

# MDB Infrastructure Cooperation Platform

A Common Set of Aligned Sustainable  
Infrastructure Indicators (SII)

Inter-American Development Bank

Climate Change Division

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(SII)

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## A Common Set of Aligned Sustainable Infrastructure Indicators (SII)

This report was prepared by the Inter-American Development Bank Group in cooperation with the European Bank for Reconstruction and Development, World Bank, International Financial Corporation, Asian Development Bank, New Development Bank, European Investment Bank, Islamic Development Bank, and African Development Bank.





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## About the MDB Infrastructure Cooperation Platform (ICP)

The Multilateral Development Bank (MDB) Infrastructure Cooperation Platform (ICP) provides an organizational structure to facilitate MDB collaboration and joint initiatives on global infrastructure policy, partnerships, and knowledge as well as general information-sharing among MDBs on topics related to infrastructure.

The ICP was formed in January 2018 in response to the growing consensus over the role of MDBs in supporting the preparation and financing of infrastructure investments as well as in mobilizing private finance for the purpose of closing the global infrastructure services gap. The intention of the ICP is to reinforce the coordination of MDB activities in areas such as infrastructure standards, project preparation, and credit enhancement.

This report<sup>1</sup> contains the output of the ICP Sustainable Infrastructure Indicators workstream, aligned, and supported by the G20 Infrastructure Working Group (IWG).

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<sup>1</sup> This report presents a common set of aligned Sustainable Infrastructure Indicators based on MDB published sustainable infrastructure frameworks and ongoing MDB initiatives presenting good practices on sustainable infrastructure investment and monitoring. It is not a compliance or safeguards document. In case of any inconsistency or conflict between this document and the ESG safeguard policies adopted by the MDBs, such policies shall prevail. The information and opinions within this document are for information purposes only.



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# Acronyms

**ADB**

Asian Development Bank

**AIMM**

Anticipated Impact Measurement and Monitoring

**ASSI**

Aligned Set of Sustainability Indicators for infrastructure

**EBRD**

European Bank for Reconstruction and Development

**EIB**

European Investment Bank

**ESG**

Environmental, Social and Governance

**GHG**

Greenhouse Gas

**GIB**

Global Infrastructure Basel

**GIZ**

German Corporation for International Cooperation GmbH

**GRIS**

Green, Resilient, Inclusive and Sustainable

**HIPSO**

Harmonized Indicators for Private Investors

**ICP**

Infrastructure Cooperation Platform

**IDB**

Inter-American Development Bank

**IFC**

International Finance Corporation

**ISCA**

Infrastructure Sustainability Council of Australia

**ISI**

Institute for Sustainable Infrastructure

**MDBs**

Multilateral Development Banks

**MDGs**

Millennium Development Goals

**OECD**

Organization for Economic Co-operation and Development

**PPIAF**

Public-Private Infrastructure Advisory Facility

**QII**

Quality Infrastructure Investment Indicators

**SDGs**

Sustainable Development Goals

**SIF**

Sustainable Infrastructure Framework

**SPD**

Strategy, Policy and Partnerships Department

**WBG**

World Bank Group

# Executive Summary

Sustainable infrastructure (SI) is an essential foundation for achieving the Sustainable Development Goals (SDGs) and the objectives of the Paris Agreement. However, at present, the world invests too little to meet growing demand resulting in lower economic growth and depriving citizens of essential services.

The closing of the infrastructure gap must go beyond building more but instead requires increasing the quality, efficiency, and innovation of service delivery and transforming how public and private project developers plan, procure, finance, and operate assets that meet all sustainability criteria (social, environmental, institutional, and economic-financial aspects across the asset lifecycle).

As part of the work underway by the MDB ICP Sustainable Infrastructure Workstream, this report shows that despite the numerous sustainable infrastructure tools, frameworks, and sets of indicators that currently exist, none of those frameworks have been jointly developed across all MDBs. To help rectify this issue, the report presents a stock-take of some of the ICP member's latest initiatives and frameworks to identify the common elements that they are using to define sustainable infrastructure.

It also provides insights into how reaching an aligned set of sustainable infrastructure indicators can mobilize public and private sustainable investment and how key public and private players can incorporate/monitor them at various stages of the asset lifecycle—from strategies and planning to portfolio and project design, construction, operations, maintenance, and ultimately decommissioning.

Lastly, this piece of work discusses the extent to which each of the 16 proposed indicators align with the SDGs and with specific SDG targets.

MDBs are uniquely positioned to catalyze leading practices of sustainable infrastructure development and assessment because they (i) provide assistance/technical advice on sustainable infrastructure project preparation and structuring; (ii) have the capacity to tap climate finance funds and mobilize resources for sustainable programs; (iii) are key providers of finance for infrastructure assets to developing countries, and; (iv) support long-term economic growth and development as an essential part of their DNA.

The timing is critical. The global economy is facing one of the worst economic downturns in history, caused by the Covid-19 pandemic. As cash-strapped national and subnational governments face strong fiscal pressures, the space to close the infrastructure gap through public sector investment continues to shrink (Figure 1). It is essential to mobilize private investment at scale for shovel ready bankable sustainable infrastructure investments to foster an inclusive, resilient, and low-emission economic recovery.

The report represents a first step towards providing a common language for dialogue around sustainable infrastructure, and to ensure a more consistent approach to key challenges and opportunities across the project cycle. It offers an important contribution towards a broader effort to deliver an agreed upon set of common indicators and proposes a series of next steps to refine, pilot and disseminate them with key stakeholders.



# 1.

## Towards Common Indicators for Sustainable Infrastructure Investments







# 1. Towards Common Indicators for Sustainable Infrastructure Investments

Sustainable infrastructure (SI) is an essential foundation for achieving inclusive and sustainable growth, the Sustainable Development Goals (SDGs), and the objectives of the Paris Agreement. The services provided by infrastructure are the backbone of economic development, competitiveness, and inclusive growth.

Today, the world invests some \$2.5 trillion a year in the transportation, power, water, and telecom systems on which businesses and populations depend<sup>2</sup>. Yet this amount continues to fall short of the world's ever-expanding needs, resulting in lower economic growth and depriving citizens of essential services.

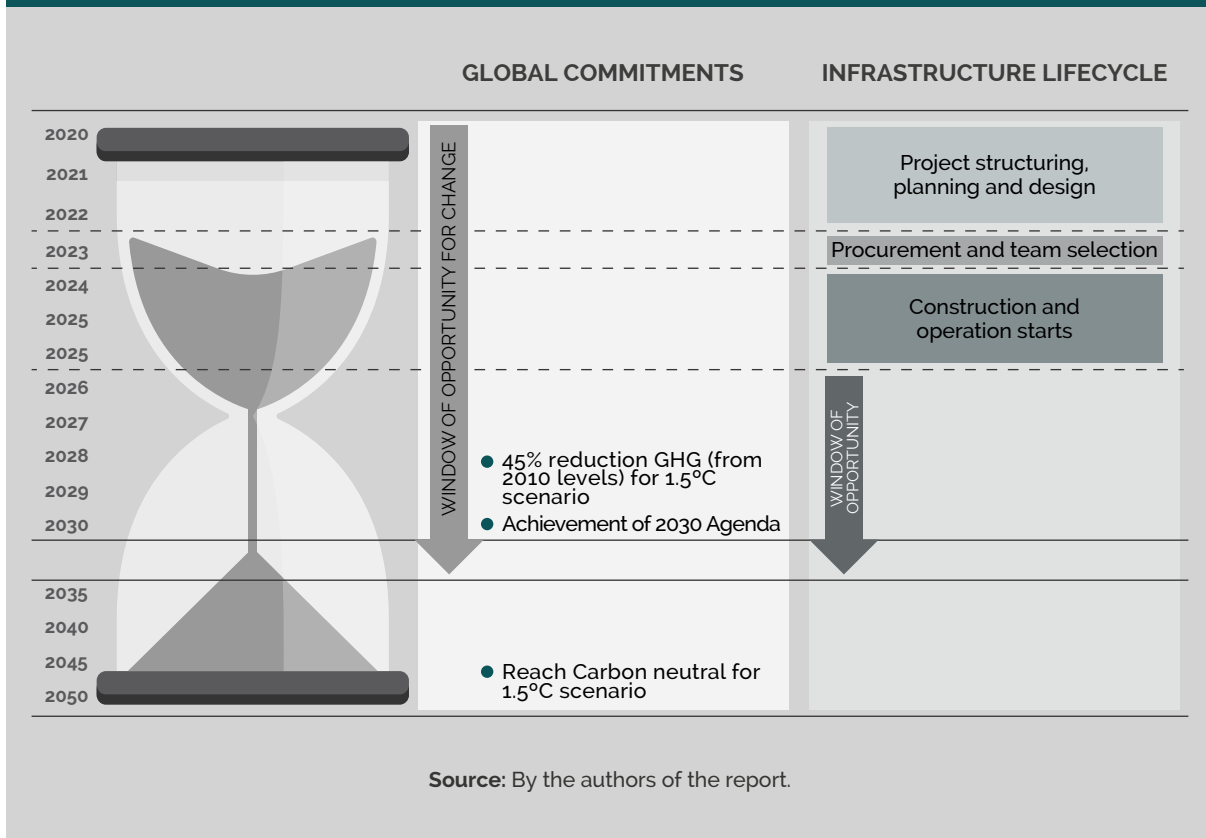
**Closing the infrastructure gap must go beyond building more roads, solar farms, and water treatment systems; it requires increasing the quality, efficiency, and innovation of service delivery and transforming how public and private project developers plan, procure, finance, and operate assets that meet all sustainability criteria (social, environmental, institutional, and economic-financial aspects across the asset lifecycle).**

As this report goes to press, the global economy is facing one of the worst economic downturns in history, caused by the Covid-19 pandemic. As cash-strapped national and subnational governments face strong fiscal pressures, the space to close the infrastructure gap through public sector investment continues to shrink. Therefore, it is essential to mobilize private investment at scale for shovel ready bankable sustainable infrastructure investments to foster an inclusive, resilient, and low-emission economic recovery. The urgency for action is even greater given the long lag time between the structuring, planning, design, procurement, and construction of infrastructure projects and realizing the results of this much-needed transition. This time frame significantly reduces the window of opportunity for national and subnational governments to plan their transitions to carbon neutral economies and catalyze public investment into planning and tendering sustainable projects. Countries have very limited time to create the structures to deploy public and private investment at scale if they are to achieve the objectives of the Paris Agreement and deliver on the Sustainable Development Goals (Figure 1).

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<sup>2</sup> Bridging-Global-Infrastructure-Gaps-In-Brief, McKinsey 2017.

**Figure 1. The Urgency of Action**



Source: By the authors of the report.

**Mobilizing public and private capital at scale for sustainable infrastructure requires first and foremost a clear definition of a sustainable asset and clear guidance on quantitative and qualitative indicators to be considered in the design, procurement and executing phases.**

In recent years, the momentum and appetite for quantifying the sustainability and quality performance of infrastructure projects has grown—hence, the plethora of existing and newly emerging approaches, tools, and frameworks designed for this purpose. Some of the existing approaches vary in their level of comprehensiveness, the phase in which they

apply—from concept, to finance, construction, or operation—and the stakeholder group<sup>3</sup> developing the tools. However, **this prolific landscape of tools and frameworks is sending mixed signals to the investment community about the definitions of a sustainable infrastructure project and its key performance indicators.**

Despite the existence of multiple sustainability infrastructure tools and an emerging consensus of what sustainable infrastructure is, to date, MDBs have not published a commonly agreed-upon set of sustainable infrastructure indicators that reflect the urgency of the matter (see Box 1).

<sup>3</sup> The different stakeholders' groups working on the development of sustainable infrastructure tools include private companies, public authorities, research institutions, non-profit organizations, development banks, or International institutions. Examples of these tools, include the Principles for Responsible Investment (PRI) developed by the UN, INVEST developed by the U.S. Department of Transportation, and Federal Highway Administration, or the Envision rating system created by the Zofnass Program for Sustainable Infrastructure at Harvard University in collaboration with the Institute for Sustainable Infrastructure (ISI). For an overview of the different existing tools, and frameworks visit [Sustainable Infrastructure Tool Navigator](#), developed by GIZ.

## Box 1: The Importance of MDBs for the Sustainable Infrastructure Agenda

MDBs are uniquely positioned to catalyze leading practices of sustainable infrastructure development and assessment because they (i) provide assistance/technical advice on sustainable infrastructure project preparation and structuring; (ii) have the capacity to tap into climate finance funds and mobilize resources for sustainable programs; (iii) are key providers of finance for infrastructure assets to developing countries, and; (iv) support long-term economic growth and development as an essential part of their DNA. Given their unique situation in the support of global sustainable infrastructure development agenda, MDBs must lead by example and collaborate to consolidate existing frameworks, approaches, and benchmarks, and develop an agreed-upon set of sustainable infrastructure indicators that serves to define the DNA of infrastructure sustainability.

The main goal of the MDB ICP Sustainable Infrastructure Workstream is to provide greater clarity and convergence around investment decisions for sustainable infrastructure by analyzing relevant frameworks and the latest ongoing initiatives related to sustainability indicators developed by MDBs and mapping how each of them consider and measure sustainability in infrastructure investment, facilitating dialogue among ICP members/MDBs to provide a data-based analysis of the commonalities and differences of their frameworks.

In order to capture relevant frameworks and latests initiatives, the ICP workstream invited all MDBs to share their latest initiatives on the topic<sup>4</sup>. Three frameworks and two initiatives were identified:

1. The Green, Resilient, Inclusive and Sustainable (GRIS) Indicators by the Asian Development Bank (ADB). (September 2019)

2. The Infrastructure Indicators within the Compendium of Indicators developed by the European Bank for Reconstruction and Development (EBRD). (NA, 2019)

3. The Sustainable Infrastructure Framework (SIF) developed by the Inter-American Development Bank (IDB). (2018, rev. May 2019)

4. The Quality Infrastructure Indicators Framework (QII), by the International Finance Corporation (IFC). (2020, forthcoming)

5. The Aligned Set of Sustainability Indicators (ASSI) developed by the Public-Private Infrastructure Advisory Facility (PPIAF). (August 2019, rev. April 2020).

