I. OBJECTIVE OF THE ALIGNMENT AND METHODOLOGICAL REPORT[1]

This document presents the development of the methodology for the potential alignment of infrastructure projects of the Mexico Projects Hub (MPH) with the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda. The exercise aligns two elements: (1) the SDGs and its goals and (2) the criteria established by the methodological framework on sustainable infrastructure of the Inter-American Development Bank (IDB)[2], which Banobras uses to analyze infrastructure projects in the Mexico Projects Hub. This alignment is adjusted to the information specific to each infrastructure project.

Through the alignment methodology, information is provided to national and international actors of the infrastructure ecosystem for making investment decisions that consider and promote sustainable development in its social, environmental, governance and economic dimensions.

About the methodological report:
This report describes the development of the methodology for aligning infrastructure projects with the SDGs and goals of the 2030 Agenda. The structure of the report is as follows:

- Executive summary: the three components of the alignment exercise included in the sustainability sheet are explained: (a) Alignment by subsector; (b) Alignment by SDG; (c) Alignment by criteria and goals.
- Analytical frameworks: the analysis frameworks used in the development of the alignment methodology are presented: (a) Attributes and frameworks for the IDB's sustainable infrastructure; (b) Goals and targets of the 2030 Agenda.
- Methodological development: the development of the alignment methodology is detailed from each of the three sections that make up the Alignment to SDG section of the sustainability sheet:
  - The first section explains the alignment of infrastructure subsectors with SDG and presents the results of the analysis in the form of a matrix.
  - The second details all the stages of the SDG alignment process, in particular the development of a base alignment matrix.
  - The third section describes the exercise of alignment by SDG goals, based on the information available in the base alignment.
- Final reflections on the process: elements necessary to be able to replicate this type of exercise are presented, as well as areas for improvement.
- Annex 1: presents the justification for the base alignment matrix.

[1] This document and alignment exercise is the result of a close collaboration between the German Cooperation for Sustainable Development in Mexico (GIZ) and Banobras, which is part of the actions developed to promote investment in sustainable infrastructure and resilient in Mexico.
[2] Bhattacharya, Amar et al., Attributes and framework for sustainable infrastructure, Inter-American Development Bank, May 2019, https://publications.iadb.org/es/atributos-y-marco-para-la-infraestructura-sostenible.

II. EXECUTIVE SUMMARY

The objective of this analysis is to present the potential relationship of the different infrastructure projects that are presented on the Mexico Projects Hub with the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda. This exercise aligns the SDGs and their goals with the criteria established by the methodological framework on sustainable infrastructure of the Inter-American Development Bank (IDB). This alignment is adjusted to the information of each project. The relevance of this exercise lies in the provision of information to the actors of the infrastructure ecosystem for making investment decisions that consider and promote sustainable development.

The alignments presented are the result of a previous alignment exercise in which coincidences were identified between: (1) the criteria of the IDB methodology on sustainable infrastructure and (2) the SDGs and their targets. To do this, a reference or mention of some goal of the 17 SDGs was sought in the description of the sustainability criteria of the IDB methodology document. With this exercise, a base alignment was achieved, which allows identifying the potential alignment of each project to the SDGs and its goals.

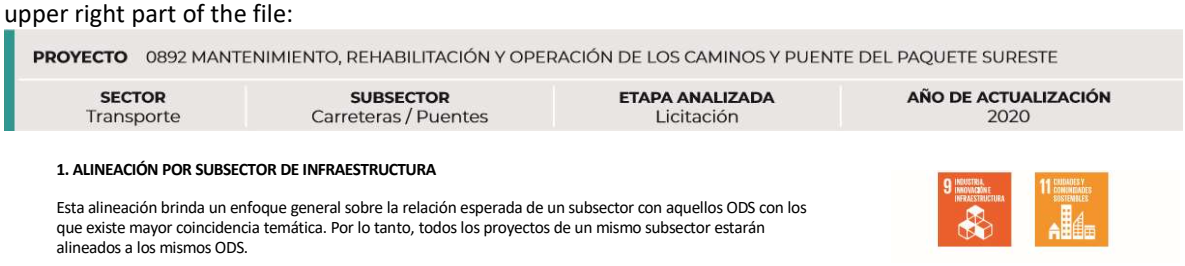
The differences between sustainability files depend on the information presented by each project, as well as on its own characteristics, such as its sustainability practices, the subsector and the region to which it belongs, as well as the stage it is in.

