



## **CIF TA Facility for Clean Energy Investments**

First Call for Proposals

Enhancing the financial regulatory framework for promoting Energy Efficiency and Distributed Generation Investments through the Green Finance Innovation Laboratory (GFIL) in Mexico & Brazil

Inter-American Development Bank













## Proposal submission template

## Country/ region

Mexico and Brazil

#### **Project Title**

Enhancing the financial regulatory framework and financial approaches for promoting Energy Efficiency and Distributed Generation Investments through Green Finance Innovation Laboratories (GFILs)

#### Implementing MDB(s)

Inter-American Development Bank (IDB)

#### MDB client<sup>1</sup>

National Development Banks/Ministry of Finance/Stock market Regulator/Financial Market Regulator

## MEXICO

#### **National Development Banks**

- Nacional Financiera (NAFIN)\*
- Banco Nacional de Comercio Exterior (BANCOMEXT)\*
- Banco Nacional de Obras y Servicios (BANOBRAS)\*
- Sociedad Hipotecaria Federal (SHF)\*
- Fideiocomisos Relacionados a la Agricultura (FIRA)\*
- Financiera Nacional de Desarrollo (FND)\*

#### **Regulatory Institutions**

- Banco de México (BANXICO)\*
- Comision Nacional Bancaria y de Valores (CNBV)\*
- Secretaría de Hacienda y Crédito Público (SHCP)\*

#### Associations

- Asociación de Bancos de México (ABM)\*
- Consejo Consultivo de Finanzas Verdes (CCFV)\*

BRAZIL [For more information on target clients and participants see Annex II]

- Banco da Amazônia S.A.\*
- Banco de Desenvolvimento de Minas Gerais S.A. (BDMG)\*
- Banco do Nordeste do Brasil S.A. (BNB)\*
- Banco Nacional de Desenvolvimento Econômico e Social (BNDES)\*
- Banco Regional de Desenvolvimento do Extremo Sul (BRDE)\*

#### MDB focal point

- Enrique Nieto, Lead Financial Markets Specialist, Connectivity, Markets and Finance, IDB enriquen@iadb.org;
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<sup>&</sup>lt;sup>1</sup> (\*) Core Targets, as NDBs are policy driven executing actors operating mostly through commercial banks. IDB works hand on hand with these institutions to develop climate related financing programs and capacity building. All of them work with IDB and together with and/or through commercial banks to develop targeted programs.



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### Detailed description of proposed activity

#### **Background:**

Increasing private investments in climate action is essential to meeting Latin America and Caribbean countries' Nationally Determined Contributions (NDCs). To this end, the Inter-American Development Bank (IDB) in cooperation with local partners and with the support of the German Development Agency for Cooperation (GIZ) and the International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) of Germany, established two pilot Green Finance Innovation Laboratories (GFILs):

- The Brazilian Lab was created in 2017 to develop innovative sustainable finance instruments enabling public and private investments in activities contributing to achieve the country's sustainable goals and commitments under the Paris Agreement. The Brazilian Lab brings together various stakeholders of the capital and financial markets that would not otherwise engage with each other to identify how to address barriers to green investments.<sup>2</sup> The GFIL work is structured around 4 thematic working groups, namely: Green Finance, Impact Investment, Fintech and Environmental, Social and Governance Risk Management and Transparency.
- The Mexican Lab has been established in 2019 to mobilize financing for climate investments in key sectors of relevance for the low-carbon transition through financial innovation and regulation. The Mexican Lab also brings together various stakeholders of the capital and financial markets to work together in addressing key financial and non-financial barriers to climate investments.<sup>3</sup> The Mexican Lab is structured around three working groups: Green Banking, Green Investments and Sector Green Finance Initiatives.

Despite the progress achieved to date under these pilot GFILs, further work is required to address policy and regulatory gaps in financial regulations, develop financial instruments suited to unlock private investments in energy efficiency and renewable energy, and build the capacity required to finance/invest in these areas. Additional work is particularly needed for e.g., developing new and supporting the implementation of relevant solutions developed under the Labs to date, expand activities to new sectors and review/integrate recent international best practices and standards such as the EU Sustainable Finance Taxonomy. Furthermore, the COVID contingency calls for enhanced dialogue and innovation to drive green investments in areas with high socio-economic impact potential and address the new barriers that came to the fore as a result of the pandemic such as the depreciation of local currencies and the reduced capability and incentives of businesses to invest in climate action.

<sup>&</sup>lt;sup>2</sup> Coordinated by IDB, the Brazilian Development Association ABDE, the Security and Exchange Commission CVM, and GIZ, the Brazilian Lab currently involves representatives from more 150 financial institutions, public and private banks, private sector companies, utilities, government and ministries officials and members from the civil society.

<sup>&</sup>lt;sup>3</sup> Coordinated by IDB, GIZ, the banking association ABM, the Green Finance Advisory Council, and six national development banks, <sup>3</sup> the Mexican Lab is currently linked to the main actors of sustainable finance in the country, developing a convening power that allows designing and executing strategies in an integrated way and avoiding dispersed efforts.

<sup>&</sup>lt;sup>4</sup> Progress include, for instance, mapping of barriers and opportunities to issuers and investors on green bonds; development of a methodology for off-balance sheet financing of energy efficiency; provision of inputs to inform the revision of selected financial regulation such as Decree 8,874 in Brazil.

<sup>&</sup>lt;sup>5</sup> See the "Complementarity and Additionality sector for further details".



#### Key outstanding barriers to investments in energy efficiency<sup>6</sup> and distributed renewable generation<sup>7</sup>

Energy efficiency and distributed renewable generation represent for Brazil and Mexico key areas on which to advance to improving the long-term sustainability of their industries and urban infrastructures, increasing energy security, and achieving their respective NDCs' commitments. Nevertheless, investments in these areas are not flowing because of the following key outstanding financial and non-financial barriers:

- Gaps in financial regulations resulting in mispricing of climate risks by private investors and financiers and in capital allocation decision-making not consistent with emissions-reduction pathways that will enable these countries' low- carbon transition.
- Gaps in investors/financiers' awareness about the business opportunity and know-how to evaluate
  and finance energy efficiency and distributed renewable generation projects. This is compounded by
  borrowers' inadequate capacity to develop pipelines of bankable green projects
- Viability gaps due to the lack of adequate access to finance and scalable and replicable business models, and high up-front capital and transaction costs
- Technology risks perceptions, due to the lack of confidence in project performance which ultimately drive up discount rates and financing costs and hold back investments.

As a result, there is a disconnect between the supply and the potential demand for finance for energy efficiency and distributed renewable generation in Brazil and Mexico. The financial and capital market play a key enabling role to match demand and supply of finance for energy efficiency and distributed renewable generation.

#### Goals and description of the proposed activities

With CIF support, IDB and its local partners aim to leverage the existing GFILs to address these outstanding financial and non-financial barriers to private investments in energy efficiency and distributed renewable generation. IDB and its local partners would do so by:

- Strengthening existing and proposing new financial policies and regulations, including with a view of driving investments towards priority areas, fostering greater disclosure of climate risks, and overcome legal hurdles.
- ii) Building the capacity of, and foster knowledge sharing among, finance and capital market actors banks, asset managers, pension funds, financial regulators on the business case associated with energy efficiency and distributed renewable generation, on the technical and financial evaluation of such projects, and how to engage with borrowers/investees to originate, develop and implement bankable pipelines. Capacity building activities will also cover aspects related to the integration of climate risks, particularly transition risk, in governance, risk management, strategy and operations, in alignment with the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD).8 They will also cover the dissemination of knowledge and the promotion of green bond and sustainable finance markets.

<sup>&</sup>lt;sup>6</sup> Energy Efficiency includes the reduction of energy losses, efficient heating/cooling systems, high efficiency motors and equipment, high efficiency private sector and municipal lighting systems, and waste heat recovery among others.

<sup>&</sup>lt;sup>7</sup> Clean distributed generation includes electrical generation and storage performed by a variety of small, grid-connected or distribution system connected devices such as PV, or small-scale wind. Fossil-fueled distributed generation is out of the scope of this proposal. The expected demand will be mainly in solar as the focus companies are SMEs.

