













CUPOLAS OF THE OLD BASILICA AND CITYSCAPE OF MEXICO CITY ©WitR/Shutterstock.com

# MEXICO

INTER-AMERICAN DEVELOPMENT BANK SUSTAINABLE INFRASTRUCTURE FRAMEWORK: MEXICO PROJECTS HUB The Sustainable Infrastructure Tool Navigator

is an online platform that connects infrastructure practitioners with over 100+ relevant tools that can assist them in evaluating and making decisions at various phases of the infrastructure life cycle. This case study demonstrates the use of a tool in a country context, to better understand the process involved as well as good practices, challenges and lessons learned.

# INTER-AMERICAN DEVELOPMENT BANK (IDB) FRAMEWORK FOR SUSTAINABLE INFRASTRUCTURE

The Attributes and Framework for Sustainable Infrastructure (https://publications.iadb.org/en/attributes-and-frameworksustainable-infrastructure), also referred to as the Inter-American Development Bank's Sustainable Infrastructure Framework (herein, IDB Framework), helps develop a shared understanding of the key dimensions and attributes that define sustainable infrastructure. This common understanding is based on the propositions that sustainability of infrastructure must consider the benefits and costs of investment over the entire life cycle, and that sustainability must be assessed across all relevant dimensions (economic/financial, environmental, social and institutional). The IDB Framework then sets out the detailed attributes that constitute the elements of each of these four dimensions. For each of these dimensions, 14 sub-dimensions have been defined,

providing areas of action for the delivery of sustainable infrastructure. These sub-dimensions are the basis for organizing the 66 attributes that comprise the framework. The dimensions, sub-dimensions and attributes provide a comprehensive framework for assessing the sustainability of infrastructure investments.

### **1. BACKGROUND**

Mexico is the fifth largest country in the Americas, the second largest economy in Latin America, and the 16<sup>th</sup> worldwide (International Monetary Fund 2022). According to the Mexico National Development Plan 2019-2024, one of the conditions for Mexico to reach its maximum economic development potential is infrastructure investment for sustained growth. Mexico depends on a wide diversity of funding sources for infrastructure projects, including the federal expenditure budget, development banks, the National Infrastructure Fund (FONADIN), commercial banks, infrastructure financial markets and private investment (Mexico Projects Hub 2022). Considering the large infrastructure investment gap in the country, the private sector has been recognized as a critical ally in mobilizing capital to bridge it.

In 2017, the Government of Mexico created an office to promote infrastructure investment. This office provided visibility to the country's major investment opportunities through an online digital platform called Proyectos México, or Mexico Projects Hub in English. The Mexico Projects Hub (https://www. proyectosmexico.gob.mx/en/home/) is an initiative of the Federal Government operated by the National Bank of Public Works and Services (BANOBRAS) that links infrastructure projects in different sectors (transportation, water and environment, social infrastructure, etc.) and phases (pre-investment, bidding, execution and operation) with national and foreign investors. The Mexico Projects Hub platform operates like an investor relations office whose core objective is to expand sources of finance and fulfill

national infrastructure goals by providing investors with in-depth information about government projects that need funding. In recent years, the country has recognized that sustainability considerations are important to investors and can potentially influence the financing conditions of infrastructure projects. As such, the Mexico Projects Hub has taken steps to indicate the sustainability classification of featured projects on the platform (Mexico Projects Hub 2022).

The Mexico Projects Hub first incorporated a "green project label". At that point, the team did not have a methodology that would help them compare the performance of different infrastructure projects against sustainability targets; the team instead relied exclusively on project typology, which was not descriptive enough. For example, renewable energy projects would automatically be classified as "green projects" but no additional or detailed analysis was performed at that stage. In 2018 and 2019, the Mexico Projects Hub received technical assistance from the Inter-American Development Bank (IDB) and then from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to better incorporate sustainability principles into strategic planning and infrastructure finance measures. IDB and GIZ helped develop and scale up sustainable infrastructure methodology that would allow projects to be classified with greater nuance and detail according to their sustainability performance. The IDB Framework was used as a basis for this effort, and was customized to Mexico's specific context. This framework has been applied to 150 projects in the country and is integral to the Mexico Projects Hub pipeline (GIZ, IDB and BANOBRAS 2021).



FIGURE 1: SUSTAINABLE INFRASTRUCTURE DIMENSIONS

## 2. APPLICATION OF THE IDB FRAMEWORK TO THE MEXICO PROJECT HUB

The IDB Framework is organized into four main dimensions: (i) economic and financial sustainability, (ii) environmental sustainability and climate resilience, (iii) social sustainability, and (iv) institutional sustainability.