The alignment exercise is divided into three components that represent different levels of analysis, each one with a greater degree of disaggregation and from different perspectives: alignment by infrastructure subsector; alignment by SDG; and alignment by criteria and goals.

1. Alignment by subsector

Alignment by subsector provides a general picture of the relationship of a project with those SDGs with which there is the greatest thematic coincidence. That is, it presents the link between the SDGs and the infrastructure subsector to which the project belongs, regardless of the specific information of the project. Therefore, all the projects corresponding to a subsector will be aligned to the same SDGs in the sector alignment section.

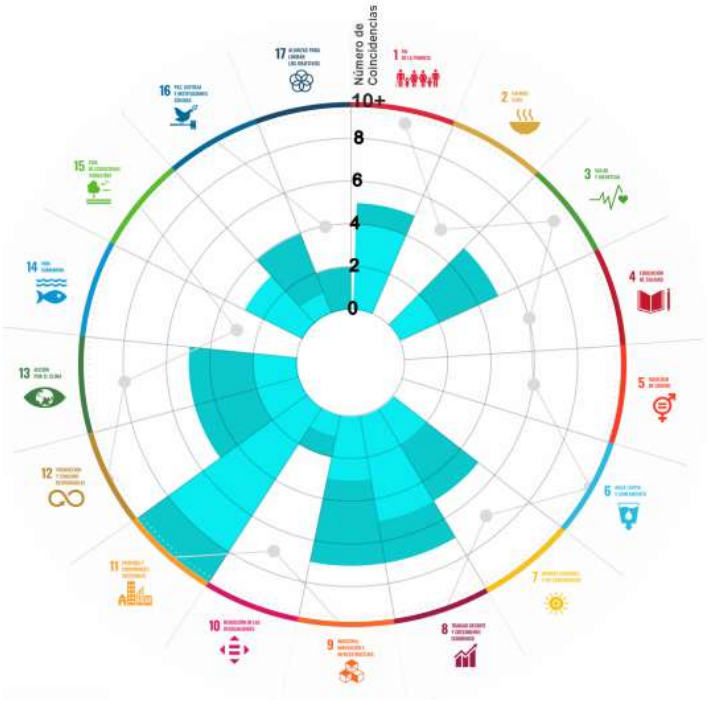
The alignment by subsector is presented through the icons of the SDGs that correspond to the project, in the upper right part of the file:



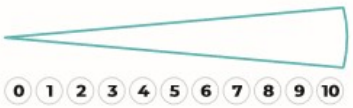
2. Alignment by SGD

This level of alignment constitutes a more detailed analytical exercise that identifies the potential relationship of each project with each SDG. A first step to generate alignment by SDG is to establish an initial alignment, called a base alignment, which generates equivalences between the IDB methodology and the goals of the SDGs. A second step consists of aligning the information available for each project with the baseline alignment between the IDB methodology and the SDGs. The result of this process is the potential

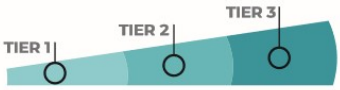
alignment that is represented in a radial graph, formed by 17 radials corresponding to each SDG, which show different types of information:



The length of the radials represents the number of times there is a potential alignment between the project and the SDGs. That is, the number of times the project information matches the base alignment of the IDB methodology and the SDGs. Being 10 the maximum number of alignments to the SDG depending on the characteristics of the project (although some SDG may exceed 10 alignments in the base alignment matrix, for the radial graph the maximum alignments were standardized at number 10). An SDG without a radio indicates that there is no potential alignment between the criteria of the methodology and the theme of the respective SDG.



