

A large-scale center pivot irrigation system is shown in operation over a vast agricultural field. The metal truss structure of the system extends from the top right towards the center, with multiple wheels and pivot points visible. The ground is a mix of lush green crops and dry, sandy soil, illustrating the impact of water management. The sky is a clear, bright blue.

INVESTING — in — REVERSING

S U S T A I N A B L E
F I N A N C E S T R A T E G I E S
A G A I N S T C L I M A T E C H A N G E



Author

Hilen Meirovich, Head of Climate Change, Advisory Services and Blended Finance, IDB Invest

About IDB Invest

IDB Invest, a member of the Inter-American Development Bank (IDB) Group, is a multilateral development bank committed to the economic development of its member countries in Latin America and the Caribbean through the private sector. IDB Invest finances sustainable companies and projects so they can achieve financial results and maximize the region's economic, social, and environmental development. With a portfolio of \$ 12.44 billion in assets under administration and 342 clients in 24 countries, IDB Invest provides innovative financial solutions and advisory services in response to its clients' needs in a variety of sectors.

Copyright © 2019 Inter-American Investment Corporation (IIC). This work has been licensed under Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives license (CC-IGO BY-NC-ND 3.0 IGO License) (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and can be reproduced with attribution to the IIC and for any non-commercial purposes. No derivative works allowed.

Any dispute related to the use of IIC works that cannot be settled in a friendly manner shall be submitted to arbitration in accordance with the rules of the United Nations Commission on International Trade Law (UNCITRAL). The use of IIC's name for any purposes other than attribution and the use of IIC's logotype will be subject to a license contract executed between the IIC and the user, and is not authorized as part of this CC-IGO license.

After a peer review process and prior written consent of IIC, a reviewed version of this work can be reproduced in any academic magazine, including those indexed by the American Economics Association's EconLit, provided the IIC is credited and the author(s) do not receive income from the publication. Therefore, the restriction to receive income for that publication will only extend to the author(s) of the publication. With respect to that restriction, if there is any inconsistency between the Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives License and these statements, the latter will prevail.

Note that the link provided above includes additional terms and conditions of the license. The opinions expressed in this publication are those of the authors and do not necessarily reflect the opinions of the IDB Group, its respective boards or the countries they represent.

November 2019.

INVESTING — in — REVERSING

S U S T A I N A B L E
FINANCE STRATEGIES
AGAINST CLIMATE CHANGE

Table of contents

Preface	6
Introduction.....	8
Strategy one: Promoting a sustainable financial sector.....	12
Solutions:	
Green lines.....	16
Thematic bonds.....	20
Influence on demand.....	22
Looking ahead.....	24
Strategy two: Catalyzing resources for sustainable projects	26
Solutions:	
B-Bonds.....	30
Total Credit Guarantee.....	32
Blended finance.....	34
Looking ahead.....	36
Strategy three: Incorporating resilience for a smart investment.....	38
Solutions:	
Sustainable agriculture.....	42
Climate modeling optimization.....	44
Sustainable value chains.....	46
Looking ahead.....	47
Epilog.....	48

Preface

Decoupling GDP growth from increased greenhouse gas emissions is one of the biggest challenges of our time. The current relationship is putting tremendous burden on our planet as emerging markets work to lift millions out of poverty and improve lives.

Adding urgency, recent protests across Latin American and the Caribbean are paralyzing economies and calling into question the traditional growth-only model of development. In countries of the region that have achieved decades of growth, social tensions shed light on underlying inequality - inequality of access to resources, like water and energy, and inequality of access to services, like education and finance. The private sector's role is under increased scrutiny.

At IDB Invest, our experience shows there are private sector firms moving away from a growth-only model. Profits tend to be only short-term when environmental, social and corporate governance sustainability are ignored.

We are working with clients that aim to play a role both to decouple and to equalize. Business models that mitigate the effects on the environment can reduce inequality and vice versa. Take renewable energy for example. When IDB Invest finances renewable energy projects, we see energy matrices increase access for excluded, oftentimes vulnerable populations and diversify away from fossil-fuel reliance.