<sup>&</sup>lt;sup>8</sup> The TCFD's recommendations are available <u>here</u>. Transition risks refer to those risks that may arise as a result of policy/regulatory, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change.



iii) Developing innovative financial instruments and business models targeting Mexico and Brazil's context-specific circumstances and the specific characteristic of energy efficiency and distributed generation projects in these countries. After the design and "incubation" stage, these financial instruments will move into pilots by the Lab's members and translate into publications for public awareness and knowledge sharing. These could include the development of technology (e.g. fintechs) to provide proper access to finance instruments.

The main activities planned to be undertaken include:

- Development of dedicated Energy Finance working group/activities in each country GFIL to design roadmaps that promotes the collaboration of all relevant industrial, regulatory, and financial sector actors to participate in the development of financial solutions for energy efficiency and clean distributed generation. (Target participants in the working group would include representatives from National Development Banks, local commercial financial institutions, investors and asset managers, insurance specialists, financial regulators, representatives of key economic sectors including energy, industrial, technology, and housing specialists and providers)
- 2. Market, regulatory and legal diagnostics to map key barriers along the finance value chains
- 3. Assessments of national/regional and international regulatory and market practices to identify, distill and disseminate lessons learned
- 4. Ad-hoc capacity building activities for financial regulators and financial institutions' technical teams and C-suite
- 5. Convening and peer-to-peer exchange with other international members of the Network for Greening the Financial System 65 financial regulators from across the globe <sup>9</sup> and institutions implementing the recommendations of the Task Force on Climate-related Financial Disclosures.
- 6. Assessing the portfolios of selected investors/financiers for climate transition risks to improve their ability to price climate risks in energy intensive industries/assets/clients/investees, align their portfolios with 2°C decarbonization pathways, and capture the related business opportunities
- 7. Development of frameworks and approaches to shape and drive private investments towards energy efficiency and renewable energy with focus on distributed generation projects with high socioeconomic impact potential, with a view of supporting the post-Covid-19 recovery agenda. 10
- 8. Financial instruments and business models including but not limited to guarantees, insurance options, credit lines, bonds, funds or facilities development support including e.g. green bonds eligibility and impact frameworks, financial modeling, documentations, certifications, public consultations etc. to finance investments with socio-environmental additionality. In light of the impact of COVID on the Brazilian and Mexican economy, as well as the relevance of capital markets in financing the energy transition, the Labs are expected to focus part of their activities in the development of credit enhancement solutions catering the risk/return profile of international private investors/financiers.

<sup>&</sup>lt;sup>9</sup> As of April 16th 2020, the NGFS consists of 65 financial regulators from across the globe (see <a href="https://www.ngfs.net/en/about-us/membership">https://www.ngfs.net/en/about-us/membership</a>)

<sup>&</sup>lt;sup>10</sup> Beyond distributed generation, activities may also focus on investments in technologies enabling the integration of variable renewable energy into power systems. The relevance of such measures become even more evident with the demand suppression resulting from factories and businesses halting operations due to the pandemic, which generated further supply-demand management challenges.



- Strengthen partnerships between development of finance institutions and Energy Service Companies (ESCOs) to accelerate the implementation of energy efficiency and clean distributed generation by providing effective operational and financing models
- 10. Revisions of ESCO contracting and operating frameworks with the aim of reducing a company's risk perception, accelerating the financing of energy efficiency projects, with methodology, standardized contracts, and energy performance guarantee insurance.

#### Justification and theory of change

IDB is proposing to invest CIF resources in scaling up the goals and activities of the Brazilian and Mexican Labs with a focus on energy efficiency and distributed renewable generation because of:

#### Finance is a critical enabler of the low-carbon transition

- Achieving the low-carbon transition requires a significant shift in investments that make financial flows
  and stocks consistent with low greenhouse gas emissions and climate-resilient development pathways.
  Meeting this goal will depend on the public and private sectors coming together to support an inclusive
  and orderly transition from high- to low-carbon assets on a global scale.
- The Labs contributes to this long-term goal of the Paris Agreement by bringing together public and private sectors players of the Brazilian and Mexican financial systems to rethink capital allocation decision-making and develop the solutions required to equipping financial institutions in serving the sustainable development transition in the real economy, and strategically target those sector with the highest environmental and socio-economic impact potential. Some of these measures seek to have a direct impact on the real economy for example, actions to build up green bond markets to more efficiently channel capital to sustainable development priorities.
- The Labs will specifically work towards developing solutions aimed at shifting and mobilizing private capital for energy efficiency and clean distributed generation in priority target sectors – especially industry and public/private buildings.

# Relevance to achieving Brazil's and Mexico's NDCs commitments and contributing to raising ambitions at a critical juncture

• Brazil is one of the world's top energy consuming country, with the industrial sector accounting for the lion share of total national consumption (around 33%). About 80% of industrial firms use electric power as their main source of energy. Furthermore, the country's power supply is vulnerable to the effects climate change given that hydropower represents 60% of the electricity generation mix. As the effects of climate change become more evident, will likely result in greater risk of power outages and unstable energy prices which can greatly impact the productivity of industrial companies. These facts highlight the relevance of investments in energy efficiency measures in industry, as well as distributed renewable generation to diversify the energy mix and ensure business continuity. Under the Paris Agreement, Brazil committed to 37% Emission Reduction by 2025 and 43% by 2030 (based on 2005 levels). Its mitigation actions include achieving 10% efficiency gains in the electricity sector by 2030 and expanding the use of renewable energy sources other than hydropower in the total energy mix to between 28% and 33% by 2030. 

\*\*Total Representation of the sector of the sector

<sup>&</sup>lt;sup>11</sup> CPI (2018), Challenges and Opportunities of Energy Efficiency: A Look at Brazilian Industry.

<sup>&</sup>lt;sup>12</sup> CPI (2018), Challenges and Opportunities of Energy Efficiency: A Look at Brazilian Industry.

<sup>&</sup>lt;sup>13</sup> Government of Brazil - Nationally Determined Contribution available <u>here</u>.



• Energy efficiency and renewable energy – clean distributed generation in particular – and are essential to meeting Mexico's goals of generating 35% of its electricity from clean energy by 2024 and reducing greenhouse gas emissions by 22% by 2030. 14 The industrial sector and the building sectors are two target areas for energy efficiency improvements. This particularly in light of the industrial sectors relative contributions to the country's direct greenhouse gas emission generation (17%), the high energy consumption of residential and commercial buildings, and the government goal of encouraging the construction of sustainable buildings and the transformation towards energy-efficient and low-carbon footprint sustainable cities. 15 More affordable power and distributed generation development is a key priority for the country's policymakers. 16

Considering the effect of COVID on energy systems, in addition to activities targeted to distributed generation, Labs activities may also focus on investments in technologies enabling the integration of variable renewable energy into power systems. The relevance of such measures become even more evident with the demand suppression resulting from factories and businesses halting operations due to the pandemic, which generated further supply-demand management challenges.

#### Relevance in delivering socio-economic benefits

• Energy efficiency and clean distributed generation help reduce energy costs for companies (particularly small-and medium sized enterprises [SMEs]), organizations and households – energy is typically one of the most important fixed cost. Distributed generation, in particular, plays a key role in securing energy supply, which is particularly relevant in contexts with unreliable supply. Investments in these technologies can improve the productivity of companies, their competitiveness and strengthen their balance sheets while contributing to lessen the impact of climate change and COVID-19.

# Presence of market and institutional failures and other barriers hindering investments in energy efficiency and distributed generation in Brazil and Mexico

• In Brazil and Mexico, energy efficiency and clean distributed generation financing face several financial and non-financial barriers which impede investments. These include: (i) relatively high upfront capital and transaction cost; (ii) lack of access to adequate commercial finance solutions such as loans or leasing options; (iii) inadequate local capacity of technology providers and engineers, which enhance technology risks perceptions; inadequate capacity among financial sector professionals to evaluate the risk-return profile of energy efficiency and clean distributed generation projects, which undermines the prospect of using the financial value of energy savings as collateral; iv) high risk perception; v) limited development of the energy service company (ESCO) industry, and vi) inability of energy technology solution providers to offer energy performance contracts with shared savings which distribute the risk among client and technology solution providers.