**Appendix A** provides a detailed description of each framework/initiative analyzed.

**The outcome of the ICP SII workstream process was the identification of 16 key sustainable infrastructure indicators and their corresponding unit of measure.**

<sup>4</sup> The call for information was based on MBD published SI frameworks and ongoing MDB initiatives; it did not include operations compliance and/ or safeguards policy documents.

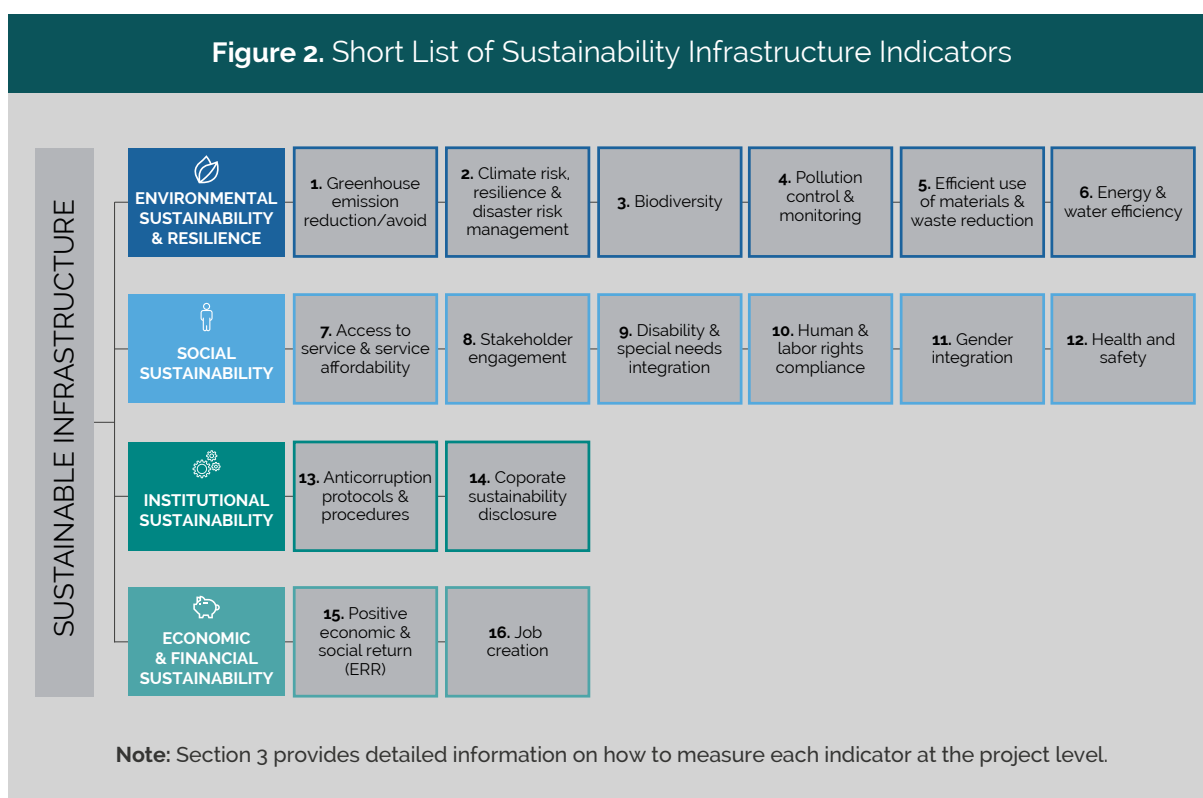


These 16 key sustainable infrastructure indicators do not constitute a comprehensive list of all determinants of sustainability, but they do provide the common denominators of the three mapped sustainable infrastructure frameworks and two latest initiatives. They represent a first step towards providing a common language for dialogue around sustainable infrastructure, and to ensure a more consistent approach to key challenges and opportunities across the project cycle.

**Appendix B** provides a detailed explanation of the due diligence, analysis, and mapping process conducted to identify the key

common indicators.

These indicators address the four categories that define sustainable infrastructure: (i) environmental sustainability and resilience; (ii) social sustainability; (iii) institutional sustainability; and (iv) economic-financial sustainability. The greatest alignment among frameworks/initiatives has been identified in the first two categories—environmental and social—while only two indicators in the areas of institutional and economic/financial sustainability are fully aligned among the three mapped sustainable infrastructure frameworks and two latest initiatives.



Other equally important indicators that were not shortlisted because of insufficient alignment among MDB frameworks include: (i) Land acquisition and resettlement compliance; (ii) Community compensation and development; (iii) Cultural preservation and heritage, (iv) Alignment with global and national strategy; (v) Project feasibility and compliance; (vi) Capacity building; (vii) Long-term financial sustainability, and; (viii) Pricing and incentive alignment.

**Section 2** of this ICP report provides insights into how an aligned set of Sustainable Infrastructure Indicators can mobilize public and private sustainable investment and how key public and private players can incorporate/monitor them at various stages of the asset lifecycle—from strategies and planning to portfolio and project design, construction, operations, maintenance, and ultimately decommissioning.



**Section 3** details the identified SI indicators, including a description of their scope and units of measure, as well as a graphic representation of key takeaways. All information presented in this section was extracted from the three mapped sustainable infrastructure frameworks and two latest initiatives analyzed; thus, the scope of the indicator is defined by the common elements

covered by the different frameworks. Section 3 briefly discusses the extent to which each of the 16 proposed indicators aligns with the SDGs and with specific SDG targets.

**Section 4** outlines some preliminary conclusions and next steps.

# 2.

## **How a set of aligned SII Can Help to Mobilize Public and Private Sustainable Investment**





## 2. How a set of aligned SII Can Help to Mobilize Public and Private Sustainable Investment

A set of aligned Sustainable Infrastructure Indicators (SII) will help (i) Enhance institutional strengthening; (ii) Develop shovel-ready sustainable infrastructure projects; (iii) Reduce transaction costs associated with preparing and structuring bankable sustainable infrastructure projects; (iv) Mobilize public and private investment; (v) Increase data collection; (vi) Facilitate dialogue and a common understanding of sustainability, and; (vii) Identify opportunities for alignment with the SDGs.

**(i) Enhance institutional strengthening.** A common set of sustainable infrastructure indicators will support systemic and long-lasting change, leading to more sustainable pipelines and aligned capacity-building efforts. Institutional strengthening will also positively influence upstream decision-making, especially in the areas of regulatory frameworks, existing policy, and PPP frameworks.

**(ii) Develop shovel-ready sustainable infrastructure projects.** A common set of sustainable infrastructure indicators will help national and subnational governments prepare and initiate better projects in a comprehensive and unified manner across multiple geographic areas. Common and quantifiable indicators can influence project design and outcomes beyond a "do no harm" ESG <sup>5</sup> approach towards projects and have a positive impact on the economy, society, and the environment.

**(iii) Reduce transaction costs associated with preparing and structuring bankable sustainable infrastructure projects.** A common set of sustainable infrastructure indicators will help reduce the fragmentation associated with the application of multiple tools while accelerating and scaling up their adoption.

**(iv) Mobilize public and private investment.** A common set of indicators provides a solid base for governments to prioritize sustainable projects in their public budgets and for the financial industry to develop market-driven labels to accelerate sustainable investments through innovative capital market instruments. Both public and private sectors sharing a harmonized definition and indicators allows for greater sustainable infrastructure investment mobilization at scale.

**(v) Increase data collection.** The consistent collection of data will help demonstrate the superior financial and economic characteristics of sustainable infrastructure as compared with conventional infrastructure. This information is key to establish the asset class and trigger larger-scale investment in sustainable infrastructure.

**(vi) Facilitate dialogue and a common understanding of sustainability.** A common set of sustainable infrastructure indicators will minimize the potential for misunderstandings of what is meant by sustainable infrastructure during discussions among different groups working in the sustainability field. A common set of sustainable infrastructure indicators will raise the bar by sending an unequivocal message to both public and private sectors that sustainability is no longer optional and that greater alignment among infrastructure investors is required to achieve the SDGs and Paris Agreement objectives this decade and future generations.

**(vii) Identify opportunities for alignment with the SDGs.** Lastly, various MDBs have simultaneously launched initiatives to map the SDGs in their respective frameworks. A common set of sustainable infrastructure indicators that identify their compatibility with the SDGs will support the convergence of efforts.

---

<sup>5</sup> Environmental, Social, and Governance (ESG) refers to the three central factors in measuring the sustainability and societal impact of an investment in a company or business. ESG follows a safeguard approach to screen out negative behaviors.



# 3.

## Identified Sustainable Infrastructure Indicators and their corresponding Units Of Measure

This section provides a detailed analysis of a set of aligned SII, their definitions (according to the common elements described in their respective frameworks), and their alignment across frameworks/initiatives. This analysis also aligns the indicator with the targets identified by the institutions.









# 1.Greenhouse emissions reduction/avoid

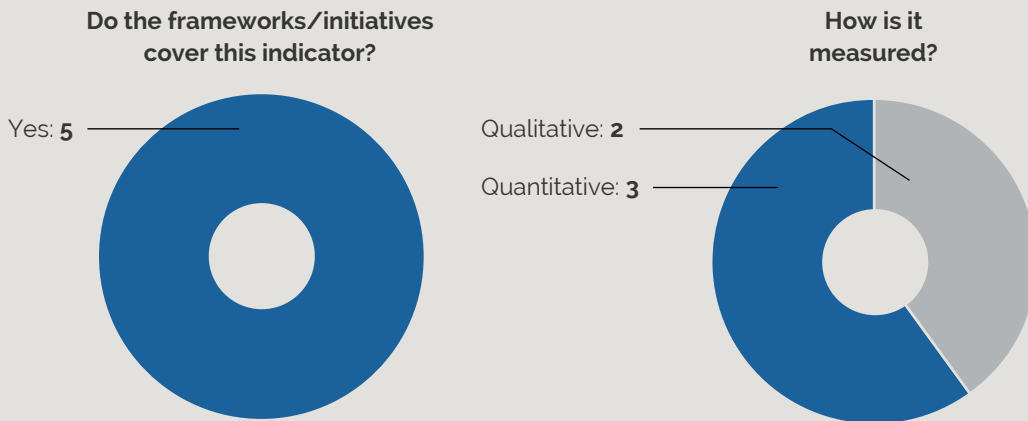
**How are MDBs measuring it?**

Y/N  
tCO<sub>2</sub>/year  
tCO<sub>2</sub>-eq/year

**Description:**

Infrastructure projects should help reduce Greenhouse Gas (GHG) emissions. Infrastructure projects should be aligned both with national GHG reduction policies and targets and international commitments such as the Paris Agreement to combat global warming. GHG emissions assessments should consider the full life cycle of the project.

**Alignment across frameworks/initiatives:**



**Comments:**

The figure on the left refers to how many of the analyzed frameworks/initiatives address this indicator. The figure on the right shows how the five different references analyzed measure the indicators' progress. Two use a binary Y/N qualitative approach while three include quantitative units of measurement such as tCO<sub>2</sub>/year or tCO<sub>2</sub>-eq/year.

All the frameworks/initiatives cover this indicator. Three out of five measure the project's performance in a similar manner by calculating the amount of GHG emissions during different stages of the project. The measurement and goals are consistent with nationally and internationally recognized guidelines and initiatives such as the IFC Greenhouse Gas Reduction Accounting Guidance for Climate-Related Projects or the Paris Agreement.

Estimates are used when real data is not available. However, the evaluation methods vary. Of the three frameworks/initiatives using quantitative methods, two measure by how much GHG emissions are reduced while the other one measures how much GHG is emitted by the project. The remaining two frameworks/initiatives use a simple binary Y/N approach to determine whether reduction measures have been applied.

Besides aligning with the Paris Agreement, some of the tools also reference national GHG reduction policies and other internationally recognized guidelines for calculating the reduction in GHG emissions.

---

### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), specifically target 1.5 (By 2030, increase the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events as well as other economic, social, and environmental shocks and disasters).



**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), particularly target 9.4 (By 2030, upgrade infrastructure and retrofit industries to make them sustainable by increasing resource-use efficiency and adopting more clean and environmentally sound technologies and industrial processes. Countries will act in accordance with their respective capabilities).



**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), particularly target 11.6 (By 2030, reduce the adverse per capita environmental impact of cities by paying special attention to air quality and municipal and other waste management).



**SDG 13** (Take urgent action to combat climate change and its impacts), specifically target 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries).



How are MDBs measuring it?

Y/N

## 2. Climate risk, resilience & disaster risk management

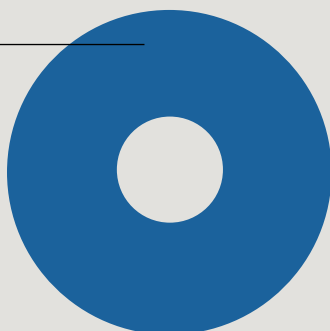
### Description:

Infrastructure projects should be resilient to current and future climate and climate change-related weather shocks (e.g. both slow and rapid onset events). Resilience considerations should be considered during the full cycle of the project addressing current and future climate change scenarios. Direct and indirect climate risks, especially those affecting workers and local communities, should be assessed and managed through a climate impact assessment and an adaptation and recovery plan in accordance to national disaster management frameworks.

### Alignment across frameworks/initiatives:

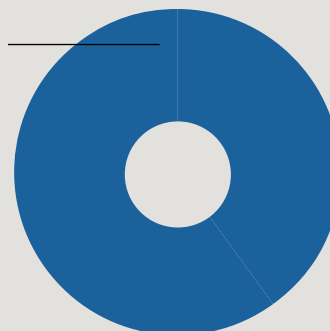
Do the frameworks/initiatives cover this indicator?

Yes: 5



How is it measured?

Qualitative: 5



### Comments:

The figure on the left shows how all the five MDB frameworks/initiatives address this indicator. The figure on the right refers to how the five different references analyzed measure the indicators' progress. In this case, all of the frameworks/initiatives used a binary Y/N qualitative approach.



All five frameworks/initiatives address this topic in a comprehensive way, highlighting that infrastructure projects should be resilient to current and future climate and weather events.

Four out of the five references evaluated point to the need to develop a risk assessment and management plan to evaluate both the direct and indirect impacts generated by the project, paying special attention to the negative effects in communities and the ecosystem. One framework highlights the use of data and technologies to help anticipate and respond to potential shocks and stresses.