The tonality of the radials symbolizes the level of detail of the available information. For this, the following scale is used: TIER 1, TIER 2 or TIER 3 for each SDG.



The dots with gray lines represent the maximum number of alignments that a project can have per SDG, that is, the total number of alignments that were identified between SDG and the IDB methodology (without taking into account the specific information of the project). This information is derived from the base alignment.

3. Alignment by criteria and goals

The Target Alignment Table is the most in-depth part of the SDG alignment exercise. This level of analysis presents detailed information on the SDG targets potentially aligned to each project, as well as the quality of these alignments. The alignment table by criteria and goals can be accessed through the QR code located on the right side of the radial graph and the View link.

This exercise is also done from the base alignment and is adjusted with the information of each project.
The quality of the alignments refers to the type of relationship between the SDG targets and the IDB's sustainability criteria. The quality of these alignments can be:

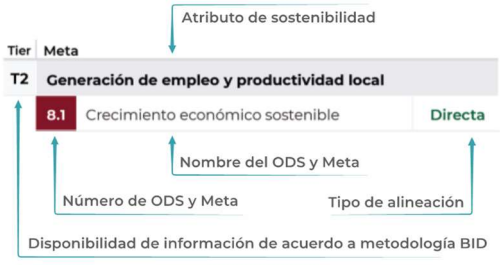
- *Direct:* it is established from the validation of any of the following assumptions:
  - **Textual coincidence between both elements** (e.g. the sustainability criterion “Climate risk and resilience” coincides textually with goal 13.1 “Strengthen resilience and the capacity to adapt to risks related to climate and natural disasters”);
  - **Causal relationship** (e.g. the criterion "Climate risk and resilience" and goal 4.A "Build and adapt educational facilities that offer safe learning environments" are causally related since the construction of safe educational facilities reduces the climate risk and strengthens resilience).
- *Indirect:* The relationship is established from the existence of **derivative elements or from particular circumstances**. In other words, it is necessary to identify the existence of additional elements in order to infer a relationship between the sustainability criterion and goals / SDGs (e.g. the criterion "Soil management" and SDG 6 "Clean water and sanitation" have an indirect relationship in target 6.4, which contemplates the degree of water stress, which in turn is related to the degradation or desertification of soils under certain circumstances: the high demand for water can cause a high degree of water stress in the area, contributing to the desertification of soils due to water scarcity).

Knowing whether the alignments are direct or indirect provides a detailed picture of how an infrastructure and / or energy project can be related to specific aspects of sustainable development. This classification strengthens the information on the potential impacts of a project.

The alignment by goals is presented in four sections that correspond to the sustainability pillars of the IDB methodology: (1) economic and financial sustainability, (2) environmental sustainability and climate resilience, (3) social sustainability and (4) institutional sustainability.

Sustainability Criteria

Each section of the table includes the applicable sustainability criteria and below them are listed the goals of the 2030 Agenda with which there is a potential alignment of the project, as well as the type of alienation.



III. ANALYTICAL FRAMEWORKS

This section shows the two analytical frameworks that were used for the alignment exercise: (1) Attributes and frameworks for the IDB's sustainable infrastructure; (2) Goals and targets of the 2030 Agenda.

Attributes and Frameworks for IDB Sustainable Infrastructure

Faced with the need to increase investment in sustainable and resilient projects, the IDB[3] developed a framework for sustainable infrastructure in May 2018. This document outlines key dimensions and criteria for analyzing infrastructure projects (their costs and benefits) from a comprehensive perspective of the sustainability.