<sup>&</sup>lt;sup>14</sup> Government of Mexico - Nationally Determined Contribution available <u>here</u>.

<sup>&</sup>lt;sup>15</sup> Government of Mexico - Nationally Determined Contribution available <u>here</u>.

<sup>&</sup>lt;sup>16</sup> The government of Mexico defines distributed generation as energy produced by systems that have a nameplate generating capacity below 500 kW (which is the threshold at which generators require a generation permit from the Energy Regulatory Commission), and below the expected demand from all the loads interconnected to the same distribution circuit (see Electricity Industry Act, Article 16, Electricity Industry Act, Article 3, XXIII, Interconnection Manual for Generation Plants Under 0.5 MW of Capacity – Source NREL (2018)).

<sup>&</sup>lt;sup>17</sup> According to several market studies conducted by the IDB in the framework of the Energy Savings Insurance.



#### **Theory of Change**

The results chain features the relation between activities proposed for the GFILs, the expected outputs, outcomes and impacts to be achieved. The change logic assumes that by directly targeting the financial and non-financial barriers hindering investments in energy efficiency and clean distributed generation and by forging dialogues among public and private stakeholders, the GFILs will improve investment environments, and unlock private capital for investments in areas considered critical to achieving Brazil and Mexico's NDCs' emission reductions goals and Sustainable Development Goals. Furthermore, by integrating a sustainable recovery from COVID-19 lens in the activities that will be put in motion, the GFILs will also contribute to achieving socio-economic co-benefits (see Annex I for the visual on the Theory of Change).

The activities and public/private partnerships developed under the GFILs are also expected to generate other positive spillover effects. In fact, by enhancing members' capabilities, the GFILs will contribute to cross-cutting initiatives implemented by their local members.

The project will benefit financial and non-financial market participants including sectoral ministries, financial regulators, local commercial financial institutions, national development banks, SMEs, industries, technology solution providers and ESCOs.

#### **Outputs**

The main outputs of the program leading to expected outcomes are the following:

- 1. GFILs participants actively engaged. This can be measured through: # institutions represented, #number of working group meetings, # of financial instruments solution ideas submitted for evaluation and development by Labs members.
- 2. Regulatory, legal, financial and market barriers to investments in energy efficiency and distributed generation mapped. This can be measured through e.g. # assessment reports; # of policy/regulatory changes identified; # of policy/regulatory changes proposals developed by the working groups.
- 3. Innovative financial solution proposals identified, incubated, and endorsed. This can be measured through # innovative solution proposals identified, developed and endorsed; # of working group members engaged in the piloting of such instruments.
- 4. Capacity built and knowledge shared: This can be measured through: # training realized; # number of participants to the training activities; # of knowledge sharing documents published; # of webinars.

#### **Outcomes**

- 1. Strengthen and enhanced policy and regulatory frameworks
  - Increased awareness among financial regulators and policymakers about the policy and regulatory gaps to green investments and approaches to overcome them
  - Enhanced ability and will of financial regulators and policymakers to strengthen the policy and regulatory environment
- 2. Increased awareness and capacity among capital and financial and non-financial markets players about:
  - How to identify, evaluate and manage climate-related risks, and how to translate identified risks into sustainable finance opportunities in priority sectors – energy, industry, and buildings.
  - The market and socio-economic opportunity associated with energy efficiency and clean distributed generation projects



- How to originate, structure and finance energy efficiency and distributed generation projects
- 3. Private capital mobilized through Lab-supported policy/regulatory-related actions and instruments and public and private partnerships.

#### Consistency with selection criteria

Align with national low carbon priorities, Paris Agreement, and sustainable development goals, including appropriate consideration of social and environmental impacts.

This proposal will support Brazil and Mexico's efforts to reduce the GHG emissions and achieve their respective NDC goals (Brazil: 37% by 2030 compared to 2005 levels; Mexico: 25% by 2030 compared to business-as-usual).

As this proposal promotes and aims to facilitate investments in energy efficiency and clean distributed generation through mechanisms development, implementation and the enhancement of policies and regulations, it is expected to contribute directly to SDG Goal 7-Affordable and Clean Energy.

Further, in light of the socio-economic impacts caused by the coronavirus pandemic, the GFILs will work towards actively integrating climate in the COVID-19 recovery response, and pursuing climate actions with positive high socio-economic impact potential.

This proposal will ensure that any adverse social and environmental impacts are prevented, avoided or mitigated in line with IDB's Socio and Environmental Safeguards. Further, the GFILs will also contribute to strengthening financial markets players' ability in integrating environmental, social and governance risk in their decision-making processes, in alignment with best international practice. (Environmental, social and governance risk management and disclosure is one of the areas targeted by the GFILs as integral to green financing).

Integrated with and complementary to existing support programs of MDBs and contribute to the mainstreaming of clean energy finance mobilization within MDBs.

Supporting the low-carbon transition in Latin America and the Caribbean region is a key priority for IDB. The Brazilian and Mexican Labs will benefit from IDB's experience and network in financing energy efficiency and clean distributed generation in the region. The IDB has developed such experience over the years with support from CIF as well as other multilateral climate funds and its own resources. Through technical assistance and loan programs, IDB has helped support the establishment of financial mechanisms and providing long-term finance for the implementation in energy efficiency and clean distributed generation investments across the region. More specifically, the IDB with its local partners has been working to enhance private sector investors' trust that energy efficiency projects do pay off (see e.g Annex IV on the innovative mechanism launched by IDB called Energy Savings Insurance Program).

Notwithstanding the activities that IDB has carried out individually or within the framework of GIFL to date, additional resources are required to strengthen the dissemination of initiatives in both the supply and demand of finance, strengthened and expand participation of financial and non-financial players, and develop ad-hoc strategies for addressing outstanding barriers to investments in and the financing of energy efficiency and distributed generation.

The following selected list includes examples of the Lab track record in Brazil on green bonds and energy, which would not have occurred in the absence of the Lab support. With CIF support, IDB and its partners expect to build on this track record, to replicate, scale up and fill gaps.

#### Green bonds:

1. Market survey of green bond market perception by Brazilian investors and issuers.



- 2. The survey supported the discussion and development of a proposal to promote green debentures through the revision of Decree 8.874 (incentivized debentures) for infrastructure investment projects that meet environmental responsibility criteria (certified as green), so that these projects can be prioritized by the government and receive incentives.
- 3. Facilitating the Brazilian Securities Commission' (CVM) procedures for issuing local green bonds
- 4. Development Sustainability Guide for Stock Exchange Financial Brokers
- 5. Development of comments to ISO discussion (ISO14030 Green Bond standard) on the metric and taxonomy for green bonds

#### Energy:

- 1. Methodology for integrating benefits and returns of distributed solar energy generation investments in the credit/spread risk analysis of banks (joint publication with the Banking Association FEBRABAN)
- 2. Energy-saving insurance (pilots with banks based on IDB experience)
- 3. Performance Guarantee Fund for Energy Efficiency and Distributed Energy accepting receivables as collateral (Pilot Fund has been developed with BNDES and is being capitalized with seed resources from the National Electric Power Conservation Program (PROCEL))
- 4. Pilot of a trust mechanism (SPV) that allows to *allocate off-balance* resources to boost energy efficiency financing in large industries (leadership with Santander and the Brazilian WBCSD branch Brazilian Business Council for Sustainable Development was selected as pilot for support by a bilateral incubation project from GIZ)
- 5. Monitoring and reviewing proposals on how to promote the "Renovabio" program that allows distributors to buy biofuel credits to offset their GHG emissions

In Mexico, which recently started its activities, an assessment study is being carried out to identify financing gaps in distributed generation and provide a detailed diagnosis of barriers and areas of opportunity. This study gathers the opinion of the main actors in the sector and the financing practices that have been successful. The study will be used to define a roadmap to guide the implementation of the activities to be carried out. Early insights from the study are recognizing the effects of the COVID19 pandemic on both supply and demand. This analytical framework could be used for assessing energy efficiency-related interventions.