All the frameworks/initiatives use a binary Y/N measurement approach, taking into consideration whether the project had incorporated resilience measures to mitigate climate

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:

**1** NO POVERTY



**SDG 1** (End poverty in all its forms everywhere), specifically target 1.5 (By 2030, increase the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events as well as other economic, social, and environmental shocks and disasters).

**2** ZERO HUNGER



**SDG 2** (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), particularly target 2.4 (By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding, and other disasters and progressively improve land and soil quality).

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), specifically target 9.1 (develop quality, reliable, sustainable, and resilient infrastructure including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all).

**11** SUSTAINABLE CITIES AND COMMUNITIES



**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), expressly target 11.5 (By 2030, significantly reduce the number of deaths and people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations).

**13** CLIMATE ACTION



**SDG 13** (Take urgent action to combat climate change and its impacts), particularly target 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries).



### 3. Biodiversity

**How are MDBs measuring it?**

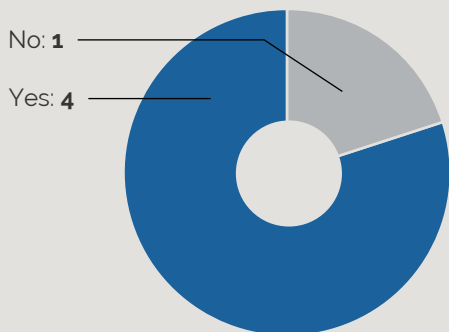
- Y/N
- # Species impacted
- % of land disturbed/protected

**Description:**

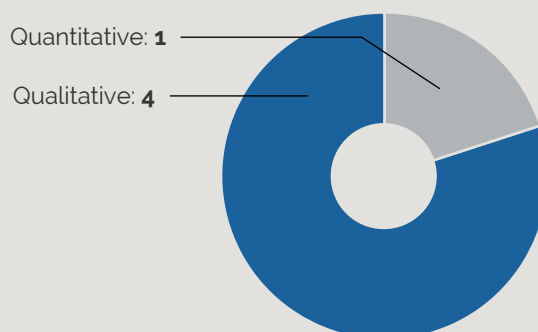
Infrastructure projects should avoid negative impacts on biodiversity as a whole, while promoting conservation strategies. The environmental risks and impacts derived from an infrastructure project must be assessed, managed, and monitored during the entire life cycle in accordance with international standards.

**Alignment across frameworks/initiatives:**

**Do the frameworks/initiatives cover this indicator?**



**How is it measured?**



**Comments:**

The figure on the left shows how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how each MDB framework/initiatives measures the indicators' performance. Four of five used a binary Y/N qualitative approach while one used quantitative units of measurement such as the number of species impacted or the percentage of land that was disturbed or protected.

Four of the five frameworks/initiatives address the biodiversity conservation topic; however, the approach and the level of detail varies. While one of the frameworks refers to biodiversity in an integrated manner, the other three disaggregate the elements of biodiversity. For instance, one of them focuses on (i) the number of endangered species directly or indirectly impacted by the project and (ii) the percentage of land disturbed. Both aspects are addressed during the planning, design, construction, and operation phases of the project. The other two frameworks/initiatives consider the protection of a wide set of elements, including wildlife and ecological corridors, natural capital, areas with high ecological value, soil, noninvasive and local species, and habitats, among others.

All four frameworks/initiatives advocate assessing and managing impacts through a biodiversity management plan and monitoring programs, highlighting the importance of avoiding and mitigating negative impacts on biodiversity.

Regarding measurement, the analysis conducted shows different approaches. Thus, they use both quantitative measurements (for example, amount of endangered species) and qualitative evaluation through a Y/N question on implementation of plans.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**1** NO POVERTY

**SDG 1** (End poverty in all its forms everywhere), specifically target 1.4 (By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance).



**6** CLEAN WATER AND SANITATION

**SDG 6** (Ensure availability and sustainable management of water and sanitation for all), particularly target 6.6 (By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes).



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), expressly target 9.4 (By 2030, upgrade infrastructure and retrofit industries to make them sustainable; increase resource-use efficiency and adopt more clean and environmentally sound technologies and industrial processes. Countries take action in accordance with their respective capabilities).



**11** SUSTAINABLE CITIES AND COMMUNITIES

**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), specifically target 11.4 (Strengthen efforts to protect and safeguard the world's cultural and natural heritage).



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**SDG 12** (Ensure sustainable consumption and production patterns), especially target 12.2 (By 2030, achieve the sustainable management and efficient use of natural resources).



**14** LIFE BELOW WATER

**SDG 14** (Conserve and sustainably use the oceans, seas, and marine resources for sustainable development), particularly target 14.2 (By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts by strengthening their resilience and taking action to restore them in order to achieve healthy and productive oceans).



**15** LIFE ON LAND

**SDG 15** (Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss).



## 4. Pollution control & monitoring

**How are MDBs measuring it?**

Y/N

µg/m3

Tonnes/year

No. of quality standard violations/year

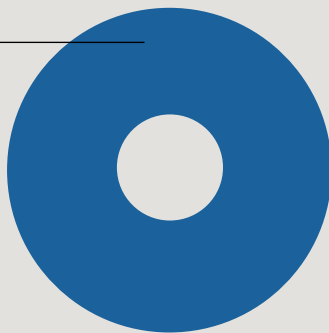
### Description:

Infrastructure projects should avoid, assess, mitigate, and manage the adverse impacts of pollution on human health and the environment. Any form of pollution caused by the project activities (including air, water, land, noise, and vibration or the use of hazardous chemicals, among others) should be minimized during every phase of the project. Full lifecycle pollution management plans and monitoring mechanisms that follow good international industry practices and regulatory requirements should be in place.

### Alignment across frameworks/initiatives:

**Do the frameworks/initiatives cover this indicator?**

Yes: **5**

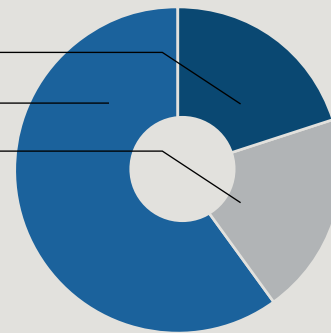


**How is it measured?**

Both: **1**

Qualitative: **3**

Quantitative: **1**



### Comments:

The figure on the left identifies how many of the five MDB frameworks/initiatives cover this indicator. The figure on the right illustrates how the indicator progress is measured. Three of the references analyzed used a binary Y/N qualitative approach, one utilized quantitative units of measurement such as µg/m3 or tonnes/year, and the remaining ones used both quantitative and qualitative measurement methods.



All the frameworks/initiatives cover this topic and require (i) the avoidance or reduction of any form of pollution and (ii) a plan to evaluate and mitigate it. However, pollution is a broad topic, and refers to various elements such as air, water, or soil pollution, among others; these topics are covered in different levels of detail.

Two of the five references analyzed look at pollution in an integrated manner, meaning that they look at water, air, etc. together. One of them looks exclusively at air pollution, while the other two have specific indicators such as particulate matter emissions, water pollution exceedances, or watershed management programs, among others.

Regarding their method of measurement, three frameworks/initiatives use a Y/N approach to determine whether measures to minimize pollution have been adopted. One combines Y/N with quantitative metrics such as  $\mu\text{g}/\text{m}^3$  (for PM<sub>2.5</sub> and PM<sub>10</sub> emissions), and the other one uses quantitative metrics to measure the air emissions reduced by the project in Tonnes/yr.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), especially target 1.5 (By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters).



**SDG 3** (Ensure healthy lives and promote well-being for all at all ages), particularly target 3.9 (By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination).



**SDG 6** (Ensure availability and sustainable management of water and sanitation for all), specifically target 6.3 (By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally).



**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), in particular target 9.4 (By 2030, upgrade infrastructure and retrofit industries to make them sustainable by increasing the efficiency of resource use and adopting more clean and environmentally sound technologies and industrial processes; countries take action in accordance with their respective capabilities).

**11** SUSTAINABLE CITIES AND COMMUNITIES



**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), specifically target 11.6 (By 2030, reduce the adverse per capita environmental impact of cities by paying special attention to air quality and municipal and other waste management).

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**SDG 12** (Ensure sustainable consumption and production patterns), expressly target 12.4 (By 2030, reduce the adverse per capita environmental impact of cities by paying special attention to air quality and municipal and other waste management).

**14** LIFE BELOW WATER



**SDG 14** (Conserve and sustainably use oceans, seas, and marine resources for sustainable development), specifically target 14.1 (By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution).



## 5. Efficient use of materials & waste reduction

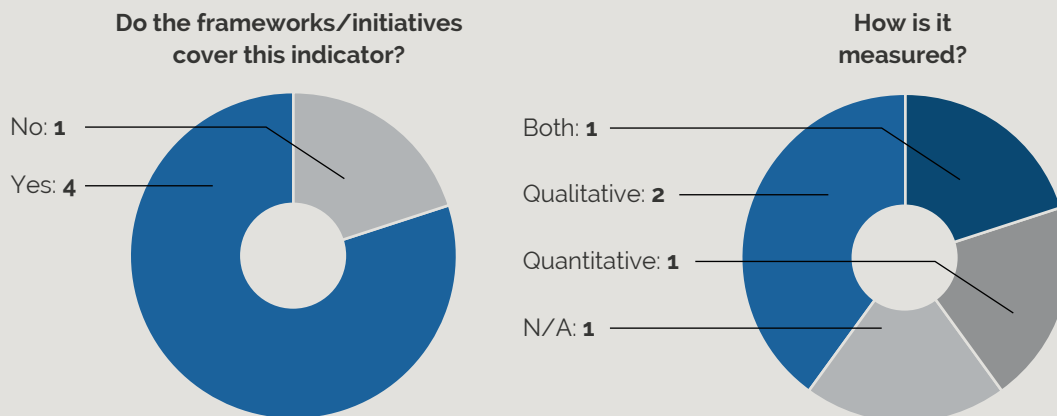
How are MDBs measuring it?

Y/N  
Tonnes (as % of total)  
Tonnes/year

### Description:

Infrastructure projects should be planned and designed considering the efficient use of materials and the integration of recycling practices. Infrastructure projects should implement a waste management plan to monitor and define programs that allow for the substitution, recycling, and recovery of those subproducts.

### Alignment across frameworks/initiatives:



### Comments:

The figure on the left identifies how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Two frameworks/initiatives use a binary Y/N qualitative approach, one uses quantitative units of measurement such as tonnes/year and one uses both qualitative and quantitative measurement methods. The remaining one does not address this indicator.

Four of the five frameworks/initiatives address this issue to varying degrees, with a greater emphasis on waste reduction matters. Two of the references analyzed address efficient use of materials and waste reduction as separate topics. Therefore, they specifically refer to the use of materials with higher recycled content, or locally sourced materials. The other two frameworks/initiatives look at this matter in an aggregate manner by including indicators such as materials reduced/recycled and resource efficiency.

Two of the frameworks refer to implementation of a waste management plan and a materials lifecycle assessment, respectively.

Regarding measurement, quantitative, qualitative, or a combination of both approaches are used. Quantitative measures include reduction of material in tons/year, or percent of total waste diverted from landfill. A Y/N approach is also used by other frameworks.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:

**8** DECENT WORK AND ECONOMIC GROWTH



**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), specifically target 8.4 (Progressively improve global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production; developed countries take the lead).

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation), especially target 9.4 (By 2030, upgrade infrastructure and retrofit industries to make them sustainable by increasing the efficiency of resource use and adopting more clean and environmentally sound technologies and industrial processes; countries take action in accordance with their respective capabilities).

**11** SUSTAINABLE CITIES AND COMMUNITIES



**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), specifically target 11.6 (By 2030, reduce the adverse per capita environmental impact of cities, paying special attention to air quality and municipal and other waste management).

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**SDG 12** (Ensure sustainable consumption and production patterns), specifically target 12.5 (By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse).





## 6. Energy & water efficiency

### How are MDBs measuring it?

Y/N	MWh/year
GWh	m <sup>3</sup> /year
kL/year	GJ/year

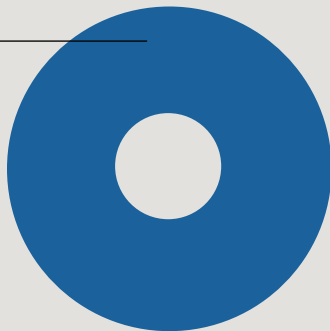
#### Description:

Infrastructure projects should monitor and promote the efficient and sustainable use of water and energy (including renewable sources) during the life cycle of the project. The use of water and energy resources during the project must not jeopardize community access to food, land, and water resources.

#### Alignment across frameworks/initiatives:

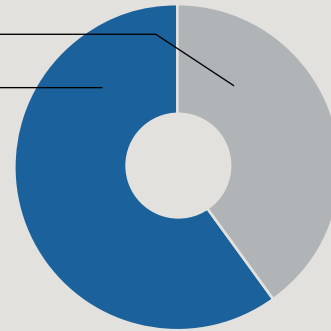
##### Do the frameworks/initiatives cover this indicator?

Yes: **5**



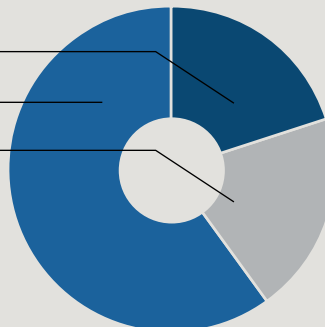
##### How is it measured?

Qualitative: **2**  
Quantitative: **3**



##### How is it addressed?

Just energy: **1**  
Energy & water: **3**  
Resources as a whole: **1**



### Comments:

The figure on the left represents how many of the five MDB frameworks/initiatives cover this indicator. The right figure identifies how the indicator progress is measured. Three of the references analyzed use quantitative units of measurement such as GWh, kL/year or MWh/year while the remaining two use a binary Y/N qualitative approach. The figure in the bottom looks at what topics are addressed by the indicator. Three of the frameworks/initiatives examine both energy and water, one looks at energy, and the remaining one considers resources as a whole.

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All frameworks/initiatives address this issue, although their approaches vary. While three of the frameworks highlight the importance of both water and energy efficiency, one focuses exclusively on energy use and another one considers resources as a whole (without specifying what kind of resources).