The IDB Framework was adapted to the Mexican context following a thorough analysis of Mexico's national development strategy, infrastructure investment priorities, and in close collaboration with different stakeholders (including IDB representatives and members of the Mexico Projects Hub).

The customization process followed several steps, defined below:

- 1. Conduct research and review literature. Review national sustainable development strategies of the country, including the National Development Plan, Public-Private Partnership (PPP) policy, and requirements for infrastructure project development.
- 2. Select indicators. Select indicators aligned with the prior literature review and later validated by the different stakeholders. The final list of indicators included 32 sustainability criteria organized under the four sustainability dimensions previously mentioned.

- **3. Define classification criteria.** To classify infrastructure projects according to the availability of sustainability information, a three-tier structure was defined based on the existing documentary evidence and the level of detail thereof. This classification criteria defines:
  - **a. TIER 1** indicates limited information available in the sustainability topic analysed.
  - **b. TIER 2** represents projects whose documentation includes a detailed analysis of the criteria, including mitigation plans.
  - **c. TIER 3** identifies the projects that have a strategic plan and a monitoring scheme during the entire life cycle.
  - **d. ND** (**non-available**) refers to projects with no information on sustainability criteria.

Tier-based classification allows users to explore projects' sustainability strengths and weaknesses. The information used to assess the sustainability of the projects comes from official public sources and is frequently updated for accuracy and transparency.

- 4. Develop case studies. To ensure that the indicators and methodology suit Mexico's infrastructure needs, numerous case studies were developed. These covered various phases addressed in the Mexico Projects Hub (pre-investment, bidding, execution and operation) and sectors (transportation, energy, water, social infrastructure, etc.). They helped refine the methodology and gather feedback on information availability.
- 5. Design a sustainability sheet and visualize results. The results obtained from classifying 20 projects were presented with a simple visualization. Clearly communicating the sustainability performance of the projects was one of the key priorities of the Mexico Projects Hub, and this gave investors a clear picture of the strengths and opportunities for improvement of each project (see Figure 2).
- 6. Build capacity. The last step in the process of adapting the IDB Framework to the Mexico Projects Hub was a capacity-building workshop. Representatives from IDB, BANOBRAS, the Mexico Projects Hub, the consulting company developing the projects, and government representatives were trained on the application of the framework and the key lessons learned.



FIGURE 2: SUSTAINABILITY DATASHEETS AND COMPARISON ACROSS THE SECTOR FOR THE FELIPE ANGELES INTERNATIONAL AIRPORT

Source: Mexico Projects Hub 2022c

### **3. RESULTS**

Besides generating an initial picture of the current state of affairs with regard to integrating sustainability into the country's infrastructure, the IDB Framework encouraged the adoption of good sustainability practices while providing investors with key sustainability information to aid decision-making.

For most investors, the platform is a valuable resource to better understand the sustainability performance of projects. According to a survey<sup>1</sup> carried out by Banobras and GIZ after the launch of the sustainability sheets, 42% of the participants

in the survey were using the platform, and 91% of them found sustainability sheets useful for different purposes, including having a better knowledge of the projects, sorting investment opportunities, and decision-making.

Key attributes from the IDB Framework that were incorporated into the Mexico Projects Hub sustainability datasheets (such as reference to climate change or social aspects) contribute to a landscape in which investors have access to more information. This in turn can help investors mitigate risks, and hopefully contribute to a greater

<sup>1</sup> Over 100 people representing 59 investment institutions (including commercial banking, multilateral banks, investment funds, insurance companies and pension funds among others) attended the session where the survey was carried out.

mobilization of capital into Mexico's infrastructure planning and delivery ecosystem. This work has helped encourage project developers to pay closer attention to sustainability matters. For example, the sustainability classification of the projects helped identify a gap in gender mainstreaming. This has led to the development of numerous capacity-building initiatives within Proyectos México/BANOBRAS teams so they become more familiar and comfortable with these critical dimensions.

Investment banks, investment funds and pension funds are among the most frequent users of the platform, accessing it to identify attractive projects, compare the performance of projects in the same sector, and use it as a basis for later analysis of the projects of interest. For example, for investment funds, the information on the platform and contained in the sustainability sheets - like specific climate change vulnerabilities facing a project - can be complemented with additional detailed analyses conducted by external parties. This comprehensive background can aid future investment decisions. Using an investment banking example, the platform has been useful in the bidding stages, providing key information on a project that can be used when contacting developers. For pension funds, comprehensive sustainability sheet information is a critical component in searching for and/or expanding information on projects of interest.