With CIF support, the Lab would i) implement the respective roadmap over the next two years and ii) to add regulatory bodies including securities and exchange commissions, superintendencies of banks and insurance, and the ministry of finance as active participants to the working groups; iii) share the lessons learned to date under the Brazilian Lab and the financing of relevant projects such as the performance guarantee fund developed with FIRA with support from CIF. Through the collaboration between the public and private financial sector actors, the Lab would create ownership which facilitates the implementation of the financial solutions developed in the different working groups.

Contribute to stronger policy framework and local capacity that facilitates scaling up of clean energy technologies by eliminating key barriers.

Targeting gaps in financial policy and regulatory frameworks is a key focus area of the Brazilian and Mexican Labs proposed for CIF support. By bringing together local public and private actors and international expertise, the Laboratories provide a platform for the identifying, characterizing and addressing such gaps and thereby strengthening of Brazil and Mexico's financial policy and regulatory frameworks.

Activities that will directly contribute to this outcome include detailed assessment of barriers, capacity and knowledge building, development of sustainable finance solutions to address these, and ownership creation for participating actors. The existing experience with, for instance, green debentures in Brazil,



indicates that the Laboratories inclusive process provide is conducive to the identification and implementation of measures strengthening the policy and financial regulatory framework.

#### Contribute to increased mobilization of private sector investment and finance in clean energy.

The financial mechanisms, instruments, and targeted policy recommendations for financial sector actors are aimed to have a direct impact on the interest of private sector investors. Private sector investors will be convened to co-develop the financial mechanisms in a transparent and participative manner. The IDB will seek to provide co-finance for credit lines through National Development Banks to support this process, subject to government demand. See Annex VI for a graphic description.

Follow an integrated approach involving key stakeholders (bi- and multilateral actors and initiatives, as well as both intra<sup>18</sup>- and inter-MDB), in order to address key issues along the value chain (from upstream policy support to downstream pipeline development) that support market transformation.

Solutions to promote investments in energy efficiency and renewable energy require the involvement of several key players. The Laboratories provides a platform for dialogue and knowledge exchanges between public and private financial sector agents and key actors of the real economy - SMEs, industrial enterprises, technology solution providers and ESCOs among other members of the value chain. Labs members will participate in the creation of conducive regulatory framework, financial mechanisms, and the creation of bankable pipelines.

Beyond local stakeholders, the Labs see the active engagement of other development partners such as GIZ, UNEP FI, the World Bank (see Annex II) and they are a joint effort among different divisions within IDB and IDB Invest. CIF support will help to further expand outreach to and engagement with other relevant multilateral stakeholders and beyond.

Follow active partnership model that harnesses the competencies of national and international energy, investment and finance institutions.

The Lab approach is built to establish partnership, actively engage, and convene national and international expertise. The focus is on the development of adapted local practicable solutions and local capacity starting from an assessment of global best practice.

The IDB team will lead on the convening of international expertise, in collaboration with CIF and other stakeholders. The IDB team has been actively engaging with both international experts from technical organizations such as Bloomberg New Energy Finance or the International Energy Agency, standard setters such as the Green Bonds Initiative, and international investors/financiers. It will hence leverage its network to establish a partnership model with international financial markets players with interest in green investments in Brazil and Mexico. The convening of international actors will also be aimed at addressing the barriers perceived by international private investors/financiers to allocate capital in emerging markets like Brazil and Mexico and develop credit enhancement solutions catering their risk/return profile.

The inclusion and cooperation with international institutions will be result-oriented and governed by the principle of cost-effectiveness. To this ends, IDB will for instance seek to integrate the public and private actors involved in the <a href="International platform for Sustainable Finance">International platform for Sustainable Finance</a> as well as those involved in the <a href="Network for Greening the Financial Systems">Network for Greening the Financial Systems</a>, and the Task Force on Climate-related Financial Disclosure.

<sup>&</sup>lt;sup>18</sup> Involvement by both public and private sector arms of the MDBs will be important to ensure that issues at the interface of public and private are not overlooked.



(Both the Brazilian and Mexico financial regulators are members of the Network for Greening the Financial Systems)

Integrate gender equality design considerations, particularly in TAF's three focus areas, as well as in the overall results framework.

This proposal will encourage the participation of women in the Labs, and gender-oriented policies and frameworks, especially related to access to finance to SMEs leaded by them. In the capacity building processes and the design of financial-related solutions, gender is one of the subjects that will be specifically targeted e.g. by focusing on (i) how to stimulate and enable energy efficiency investments by MSMEs or bigger enterprises leaded by women; (ii) how local financial institutions can offer financial products most adequate to their needs; (iii) how financial and/or capital market regulation can enable greater financial inclusion of MSMEs or enterprises leaded by women.

#### Main focus area(s)

- Financial / capital market policy, regulation, governance
- Financial instruments and related enablers e.g. investment frameworks, standards etc.
- Energy especially oriented to energy efficiency and distributed generation

#### Complementarity and additionality

The Labs are unique in their public and private partnership model focused on enabling a country-driven and country-focused dialogue among all relevant actors of the financial and capital markets to discuss how financial regulation, dedicated financial instruments and financial education can mobilize private capital for green interventions in the energy sector. Labs are unique in their holistic approach and targeted outputs and outcomes i.e. the development of specific financial policy and regulations actions and financial instruments and the adoption of international best/good practices of relevance for the energy sector. Labs involves and aligns with other national or international initiatives such as CPI's Global Innovation Lab for Climate Finance that is more limited in scope and mandate e.g. it does not focus on financial regulation (see also Annex V).

This proposal develops from the lessons learned to date under the existing Labs. In particular: Brazil's and Mexico's relevance in contributing to lowering global greenhouse gas emissions, potential for energy efficiency and distributed generation investments, the need and demand for green finance solutions, the size and maturity of their respective capital financial market.

This proposal to CIF will complement and supplement the work of the Labs and enable to take forward and scale up the activities that IDB and its partners have made to date through these platforms. It would do so by specifically targeting the delivery of financial solutions for energy efficiency and distributed generation, enhancing stakeholders' participation and buy-in, and develop pilot-ready instruments. It will allow the lessons learnt to enter the regulatory discussions and contribute to the standardization and further development of financial instruments for green investments.

The activities proposed for support by the CIF are complementary and additional because:

- The existing Labs do not have the resources required to boost their activities to the scale required and ensure the long-term local institutionalization of these country-driven public and private sector dialogue and collaborations. Further stakeholder engagement is required, particularly in Mexico, to ensure political buy-in and will in addressing policy and regulatory gaps.
- Energy efficiency and distributed energy generation are not explicitly targeted by the activities pursued under both LAbs, albeit the interested demonstrated by several members in these areas, and



financial solutions are not yet developed or mature to reach the market. For example, CIF resources will enable IDB and its members to:

- Develop a guarantee fund for ESCOs undertaking all the activities required to identifying market niches with high impact potential such as solar distributed generation in public schools and hospitals, public lighting, cooling districts, etc.
- Expand the role of the insurance sector in enabling investments, for instance by exploring synergies between the ESI mechanism and other investment insurance programs and/or developing new instruments harnessing insurance products to credit enhance green bond issuances.
- Expand the use of financial and non-financial instruments and methodologies developed under the ESI Program (Annex IV) to EE and DG initiatives recognizing learning process and the value demonstrated in IDB efforts.
- Expand the Energy Efficiency Program in Mexico. This will include promoting demand; strengthen the fund's technological guarantee and other risk coverage instruments; expansion to other technologies such as efficient air conditioning and coordination with other energy efficiency and/or distributed generation-related programs promoted by other organizations.
- Expand the role and relevance of carbon markets in driving investments in energy efficiency and distributed generation.
- Enhance the use of technology in the provision of services associated with the market infrastructure and offers in the capital market, enabling the issuance of green assets with greater efficiency lower cost and investor security in order to enable access to capital market at relatively lower costs.

## Transformational change and knowledge sharing

This proposal is expected to result in a sizeable and long-lasting transformational change potential. This is because it would directly address financial and non-financial barriers to climate investments in energy efficiency and renewable energy, contribute to enhance financial and regulatory and policy framework and to provide investors/financiers with the information and tool required to integrate climate risks/opportunities in their decision-making processes.