Some of the approaches that look at water and energy in a disaggregated manner refer specifically to good practices such as water reuse, reduction of potable water, use of renewable energy, or avoidance of the most polluting, nonrenewable options.

All frameworks/initiatives point to the need to monitor consumption; however, how to quantify it and in which phases vary. Two of them use a qualitative approach, either by including a Y/N, or by defining the attribute without a specific unit of measurement. The other three use different quantitative metrics such as the amount of energy delivered through the project, the energy saved, and the energy used. Quantification criteria vary in terms of water consumption as well as both the reduction in the amount of water used and the increase in water availability.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 6** (Ensure availability and sustainable management of water and sanitation for all), specifically target 6.4 (By 2030, substantially increase the efficiency of water use across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity; substantially reduce the number of people suffering from water scarcity).



**SDG 7** (Ensure access to affordable, reliable, sustainable, and modern energy for all), in particular target 7.3 (By 2030, double the global rate of improvement in energy efficiency).

**8** DECENT WORK AND ECONOMIC GROWTH



**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), specifically target 8.4 (Progressively improve global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production; developed countries take the lead).

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), specifically target 9.4 (By 2030, upgrade infrastructure and retrofit industries to make them sustainable by increasing the efficiency of resource use and adopting more clean and environmentally sound technologies and industrial processes; countries take action in accordance with their respective capabilities).

**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**SDG 12** (Ensure sustainable consumption and production patterns), precisely target 12.2 (Implement the 10-year framework of programs on sustainable consumption and production; all countries take action, led by developed countries and taking into account the level of development and capabilities of developing countries).

**15** LIFE ON LAND



**SDG 15** (Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss), specifically target 15.1 (By 2020, ensure the conservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands; comply with obligations of international agreements).



## 7. Access to service & service affordability

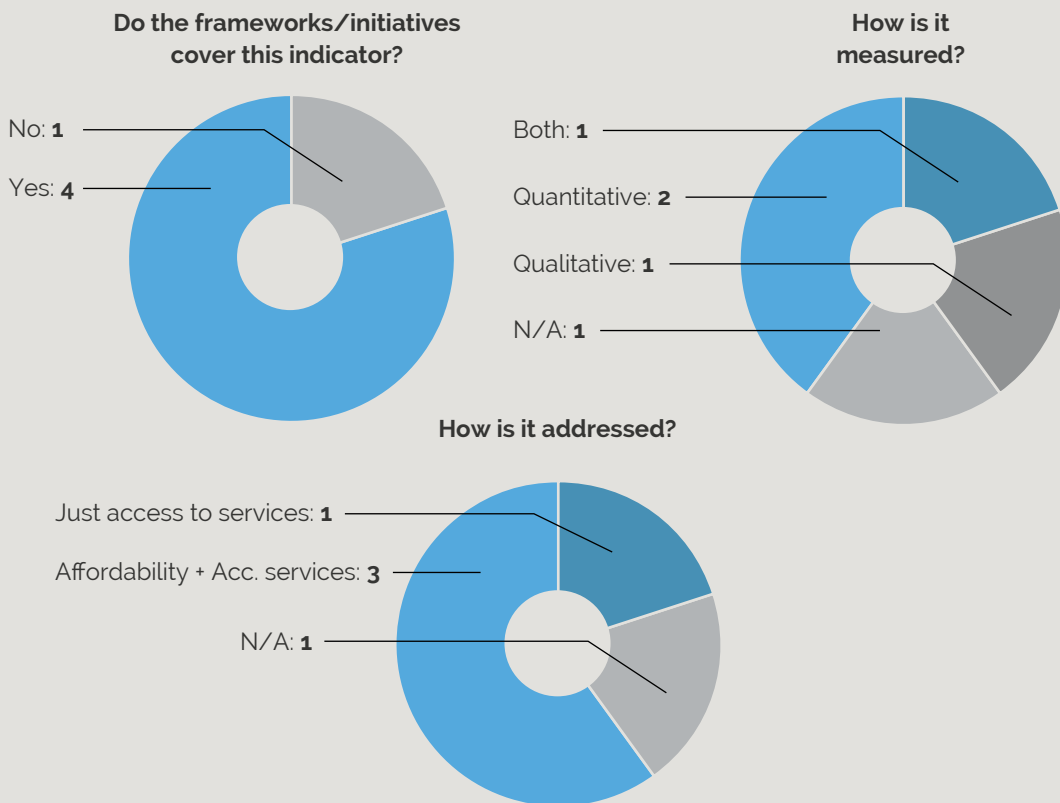
**How are MDBs measuring it?**

Y/N	#/month or SAIFI
GWh	Hours or SAIDI
#	US Cents per kWh
	No. Hours/week

**Description:**

Infrastructure projects should broaden access to high-quality, reliable, affordable, and accessible infrastructure services, especially for disadvantaged, vulnerable, and underserved groups. Likewise, infrastructure projects should consider the resource needs of local communities while calculating assets required for project activities.

### Alignment across frameworks/initiatives:





### Comments:

The figure on the left illustrates how many of the five MDB frameworks/initiatives address this indicator. The right figure shows how the indicator progress is measured. Two of the references analyzed use quantitative units of measurement such as GWh or the number of hours/weeks, one uses a binary Y/N qualitative approach and one uses both quantitative and qualitative measurement methods. The remaining one does not address the indicator. The figure in the bottom identifies which topics are addressed by the indicator. Three frameworks/initiatives consider both affordability and accessibility of services while one refers only to access to services. One framework does not address this indicator.

Four of the five frameworks/initiatives address this issue. While three of them refer to infrastructure services in general terms looking at both access and affordability of services, one tool looks specifically at the provision of power and electricity services.

The four frameworks/initiatives that address this topic specify that infrastructure projects should broaden access to vulnerable groups, although they refer to these groups with different terms (disadvantaged, underserved). These use income, gender, or geographic area among other factors to characterize these groups.

Regarding the metrics, the references analyzed use various combinations including quantitative, qualitative, or a combination of both. While some of them evaluate the access to services employing a Y/N approach, other (especially those focused on power and electricity services) use quantitative or a combination of quantitative and qualitative approaches.

### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), specifically target 1.4 (ensure that all men and women, in particular the poor and the vulnerable, have access to basic services).



**SDG 2** (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), particularly target 2.1 (By 2030, end hunger and ensure access by all people—in particular the poor and people in vulnerable situations, including infants—to safe, nutritious, and sufficient food year round).



**SDG 3** (Ensure healthy lives and promote well-being for all at all ages), in particular target 3.8 (Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality, and affordable essential medicines and vaccines for all).



**4** QUALITY EDUCATION

**SDG 4** (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), specifically target 4.3 (ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education).



**5** GENDER EQUALITY

**SDG 5** (Achieve gender equality and empower all women and girls), in particular target 5.6 (Ensure universal access to sexual and reproductive health and reproductive rights in accordance with the Program of Action of the International Conference on Population and Development, the Beijing Platform for Action, and the outcome documents of their review conferences).



**6** CLEAN WATER AND SANITATION

**SDG 6** (Ensure the availability and sustainable management of water and sanitation for all), specifically target 6.1 (achieve universal and equitable access to safe and affordable drinking water for all).



**7** AFFORDABLE AND CLEAN ENERGY

**SDG 7** (Ensure access to affordable, reliable, sustainable, and modern energy for all), specifically target 7.1 (By 2030, ensure universal access to affordable, reliable, and modern energy services).



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), especially target 9.1 (develop quality, reliable, sustainable, and resilient infrastructure that provides affordable and equitable access for all).



**10** REDUCED INEQUALITIES

**SDG 10** (Reduce inequality within and among countries), specifically target 10.2 (By 2030, empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status).



**11** SUSTAINABLE CITIES AND COMMUNITIES

**SDG 11** (Make cities and human settlements inclusive, safe, resilient and sustainable), specifically target 11.2 (Provide access to safe, affordable, accessible, and sustainable transport systems for all).



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), in particular target 16.3 (Promote the rule of law at the national and international levels and ensure equal access to justice for all).



## 8. Stakeholder engagement

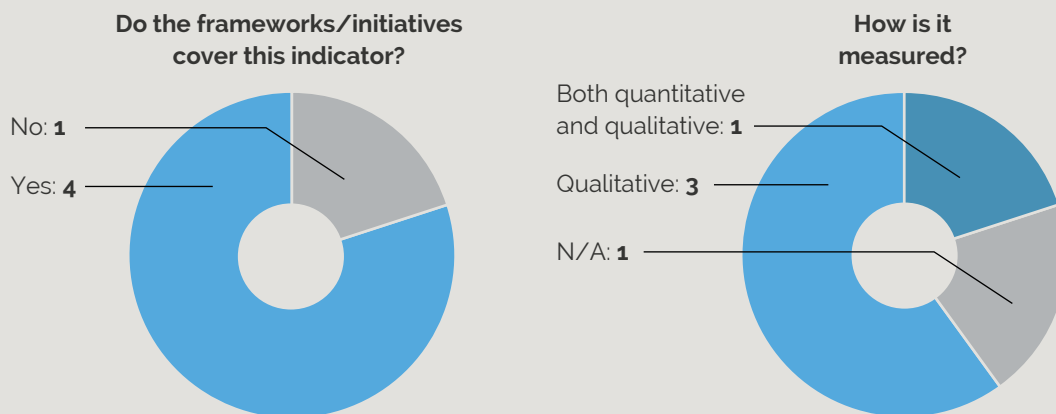
How are MDBs measuring it?

Y/N  
No. of beneficiaries

### Description:

Infrastructure projects should identify and engage stakeholders and affected communities to fully understand their needs and incorporate them into the project. Official public consultation, grievance mechanisms and other engagement processes should be in place to ensure the adequate participation of the affected parties. A clear stakeholder engagement and consultation plan should be used to monitor progress.

### Alignment across frameworks/initiatives:



### Comments:

The figure on the left identifies how many of the five MDB frameworks/initiatives cover this indicator. The figure on the right shows how the indicator progress is measured. Three of the frameworks/initiatives use a binary Y/N qualitative approach while one use both quantitative and qualitative units of measurement. The remaining one corresponds to a framework that didn't address this indicator.

Four of the five frameworks/initiatives addressed this issue. The four frameworks/initiatives address stakeholder engagement similarly by looking at the need to incorporate engagement procedures and practices to ensure that stakeholders are properly and sufficiently involved in the project.

Three of the four references analyzed address this topic consider implementing a stakeholder engagement and community consultation plan. The feedback and input collected through this plan will in turn influence the decision-making process of the project. Two of the frameworks go a step further by specifying that in high impact projects affecting natural resources and/or territories of local communities, project developers should obtain the free, prior, and informed consent of the community before approving or launching the project.

In identifying and mapping stakeholders, all frameworks/initiatives agree that a full range of stakeholders should be represented. However, these vary in their use of terms to identify stakeholders (affected communities and minorities, indigenous groups, or women, are examples of terms used to describe stakeholders).

Regarding the unit of measurement, all four frameworks/initiatives use a Y/N approach to determine whether stakeholder engagement practices have been implemented during the project life cycle. In addition to the Y/N approach, one framework also uses a quantitative measurement to evaluate the number of beneficiaries reached through advocacy or outreach.

### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:

<p><b>5</b> GENDER EQUALITY</p> 	<p><b>SDG 5</b> (Achieve gender equality and empower all women and girls), specifically target 5.1 (Ensure women's full and effective participation at all levels of decision-making in political, economic, and public life).</p>
<p><b>6</b> CLEAN WATER AND SANITATION</p> 	<p><b>SDG 6</b> (Ensure availability and sustainable management of water and sanitation for all), specifically target 6.b (Support and strengthen the participation of local communities in improving water and sanitation management).</p>
<p><b>10</b> REDUCED INEQUALITIES</p> 	<p><b>SDG 10</b> (Reduce inequality within and among countries), specifically target 10.6 (Ensure enhanced representation and voice for developing countries in decision-making).</p>
<p><b>11</b> SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p><b>SDG 11</b> (Make cities and human settlements inclusive, safe, resilient, and sustainable), concretely target 11.3 (enhance inclusive and sustainable urbanization and the capacity for participatory, integrated, and sustainable human settlement planning and management in all countries).</p>
<p><b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 	<p><b>SDG 16</b> (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), especially target 16.7 (Ensure responsive, inclusive, participatory, and representative decision-making at all levels).</p>





How are MDBs measuring it?

Y/N

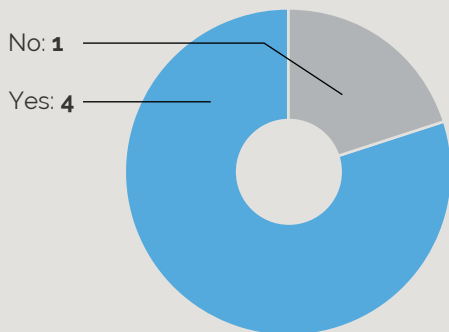
## 9. Disability & special needs integration

### Description:

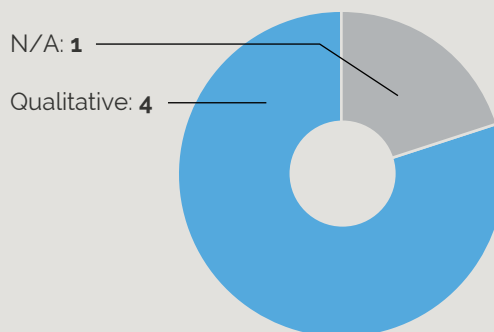
Infrastructure projects should ensure that infrastructure services are fully accessible to disabled, disadvantaged, and other groups with special needs. Infrastructure projects should be designed and implemented following universal accessibility standards. Infrastructure projects should collect and implement feedback from these target groups, ensuring that their input and needs are taken into consideration throughout the project life cycle.

### Alignment across frameworks/initiatives:

Do the frameworks/initiatives cover this indicator?



How is it measured?



### Comments:

The figure on the left illustrates how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Four of the frameworks use a binary Y/N qualitative approach. The remaining framework does not cover this indicator.

Four of the five frameworks address this issue, although they differ in their approach and level of depth. One of them addresses the topic directly and comprehensively, explicitly recommending that infrastructure projects ensure that the services delivered are fully accessible to people with disabilities. The other three frameworks/initiatives consider people with disabilities as one of the stakeholders that should be identified and engaged during the project in order to ensure special needs integration.