According to the IDB definition of sustainable infrastructure, there are four main dimensions of sustainable infrastructure: 1) economic and financial sustainability; 2) environmental sustainability and climate resilience; 3) social sustainability; 4) institutional sustainability. Each of these dimensions is divided into sub-dimensions, which group sustainability criteria by topic.

In turn, each subdimension contemplates different sustainability criteria, which represent the most detailed level of information for a project. For example, the subdimension "economic and social profitability" is made up of four sustainability criteria:

- Economic and social profitability throughout the life cycle of the project;
- Growth, productivity and indirect effects;
- Employment creation;
- Access, quality, reliability and affordability of the service.

It is at this last level of analysis - that of sustainability criteria - the IDB framework is very useful to be able to compare it with the goals of the 2030 Agenda in order to generate a series of equivalences that make it possible to align the information of projects of infrastructure with the goals and targets of the 2030 Agenda.

Goals and targets of the 2030 Agenda

The 2030 Agenda constitutes the most important international framework to promote sustainable development, as it is a commitment signed by 193 countries and made up of 17 Sustainable Development Goals (SDGs), which group key sustainability issues: from the eradication of poverty in all its dimensions (SDG 1), to the construction of resilient and sustainable infrastructure (SDG 9), or the adoption of measures against climate change (SDG 13).

Each SDG is made up of goals and indicators, which guide the implementation of the Agenda and lay the foundations for measuring and evaluating its fulfillment. In total, the Agenda includes 169 global goals and 232 indicators (e.g. SDG 8 “Decent work and economic growth” has twelve goals. The first is “8.1 Maintain per capita economic growth in accordance with national circumstances”; its indicator universal is the annual growth rate of real GDP per capita).

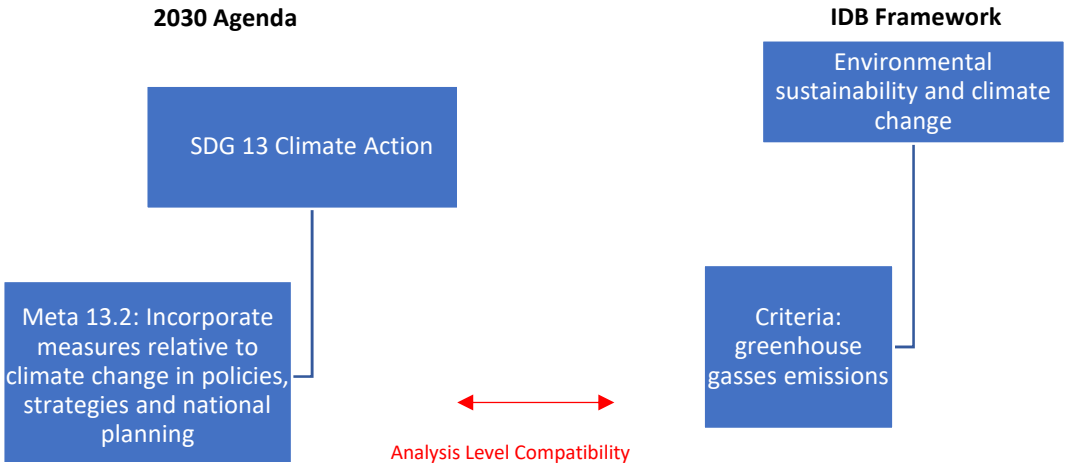
Despite the fact that the indicators constitute the most detailed level of disaggregation to assess compliance with the SDGs, for this alignment exercise, most of the targets are used as a point of analysis to generate equivalences with the IDB methodology. The goals of the SDGs facilitate comparison due to their degree of disaggregation: specific enough to reflect the uniqueness of each goal (and the elements that can contribute to its fulfillment) and, at the same time, general enough to communicate the general spirit of the goal, which makes it possible to relate goals to topics not explicitly contemplated in the 232 global indicators.