Clean electricity access to those who were previously without it brings new opportunities in terms of health, education, safety and economic activity, while minimizing the environmental toll. The positive impacts are multiplied when we deploy financial instruments like B-Bonds. Bonds issued in local capital markets allow citizens to play a role in funding clean energy production with their pensions and savings, reaping both the financial and environmental benefits.

Initiatives like the country-level Sustainable Roundtables led by private sectors in

Paraguay, Argentina and now El Salvador allow financial institutions to discourage illegal deforestation and preserve the rainforests for the people, plants and animals that depend on them. IDB Invest also finances climate-resilient infrastructure such as ports that are now adjusting the depth of their dredging to ensure they can withstand extreme weather events, sea level rise and eroding shorelines.

This is climate action.

Our private sector clients are showing us how to use their influence to push for business models that share opportunities and reduce emissions. To support our clients and our region, IDB Invest participates in the climate talks with two clear purposes. First, we are increasing the urgency for more climate action and showcasing best practices from the region like renewable energy leadership and urban mobility. Secondly, we are mobilizing capital from traditionally cautious investors who seek to make smart

investments in a region vulnerable to natural disasters and social tensions. To do so, we deploy an array of financial and non-financial products to protect our assets and promote sustainable development. We then share our knowledge and lessons for exponential impact.

At IDB Invest, we are investing in reversing; that is to say, that our projects contribute, as far as possible, to repair environmental damage past and present, and to add value and share value for the long-term.

IDB Invest is making our mark on the UN Sustainable Development Goals and supporting solutions to allow all to thrive economically in a low-carbon world.

James P. Scriven,
Chief Executive Officer (CEO),
IDB Invest

“Intelligence without ambition is a bird without wings”

Salvador Dalí

At the Paris Climate Conference (COP21), held in December 2015, 195 countries approved the first global binding agreement on climate, whose purpose is to keep an increase in the global mean temperature well below 2°C above pre-industrial levels and continue to work to limit that temperature increase even further to 1.5°C. The governments agreed to report regularly on the reduction of emissions every five years.

One year before verifying the progress made, the expectations are not positive, and the signatory countries of the Agreement must increase their efforts and ambitions in their action plans to achieve the expected goals.

IDB Invest wants to join the commitment of raising the bar in terms of sustainability, from the environmental (which is more directly related to the Paris Conference), social and governance standpoint.

We want to express our certainty that all resources we grant to our clients help reverse the negative trends that contribute to climate change and undermine sustainability. We understand that our investments have the capacity to change the detrimental behavior patterns of economic agents, reduce emissions, mitigate impacts resulting from environmental problems and limit the associated costs. In short: investing is reversing.

IDB Invest, a member of the IDB Group, is a multilateral development bank committed to the economic development of its member countries in Latin America and the Caribbean through the private sector. As such, it makes available all its financial resources (loans, bonds, guarantees, equity investments, etc.), advisory and knowledge to mobilize investments in sustainable projects to the companies in Latin America and the Caribbean. This goal is channeled through a triple ambition:

1. Ambition to fully involve the financial sector with regard to sustainability.

Financial entities play a crucial role in the development of projects that have an environmental and social impact. At IDB Invest, we have launched a double strategy to channel their influence in a positive manner. We have created an innovative portfolio of green financial solutions related to low-emission projects that are resilient to climate effects. Among financial entities, their clients and investors, we work to raise awareness that sustainable finance is a business opportunity worth considering. In this manner, we try to match supply and demand to create a deep market of sustainable financial instruments.