Two frameworks/initiatives refer to the need for engagement methods to collect feedback from groups with special needs to ensure that those needs are considered in the project.

The four frameworks/initiatives that address this issue use Y/N to describe the level of coverage of this indicator.

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### Compatibility with SDGs:

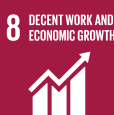
The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), in particular target 1.4 (By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services, including microfinance).



**SDG 4** (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), specifically target 4.a (Build and upgrade education facilities that are disability sensitive to provide a safe, non-violent, inclusive, and effective learning environment).



**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), in particular target 8.5 (By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities; assure equal pay for work of equal value).



**SDG 10** (Reduce inequalities within and among countries), especially target 10.2 (empower and promote the social, economic, and political inclusion of all, including disabled people).

**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), in particular target 11.2 (By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all; improve road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities, and older persons).

**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels) especially target 16.7 (Ensure responsive, inclusive, participatory, and representative decision-making at all levels).



# 10. Human & labor rights compliance

How are MDBs measuring it?

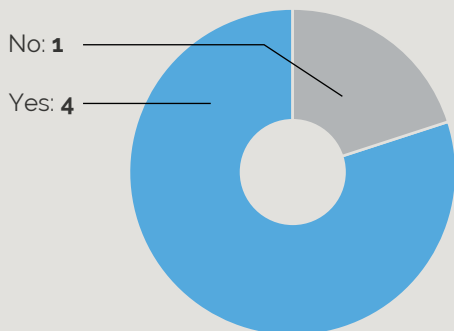
Y/N  
%

**Description:**

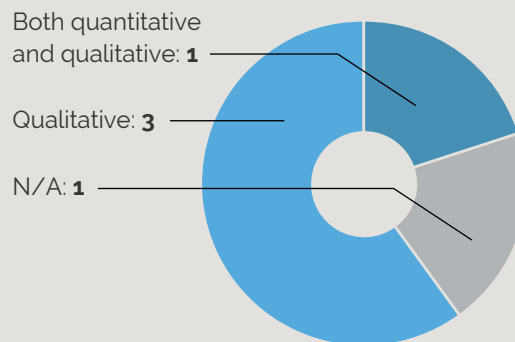
Infrastructure is a key sector in which countries can demonstrate their commitment to human rights. Infrastructure projects should comply with human rights agreements and core labor practices and standards, thereby protecting, promoting, and ensuring fair treatment, inclusiveness, nondiscrimination, and equal opportunity for all in a manner consistent with MDB's establishing agreements. Special attention should be paid to address the needs of vulnerable groups, including indigenous groups, as well as to protect them from any kind of discrimination.

**Alignment across frameworks/initiatives:**

**Do the frameworks/initiatives cover this indicator?**



**How is it measured?**



**Comments:**

The figure on the left shows how many of the five frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Three issues from the ones analyzed use a binary Y/N qualitative approach while one uses both qualitative and quantitative measurement methods. The last framework does not address this indicator.



Four of the five frameworks/initiatives address this topic and take a similar approach to protecting human rights and core labor standards. All four agree on compliance with labor rights agreements, policies, and practices, support for inclusive hiring practices, and the avoidance of any form of discrimination, including forced and child labor. Two frameworks/initiatives highlight the importance of preventing and addressing harassment, intimidation, and/or exploitation of any kind.

The most common metric adopted by the four frameworks/initiatives is the Y/N approach. However, a percentage measurement is also envisaged by one framework to estimate the percentage of the workforce being paid a fair wage.

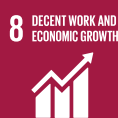
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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 5** (Achieve gender equality and empower all women and girls), in particular target 5.4 (Recognize and value unpaid care and domestic work by providing public services, infrastructure, and social protection policies and promoting shared responsibility within the household and the family as nationally appropriate).



**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), especially target 8.5 (By 2030, achieve full and productive employment and decent work for all women and men, including young people and persons with disabilities; ensure equal pay for work of equal value).



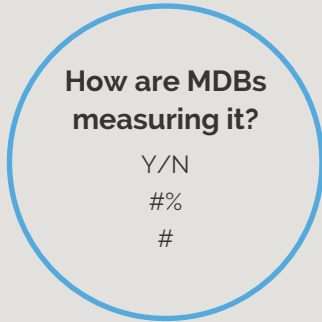
**SDG 10** (Reduce inequalities within and among countries), especially target 10.3 (Ensure equal opportunity and reduce inequalities of outcome by eliminating discriminatory laws, policies, and practices).



**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), specifically target 16.2 (End abuse, exploitation, trafficking and all forms of violence against and torture of children).



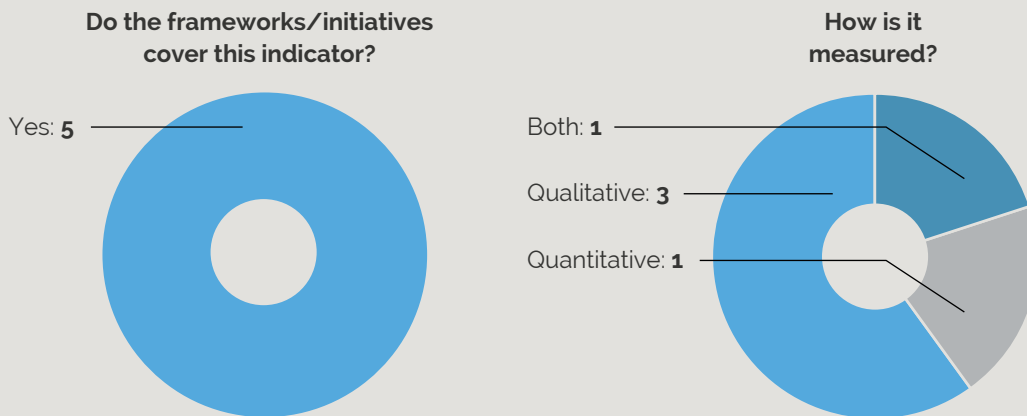
# 11. Gender integration



**Description:**

Infrastructure projects should prevent and mitigate adverse impacts related to gender, providing equal opportunity to both women and men. Infrastructure projects should promote initiatives to enhance women’s empowerment, advance gender equality, and stimulate women’s access to resources, economic activities, and education.

**Alignment across frameworks/initiatives:**



**Comments:**

The figure on the left identifies how many of the five MDB frameworks/initiatives cover this indicator. The figure on the right shows how the indicator progress is measured. Three frameworks/initiatives use a binary Y/N qualitative approach, one uses quantitative units of measurement such as hours/week available for economic activities or education due to improved or new access to services, and the remaining ones uses both qualitative and quantitative measurement methods.

All five frameworks/initiatives address this issue and use a similar approach to promote women's empowerment. Stimulating equal opportunity, creating direct female employment, or ensuring women's representation on decision-making bodies are a few examples of initiatives. Three of the five frameworks/initiatives propose creating social development or gender action plans.

In terms of measurement, three frameworks/initiatives use a Y/N approach, limiting their consideration to the existence or not of gender integration measures. One of them uses a quantitative method to calculate the total hours that women have available to reallocate to economic activities or education on a weekly basis thanks to improved access to services. Additionally, one framework uses both qualitative and quantitative measurement methods; it determines the percentage of the total number of direct female employees in the project during the construction and operation phases.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), specifically target 1.4 (Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services, including microfinance).



**SDG 2** (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), especially target 2.3 (By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists, and fishers, by securing equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment).



**SDG 4** (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), particularly target 4.5 (By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations).



**SDG 5** (Achieve gender equality and empower all women and girls).

**6** CLEAN WATER AND SANITATION



**SDG 6** (Ensure availability and sustainable management of water and sanitation for all), especially target 6.2 (Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation; pay special attention to the needs of women and girls).

**8** DECENT WORK AND ECONOMIC GROWTH



**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), particularly target 8.5 (By 2030, achieve full and productive employment and decent work for all women and men, including young people and persons with disabilities, and equal pay for work of equal value).

**10** REDUCED INEQUALITIES



**SDG 10** (Reduce inequality within and among countries), especially target 10.2 (Empower and promote the social, economic, and political inclusion of all, irrespective of gender).

**11** SUSTAINABLE CITIES AND COMMUNITIES



**SDG 11** (Make cities and human settlements inclusive, safe, resilient and sustainable), specifically the target 11.2 (By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons).





## 12. Health & safety

How are MDBOs measuring it?

Y/N

No. of fatal / non-fatal occupational injuries

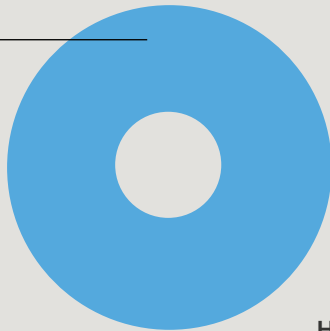
### Description:

Infrastructure projects should assess, evaluate, and manage project impacts and risks on community health and safety over the project cycle, assuring that project activities do not increase security risks for local populations. At the same time, infrastructure projects should ensure a safe working environment for all workers by establishing occupational health and safety standards.

### Alignment across frameworks/initiatives:

Do the frameworks/initiatives cover this indicator?

Yes: **5**

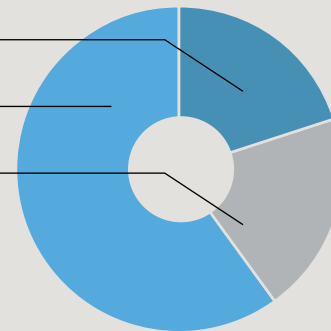


How is it measured?

Both: **1**

Qualitative: **3**

Quantitative: **1**

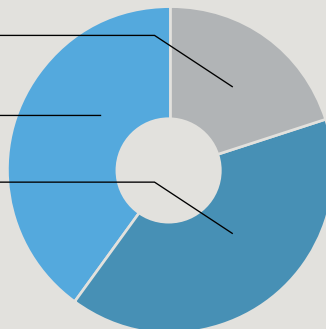


How is it addressed?

Communities & local populations: **1**

Occupational health and safety: **2**

Both: **2**



### Comments:

The figure on the left illustrates how many of the five MDB frameworks/initiatives address this indicator. The right figure shows how the indicator progress is measured. One framework uses quantitative units of measurement such as the number of fatal/non-fatal occupational injuries; three frameworks/initiatives use a binary Y/N qualitative approach; the last one uses both quantitative and qualitative measurement methods. The figure in the bottom looks at what topics are addressed by the indicator. One looks at the health, safety, and well-being of communities and local populations, two refer to access to services, and the remaining two consider both topics.

This topic is addressed by all five frameworks/initiatives, albeit with varying approaches. Two of them look at occupational health and safety, one considers health, safety, and well-being of communities and local populations, and the remaining framework looks at both topics. Three of the four frameworks/initiatives that cover occupational health and safety recommend the infrastructure project comply with health and safety standards. Of these same four references analyzed, two estimate fatal and non-fatal occupational injuries as a way of providing information on the relative safety of the workplace. Regarding the health, safety, and well-being of communities and local populations, two of the three frameworks/initiatives that address this topic point to the need to evaluate and manage the risks and impacts to health and safety throughout the project life cycle. By contrast, the remaining framework focuses on the health and safety outcomes derived from the infrastructure project once it is developed.

Regarding measurement, three of the frameworks/initiatives use a binary Y/N qualitative approach. One of them uses a quantitative method to evaluate the total number of fatal and non-fatal occupational injuries while the remaining one uses a combination of quantitative and qualitative methods.

### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), especially target 1.5 (By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters).



**SDG 3** (Ensure healthy lives and promote well-being for all at all ages) almost entirely, in particular targets such as 3.9 (By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination).



**4** QUALITY EDUCATION

**SDG 4** (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), especially target 4.a (Build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, non-violent, inclusive, and effective learning environments for all).



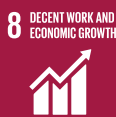
**5** GENDER EQUALITY

**SDG 5** (Achieve gender equality and empower all women and girls), particularly target 5.2 (Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation).



**6** CLEAN WATER AND SANITATION

**SDG 6** (Ensure availability and sustainable management of water and sanitation for all), specifically target 6.3 (By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally).



**8** DECENT WORK AND ECONOMIC GROWTH

**SDG 8** (Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all), especially target 8.8 (Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment).



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), particularly target 9.1 (Develop quality, reliable, sustainable, and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all).



**11** SUSTAINABLE CITIES AND COMMUNITIES

**SDG 11** (Make cities and human settlements inclusive, safe, resilient, and sustainable), especially targets such as 11.1 (By 2030, ensure access for all to adequate, safe, and affordable housing and basic services and upgrade slums).



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**SDG 12** (Ensure sustainable consumption and production patterns), in particular target 12.4 (By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil in order to minimize their adverse impacts on human health and the environment).



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), especially target 16.1 (Significantly reduce all forms of violence and related death rates everywhere).