The change is expected as knowledge and capacity are built through the participation of relevant actors to the Labs activities and the resulting partnerships. The Labs will strength and develop the capacities of Lab members on energy efficiency and renewable energy projects, financial and risk evaluation, as well the environmental and social benefits of these investments. Labs members/participants will be able to translate the activities of the Lab and related outcomes in practice and thus create new energy efficiency / clean distributed generation markets where the private sector can function on its own in the medium-to long-term.

Key lessons learned and Labs outputs/outcomes will be shared with the broader community via the <u>Green</u> <u>Finance LAC</u> web platform of the IDB Group. CIF web site and stakeholders' related media outlets.



## Budget<sup>19</sup>

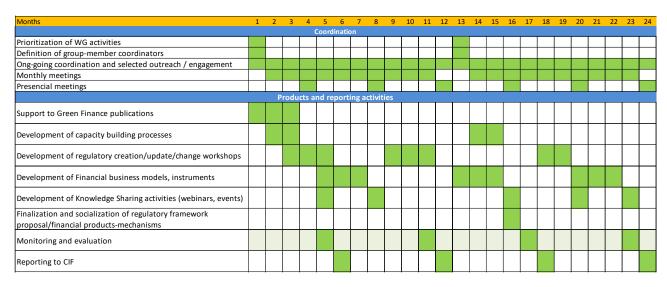
| Activity                     | Description  | Consultant                   | BRAZIL<br>Budget Year 1 &2<br>(USD) | MEXICO<br>Budget Year 1 & 2<br>(USD) |  |  |
|------------------------------|--|------------------------------|-------------------------------------|--------------------------------------|--|--|
|                              | Group coordination   | Consultant Services          | 20,000                              | 20,000                               |  |  |
|                              | Capacity building & outreach   | Consultant Services          | 20,000                              | 25,000                               |  |  |
| Lab Working Group Activities | Legal, regulatory, and market diagnostics  | Consultant Services          | 38,000                              | 40,000                               |  |  |
|                              | Development of regulatory/policy reforms   | Consultant Services          | 20,000                              | 20,000                               |  |  |
|                              | Identification and development of new financial instruments & business models      | Consultant Services          | 50,000                              | 55,000                               |  |  |
|                              | Developing, drafting and editing GFILs analysis reports, publications and articles | Consultant Services          | 30,000                              | 30,000                               |  |  |
|                              | Organization and production of webinars  | Consultant Services          | 5,000                               | 5,000                                |  |  |
|                              | Media (Website/Video)  | Consultant Services          | 1,000                               | 1,000                                |  |  |
|                              | Speakers   | Speaker Travel               | 15,000                              | 15,000                               |  |  |
| Convening<br>(Year 2 or 3)   | Logistics  | Hotel, Catering, AV services | 40,000                              | 40,000                               |  |  |
| (1001 2 01 0)                | Media (Website/Video)  | Website                      | 9,600                               | 9,600                                |  |  |
|                              | iviedia (website/ video)   | Video                        | 500                                 | 500                                  |  |  |
| Extra                        | Hotel Lab meetings   |                              | 20,000                              | 20,000                               |  |  |
| Local Coordinator            | Local support/IDB liaison  |                              | 20,000                              | 8,000                                |  |  |
| Contingency 5%               |  |                              | 15,000                              | 15,000                               |  |  |
| Total per country            |  |                              | 304,100                             | 304,100                              |  |  |
| Total for GFIL Program       | 608,2  | 200                          |                                     |                                      |  |  |
| Co-financing from IDB        | and other sources for technical cooperation  |                              | 60,820                              | 60,820                               |  |  |

<sup>&</sup>lt;sup>19</sup> Please note that this is an estimated budget. Labs call for some flexibility to ensure alignment with context-specific circumstances and countries' priorities. Hence, there might be reallocation of funding among activities.



## Implementation plan and timeline<sup>20</sup>

#### **BRAZIL**



#### **MEXICO**

| Months   | 1 | 2 | 3 | 4 | 5   | 6     | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|--|---|---|---|---|-----|-------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Preparation  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Hiring of local technical consultants services to develop the<br>capacity building process                                   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Definition of participants of the capacity building processes  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Analyses and roadmap design  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Kick-off meeting with the consultants to develop capacity building content   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Kick-off meeting with the consultants to develop analytical work on financial regulations, access to finance and instruments |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Ongoing coordination and selected outreach / engagement  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  |   |   |   |   | Ope | ratio | n |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Baseline assessment within each thematic working group   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Development of capacity building processes   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Development of regulatory creation/update/change workshops   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Development of Financial business models, instruments  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Development of Knowledge Sharing activities  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    | ı  |    |
| Finalization and socialization of regulatory framework proposal / financial products / mechanisms                            |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Monitoring and evaluation  |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Reporting to CIF   |   |   |   |   |     |       |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

#### Stakeholder engagement and partnerships

The Labs will engage a wide-range of relevant financial sector actors including development financial institutions (IFDs), private financial intermediaries, investors, insurances specialists, central bankers, regulators of financial, capital and insurance markets, and representatives of key sectors of the economy including for instance energy, industrial, technology and housing development.

Annex II illustrate the local stakeholders involved in the Brazil Financial Innovation Lab as an example.

<sup>&</sup>lt;sup>20</sup> Indicative timelines. At the beginning of the activities, working Group leads and coordinators will define the work plan most suited to all parties involved and time to delivery of specific outputs.



Relevant partnerships will be assessed as part of the lab set-up in each country and will include existing partnerships between the IDB team and regional actors such as ALIDE and international actors including OECD, IEA and IRENA, as well as additional partnerships to ensure donor coordination.

### Results framework<sup>21</sup>

| Number                | Description  | Baseline       | Target      | MRV   |  |  |  |  |  |  |
|-----------------------|--|----------------|-------------|---|--|--|--|--|--|--|
| Outcome 1             | Increased awareness and capacity among capital and financial and non-financial markets players   |                |             |   |  |  |  |  |  |  |
| BRAZIL                |  |                |             |   |  |  |  |  |  |  |
| Output 1^             | GFILs participants actively engaged: # of people (men and women) engaged from the public and private sector (ministries, regulators responsible for economic development, finance and planning, public and private financial institutions, experts, industry-relevant actors etc.) | 114            | 170         | Participants  |  |  |  |  |  |  |
|                       | GFILs participants trained: # of capital and financial and non-financial markets players trained   | 114            | 170         | Participants  |  |  |  |  |  |  |
|                       | GFILs participants trained: # of women trained   | 47             | 85          | Participants  |  |  |  |  |  |  |
| MEXICO                |  |                |             |   |  |  |  |  |  |  |
| Output 1 <sup>^</sup> | GFILs participants actively engaged: # of people (men and women) engaged from the public and private sector (ministries, regulators responsible for economic development, finance and planning, public and private financial institutions, experts, industry-relevant actors etc.) | 60             | 150         | Participants  |  |  |  |  |  |  |
|                       | GFILs participants trained: # of capital and financial and non-financial markets players trained   | 30             | 80-100      | Participants  |  |  |  |  |  |  |
|                       | GFILs participants trained: # of women trained   | 20             | 50          | Participants  |  |  |  |  |  |  |
| Outcome 2             | Financial sector policy and regulation with energy relevance increasing  | gly conduci    | ve to finan | cing/investments in clean energy projects                   |  |  |  |  |  |  |
| BRAZIL                |  |                |             |   |  |  |  |  |  |  |
| Output 2              | Number of financial sector related policies, laws, or regulations adopted, updated, or changed to support private sector investments (removing barriers, limiting risks).  | 12             | 20          | Policies, laws, or regulations adopted, updated, or changed |  |  |  |  |  |  |
| MEXICO                |  |                |             |   |  |  |  |  |  |  |
| Output 2              | Number of financial sector related policies, laws, or regulations adopted, updated, or changed to support private sector investments (removing barriers, limiting risks).  | 0              | 4           | Policies, laws, or regulations adopted, updated, or changed |  |  |  |  |  |  |
| Outcome 3             | Private capital mobilized through Transaction enablers - Increased avainstruments that enable and de-risk clean energy investments   | ilability / ad | loption of  | business models and financing                               |  |  |  |  |  |  |
| BRAZIL                |  |                |             |   |  |  |  |  |  |  |
| Output 3              | # of financial instruments / businenss models and other solutions  | 13             | 30          | Working Group member reports                                |  |  |  |  |  |  |
| Output 4              | # of total funding expected to be mobilized in Million USD   | 0              | tbd*        | IDB Systems and Working Group member reporting              |  |  |  |  |  |  |
| MEXICO                |  |                |             |   |  |  |  |  |  |  |
| Output 3              | # of financial instruments / businenss models and other solutions  | 0              | 10-15       | Working Group member reports                                |  |  |  |  |  |  |
| Output 4              | # of total funding expected to be mobilized in Million USD   | 0              | tbd*        | IDB Systems and Working Group member reporting              |  |  |  |  |  |  |

Notas: (^) Targets are conservatives. The Labs will seek to increase participation to the greatest extent possible. (\*) The activities of the GFIL are expected to result in a sizeable mobilization effect. In light of the COVID-19 crisis, it is difficult to provide an estimate ex-anti.