2. Ambition to be the catalyst to mobilize greater resources to sustainable projects in the real economy.

We know that IDB Invest’s participation in sustainable projects represents a multiplying and “bandwagon” effect on the private sector. Investors can use innovative financial products created in recent years to facilitate their participation in the development of sustainable infrastructures in Latin America and the Caribbean, for example, B-Bonds, Total Credit Guarantee (TCG) and blended finance. To design these products, IDB Invest acts in accordance with the Blended Finance Principles by the development finance institutions,¹ taking into account les-

sons learned that are included in the reports on new climate economy from the Global Commission on the Economy and Climate.

3. Ambition to shield infrastructures and agricultural production with smart investments to facilitate their resilience with regard to climatic events.

For this purpose, financing operations include a risk analysis that considers the exposure of projects to climate change and plans steps to safeguard flows of income against those eventual changes, for example, financial resilience clause to facilitate repayment of loans. We also develop models applied to engineering designs that detect possible future risks through climate risk management

¹ | DFI Working Group on Blended Concessional Finance for Private Sector Projects (Joint Report, October 2019 Update).



A large, detailed globe of the Earth is the central focus, featuring a grid of latitude and longitude lines. The globe is mounted on a metal structure and is displayed in a modern museum or gallery with large windows in the background. In the lower-left corner, a few people are visible on a walkway, providing a sense of scale. A semi-transparent blue rectangular box is overlaid on the center of the globe, containing white text.

This is why we continue to explore new formulas to promote clean energies and facilitate the transition from polluting industries; to further various financial instruments; to standardize the criteria to define sustainable projects, or to face problems resulting from insurance coverage of risks related to climate change.

plans. In this context, it is vital to take into account that climate change can affect the supply chain of commodities, with potential highly negative effects on local producers. In addition to providing finance, IDB Invest helps mitigate this problem by sharing models that facilitate the calculation of consequences that climate change can have on the value chain.

In recent years, the international financial and business community has made substantial progress in its awareness of the importance of environmental, social and governance issues in Latin America and the Caribbean.

We modestly believe that IDB Invest has made a decisive contribution to that positive evolution. **We are preferential partners in many sustainable projects because we have a deep understanding of international market trends and because we are capable of adapting these trends to various and different realities of the region.**

But we do not settle for this. There is still plenty to do. This is why we continue to explore new formulas to promote clean energies and facilitate the transition from polluting industries; to further various financial instruments such as sustainability-linked loans; to standardize the criteria to define sustainable projects, or to face problems resulting from insurance coverage of risks related to climate change.

We thank our clients for their trust and IDB Invest's donors, who help us to finance our clients and provide a variety of advisory services that add value to the financial products we offer. Everything would be much more difficult without the contribution of the Canadian Climate Fund for the Private Sector in the Americas (C2F), the UK Sustainable Infrastructure Program (UK SIP), the Sustainable Energy and Climate Change Initiative (SECCI) Multi-donor Fund, and the Nordic Development Fund (NDF).

Finally, we trust that this book will be a source of knowledge and communication to continue to move forward in the same direction.





strategy one

Promoting a sustainable
financial sector

Political action is indispensable to protect the environment; but it is not enough. The 2015 Paris Agreement understood this when it explicitly recognized for the first time the need to encourage investment flows to reduce greenhouse gas (GHG) emissions and fight climate change. The crucial role of the financial sector to comply with the environmental goals set in Paris was enshrined in the Agreement, to channel the necessary economic resources and to identify risks that economic agents responsible for making investment decisions are exposed to.

In tune with this vision, IDB Invest has increased its efforts to direct resources of the financial sector, using two methods:

- **The creation of a supply of green products from the region's financial intermediaries**, namely, financial instruments related to low-emission projects that are resilient to climate impacts in Latin America and the Caribbean.
- **The generation of appropriate demand for these products**, making investors and financial intermediaries and their clients aware that sustainable finance is a unique and innovative market opportunity.

The priority target of this strategy is financial entities that have natural access to capital markets; but we also work with non-financial companies, as we see below when we detail specific financing projects. From the sectorial standpoint, the promotion of investment flows focuses

on energy projects that are perceived as more directly linked to the reduction of emissions and costs and, therefore are easier to trade. Financial instruments related to agricultural production, among other sectors, are encouraged to facilitate sustainable resources to the sector (irrigation, development of technologies, improved operation techniques, new varieties of products, etc.).