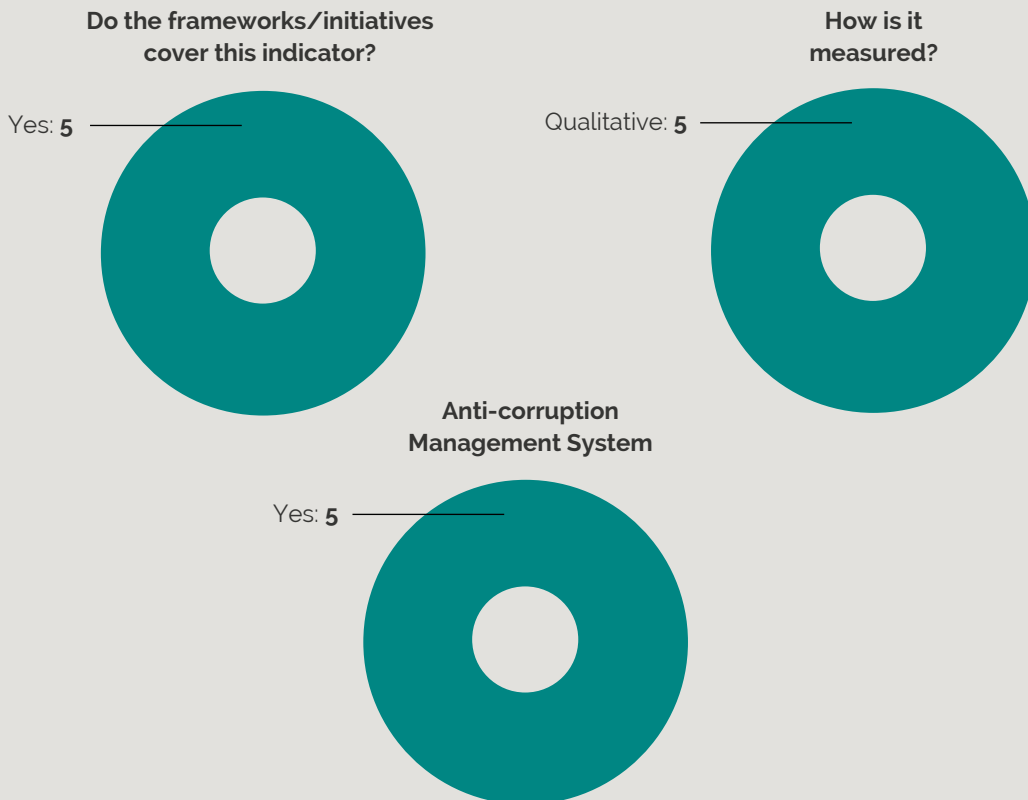


How are MDBs measuring it?  
Y/N

### 13. Anti corruption protocols & procedures

**Description:**  
Infrastructure projects should develop and implement an anti-corruption and anti-bribery management system along the project life cycle, including measures that promote ethics, accountability, integrity, and transparency. The project should uphold standards of conduct and go through the appropriate channels to report wrongdoing.

**Alignment across frameworks/initiatives:**



**Comments:**

The figure on the left illustrates how many of the five MDB frameworks cover this indicator. The figure on the right shows how the indicator progress is measured. All frameworks/initiatives use a binary Y/N qualitative approach.

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All frameworks/initiatives address the anti-corruption topic using a similar approach. All of them call for developing an anti-corruption and corporate governance action plan that ensures accountability, transparency, and integrity over the life cycle of the project.

Regarding quantification, all frameworks/initiatives use the Y/N approach to determine whether measures and proper procedures to avoid corruption have been applied.

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**Compatibility with SDGs:**

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), especially target 16.5 (Substantially reduce corruption and bribery in all their forms).





## 14. Corporate sustainability disclosure

How are MDBs measuring it?

Y/N

Currency/year and % of total value

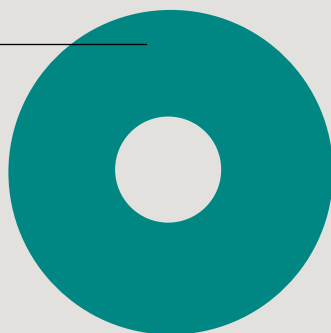
### Description:

Infrastructure projects should comply with national corporate governance regulations to ensure that environmental and social management policies and plans are applied over the life cycle of the project. These plans and policies should be made public and ensure a transparent and open procurement process. Infrastructure developers should work with certified suppliers that follow sustainability practices.

### Alignment across frameworks/initiatives:

Do the frameworks/initiatives cover this indicator?

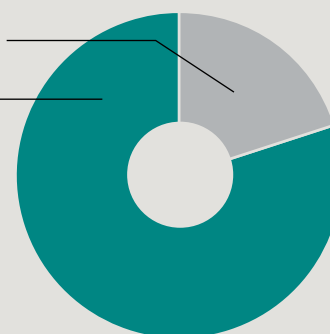
Yes: 5



How is it measured?

Both quantitative and qualitative: 1

Qualitative: 4



### Comments:

The figure on the left shows how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Four frameworks/initiatives use a binary Y/N qualitative approach while the remaining one uses both quantitative and qualitative measurement methods.

The five frameworks/initiatives address this issue similarly. All of them agree on the need to comply with national corporate governance regulations over the life cycle of the project. According to these regulations, infrastructure projects should follow environmental and social management policies and plans, ensure the separation and independence of powers and roles and establish organizational roles. In terms of the procurement process, all of them agree on the need to incorporate open and transparent procedures guaranteeing that selected suppliers are certified and that they implement sustainability practices. All the frameworks/initiatives support a transparent procurement process that ensures open competition. One framework highlights the importance of assessing different strategic options and giving priority to options that contribute to sustainable community development. One framework recommends purchasing goods and services from domestic suppliers.

Regarding the metrics, all frameworks/initiatives adopt a Y/N approach. However, one of them also uses a quantitative method to measure the value of the project's purchase of goods and services from domestic suppliers.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**SDG 12** (Ensure sustainable consumption and production patterns), in particular target 12.6 (Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle).



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS

**SDG 16** (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels), especially target 16.6 (Develop effective, accountable, and transparent institutions at all levels).

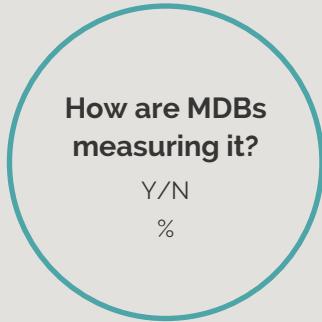


**17** PARTNERSHIPS FOR THE GOALS

**SDG 17** (Strengthen the means to implement and revitalize the global partnership for sustainable development), specifically target 17.14 (Enhance policy coherence for sustainable development).



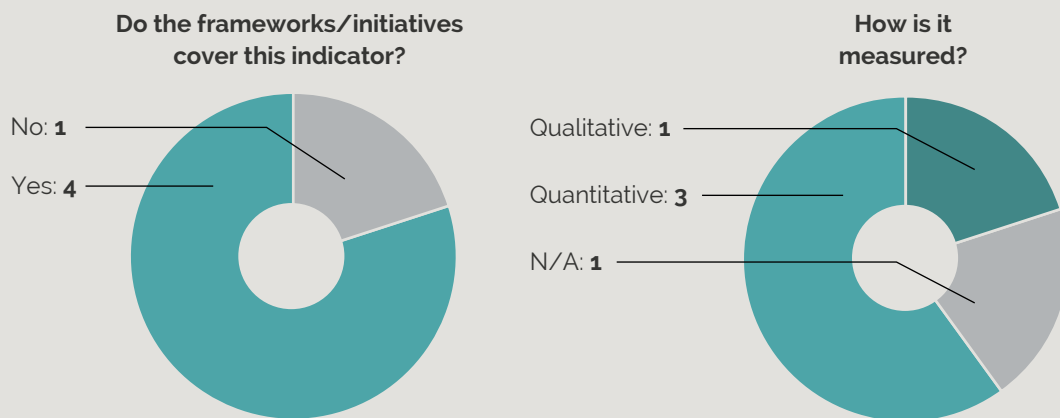
## 15. Positive economic & social return (ERR)



**Description:**

Infrastructure projects should capture the net economic and social returns over the entire project life cycle, taking into consideration both positive and negative externalities.

**Alignment across frameworks/initiatives:**



**Comments:**

The figure on the left identifies how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Three of the frameworks/initiatives use quantitative units of measurement such as the rate of return (%) while one uses a binary Y/N qualitative approach. One framework does not address this indicator.

Four of the five frameworks/initiatives cover this topic. Most of them consider that infrastructure projects should capture not only economic but social returns over the project's life cycle. Examples of the social and economic returns mentioned include better public health or the benefits of reducing carbon emissions.

All four frameworks/initiatives also consider specific techniques to capture the cost-benefit of the project, evaluating not just economic costs but also environmental or other external costs. Most of the references analyzed use quantitative methods such as economic rate of return (ERR), internal rate of return (IRR), or life-cycle cost accounting aiming to assess the total cost of an asset over its lifetime. One framework uses a Y/N approach to applying the cost-benefit analysis.

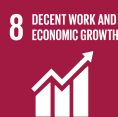
### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**2** ZERO HUNGER

**SDG 2** (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), in particular target 2.4 (By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen the capacity to adapt to climate change, extreme weather, drought, flooding, and other disasters and that progressively improve land and soil quality).



**8** DECENT WORK AND ECONOMIC GROWTH

**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), especially target 8.4 (Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programs on sustainable consumption and production; developed countries take the lead).



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), particularly target 9.1 (Develop quality, reliable, sustainable, and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all).



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION

**SDG 12** (Ensure sustainable consumption and production patterns), especially target 12.b (Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products).



**17** PARTNERSHIPS FOR THE GOALS

**SDG 17** (Strengthen the means to implement and revitalize the global partnership for sustainable development), specifically target 17.19 (build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product).



How are MDBs measuring it?  
Y/N  
#

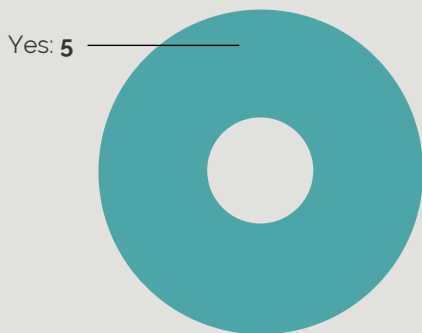
## 16. Job creation

### Description:

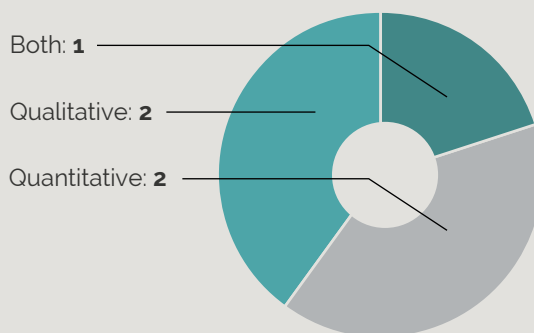
Infrastructure projects should promote inclusive and sustainable growth by creating direct and indirect quality, local employment. Infrastructure projects should boost job creation beyond the project's construction phase and aim to increase productivity in the area of influence.

### Alignment across frameworks/initiatives:

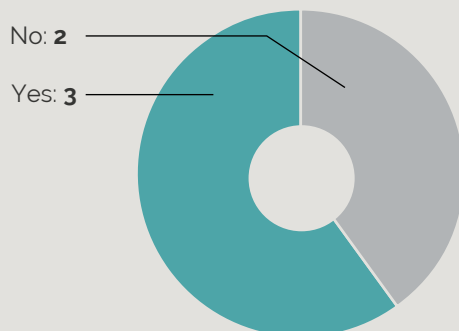
Do the frameworks/initiatives cover this indicator?



How is it measured?



Creation of local employment





### Comments:

The figure on the left illustrates how many of the five MDB frameworks/initiatives address this indicator. The figure on the right shows how the indicator progress is measured. Two frameworks/initiatives use a binary Y/N qualitative approach, two use quantitative units of measurement such as the number of jobs created, and the remaining ones uses both quantitative and qualitative measurement methods. Some of the frameworks make specific reference to job creation.

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The five frameworks/initiatives address this issue in slightly different ways. While all of them advocate for job creation, three specify that ideally, the jobs created should be local, meaning filled by local community workers and nationals. In addition, one of these two frameworks/initiatives differentiates between the amount of local full-time and full-time jobs created. While all all of them agree on the importance of job creation to boost productivity and promote sustainable growth, they differ in the phases of the project in which jobs should be created. One framework calls for creating jobs during the construction phase and beyond. Another framework states that direct employment should be created during the construction and operation phases, while indirect employment should be generated through the services provided by the infrastructure project. Two frameworks suggest that job creation should be promoted in the operation and maintenance phases, and construction and operation phases, respectively.

Regarding measurement, two frameworks/initiatives use a quantitative evaluation to measure the number of jobs created. Two use a Y/N approach to evaluate whether measures to promote job creation have been applied throughout the project. Finally, one framework uses both quantitative and qualitative criteria.

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### Compatibility with SDGs:

The analysis of compatibility between this indicator and the SDGs is the result of the aggregation of data previously conducted by several of the frameworks/initiatives analyzed, where the alignment between their indicators and the SDGs was conducted. As such, this indicator is aligned with the following SDGs:



**SDG 1** (End poverty in all its forms everywhere), especially target 1.2 (By 2030, reduce at least by half the proportion of men, women, and children of all ages living in poverty in all its dimensions according to national definitions).

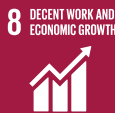


**SDG 2** (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), in particular target 2.3 (By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists, and fishers; ensure secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment).



**4** QUALITY EDUCATION

**SDG 4** (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), expressly target 4.4 (By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship).



**8** DECENT WORK AND ECONOMIC GROWTH

**SDG 8** (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all).



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE

**SDG 9** (Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation), especially target 9.2 (Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries).



**10** REDUCED INEQUALITIES

**SDG 10** (Reduce inequality within and among countries), in particular target 10.1 (By 2030, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average).

# 4.

## Conclusions and Next Steps







## 4. Conclusions and Next Steps

Numerous sustainable infrastructure tools, frameworks, and sets of indicators currently exist.

However, none of those frameworks have been jointly developed across all MDBs. Thus, this report is an important contribution towards a broader effort to deliver an agreed upon set of common indicators. The present report presents a stock take resulting in 16 key sustainable infrastructure indicators which, while not an exhaustive list, do provide the common denominators of the 3 mapped sustainable infrastructure frameworks and two initiatives of MDBs:

1. The Green, Resilient, Inclusive and Sustainable (GRIS) Indicators by the Asian Development Bank (ADB). (September 2019)

2. The Infrastructure Indicators within the Compendium of Indicators developed by the European Bank for Reconstruction and Development (EBRD). (NA, 2019)

3. The Sustainable Infrastructure Framework (SIF) developed by the Inter-American Development Bank (IDB). (2018, rev. May 2019)

4. The Quality Infrastructure Indicators Framework (QII), by the International Finance Corporation (IFC). (2020, forthcoming)

5. The Aligned Set of Sustainability Indicators (ASSI) developed by the Public-Private Infrastructure Advisory Facility (PPIAF). (August 2019, rev. April 2020).

The identified indicators cover topics related to environmental sustainability, climate change and resilience, social inclusion, institutional sustainability and governance, job creation, and economic and social return, among others. The indicators have been used by almost all the frameworks and

initiatives referenced above. Of course, the mandates and contexts in which the ICP member institutions operate vary significantly and so influence the scope of their operations and their approach to sustainability.