## Assumptions and risks/ risk management

The success of the LABs relies on:

<sup>&</sup>lt;sup>21</sup> Labs coordinators will report to CIF any other relevant metrics that will be developed based on the final scope of the activities under each Labs' working groups.



- The active participation of IDB and its local partners ABDE, CVM and GIZ in Brazil, and ABM, CCFV
  and GIZ in Mexico. Further, it also relies on the buy-in and active participation of the members of the
  working groups.
- Effective leadership and coordination of the Labs and of the various activities undertaken by the working group
- strong ownership of the beneficiaries and continuous involvement of working group members to keep promoting the green finance lines
- Incentives, capabilities and will to target efforts toward the development of quality green finance solutions and policy/regulatory actions.
- Incentives, capabilities and will to institutionalize the activities of the Lab within the different organizations involved
- Availability of financial resources to enable the Labs to operate.

Based on the Labs experience to date, and with the enablers of success mapped, the Lab coordinators and project team leader will ensure that the Labs-related meetings and related activities are well coordinated, and materials developed are peer-reviewed by experts. They will also ensure on-going engagement with and among participants.

The work proposed in this program is highly technical and involve several players, there is a risk of not obtaining good quality results if the work carried out by consultants and working groups is not properly guided and monitored. It is important to maintain a balance between creating initiatives that add value for the LAB on the one hand, and the ability to assign priorities to avoid saturating participants with activities that disperse their attention in the other. One of the biggest challenges arises in maintaining a single agenda of activities that is shared by all stakeholders, avoiding duplication of effort and dispersion of resources. For this, the different participants must recognize as legitimate the efforts of LAB in each country.

IDB's and its partners' experience to date with the Brazilian and Mexican Labs, and historical experience energy efficiency and distributed generation projects, as well as the ability to exchange experience between national laboratories (see annex II and III) has already provided good lessons learned on risk to implementation and risk management good practice.

On the one hand, COVID-19 social distancing measures are not expected to significantly disrupt the modus operandi of the Labs. Extra efforts are being and will be put in place to ensure that the Lab work continues in a remote fashion. On the other, COVID-19 impact on the Brazilian and Mexican economy is and will have implications on national and international investors' and financiers' priorities, risk appetite and tolerance for climate action. The Labs will have to enhance efforts to ensure participants' understanding about the relevance and benefits associated with the integration of climate in the COVID recovery and guide the work of the Labs participants towards the development of green finance solutions addressing the enhanced risks and uncertain policy/regulatory environment.

#### Co-financing, if any

CIF resources is expected to be matched by an estimated USD 121,640 in co-financing from IDB and other sources of technical cooperation (IKI and IDB Accelerator). It should be noted that as the Labs are executed in collaboration with local and international partners (e.g. GIZ), it is expected that these institutions will also have additional in-kind support in the promotion of events and information sharing, that we did not account explicitly as co-finance in the proposal.

If required, additional co-financing resources will be sought to support the piloting of the solutions developed under the Labs



#### Gender considerations and expected results

Gender considerations will be addressed via the following key avenues:

- 1. Working group representation: The Labs will actively target and encourage the participation of female representatives from Labs members' organizations and participants to the working groups, including: Development Finance Institutions, National Development Banks, Local Financial Institutions, investors and asset managers, insurance specialists, financial regulators, representatives of key sectors of the economy including, for instance, energy, industrial, technology providers and housing developers. The project will explicitly encourage the participation of experts from both genders to create a balanced atmosphere and an enabling environment for technical discussion. Relevant gender considerations will be further analyzed where relevant in the thematic sub-groups.
- 2. **Financial regulation**: In the discussions related to regulatory framework, the LABs will seek to enhance the regulatory framework such that to promote the financial inclusion of MSME's or enterprises leaded by women need.
- 3. **Financial instruments**: The Labs activities will explicitly integrate gender considerations in the identification of barriers and development of financial solutions via local financial institutions
- 4. **Training**: The Labs activities will integrate gender-specific considerations in the design and delivery of training activities, including by actively seeking to cater the needs of women-owned enterprises. The expected key results are:



#### Annex I Project Results Chain

STARTING SITUATION

- Energy efficiency and distributed renewable generation represent for Brazil and Mexico key areas on which to advance to improving the long-term sustainability of their industries and urban infrastructures, energy security and achieving their respective NDCs commitments.
- These countries presents: gaps in financial regulations, investors/financiers' awareness, and the lack of adequate access to finance and scalable and replicable business models related to energy efficiency and distributed generation investments.
- Technology performance risks perceptions, due to the lack of confidence in project performance which ultimately drive up discount rates and financing costs and hold bank investments.

**ACTIVITIES** 

#### **OUTPUTS** OUTCOMES

#### Technical assistance (CIF Funds)

- Strengthening financial policies and regulations related to EE and DG.
- Building the capacity of, and forester knowledge sharing among, finance and capital market actors in EE and DG Developing innovative
- financing instruments and business models targeting Meyico and Brazil's contexts specific circumstances Financial instruments (IDB Funds)
- Project development Blending of loan, guarantee, grant instruments utilizing IDB and external public and private funds

Output 1: GFILs participants actively engaged and trained to develop financial solutions enabling investments in energy efficiency and distributed renewable generation

Output 2: Regulatory, legal, financial and market barriers to investments in energy efficiency and distributed generation mapped

Output 3: Transactions enablers: Innovative solution proposals identified, incubated, and Outcome 1: Increased awareness and capacity among capital and financial and non-financial markets players

Outcome 2: Strengthen and enhanced policy and regulatory frameworks

Outcome 3: Private capital mobilized through Lab-supported policy/regulatory-related actions and instruments and public and private partnership.

Enhanced finance and investm environment for EE and DG

Active participation of financing and investor community in Brazil and Mexico in EE and DG investments

Private finance mobilized

GHG emissions reduced

NDCs accomplishment support to

CO-BENEFITS

HYPOTHESES: •

- The GFILs contributes to get public and private sectors players of the Brazilian and Mexican financial systems to rethink their capital allocation decision-
- making processes and develop financial solutions for green investments

  The GFILs will specifically work towards developing solutions aimed at shifting and mobilizing private capital for energy efficiency and distributed
- generation

  Activities will seek to improve the environment for energy efficiency and distributed generation investments in the target countries
- Private investment/financing opportunities in energy efficiency and distributed generation demonstrated



#### Annex II: The Brazil Innovation Lab on Finance

The Brazil Innovation Laboratory on Finance (LAB) is a multisectoral forum created by the Brazilian Development Association (ABDE), the Inter-American Development Bank (IDB) and the Securities Commission of Brazil (CVM), which, in partnership with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH brings together government and civil society representatives to promote sustainable finance in the country. The objective is to create innovative financing solutions to leverage private resources for projects with social and/or environmental additionality and contribute to the fulfillment of the Brazilian goals associated with the Sustainable Development Goals (SDG) (Agenda 2030) and commitments to address the risks of climate change (under the Paris Agreement). Topics such as insurance and guarantees, green bonds, SDG bonds, social impact assessment, investment crowdfunding, solidarity funds, venture philanthropy, fintech's, social and environmental risk management and many others are on the Laboratory's agenda. Launched in August 2017, the LAB operates through intersectoral dialogue organized in 4 different Working Groups (WG) described below.