[3] Sustainable infrastructure “refers to infrastructure projects that are planned, designed, built, operated and dismantled, ensuring economic and financial, social, environmental (including climate resilience), and institutional sustainability throughout the entire life cycle of the project".

Using analytical frameworks

The goals of the 2030 Agenda and the methodology on sustainable infrastructure of the IDB constitute the key inputs for the development of the methodology that nourishes the second and third sections of the factsheet: alignment by SDG and alignment by criteria and goals.

The alignment of these analytical frameworks - which entails relating the themes of the sustainability criteria and the goals of the SDGs - will be reflected in the development of a matrix that considers all the possible relationships between these elements. This matrix - called base alignment - will serve as an analysis tool to examine any infrastructure project in a disaggregated way in light of the 2030 Agenda, without the need to alter the information load of the Mexico Projects Hub, which uses the IDB methodology.



IV. METHOD DEVELOPMENT

A) ALIGNMENT BY INFRASTRUCTURE SUBSECTOR

Alignment by subsector is an exercise that provides a general image of the relationship of a project with those SDGs with which there is the greatest thematic coincidence. That is, it presents the link between the SDGs and the infrastructure subsector to which the project belongs, regardless of the project information. Therefore, all the projects corresponding to a subsector will be aligned to the same SDGs in the sector alignment section.

For this analysis, only two elements were considered: (1) the infrastructure subsector to which each project corresponds (e.g. Airports, Wind Power, Roads / Bridges, Health, Solid Waste, etc.) and (2) the SDGs. The relationship between the two is defined from an analysis that contemplates, on the one hand, the intrinsic nature of the subsectors and, on the other, the general themes of each SDG (e.g. poverty, services, infrastructure, water and sanitation, energy affordable and non-polluting, etc.). For example, projects in the roads / bridges subsector are implicitly related to SDG 9 “Industry, innovation and infrastructure”, since SDG 9 refers to the development of sustainable, resilient and quality infrastructure. Likewise, this subsector is implicitly aligned with SDG 11 “Sustainable cities and communities”, which refers to safe, affordable, accessible and sustainable transport systems.

Based on these thematic relationships, the following table was developed that condenses all the alignments by infrastructure subsector. Although most of the alignments are automatic (marked with "X"), some alignments require the mention of a specific theme in the project description to be contemplated. These cases are marked with a superscript and with the text on which their applicability depends.

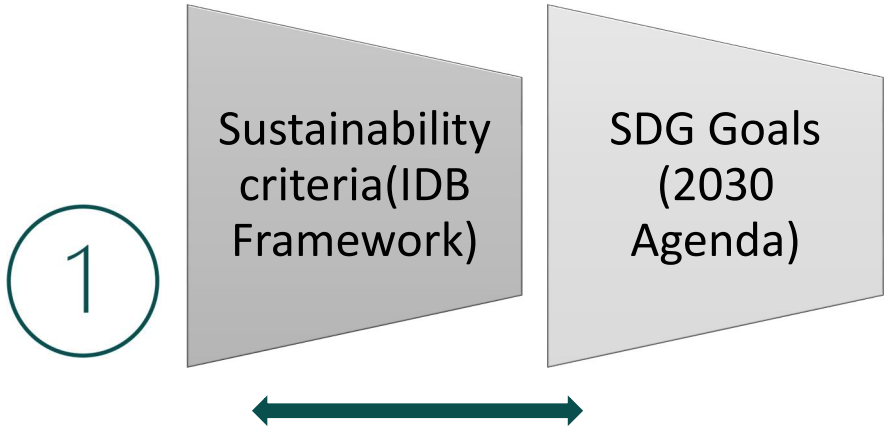
Sector	Subsector	SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9
Water and Environment	Water Supply						X			X
Water and Environment	Water Management						X			X
Water and Environment	Solid Waste							X[4]		
Water and Environment	Water Sanitation						X			X
Electricity	Wind Power							X		X
Electricity	Geothermic Power							X		X
Electricity	Hydraulic Power							X		X
Electricity	Solar Power							X		X
Electricity	Thermic Power							X		X
Electricity	Generation							X		X
Electricity	Transmission / Distribution							X		X
Electricity	Turbogas							X		X
Hydrocarbons	Upstream								X	X
Hydrocarbons	Midstream								X	X

[4] Requires mention of garbage as a source of energy (goal 7.2).