The aim of this work is not to standardize internal MDB policies or processes, but to distill the essence of infrastructure sustainability only from the referenced frameworks. It will be useful to continue the analysis and map further frameworks and emerging initiatives to further refine critical aspects of sustainable infrastructure.

The COVID19 crisis has exacerbated the urgency to deliver a set of indicators to ensure clear market guidance is provided to governments, banks, and investors to direct more investment into sustainable infrastructure projects that will support a sustainable global economic recovery. In order to contribute to a broader effort, the SII workstream outcomes will continue to be disseminated with other global initiatives and platforms with similar objectives, such as; The Sustainable Infrastructure Label workstream under the Fast Infra Initiative, The multilateral platform SOURCE, The Quality Infrastructure Indicators Framework (QII) and The Aligned Set of Sustainability Indicators (ASSI), among others.

Finally, it is essential that we continue to work to mobilize private investment at scale for bankable sustainable infrastructure investments to foster an inclusive, resilient, and low emission economic recovery. The timing is critical. As cash-strapped national and subnational governments face strong fiscal pressures, the space to close the infrastructure gap through public sector investment continues to shrink. This report represents an important contribution towards a common language around sustainable infrastructure for both public and private sectors.



# 5.

## References





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# 6.

## Appendix





# Appendix A: Frameworks and Initiatives Analyzed

## The Aligned Set of Sustainable Indicators for infrastructure (ASSI) by PPIAF

The Aligned Set of Sustainable Indicators for Infrastructure initiative is based on existing sustainability rating schemes, reporting frameworks, and standards and is led by the World Bank's Public-Private Infrastructure Advisory Facility (PPIAF). The ASSI is directed to government clients in emerging economies, development finance institutions, and private investors among other targets.

The goal of the ASSI is to mobilize additional private capital towards more sustainable infrastructure projects in emerging markets and developing economies. To do so, the ASSI works to establish an aligned set of environmental, social, and governance (ESG) indicators and align such indicators with applicable SDGs. Under this general umbrella, the ASSI specifically aims to (i) ensure that the aligned set of indicators can be applied worldwide, including in data-poor low-income countries; (ii) unify the market standard landscape through coordination and agreement among four leading infrastructure sustainability standards—SuRe by Global Infrastructure Basel (GIB), Envision by the Institute for Sustainable Infrastructure (ISI), IS-Scheme by the Infrastructure Sustainability Council of Australia

(ISCA), and Ceequal by BRE, together with the collaboration of GRESB—and lastly, (iii) serve as a guide to public authorities in infrastructure program and project preparation and to private investors, among other stakeholders.

The ASSI is currently in development and will be consulted with the private sector to ensure investment-relevance before being tested in the field. The work-in-progress version used for the present ICP initiative is composed of 13 key topics and 27 indicators. The process for defining the indicators started with the international standard setters and benchmarkers discussing and agreeing on the key topics or areas that the indicators should address. The approach consists of identifying key indicators, selected on the basis of probative value across the different systems such that integrating them at an early stage of preparation and design is expected to reinforce the sustainability of infrastructure projects. The initial list of indicators is to be improved by MDBs' developing countries' experience, enhanced through private sector investors' feedback and tested on the field in real cases. The information provided for each indicator includes the name, metric, and unit of measure, as well as the project phases in which the indicator is present and what reportable value and kind of disaggregation applies (if any) per indicator. A brief text explaining why the indicator is important and, and reference to the SDGs is also provided.

**Table 1.** The Aligned Set of Sustainable Indicators for infrastructure (ASSI) by PPIAF

TOPIC	#	INDICATOR
<b>Option Assessment</b>	1	Strategic options assessment
<b>Gender</b>	2	Gender equality, inclusiveness and empowerment
<b>Resilience</b>	3	Climate Risk Resilience
<b>Stakeholder Engagement</b>	4	Stakeholder engagement plan
	5	Free, Prior and Informed Consent (FPIC)
	6	Resettlement
	7	Heritage assessment
	8	Public health and safety management plan
<b>Water pollution</b>	9	Freshwater withdrawal
	10	Watershed Management
	11	Number of water pollution exceedances
<b>Air Quality</b>	12	Fine particulate matter emissions
<b>Energy / GSG</b>	13	GHG emissions (construction & operation)
	14	Efficient use of energy
<b>Materials lifecycle approach</b>	15	Materials lifecycle thinking
	16	Reduction of Waste
<b>Ecosystem and land use</b>	17	Endangered species
	18	Previously Disturbed Land
<b>Sustainability Management System</b>	19	Project supply chain sustainability
	20	Sustainability Management System: Reporting
<b>Anticorruption</b>	21	Anticorruption procedures
<b>Procurement Process</b>	22	Sustainability in project award
<b>Working Conditions</b>	23	Human and labor rights
	24	Occupational Health & Safety (OH&S) Management Systems
	25	Frequency rates of fatal and non-fatal occupational injuries
	26	Fair Wages
	27	Local jobs created

Source: Public-Private Infrastructure Advisory Facility (PPIAF).

## The Green, Resilient, Inclusive, and Sustainable Indicators (GRIS) by ADB

The Green, Resilient, Inclusive, and Sustainable Indicators framework (GRIS) was developed by the Strategy, Policy, and Partnerships Department (SPD) of the Asian Development Bank (ADB). It builds on existing tools assessing the overall sustainability and quality of infrastructure investments, such as ADB's sustainable transport appraisal tool, and the Inter-American Development Bank's work on sustainable infrastructure. The framework aims to capture and highlight good practices across ADB projects, reflecting these agendas and the 2019 G20 Principles on Quality Infrastructure.

The GRIS framework is composed of 16 qualitative criteria related to the four principles of quality infrastructure included in ADB's Strategy 2030; that is, green, resilient, inclusive, and sustainable (GRIS). At the same time, each of these four categories

includes four indicators to be assessed (See Appendix E). One of the four indicators under each category is mandatory. These mandatory indicators (climate mitigation, climate risk and vulnerability, Gender and life cycle costing) reflect the priorities of the Strategy 2030, as well as its focus on promoting gender equality and action on climate change, and G20 commitments on quality infrastructure. Besides the mandatory criteria, one additional criterion that highlights a project good practice will also be selected and scored. It will derive an overall score based on 8 criteria.

All criteria are rated on a 5-point scale (-1 to +3). Ratings higher than 0 (neutral) are considered a good score that features a good practice associated with the investment. The GRIS indicator is initially applied at the investment approval stage, although the SPD will explore opportunities to incorporate the indicator framework into different stages of project development and project implementation.





**Table 2.** The Green, Resilient, Inclusive, and Sustainable Indicators (GRIS) by ADB

PRINCIPLE	CRITERIA
<b>GREEN</b>	<ul style="list-style-type: none"> <li>● Climate change mitigation*</li> <li>● Pollution and other emissions (air, water, and soil)</li> <li>● Resource efficiency</li> <li>● Nature-based solutions, natural capital, biodiversity, and ecosystem services</li> </ul>
<b>RESILIENT</b> (physical and economic)	<ul style="list-style-type: none"> <li>● Climate risk and vulnerability*</li> <li>● Resilience and adaptability to natural hazards and other shocks and stresses</li> <li>● Maximizing positive impact on sustainable growth and development</li> <li>● Information for infrastructure service optimization</li> </ul>
<b>INCLUSIVE</b> (in meeting the needs of the poorest and supporting social development)	<ul style="list-style-type: none"> <li>● Gender*</li> <li>● Accessibility</li> <li>● Job creation and livelihoods</li> <li>● Health and safety</li> </ul>
<b>SUSTAINABLE</b> (financial viability and durability, and governance arrangements)	<ul style="list-style-type: none"> <li>● Life-cycle cost accounting*</li> <li>● Operation and maintenance</li> <li>● Governance, procurement practices, and anticorruption measures</li> <li>● Financing strategy</li> </ul>

\* This criterion is mandatory.

**Source:** Asian Development Bank (Strategy, Policy and Partnerships Department).

## The Infrastructure Indicators by EBRD

The Compendium of Indicators Framework was developed by the European Bank for Reconstruction and Development (EBRD) between 2017 and 2018. Within the set of 139 standardized indicators used in bank investments and technical cooperation, a subsection contains indicators focused on infrastructure and energy.

This infrastructure and energy subsector list is composed of 65 different indicators that align with the six transition qualities underpinning EBRD's theory of change (competitive, well-governed, green, inclusive, resilient, and integrated). Alignment with HIPSO (Harmonized Indicators for Private Sector Operations) is an ongoing exercise. Each of these indicators also includes a comprehensive description, the unit of measurement, and a menu option when applicable enabling disaggregation and tailoring.

**Table 3.** The Infrastructure Indicators by EBRD

CODE	INDICATOR NAME
LT.16	Operational performance of the client: metric
LT.17	PPP contract or concession implemented
LT.2	Productivity measure of the client
LT.43	Number of employees of beneficiary firm, sex-disaggregated
LT.45	Number of beneficiaries with improved access to services
LT.5	Profitability Ratio
LT.50	Energy saved (GJ/y)
LT.51	Energy consumption (GJ/y)
LT.52	CO2 Emissions Reduced or Avoided (tonnes/yr)
LT.53	Water Saved (m3/y)
LT.54	Materials reduced/recycled (tonnes/yr)
LT.57	Air emissions reduced (tonnes/yr)
LT.58	Tariffs reached the target level
LT.6	Legal, institutional or regulatory frameworks in target areas improved
LT.75	Corporate governance improved: type
LT.79	Actions in the Corporate Governance Action Plan Implemented
LT.9	Market share of client
O.1	Physical capacity of the client extended or modernised: type
O.10	Compliance with pre-signing requirements standards
O.11	Level of capital of the client increased to targeted levels
O.12	Memorandum of Understanding signed
O.13	Project preparation product approved: type
O.14	Project implementation support completed: type
O.15	Number of knowledge products disseminated
O.17	Number of beneficiaries reached through advocacy or knowledge activity
O.5	Policy advice delivered: type
O.6	Training provided to beneficiaries
O.7	Number of beneficiaries trained
O.8	Business advisory recommendations agreed: type
O.9	Advocacy/knowledge management activity(ies) delivered



**CODE****INDICATOR NAME**

<b>ST.1</b>	Client enters or expands activities in a target market
<b>ST.102</b>	Policy dialogue platform is operational
<b>ST.103</b>	Client engages in policy dialogue: type
<b>ST.106</b>	Recommended policy or strategy agreed by relevant stakeholder(s)
<b>ST.108</b>	Number of women represented on decision-making bodies: specify
<b>ST.109</b>	Environmental and Social Action plan implemented as targeted
<b>ST.11</b>	Operational restructuring completed
<b>ST.114</b>	Number of individuals in target group receiving knowledge as a result of outreach activities
<b>ST.118</b>	Volume of direct EBRD financing as a result of technical cooperation
<b>ST.12</b>	Improved standards
<b>ST.120</b>	Institution-level capacity strengthened in target area
<b>ST.13</b>	Practices of the relevant stakeholder improved as targeted
<b>ST.15</b>	New or updated technology/product/service introduced
<b>ST.16</b>	Number of individuals in target group enhancing their skills as a result of training
<b>ST.2</b>	State ownership reduced: type
<b>ST.23</b>	Number of new/improved service connections
<b>ST.24</b>	Pre-privatisation programme completed
<b>ST.27</b>	Concession contract agreed in accordance with the specific policies
<b>ST.28</b>	Infrastructure services transferred to private sector through performance-based arrangement with a targeted mechanism
<b>ST.29</b>	Public service contract or Public Service Obligation signed and implemented
<b>ST.31</b>	New financing instrument or method introduced: type
<b>ST.35</b>	Net increase in infrastructure usage and/or capacity
<b>ST.56</b>	Tailored training programme developed and implemented
<b>ST.58</b>	Changes in the design of products or services as targeted
<b>ST.7</b>	Tariff reform in target segment adopted by authorities
<b>ST.70</b>	Organisational restructuring completed as targeted
<b>ST.71</b>	Financial restructuring completed as targeted
<b>ST.75</b>	Expanded access of services and products
<b>ST.76</b>	Regulatory body established or strengthened as targeted

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**CODE****INDICATOR NAME**

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<b>ST.77</b>	PPP contract awarded
<b>ST.79</b>	Improved quality of services and products
<b>ST.8</b>	Performance or action plan implemented by the client
<b>ST.80</b>	Time available for reallocation to economic activities or education as a result of improved access to service (hours/week)
<b>ST.97</b>	Corporate Governance Action Plan (CGAP) approved
<b>ST.98</b>	Representative appointed to the Board of the beneficiary firm as targeted

**Source:** European Bank for Reconstruction and Development (EBRD).

## The Quality Infrastructure Investment Indicators (QII) by IFC

The Quality Infrastructure Investment Indicators developed by the International Finance Corporation (IFC) is based on an existing body of work, including IFCs' Anticipated Impact Measurement and Monitoring (AIMM) framework, the Organization for Economic Co-operation and Development (OECD) Background Note on the Governance of Quality Infrastructure, MDB Perspective on Quality Infrastructure Investment toward Shared Standards from the European Investment Bank (EIB), and drafts of ongoing work on resilience and procurement of quality infrastructure at the World Bank Group (WBG).

In contrast to the other frameworks analyzed, this one addresses the term "quality infrastructure" following the G20 Principles for Quality Infrastructure Investment (QII). Similar to sustainable infrastructure, the aim of seeking QII is to maximize the positive economic, environmental, social, and developmental impact of an infrastructure project. Besides ensuring alignment of a project with the key principles of quality infrastructure investment, QII indicators are expected to (i) inform decision-making on the design,

building, operation, and maintenance phases of infrastructure projects, (ii) enable monitoring of projects' objectives that have been previously set during the implementation phase, and (iii) capture infrastructure's contribution to the SDGs.

The QII framework is composed of five different categories: Economic Efficiency, Environmental Impact, Social Impact, Resilience, and Governance. Among these five categories, the Matrix provides a total of 24 indicators (final number still under consideration) relevant to different project types. However, not all indicators apply to every project; the objective is to select the ones that are reflective of the projects' main impact objectives. The selection of which indicators have to be applied will be guided by evaluation good practices criteria, including (i) Relevance, (ii) Completeness, (iii) Consistency, (iv) Transparency, (v) Accuracy, and (vi) Conservativeness. There are two types of indicators: those that inform project design along with QII principles and those that measure and monitor project outcomes. The use of the indicators is non-binding and can be tailored for both project objectives and country context.