The Financial Instruments and Impact Investments WG aims to contribute to the creation of alternative financial instruments to finance social impact investments. This Working Group has two main tracks: (i) focus on social impact and (ii) deepening financing solutions for local projects, which makes its composition concentrated on development banks and state development agencies, among other actors. Subjects such as Investment Crowdfunding, Solidarity Revolving Funds, Social Impact Contracts, Impact Assessment Metrics, Venture Philanthropy and SDG Bonds are all part of the Working Group's agenda.

The Fintech WG aims to contribute to the development of innovative financial technologies that promote greater efficiency, reduced cost of operations and financial inclusion. The group, which has strong participation by companies in the sector, financial institutions, government entities and regulators, has among its action fronts the support to the creation of a Regulatory Sandbox in the country, the strengthening of the fintech ecosystem and the use of new technologies by financial institutions, public and private.

The Green Finance WG is the result of the merger between the Green Bonds and Green Finance WGs, created in August 2017, and it aims to promote green finance in the country, now with an expanded sectoral bias, incorporating the Energy segment, the Water segment, Sanitation and Waste; and Sustainable Agriculture and Land Use. This WG continues to contribute to the strengthening of sustainable finance in the country, both in the financial and capital markets, in the latter case, focusing on the issuance of green labeled securities, whose funding is directed to investments that promote benefits. to the environment or reduce risks of climate change.

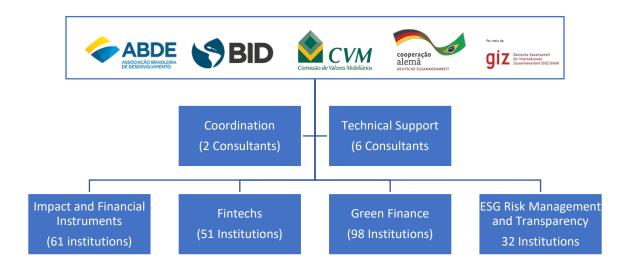
Among its main areas of activity are the dissemination of knowledge among issuers and investors and the proposition of regulatory improvements; in addition to identifying sectoral bottlenecks for investment financing and the indication of solutions, with the creation of financial structures, risk mitigation and guarantees that contribute to the financing of projects with social and environmental sustainability in specific sectors.

The **ESG Risk Management and Transparency WG** was created with the purpose of discussing and improving the way Brazilian financial market institutions deal with Environmental, Social and Governance factors (ESG) and how they can be translated into business risks or opportunities. Building on previous alignment of existing initiatives, the WG seeks to develop proposals that can support financial institutions,



companies, funds and insurers in the process of defining, measuring and integrating ESG factors. As well as encouraging and demonstrating the benefits of transparency in managing these aspects and its impacts on business. Among other things, this WG aims to integrate the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

#### The Brazilian Lab's structure



The Brazilian LAB 157 Institutions 457 Members

More information: <a href="http://www.labinovacaofinanceira.com/">http://www.labinovacaofinanceira.com/</a>



| Green Finance   | Fintech   | Impact<br>ABDE                     | ESG Risks and Transparency             |
|---|---|------------------------------------|--|
| ABDE<br>Abesco  | ABBC<br>ABCD  | ABDE<br>ABFintech                  | ABBC<br>ABDE                           |
| ABNT  | ABCripto  | Abrapp                             | Abrapp                                 |
| ABRAPP<br>Absolar   | ABDE<br>ABFintech                                     | AgeRio                             | ANBIMA<br>APIMEC                       |
| AFD   | ABStartups  | Aggrego<br>Aliança                 | B3                                     |
| Aggrego   | AgeRio  | В3                                 | Banco da Amazônia                      |
| Agroícone<br>ANBIMA   | Anbima<br>Anjos do Brasil                             | Badesc<br>Badesul                  | Banco do Brasil<br>BDMG                |
| Aneel   | ANPROTEC  | Banco Central                      | BID                                    |
| APIMEC  | B3  | Banco do Brasil                    | BNDES                                  |
| Araújo e Policastro Advogados<br>B3                             | Banco Central Banco da Amazonia                       | Bancoob<br>Bandes                  | BRDE<br>BTG                            |
| Badesc  | Banco do Brasil                                       | Basement                           | BV Rio                                 |
| Badesul   | Bandes  | BDMG                               | CAIXA                                  |
| Banco Bradesco Banco Central                                    | Barroso Fontelles<br>BDMG                             | Bem te vi<br>BID                   | CEBDS                                  |
| Banco da Amazônia   | BID   | BMA Law                            | CNSeg                                  |
| Banco do Brasil   | Bit Capital   | BNB                                | CVM                                    |
| Banco Mundial<br>Banco Santander                                | Blockchain Academy BNDES                              | BNDES<br>Bradesco                  | Desenvolve SP<br>Fapes                 |
| Bandes  | Bradesco  | BRDE                               | Febraban                               |
| BDMG<br>BID   | BRDE<br>C6 Bank                                       | BTG<br>Caixa                       | Fractal<br>GIZ                         |
| BNB   | Caixa Econômica Federal                               | Citi Private Bank Brasil           | GVCes                                  |
| BNDES   | Camara-e.net  | Cnseg                              | Itaú Unibanco                          |
| Bradesco<br>BRB   | Cescon Barrieu  | Comportamental Consultoria         | LAB                                    |
| BRDE  | CIP — Câmara Interbancária de Paga<br>Conexão Fintech | Consórcio do Nordeste<br>Consultor | Mattos Filho<br>Ministério da Economia |
| BSi PRIME Investimentos   | Consulado Britânico                                   | Consultora                         | Previ                                  |
| BTG   | Consultor   | Converge Capital                   | PREVIC                                 |
| BVRio<br>Caixa Econômica Federal                                | Cubo Digital<br>CVM                                   | CVM<br>Desenvolve SP               | PRI<br>Proactiva Agro                  |
| Carbon Trust  | Desenvolve SP   | Din4mo                             | Rede Brasil do Pacto Global            |
| CEBDS   | Endeavor  | Endeavor                           | Secretaria de Governo                  |
| Cela Experts<br>Climate Bonds Initiative                        | Equity<br>Febraban                                    | Equity<br>Febraban                 | SIS<br>Sitawi                          |
| Climate Bolids Initiative Climate Policy Iniciative Brasil      | FGV-Direito   | Finep                              | Stocche Forbes                         |
| CNC   | Fialdini Advogados                                    | Fomento PR                         | SulAmerica                             |
| CNSeg Consórcio do Nordeste                                     | Finep<br>Fomento Paraná                               | Fractal<br>Fundação Boticário      | SUSEP<br>Sustenseg                     |
| Consulado Britânico   | KPMG  | GRI                                | Tauil & Chequer Advogados              |
| Consulado Geral do Canadá                                       | LAB   | Igua Saneamento                    | TozziniFreire Advogados                |
| Covolan<br>Credit Agricole                                      | Legal Bot<br>Mattos Filho                             | Impact Hub<br>Insper               | UNEP<br>UNEP FI                        |
| CSN   | MCTIC   | Instituto Iguá                     | Votorantim                             |
| CVM   | Ministério da Fazenda                                 | Itaú Unibanco                      | Way Carbon                             |
| Desenvolve SP<br>Ecoeficiência Energia                          | Previc<br>Qrcapital                                   | IVPC<br>Mattos Filho               |  |
| Eletrobrás  | R3  | Ministério da Economia             |  |
| Pesquisa Agropecuária   | Rodhium   | Moeda Seeds                        |  |
| Eneva   | Sebrae  | Natura                             |  |
| EPE   | Solum Participações                                   | NESsT                              |  |
| Ernst Young Evolutia Capital Assessoria Empresa                 | Susep<br>Swifit                                       | Pacto Global<br>PGE-BH             |  |
| Faro Energy   | USP   | Pipe                               |  |
| Febraban  | VRTX  | Previc                             |  |
| Fialdini Advogados<br>Finep                                     |   | PRI<br>Rio de Impacto              |  |
| Fomento Paraná  |   | Santander Asset                    |  |
| Fractal   |   | Sebrae                             |  |
| Fram Capital<br>Freitas Leite Advogados                         |   | Sistema B<br>Sitawi                |  |
| Fundação Boticário  |   | Solum Participações                |  |
| GIZ   |   | Stocche Forbes                     |  |
| Grupo Gaia<br>GT Finanças Verdes                                |   | SUSEP<br>Tozzinifreire Advogados   |  |
| IBGC  |   | TRE                                |  |
| Igua Saneamento Instituto Clima e Sociedade                     |   | Veirano Advogados<br>Vox Capital   |  |
| Instituto Ciiria e sociedade                                    |   | Water.org                          |  |
| Ipam  |   | Wright Capital                     |  |
| ISACTEEp<br>Itaú Asset Management                               |   | Zurich Santander                   |  |
| Kaeté Investimentos   |   |                                    |  |
| LAB   |   |                                    |  |
| Mattos Filho<br>Ministério da Agricultura                       |   |                                    |  |
| Ministério da Agricultura  Ministério da Economia               |   |                                    |  |
| Ministério do Desenvolvimento                                   |   |                                    |  |
| Regional - Secretaria Nacional de<br>Saneamento                 |   |                                    |  |
| Ministério do Planejamento - SEAI                               | N   |                                    |  |
| Ministério Público  |   |                                    |  |
| Moody's<br>Moura e Varella                                      |   |                                    |  |
| Palladium Brazil  |   |                                    |  |
| PawaFinance   |   |                                    |  |
| Pezco<br>PGE-BA   |   |                                    |  |
| Pinheiro Neto Advogados   |   |                                    |  |
| Previc  |   |                                    |  |
| PRI<br>Proactiva Agro   |   |                                    |  |
| Resultante  |   |                                    |  |
| Sebrae  | do SD   |                                    |  |
| Secretaria de Agricultura Governo e<br>Secretaria de Governo da | de SP   |                                    |  |
| Presidência da República  |   |                                    |  |
| Sirius Consulting   |   |                                    |  |
| SIS<br>SITAWI   |   |                                    |  |
| Stocche Forbes Advogados  |   |                                    |  |
| SUSEP   |   |                                    |  |
| TNC Tozzinifreire Advogados                                     |   |                                    |  |
| Tribuci Advogados   |   |                                    |  |
| True Securitizadora   |   |                                    |  |
| UNEP  |   |                                    |  |
| UNIDO<br>Veirano Advogados                                      |   |                                    |  |
| Vert Capital  |   |                                    |  |
| Votorantim Reservas   | Mataras   |                                    |  |
| Weg Equipamentos Elétricos S/A - I<br>WRI Brasil                | viotores  |                                    |  |
| WWF   |   |                                    |  |
|   |   |                                    |  |