The IDB Framework also allows for project data and performance to be associated with global development commitments like the Sustainable Development Goals (SDGs). As a result, the sustainability sheets now include analysis regarding potential alignment to the SDGs and specific SDG targets.<sup>2</sup>

### 4. LESSONS LEARNED

Approximately 150 infrastructure projects have been classified in the Mexico Projects Hub. Beyond investors – the most frequent users of the platform – analysis suggests that many other actors like project developers and public sector representatives also benefit from this tool since it covers multiple dimensions of infrastructure development and delivery.

The IDB Framework also highlights how sustainability can be assessed beyond the traditional or obvious "green" sectors, and it has been applied to projects like gas pipelines and highways. The IDB Framework helps identify the project-specific opportunity areas where sustainability practices and theories can be applied. It is important to remember that information transparency and disclosure is the critical first step to augmenting and amplifying project sustainability. This is essential for two reasons: 1) baseline conditions and full details of a project are needed at the earliest possible stage; and 2) gaps in sustainability knowledge and/or practice need to be known as soon as they are discovered so practitioners can adjust and improve.

The tool highlights the importance of establishing mechanisms that incorporate sustainability practices in the early stages of the project; this in turn facilitates greater permanence throughout the project's life. In general, the customization process found that the legal framework within which projects operate is a crucial determinant of good practice implementation. For example, projects developed under the PPP scheme in Mexico have greater availability of information since they publish feasibility studies. It is also worth noting that even projects with highly sustainability considerations developed have identified areas where sustainability performance can be improved.

One key finding is that there are current information gaps amongst stakeholders. Building additional capacity among all relevant stakeholders (investors, project developers and public officials) would be a good step towards understanding sustainability benefits. Developing a Knowledge Strategy, and Knowledge Management Plans for sustainable infrastructure across the Project Hub could help bridge some of these existing information gaps.

In general, the projects did not exceed the Tier 1 classification (the lowest level of information availability) across the four dimensions. More comprehensive sustainability, disclosure, and information gathering are needed for projects to move into Tier 2 and Tier 3. Finally, as mentioned in Section 4 in relation to the SDGs, connecting country-specific projects to global commitments and agendas helps advance greater common understanding about the role sustainability plays in international affairs and development (Proyectos México team 2022).

### **5. REPLICABILITY**

The IDB Framework is widely applicable and has already been used in infrastructure projects across a range of countries where the IDB operates. The IDB Framework is being used by the Colombian National Infrastructure Authority (ANI) to define the sustainability criteria to be incorporated into the 5th generation concession agreements in the transport

<sup>2</sup> The Mexico Projects Hub team developed a digital application (https://www.proyectosmexico.gob.mx/alineacion-ods/) that facilitates this SDG alignment analysis, providing inputs for sectoral evaluations and the identification of gaps for the creation of more sustainable public policies.

sector. The application of the IDB Framework can be helpful for governments, project developers, and investors to enhance their understanding of how sustainability can be integrated into infrastructure projects. The IDB framework can be used in specific projects while also informing improvements in national level legal frameworks, regulations and incentives, helping prioritize more sustainable public projects and encourage private investment.

It is worth noticing that the classification of projects through the application of this methodology has become more efficient over time, reducing the time estimated by the project from over a week to a few days. And as the experience of the Mexico Projects Hub shows, the IDB Framework can easily be applied to infrastructure projects and project portfolios across sectors. It is a useful tool for advancing integrated approaches to sustainable infrastructure, and for strengthening government processes and increasing transparency – all of which are key for encouraging private investment.

# KEY INSIGHTS

- The IDB Framework allows for a holistic and wide-ranging vision of the project's sustainability and can be used to assist and inform public policy. This tool helps also identify gaps in information availability and provides opportunities for improvement.
- The IDB Framework can be easily adapted to countries and sectors' different contexts and needs. In order to ensure better integration of sustainability solutions, it is recommended to build capacity in the teams that will be applying it.
- Through the Mexico Projects Hub, the IDB Framework has enabled improvement in the quality of the country's projects, increasing their sustainability and the integration of attributes that were not considered before, for instance gender mainstreaming.

### FEEDBACK

The flexibility and adaptability of the IDB Framework facilitated the adoption of sustainability criteria that are aligned to the context and needs of Mexico. The IDB Framework is rooted in global sustainability norms and standards, facilitating greater practitioner understanding about best practices and commitments.

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