Social Infrastructure	Culture and Leisure									
Social Infrastructure	Education / Science and Technology				X[5]					X[6]

B) ALIGNMENT BY SDG

This level of alignment constitutes a more detailed analytical exercise than alignment by subsector, as it identifies the potential relationship of the project with each SDG based on project-specific information. The present analysis, therefore, requires evaluating all the information available for an infrastructure project in light of the 17 SDGs. This process can be analyzed in two steps:



First step: Linking between analytical frameworks

	SDG 1	SDG 2	SDG 3	SDG 4
Criteria				
	alignment			

Second step: Matrix elaboration

First step: linking between analytical frameworks

Because the information captured in the Mexico Projects Hub is organized according to sustainability criteria (e.g., greenhouse gas emissions, Effects of biodiversity in the area and native flora / fauna, etc.), alignment with the SDGs it should be done at a similar level of disaggregation, that is, at the level of the SDG targets. This with the purpose of generating alignments between criteria and goals without losing detailed information.

[5] Requires mention of education or schools
[6] Requires mention of science and technology

In this case, the IDB's sustainable infrastructure framework is extremely useful for this function given that its criteria are at a similar level of disaggregation to that of the SDG targets (e.g., the description of sustainability criteria related to the use of efficient resource and recycling strategies is explicit, broad and detailed enough to include subtopics such as: the efficient use of materials in infrastructure projects, the promotion of recycling and the waste management for its monitoring and reduction).

Once the compatibility between analytical frameworks has been determined, the sustainability criteria are aligned with the goals of the SDGs, as they are levels of analysis with a highly compatible degree of disaggregation of information.

Second step: Matrix elaboration

As a next step, a matrix is generated that allows identifying the coincidences between the sustainability criteria and the SDG targets. The matrix is structured by an initial column that corresponds to the sustainability criteria. The other columns correspond to the 17 SDGs.

Crossing the information in the matrix makes it possible to mark those quadrants in which some goal of the SDGs refers (explicitly or implicitly) to the description of the IDB's sustainability criteria:

SUSTAINABILITY CRITERIA	**SDG 1**: End of poverty	**SDG 2**: Zero hunger	**SDG 3**: Health and wellbeing	**SDG 4** Quality education
M1 Greenhouse gas emissions (all stages)				
M2 Greenhouse gas emissions (all stages)	**1.5** Reduce vulnerability by building climate resilience			**4.A** Construct and adapt educational facilities that offer safe learning environments.
M2 Greenhouse gas emissions (all stages)				

What does the matrix represent?

The matrix represents the base alignment of this exercise since it condenses all the possible relationships between the IDB's sustainability criteria and the goals/objectives of the 2030 Agenda. This instrument, therefore, will serve to analyze the potential alignment[7] of any project of infrastructure to the SDGs and their targets. The list with the justification of all the alignments is in Annex I.

What does an alignment mean?

[7] The alignments have a potential or approximate character since the analysis depends, ultimately, on the available information of a project: its availability, degree of detail and veracity (in all stages of the project).

Indicates the capacity of the project to influence a specific goal or SDG. The contribution, however, can be positive or negative[8]. That will depend on the particularities of the project and what its real effects are throughout the planning, bidding, construction and operation.