#### Annex III: The Mexican Innovation Lab on Finance

The Mexican Innovation Laboratory on Finance (LAB Mexico), as is commented for the Brazilian LAB, is a multisectoral forum in this case created by the Mexican Banks Association (ABM), the Consultative Council of Green Finance (CCFV) and the Inter-American Development Bank (IDB). In the same way as Brazil, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH collaborates in partnership with LAB. The objective is to create innovative financing solutions to leverage private resources for projects with social and/or environmental additionality and contribute to the fulfillment of the Mexican goals associated with the Sustainable Development Goals (SDG) (Agenda 2030) and commitments to address the risks of climate change (under the Paris Agreement). LAB Mexico has a strong sectorial strategy enforcing sustainable strategies in topics like transport, distributed generation, energy efficiency, cities and agriculture. Launched in early 2017, the LAB operates through intersectoral dialogue organized in 3 different Working Groups (WG) described below.

**Green Banking WG**: Support the development of a green model in public and private banking by creating capacities and a culture that fosters good practices in sustainable finance, especially in terms of climate risks and development of a green portfolio.

**Sustainable Finance WG:** Promote the development of the market for sustainable investments in Mexico, especially green bonds, both at the level of issuers, investment banks as well as potential investors.

**Sectorial Initiatives WG:** Propose business models that promote sustainable financing programs in different sectors such as Transportation, Agriculture, Housing, Industry and Services in applications such as renewable energy, energy efficiency or transitional or disruptive technology.

Among the main challenges are:

- Create a shared and transparent agenda of initiatives that support the integration and coordination of similar projects, thereby avoiding the dispersion of efforts.
- To be recognized as a space that encourages discussion and innovation in the field of green finance.
- Promote existing best practices and promote them instead of creating new ones, thereby avoiding duplications that dilute their impact.
- To create interest in private and public institutions in joining this Laboratory contributing from its sphere of influence with knowledge or resources that allow accelerating its impact.
- Identify bottlenecks for private investment in green financing especially in sectors such as energy, transport, agriculture and water.
- Design innovative financial instruments to encourage climate investments.

More information: <a href="http://www.labmexico.com/">http://www.labmexico.com/</a>



#### Annex IV: Energy Savings Insurance Program (ESI)

The IDB with the support of the Government of Denmark is promoting the uptake and scale up of the <u>Energy Savings Insurance (ESI)</u> program in the Latin America and Caribbean (LAC) region. The initiative was formalized through a five-year Administration Agreement between the Ministry of Foreign Affairs (MFA) of Denmark and the IDB, approved on December 15th, 2015.

The ESI Program seeks to promote investments in energy saving measures by small and medium enterprises (SMEs) by addressing existing financial and non-financial barriers related to both demand and supply of financing for energy savings projects by private sector companies. It was shortlisted as one of the most promising transformative green finance instruments by the Climate Policy Initiative (CPI). The TC RG-X1258 supports National Development Banks (NDBs) and different stakeholders in the beneficiary countries in conducting market analysis and developing financing strategies, identify energy efficiency project opportunities, providing credit lines and build trust and confidence among market actors. Core elements of the program are the development of an insurance to guarantee the investor the energy savings, a performance contract, standardized methodologies to estimate energy savings for different technologies; and technical support to reach the proof of concept and remove operational barriers. The Program initially included five countries: Brazil, Colombia, El Salvador, Mexico and Peru. Chile was incorporated to the Program in Q3 of 2018.

Since Q1 2018 the ESI model is being replicated in Italy, Portugal and Spain as part of a project titled ESI Europe. It is being funded by the European Union's Horizon 2020 research and innovation Program. IDB participate as advisor of this Program. Further efforts to replicate the model are underway by AFD France (Turkey and India) and the GCF (Mongolia). The program is being further replicated by IDB in Paraguay, Argentina and Nicaragua with funds from other donors.

As of October 2019, the major progress of the Program is observed in Colombia where 12 projects in four types of technologies: air conditioning, electronic sensors, solar water heating and photovoltaic have acquired are using the ESI model. Altogether they represent a total investment of USD 2.19 million. 7 out of the 12 projects have been financed by first tier banks, through the BANCOLDEX energy efficiency credit line for Hotels, Clinics and Hospitals. This line operated with a USD 20 million loan from the Clean technology Fund (CTF). A video of a case study is available at: <a href="https://www.greenfinancelac.org/first-success-story-esi-in-colombia/">https://www.greenfinancelac.org/first-success-story-esi-in-colombia/</a>

More information: <a href="https://www.greenfinancelac.org/our-initiatives/esi/">https://www.greenfinancelac.org/our-initiatives/esi/</a>



### Annex V Participation of IDB in the Climate Finance Innovation Lab

IDB participates in relevant initiatives focused on climate finance innovation. For instance, it has been a member of the Global Innovation Lab for Climate Finance since 2015. IDB participation in this and other for a allows it to remain abreast about the construction of solutions for financing climate investments and the support of mechanism to develop financial products, knowledge-sharing activities and the support necessary to launch pilots.

### IDB has participated in these innovative projects:

| • | Global Innovation Lab for Climate Finance - Cooling as a Service  | 2019 |
|---|---|------|
| • | Global Innovation Lab for Climate Finance - <u>Long-Term Debt Facility for Traction Batteries India</u> | 2018 |
| • | Global Innovation Lab for Climate Finance - <u>Distributed Energy for Social Housing in Brazil</u>      | 2018 |
| • | Global Innovation Lab for Climate Finance - Climate-Smart Cattle Ranching in Brazil                     | 2017 |
| • | Global Innovation Lab for Climate Finance - Energy Savings Insurance as applicant                       | 2015 |



## **Annex VI Graphic Description of the Proposal**