From the demand side, IDB Invest has implemented training programs addressed to employees of the financial entities and their clients to communicate among both groups the new opportunities for profitability with this type of products.

With this double line of intervention to promote a sustainable financial sector, IDB Invest has carried out several actions and projects that we detail below.

**The priority target of this strategy is
financial entities; but we also work with
non-financial companies.**

Solutions

IDB Invest creates innovative solutions to mobilize banking sector resources to segments of the economy that can reduce emissions or increase the resilience of sectors such as agribusiness, construction, manufacturing or electricity to the impact of emissions. For this purpose we work with financial institutions, microfinance entities and investment funds, from corporate to operational aspects, generating internal systems, policies and strategies, such as adhering to international criteria (Principles for Responsible Banking - PRB, or those established by the Task Force on Climate-related Financial Disclosures - TCFD), or designing green products.

Green lines

IDB Invest's process to grant green lines to a financial entity includes structuring the financing operation and all the advisory services necessary to develop their implementation, such as the identification of segments with growth potential, roll-out to the market or training employees.

IDB Invest has created 35 green lines in 15 countries in the region that are reducing an estimate of 41 million tons of CO² equivalent per year.

Let us see four characteristic examples.

Banco del País (Banpaís)

Is a financial entity from Honduras that is part of Corporación Banco Industrial de Guatemala, the largest financial group in Central America. In 2017 IDB Invest signed a senior loan of US\$8 million with Banpaís to increase the credit supply addressed to SMEs. The China Co-financing Fund for Latin America and the Caribbean co-financed the transaction with US\$ 4 million. The amortization tenor is five years, an advantage for the bank, as it generally operates with financing for

much shorter tenors. **The operation is supplemented with technical advisory services** from the Greenpyme Program (see its characteristics in this chapter) on sustainability topics. The main purpose was to offer Banpaís **analysis and training tools for the implementation of green financial products** in the institution. Direct and free-of-charge support was provided to clients in this entity on topics such as **energy audits or efficient water management strategies so that the**

companies become more competitive and obtain cost savings. The election of Banpaís as the recipient of the loan and as a strategic partner is related to its commitment to support growth of

its credit portfolio to SMEs that Banpaís finances under appropriate tenors and interest rates, helping in particular companies with low capitalization levels.

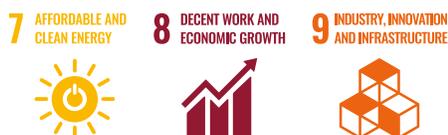


* All our operations potentially contribute to the United Nations Sustainable Development Goals (SDGs).

Banco Promerica de Costa Rica

In 2019 IDB Invest granted a loan of US\$20 million to Banco Promerica de Costa Rica. The purpose was to facilitate financing of SMEs in the country (approximately 80% of the funds of the operation will be devoted to that purpose) and to increase the green line portfolio of the Costa Rican entity (the remaining 20%). The loan has an amortization tenor of five years, reducing Promerica’s dependence on short-term deposits to finance this type of investment. The loan is expected to significantly accelerate the growth of operations with SMEs (an annual increase

rate of 32% in real terms is expected until 2022) and of the green line portfolio (an annual increase of 15.8%). In addition to its financial contribution, IDB Invest is working with Promerica to develop **an impact assessment that identifies the most effective way of communicating the benefits of energy efficiency** measures and to facilitate placement of its green products with its SME clients. IDB Invest is developing the sustainability reference framework and the second opinion in preparation for the issue of Promerica’s first sustainable bond.