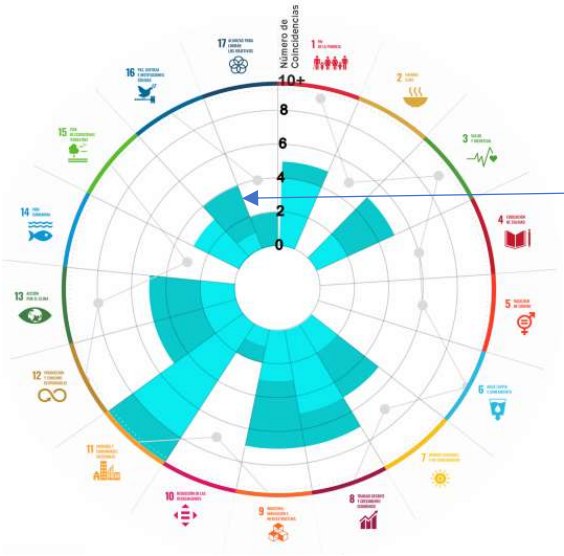
How is the base alignment matrix used?
The alignments identified in the matrix are programmed in the Mexico Projects Hub in order to automate the process of generating project alignments. Therefore, the information capture of an infrastructure project - carried out based on sustainability criteria through the Mexico Projects Hub -will automatically determine the alignments between that information and the goals/objectives of the 2030 Agenda.

How does goal alignment translate to SDG alignment?
The base alignment matrix is structured based on goals, that is, a level of disaggregation greater than that required for alignment by SDG. Therefore, to obtain the alignment of the project by SDG it is necessary to carry out an information aggregation exercise. This process consists of adding the alignments to a project's goals and organizing them by SDG. In this sum, no more than one goal per sustainability criterion is counted, despite the fact that it may have more than one goal aligned to a sustainability criterion (the detail of these alignments is reflected in the alignment by criteria and goals). E.g. if the infrastructure project is aligned with goals 1.2, 1.3 and 1.4 in different sustainability criteria, the number of coincidences between the project information and SDG 1 will be three.

How is the SDG lineup represented?
This degree of alignment will be reflected in a graph with 17 radials that correspond to each SDG. The length of the radials represents the number of times there is a potential alignment between the project and the SDGs. That is, the number of times the project information matches the base alignment of the IDB methodology and the SDGs. Being 10 the maximum number of alignments to the SDGs depending on the characteristics of the project. E.g.: the graphic representation that the infrastructure project[9] is aligned with four goals of SDG 16 (goals 16.1, 16.2, 16.5 and 16.6) is the following:

[8] Determining the type of contribution will depend on the particularities of the project and its operation. For example, the information from a water treatment plant may suggest that the project has the capacity to positively influence the improvement of water quality by reducing pollutants (Target 6.3). However, if during the operation of the plant's environmental regulations are not complied with or there are deficiencies in their maintenance, the infrastructure project could contribute to water pollution and have a negative contribution to the fulfillment of goal 6.3.

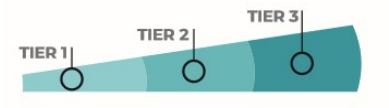
[9] Although some SDGs may exceed 10 alignments in the base alignment matrix, for the radial plot the maximum alignments were standardized at the number 10.



The dots with gray lines represent the maximum number of alignments that a project can have per SDG, that is, the total number of alignments that were identified between SDG and the IDB methodology.

What does the tonality of the radials represent?

The tonality of the radials symbolizes the level of detail of the information available for each project. For this, the following scale is used: TIER 1, TIER 2 or TIER 3, for each SDG.



C) ALIGNMENT BY CRITERIA AND GOALS

The criteria and goals alignment table is the most detailed part of the SDG alignment exercise. This level of analysis presents detailed information on (1) the SDG targets potentially aligned to the project, as well as (2) the quality of these alignments. This exercise is also done from the base alignment matrix and adjusted with the project information. The table can be accessed through the QR code on the left side of the radial graph.

Classification of alignments: indirect and indirect

The quality of the alignments refers to the type of relationship between the SDG targets and a sustainable infrastructure criterion. This can be: direct or indirect.

