take into

account stakeholder needs (e.g., language requirements, accessibility needs) to ensure all stakeholders are able to access this information.

Such commitments should be included as part of the stakeholder engagement and public participation plan (per criterion SE1), and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage

To rate this indicator as "5-excellent" the project must commit to publishing/making available regular reports summarising the substantial outcomes of general stakeholder engagement meetings, including those that take place during the project Development stage and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction.

For example, this could be done by incorporating such commitments in the development of feasibility studies and analysis; including publication/updates on stakeholder engagement meeting outcomes as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate stakeholder engagement meeting outcomes publication/update requirements.

Implementation stage

To rate this indicator as "5-excellent" the project must commit to publishing/making available regular reports summarising the substantial outcomes of general stakeholder engagement meetings, including those that take place during the project Implementation stage and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating stakeholder engagement meeting outcomes publication/update requirements in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include stakeholder engagement meeting outcomes publication/update requirements ; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure stakeholder engagement meeting outcomes publication/update requirements are met over the life of the project.

SE4 MANAGE PUBLIC GRIEVANCES AND END USER FEEDBACK

Rationale

Intent Enhance public and end user satisfaction with the project through the implementation of a public grievance and end user feedback mechanism.

Metric The establishment of a public grievance and end user feedback process and mechanisms throughout the life of the project.

Description The focus of this criterion is on ensuring the PPP includes a process and mechanisms to capture and respond to customer/end user feedback and any public grievances that may occur over the life of the project. This criterion encourages PPPs to capture and respond to/resolve customer/end user concerns and public grievances in a prompt, fair, and equitable way. Many types of public grievances could occur over the life of a project, including but not limited to:

- Noise and vibration (e.g., during construction and operations/maintenance);
- Community health and safety;
- Intrusive lighting;
- Wayfinding, access and mobility (e.g., during construction);
- Service quality;
- Pricing and affordability;
- Impacts to cultural, historic, and/or public space and amenities;
- Impacts to views and/or local character;
- Stakeholder engagement processes used throughout project planning, design and delivery;
- The PPP procurement process;
- Availability and accessibility of project information;
- Environmental and/or ecosystem impacts (e.g., impacts to air quality, surface and/or groundwater quality, farmland); and
- Temporary impacts to existing public services (e.g., electricity, water, communications).

Due to the range of possible grievances and customer/end user concerns that could be raised throughout the life of the project, PPPs need to have a flexible, adaptable and sound approach to accept and manage grievances and end user feedback on a wide variety of issues, some of which may not have been possible to anticipate prior to the development and implementation of the project.

Applicability While there are no mandatory indicators included in this criterion, all PPPs for the SDGs should have a process in place to manage public grievances and end user/customer feedback and are therefore encouraged to address the indicators included in this criterion where possible.

Indicators and Guidance to users when replying to the indicator depending on the stage of the project

SE4.1 ***Are a process and mechanisms to manage public grievances and end-user/customer feedback being set up?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to explicitly commit to setting up a process and mechanisms for capturing and responding to public grievances and end-user/customer feedback, aligned with the stakeholder engagement plan (per criterion SE1).

The goal of meaningful, equitable, and inclusive stakeholder engagement, which is advocated for throughout criteria SE1, SE2, and SE3, is to develop and implement the project in such a way to minimise or even prevent the need for the public and/or end-users or customers to file grievances or complain about the project. However, it is important to ensure that such grievances, should they arise, are able to be dealt with in a prompt, fair, and equitable way. Such commitments should be included as part of the stakeholder engagement and public participation plan, and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to processes and mechanisms to manage public grievances and end-user/customer feedback, as per the stakeholder engagement plan (as identified in the project Identification Stage) and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating processes and mechanisms to manage public grievances and end-user/customer feedback in the development of feasibility studies and analysis; including processes and mechanisms to manage public grievances and end-user/customer feedback as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate processes and mechanisms to manage public grievances and end-user/customer feedback.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to processes and mechanisms to manage public grievances and end-user/customer feedback, as per the stakeholder engagement plan (as identified in the project Identification Stage and developed in the project Development Stage) and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating processes and mechanisms to manage public grievances and end-user/customer feedback in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include processes and mechanisms to manage public grievances and end-user/customer feedback; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure public grievances and end-user/customer feedback is appropriately handled over the life of the project.