**Table 4.** The Quality Infrastructure Investment Indicators (QII) by IFC

<b>Economic Efficiency</b>		
	<b>PROJECT OUTCOME</b>	<b>PROJECT OUTCOME</b>
<b>ALL INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>• Rates of return</li> <li>• Cost contingencies</li> <li>• Realized cost overruns</li> <li>• Employee participation in training and education through employer sponsored program</li> </ul>	-----
<b>POWER SECTOR</b>	<ul style="list-style-type: none"> <li>• Leveled cost of electricity (LCOE)</li> <li>• Electric power transmission and distribution losses</li> </ul>	<ul style="list-style-type: none"> <li>• Timeliness of construction works</li> </ul>

<b>Environmental</b>		
<b>PROJECT OUTCOME AND DESIGN</b>		
<b>ALL INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>• Adopt an environmental and social mitigation hierarchy framework</li> <li>• Conservation and protection of biodiversity (modified, natural and critical)</li> <li>• International Sustainability Certification</li> <li>• Provides tools, and data to improve E&amp;S practices for stakeholder engagement</li> </ul>	
	<b>PROJECT OUTCOME</b>	<b>PROJECT OUTCOME</b>
<b>POWER SECTOR</b>	<ul style="list-style-type: none"> <li>• Local pollution reduction</li> </ul>	<ul style="list-style-type: none"> <li>• GHG emission reduction/avoided</li> <li>• Renewable energy generation</li> <li>• Energy saved</li> <li>• Energy intensity of power plant</li> </ul>

## Resilience

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### PROJECT OUTCOME

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#### ALL INFRASTRUCTURE

- Project contributes to climate resilience of community and ecosystem under current and plausible future climate change scenarios
  - Disaster and climate risk insurance
- 

#### POWER SECTOR

- Continuity of service: Power infrastructure includes redundancies against system failure
- Project adopts design that addresses risk and vulnerabilities under current and plausible future climate change scenarios

## Social

	PROJECT OUTCOME	PROJECT DESIGN
<b>ALL INFRASTRUCTURE</b>	<ul style="list-style-type: none"> <li>● Direct permanent female jobs created/Share of female workers</li> <li>● Goods and services sourced domestically</li> <li>● Construction jobs created</li> <li>● Permanent jobs created during operations and maintenance</li> <li>● Number of fatal occupational injuries</li> <li>● Number of non-fatal occupational injuries and lost time incidents rate</li> <li>● Community Development Contributions</li> </ul>	<ul style="list-style-type: none"> <li>● Participatory project identification, planning and design</li> <li>● Design minimizes land acquisition and involuntary resettlement</li> <li>● Livelihood restoration for people physically displaced by project exceeds industry standards</li> <li>● Introduction of inclusive hiring practices, including nondiscrimination and equal opportunity standards</li> </ul>
<b>POWER SECTOR</b>	<ul style="list-style-type: none"> <li>● Power output</li> <li>● Power delivered to underserved populations</li> <li>● Electricity connection: # of individual residential customers-equivalent)</li> <li>● Number of power outages</li> <li>● Average duration of power outages</li> <li>● Average end-user tariffs</li> <li>● Average cost of generation (US Cents per kWh)</li> </ul>	<ul style="list-style-type: none"> <li>● Electricity access to women and female-headed households</li> </ul>



## Governance

### PROJECT OUTCOME

#### ALL INFRASTRUCTURE

- Introduction of best practice procurement standards for infrastructure projects
- Conflict of interest and ethics rules for project are observed and enforced

#### POWER SECTOR

- Fiscal transfers to the power sector

Source: International Finance Corporation (IFC).

## The Sustainable Infrastructure Framework (SIF) by IDB

The Sustainable Infrastructure Framework (SIF) was developed by the Inter-American Development Bank (IDB) in collaboration with colleagues from Brookings and researchers from Harvard University. This framework is based on the analysis and review of existing literature, tools and standards, discussions within the IDB and other MDBs, and the analytical work of the authors. The SIF aims to contribute to the ongoing discussion of the key dimensions and attributes that, when taken together, define sustainable infrastructure.

The IDB framework is divided into four dimensions: (i)

Economic and Financial Sustainability, (ii) Environmental Sustainability and Climate Resilience, (iii) Social Sustainability, and (iv) Institutional Sustainability. Each of these four categories defines the main strategic dimensions of sustainability and, in turn, is composed of different categories or sub-dimensions. Under each sub-dimension are grouped a total of the different attributes (See Appendix A). The attributes represent the elements that must be considered in a Sustainable Infrastructure project and are defined with a comprehensive level of detail. In total, the SIF is composed of four dimensions, 14 sub-categories, and 66 attributes. For an infrastructure asset to be considered sustainable, it is necessary that each of the four dimensions is addressed.

**Table 5. The Sustainable Infrastructure Framework (SIF) by IDB**

**Environmental sustainability and climate resilience**

CATEGORY	CRITERIA
<b>1. CLIMATE AND NATURAL DISASTERS</b>	<ul style="list-style-type: none"> <li>● Reduction of GHG emissions</li> <li>● Climate risks and resilience</li> <li>● Disaster risk management</li> </ul>
<b>2. PRESERVATION OF NATURAL ENVIRONMENT</b>	<ul style="list-style-type: none"> <li>● Biodiversity</li> <li>● Natural capital, areas of high ecological value and farmland</li> <li>● Ecological connectivity and ecosystem services</li> <li>● Soils management</li> <li>● Invasive species</li> <li>● Public amenities</li> </ul>
<b>3. POLLUTION</b>	<ul style="list-style-type: none"> <li>● Air contamination</li> <li>● Water pollution</li> <li>● Other forms of pollution</li> <li>● Hazardous materials</li> </ul>
<b>4. EFFICIENT USE OF RESOURCES</b>	<ul style="list-style-type: none"> <li>● Efficient use of water resources</li> <li>● Material use and recycling</li> <li>● Energy use and renewable sources</li> <li>● Waste management and recycling</li> </ul>

## Social sustainability

CATEGORY	CRITERIA
<b>1. POVERTY AND SOCIAL IMPACT AND ENGAGEMENT WITH COMMUNITIES</b>	<ul style="list-style-type: none"><li>• Equitable distribution of benefits</li><li>• Stakeholder engagement and community consultation and participation</li><li>• Grievance redress mechanism</li><li>• Resettlement and economic displacement</li><li>• Community access to resources</li><li>• Community compensation and benefit sharing</li><li>• Community mobility and connectivity</li><li>• Disabilities and accessibility</li><li>• Community health and safety</li><li>• Occupational health and safety</li></ul>
<b>2. HUMAN AND LABOR RIGHTS</b>	<ul style="list-style-type: none"><li>• Preserving rights of affected groups</li><li>• Labor standards</li><li>• Community security and crime prevention</li><li>• Gender inclusive project design</li></ul>
<b>3. CULTURAL PRESERVATION</b>	<ul style="list-style-type: none"><li>• Cultural resources and heritage</li><li>• Indigenous and traditional people</li></ul>

## Institutional sustainability

CATEGORY	CRITERIA
<b>1. ALIGNMENT WITH GLOBAL AND NATIONAL STRATEGIES</b>	<ul style="list-style-type: none"><li>• National and international commitment</li><li>• Sector, land use and urban planning integration</li></ul>
<b>2. HUMAN AND LABOR RIGHTS</b>	<ul style="list-style-type: none"><li>• Corporate governance structures</li><li>• Anti-corruption and transparency framework</li></ul>
<b>3. EFFECTIVE MANAGEMENT SYSTEMS AND ACCOUNTABILITY</b>	<ul style="list-style-type: none"><li>• Project design and feasibility</li><li>• Project compliance</li><li>• Sustainable bidding and procurement</li><li>• Integrated environmental and social impact assessment</li><li>• Management systems and accountability</li><li>• Project information monitoring and sustainability tracking</li><li>• Management of existing liabilities</li></ul>
<b>4. CAPACITY BUILDING</b>	<ul style="list-style-type: none"><li>• Integration of technological advances</li><li>• Knowledge transfer and collaboration</li><li>• Regulatory, institutional, and local capacity</li><li>• Data collection, monitoring and evaluation</li><li>• Capacities for implementation</li></ul>

## Economic and financial sustainability

CATEGORY	CRITERIA
<b>1. ECONOMIC AND SOCIAL RETURNS</b>	<ul style="list-style-type: none"><li>• Economic and social return over project life cycle</li><li>• Growth, productivity and spillovers</li><li>• Job creation</li><li>• Service access, quality, reliability, and affordability</li></ul>
<b>2. FINANCIAL SUSTAINABILITY</b>	<ul style="list-style-type: none"><li>• Clarity on revenue streams</li><li>• Effective risk allocation and management</li><li>• Operating profitability</li><li>• Asset profitability</li><li>• Positive net present asset value</li><li>• Liquidity ratios</li><li>• Solvency ratios</li><li>• Mobilization of local financing</li></ul>
<b>3. POLICY ATTRIBUTES</b>	<ul style="list-style-type: none"><li>• Effective regulation</li><li>• Debt and fiscal sustainability</li><li>• Pricing and incentive alignment</li><li>• Asset maintenance and optimal use</li></ul>

**Source:** The Inter-American Development Bank (IDB).



# Appendix B: Method and Level of Coverage

The present analysis has been conducted using direct observation of the tools/frameworks or sets of indicators previously described. This process includes the annotation of the name of every framework analyzed, as well as the description and the units of measurement (when applicable) of their respective indicators. In order to simplify the understanding of the main similarities and differences between the frameworks analyzed, a summary section was added to highlight the main similarities and differences between tools.

The spreadsheet is divided into four different categories commonly used as the pillars of Sustainable Infrastructure. These are (i) Environmental sustainability and resilience, (ii) Social sustainability, (iii) Institutional sustainability, and (iv) Economic and financial sustainability. Each of the four categories is divided into subcategories that serve as a thematic cluster around which the different similarities and differences were analyzed. For instance, the category

Environmental sustainability and resilience was divided into Climate and resilience, Preservation of natural environment and pollution, and lastly Efficient use of resources. After populating the different topics with the information available in the five frameworks assessed, an additional analysis was conducted to determine the level of compatibility among them following direct observation. All indicators from all frameworks were classified in this process.

Finally, as part of the mapping carried out (Figure 3), the alignment between the Sustainable Development Goals (SDGs) and each of the 16 indicators were also analyzed. This alignment has been drawn from the work conducted by some of the frameworks such as the Green, Resilient, Inclusive and Sustainable Indicators (GRIS) by ADB, the Aligned Set of Sustainable Indicators for infrastructure (ASSI) by PPIAF, or the work developed by the IDB in which the indicators had already been aligned with the SDG.

Figure 3. Comparative Analysis

ATTRIBUTES ENVIRONMENTAL IMPACT

Compatibility Color coded	ATTRIBUTES IDB (OFFICIAL FRAMEWORK)		QUALITY INFRASTRUCTURE		PPIAF		EBRD INFRASTRUCTURE INDICATORS		ASDB GREEN, RESILIENTE, INCLUSIVE AND SUSTAINABLE (GRIS) INDICATORS	
	INDICATORS	(UNIT OF MEASUREMENT)	INDICATORS	(UNIT OF MEASUREMENT)	INDICATORS	(UNIT OF MEASUREMENT)	INDICATORS	(UNIT OF MEASUREMENT)	INDICATORS	(UNIT OF MEASUREMENT)
Green House emission reduction/ avoided	Reduction of GHG emissions	<b>Metric:</b> GHG emissions monitored through the life-cycle of the project/actions plans to minimize emissions. <b>Unit:</b> (Y/N)	<b>GHG emission reduction/avoided</b> (*) This can apply to every infrastructure project but is currently classified as power sector specific indicator	<b>Metric:</b> GHG emissions reduction/avoided measured in tons of carbon dioxid equivalent (tCO2) <b>Unit:</b> tCO2/Year	<b>GHG emissions (construction &amp; operation)</b>	<b>Metric:</b> Volume of Greenhouse gas emissions emitted by the project <b>Unit:</b> tCO2-eq / year	<b>CO2 Emissions Reduced or Avoided</b>	<b>Metric:</b> GHG emissions reduced expressed as tonnes of carbon dioxide equivalent (tCO2) of global warming potentials is used, using the 100 years' time horizon, GET Handbook <b>Unit:</b> tCO2e/Year	<b>Climate change mitigation</b>	<b>Metric:</b> Minimization of GHG emissions and alignment with national greenhouse gas reduction policies and targets.
Climate Risk, resilience & Disaster Risk Management	Climate risks and resilience	<b>Metric:</b> Climate risk assessment and management plans <b>Unit:</b> (Y/N)	Project contributes to climate resilience of community and ecosystem under current and plausible future climate change scenarios.	<b>Unit:</b> (Y/N)	Climate risk Resilience	<b>Metric:</b> Extent to which climate related risks and opportunities have been identified and assessed. <b>Unit:</b> Y/N	---	<b>Metric:</b> Changes in the products or services as targeted to improve resilient to climate change	Resilience and adaptability to natural hazards and other shocks and stresses	<b>Metric:</b> Flexible and adaptive approaches used to build in resilience to infrastructure
	Disaster risk management	<b>Metric:</b> Climate risk assessment and management plans <b>Unit:</b> (Y/N)	<b>Energy infrastructure:</b> Continuity of service: Power infrastructure includes redundancies against system failure (*) This can apply to every infrastructure project but is currently classified as power sector specific indicator	<b>Unit:</b> (Y/N)						
	Disaster risk management	<b>Metric:</b> Follow national disaster management frameworks/ Disaster risk monitoring and management plans <b>Unit:</b> (Y/N)	Disaster and climate risk insurance	<b>Unit:</b> (Y/N)	---				<b>Climate risk and vulnerability</b>	<b>Metric:</b> A comprehensive risk management plan that influences the design of infrastructure, the ongoing maintenance and consider the re-established of essential services.

Source: By the authors of the report.





**IDB**

Inter-American  
Development Bank