Omni

IDB Invest granted a loan of 100 million Brazilian reais (BRL) to Omni S.A. Crédito, Financiamento e Investimento, a provider of credit solutions for underserved populations in Brazil. The funds will enable the company to expand its microcredit portfolio in three main segments: financial technology (fintech) clients, truck drivers

and immigrant micro entrepreneurs. Since trucks are a source of GHG emissions, IDB Invest matched the financing with advisory to structure the green lines for trucks, for the purpose of reducing fuel consumption, increasing engine efficiency and reducing GHG emissions in the client's operations.



American Mezzanine Infrastructure Fund (CAMIF)

CAMIF is a private equity fund managed by Latin America Partners. A second operation was designed in 2013 to provide mezzanine loans to non-sovereign-guaranteed (NSG) infrastructure projects, mainly in Central America and the Caribbean, with some allocation in Mexico and Colombia. The operation consisted

of a senior loan of US\$100 million initially granted to CAMIF, with the subsequent **advisory services to empower the fund managers in the inclusion of sustainability topics and influence the portfolio companies to make decisions aimed at sustainability.**





Thematic bonds

Another innovative formula used by IDB Invest to mobilize sustainable financial resources is supporting the issue of thematic bonds² (aimed at financing specific activities or sectors) related to green projects. These are some examples:

2 | IDB Invest also supports the issue of social and sustainable bonds, but this book specifically focuses on the green aspect of bonds.

Vinte

Mexican real estate company Vinte Viviendas Integrales has engaged in the development of sustainable homes for low- and medium-income families for more than 15 years. IDB Invest has collaborated with this company in various financial operations. The most recent project, signed in 2018, consists of IDB Invest's partial credit guarantee for 250 million Mexican Pesos (MXN) for the bond issue, Vinte Bond 18X, for MXN 800 million. Maturing in seven years, this is **the first bond issued in Latin America to finance social housing**. It has been certified

by Sustainalytics, a renowned firm in the sector, recognizing the sustainable construction measures (energy efficiency and water use efficiency) as vital to qualify the operation as sustainable. IDB Invest's guarantee raised the bond's credit rating to international investment grade enabling the placement to be oversubscribed by 50%. The operation facilitates the promotion, construction and trading of social interest homes in various states in Mexico. It helps reduce the country's housing deficit and contributes to the development of Mexico's capital market.

8 DECENT WORK AND ECONOMIC GROWTH



11 SUSTAINABLE CITIES AND COMMUNITIES



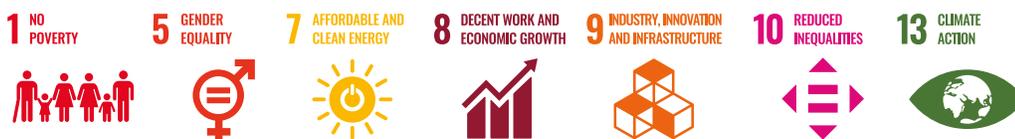
17 PARTNERSHIPS FOR THE GOALS



BICE

In 2018 IDB Invest subscribed to a bond worth US\$30 million at a five-year tenor with Banco de Inversión y Comercio Exterior (BICE), an Argentine public entity that grants credits aimed at investments and foreign trade and that specializes in financial inclusion and regional development. IDB Invest participated in structuring the bond, the first one qualified as sustainable in the Southern Cone, as supported by the independent opinion of Vigeo Eiris, a company specializing in assessing this type of operation. The issue stands out for its

potential contribution to a large number of SDGs in Latin America and the Caribbean. Thanks to the IDB Group's technical assistance, BICE designed **a framework for the identification and selection of green and/or social projects aligned with the Principles of the International Capital Market Association (ICMA) and with the SDGs.** The use of the funds is mainly targeted to energy efficiency and renewable energy projects, companies led by women and actions that support the development of northern Argentina.



Green finance is a source of business opportunities for the region. IDB Invest's perspective, based on the product strategy, the analysis of projects and the communication of knowledge is already bearing fruit. The ultimate purpose is to transform sustainability into a fundamental axis for the development of the region and the profitability of businesses.