SE4.2 ***Are public grievances and end-user/customer feedback being successfully addressed and/or resolved?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
This indicator builds on SE4.1. If the project has gone beyond making the commitments as required by indicator SE4.1 to having a draft process and mechanisms in place to capture and respond to public grievances and end-user or customer feedback, the project may rate this indicator as "5-excellent". The project should take care to document any instances of grievances received and how they were resolved. This process – the process for managing public grievances and end-user/customer feedback – needs to be sufficiently flexible to accommodate a wide range of potential grievances/issues that may not be foreseen at the outset of the project, such as noise and vibration complaints (e.g., during construction and operations/maintenance); community health and safety issues; intrusive lighting; wayfinding, access and mobility concerns (e.g., during construction); service quality issues; pricing and affordability issues; impacts to cultural, historic, and/or public space and amenities; impacts to views and/or local character; stakeholder engagement processes used throughout project planning, design and delivery; the PPP procurement process; the availability and accessibility of project information; environmental and/or ecosystem impacts (e.g., impacts to air quality, surface and/or groundwater quality, farmland); and temporary impacts to existing public services (e.g., electricity, water, communications). The draft process and mechanisms should be included as part of the stakeholder engagement and public participation plan, and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.

Development stage
To rate this indicator as "5-excellent" the project must commit to addressing and/or resolving public grievances and end-user/customer feedback successfully and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by incorporating requirements to address and/or resolve public grievances and end-user/customer feedback successfully in the development of feasibility studies and analysis; including requirements to address and/or resolve public grievances and end-user/customer feedback successfully as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design incorporate requirements to address and/or resolve public grievances and end-user/customer feedback successfully.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to addressing and/or resolving public grievances and end-user/customer feedback successfully and incorporate such commitments in such project implementation activities as construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities. For example, this could be done by incorporating requirements to address and/or resolve public grievances and end-user/customer feedback successfully in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include requirements to address and/or resolve public grievances and end-user/customer feedback successfully; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to require requirements the project to address and/or resolve public grievances and end-user/customer feedback successfully over the life of the project.

SE4.3 ***Are public grievances and end-user/customer feedback, including outcomes being tracked and made available subject to personal data protection regulations?***

Guidance to users when replying to the indicator depending on the stage of the project

Identification stage
To rate this indicator as "5-excellent", the project needs to explicitly commit to tracking and sharing grievances and end-user/customer feedback, including outcomes (i.e., how grievances were resolved) – subject to personal data protection regulations –throughout the life of the project. This could be done through publishing and maintaining an up-to-date FAQ (frequently asked questions) document based on grievances filed/feedback received, publishing reports summarising grievances/feedback and resolutions, and/or making the actual log of complaints filed (and how and when they were resolved) publicly available. Such commitments should be included as part of the stakeholder engagement and public participation plan, and included in the PPP development strategy, concept document, prefeasibility study or equivalent documentation.
Development stage
To rate this indicator as "5-excellent" the project must commit to tracking and sharing grievances and end-user/customer feedback, including outcomes (i.e., how grievances were resolved) – subject to personal data protection regulations and incorporate such commitments in such project development activities as assessing project feasibility, tendering the project, developing the technical design, structuring the legal and financial components, and closing the transaction. For example, this could be done by tracking and sharing grievances and end-user/customer feedback, including outcomes and/or how grievances were resolved, in the development of feasibility studies and analysis; including tracking and sharing grievances and end-user/customer feedback, including outcomes and how grievances were resolved, as part of the project's performance requirements over the life of the project; and/or ensuring the project's conceptual technical, physical, and financial design includes tracking and sharing grievances and end-user/customer feedback, including outcomes and how grievances were resolved.
Implementation stage
To rate this indicator as "5-excellent" the project must commit to tracking and sharing grievances and end-user/customer feedback, including outcomes and how grievances were resolved – subject to personal data protection regulations, and incorporate such commitments in such project implementation activities as

construction of the infrastructure, operation of the facility or services, and contract management including performance monitoring and compliance activities.

For example, this could be done by incorporating tracking and sharing grievances and end-user/customer feedback, including outcomes and/or how grievances were resolved, in the construction of the infrastructure and/or commissioning the services; incorporating contract performance indicators that include requirements for tracking and sharing grievances and end-user/customer feedback, including outcomes and/or how grievances were resolved; and/or conducting periodic review and reasonable calibration of the services in the project agreements in order to ensure the project tracks and shares grievances and end-user/customer feedback, including outcomes and/or how grievances were resolved over the life of the project.