Alignment quality grading is a procedure carried out during construction of the base alignment matrix. This procedure is not mentioned in the previous section because the direct or indirect alignment classification is only reflected in this section.

The criteria to differentiate the type of alignments are:

Direct: This relationship is established from the validation of one of these two assumptions:

a. **Textual coincidence between both elements** (e.g. the sustainability criterion "Climate risk and resilience" coincides textually with goal 13.1 "Strengthening resilience and the capacity to adapt to risks related to climate and natural disasters");
b. **Causality relationship** (e.g. the criterion "Climate risk and resilience" and goal 4.A "Build and adapt educational facilities that offer safe learning environments" are causally related, since the construction of safe educational facilities has as effect of reducing climate risk and strengthening resilience).

Indirect: The relationship is established from the existence of **derivative elements or particular circumstances**. That is, it is necessary to identify the existence of additional elements in order to infer a relationship between the sustainability criterion and goals/SDGs (e.g. the criterion "Soil management" and SDG 6 "Clean water and sanitation" have an indirect relationship due to the fact that goal 6.4 contemplates the degree of water stress, which is related to the degradation or desertification of soils under certain circumstances: the high demand for water can cause a high degree of water stress in the area, contributing to the desertification of soils due to water shortage).

Knowing if the alignments are direct or indirect provides more detail on how an infrastructure and/or energy project can be related to specific aspects of sustainable development. This classification strengthens the information on the potential impacts of a project.

How to read the alignment table by criteria and goals?

The alignment by goals is generated automatically in the Mexico Projects Hub and is represented in a table divided into four sections corresponding to the sustainability pillars of the IDB methodology: (1) economic and financial sustainability, (2) environmental sustainability and climate resilience, (3) social sustainability and (4) institutional sustainability.

ALINEACIÓN POR META

Tier	Meta		
	SOSTENIBILIDAD ECONÓMICA Y FINANCIERA		
T2	**Retorno económico y social del proyecto**		
	8	Trabajo decente y crecimiento económico	Indirecta
T2	**Generación de empleo y productividad local**		
	8.1	Crecimiento económico sostenible	Directa
	8.3	Políticas para la creación de empleos y el crecimiento de las empresas	Indirecta
	9.1	Infraestructuras sostenibles, resilientes e incluyentes	Directa

Each pillar includes the applicable sustainability criteria and below them are listed the goals of the 2030 Agenda with which there is a potential alignment of the project, as well as the type of alienation.

V. FINAL REMAKRS ABOUT THE PROCESS

Elements necessary to be able to carry out an exercise of this type

- Have comparable analytical frameworks in terms of thematic coverage and similarity of degrees of disaggregation.
- Have technical support to automate the alignment methodology, with the purpose of reducing the substantive work in the generation of sustainability files or similar products.

Final considerations

- The alignments generated for this fact sheet constitute a detailed analysis, but not a determining one, of the relationship between elements of sustainable infrastructure and the 2030 Agenda. Therefore, there is the possibility of deriving more relationships between the frameworks of analysis on sustainable infrastructure and the SDGs. and it's goals.
- One limitation of this exercise is its potential or approximate nature since the analysis ultimately depends on the information available on a project: degree of detail or veracity. Therefore, multiple factors related

to the accuracy, absence or veracity of the information can affect the relationship of an infrastructure project with the goals and objectives proposed by this methodology.

- The alignments in this exercise indicate the ability of a project to impact on a specific goal or SDG. The contribution, however, can be positive or negative. Determining the type of contribution will depend on the particularities of the project and its operation. For example, information from a water treatment plant may suggest that the project has the capacity to positively influence the improvement of water quality by reducing pollutants (Target 6.3). However, if during the operation of the plant environmental standards are not complied with or there are deficiencies in their maintenance, the infrastructure project could contribute to water pollution and have a negative contribution to the fulfillment of goal 6.3.