Influence on demand

To expand company, issuer and investor bases in green projects, it is not only necessary to offer a portfolio of attractive and innovative products, but it is also necessary to create conditions to stimulate demand for this type of operation. That is the purpose of the projects that we describe below.

Greenpyme

Through its Greenpyme program, IDB Invest offers energy and water use efficiency audits, training workshops and technical assistance to develop optimal practices that promote adoption of technologies and use of efficient and environmentally friendly equipment to SMEs in Latin America and the Caribbean. IDB Invest provides them with information and advice to help them gain access to financing methods for investment in energy efficiency. This not only improves the environmental results of their facilities, but increases their competitiveness. Throughout the development of the

program (932 companies participated in Greenpyme between 2011 and 2018), it was noted that although they carried out energy audits and held training workshops, the SMEs had problems gaining access to financing to implement the recommendations resulting thereof. To bridge that gap, the program provides training to local banks to make them aware of the potential of energy efficiency projects and the business opportunities they offer, encouraging them to create green financial products and to properly trade them among the SMEs.

Sustainability roundtables

Another formula whereby IDB Invest is creating demand for green lines is by working at market level, to support sustainable finance becoming the standard of the local financial market, promoting the creation of business, development and investment opportunities in which national banks can jointly adhere to the

implementation of best international practices and policies. Examples of these initiatives include the Paraguay Sustainability Table, the Green Protocol of Ecuador and Colombia, and more recently work with Honduras, El Salvador, Chile and Argentina.

Think Sustainable Network

IDB Invest understands that it can broaden its impact by using its convening capacity. In 2018 IDB Invest launched Think Sustainable Network, an innovative network that seeks to connect senior executives who work in the region, managers of banks, microfinance entities, insurance companies, investment or pension funds, to talk about sustainable finance. Think Sustainable Network

offers leaders the possibility of sharing experiences and provides them with specific training on sustainable finance and knowledge of the latest megatrends in sustainability, and on a broad range of market opportunities associated with these respective lines of work.

Green bond transparency platform

With the support of multiple donor countries and backed by other partners, IDB and IDB Invest developed a platform to communicate impacts generated by all the green bonds in Latin America and the Caribbean, to support knowledge

and development of green bonds. This is achieved by following up on the bonds at project level, accessing the issuers, to build a history in the green bond market, in addition to ensuring the safety and traceability of information on green bonds.

Market studies

IDB collaborated with the Climate Bonds Initiative (CBI) is sponsored by IDB, IDB Invest and the United Nations Development Program (UNDP) to to

generate the first analysis of the green finance market in Latin America and the Caribbean, since the first issuer in the region entered the market in 2014.

Looking ahead

Looking ahead, IDB Invest works on various action lines, especially to create innovative financial instruments that attract banks, companies or private investors. The main purpose is to match supply and demand in the most efficient manner and to deepen the sustainability-linked financial market in Latin America and the Caribbean.

Granting sustainability-linked loans is one of the new trends related to the creation of green and sustainable financial products. The interest rate of these loans depends on complying with certain sustainability indicators. In this manner, the recipient of the loan has a great incentive to act responsibly with regard to environmental, social and governance issues. This instrument is beginning to develop in Europe, but is taking longer in the United States.

Issuance of sustainability-linked bonds, which is similar to sustainability-linked loans, in that the coupon of these bonds will fluctuate on the basis of compliance with predetermined performance goals, in addition to being aligned with corporate strategy. Sustainability-linked bonds aim to expand the market of prospective clients, as it can attract investors interested in sustainability that cannot find suitable projects.

The promotion of other types of bonds, increasingly focused on and limited to a specific application, such as the transition process to more sustainable business models (transition bonds), mainly addressed to carbon-intensive sectors, blue bonds to preserve and protect the oceans, the forestry bonds that promote projects that prevent deforestation or contribute to reforestation, or bonds that finance infrastructure projects to prevent or fight natural disasters (resilience bonds).

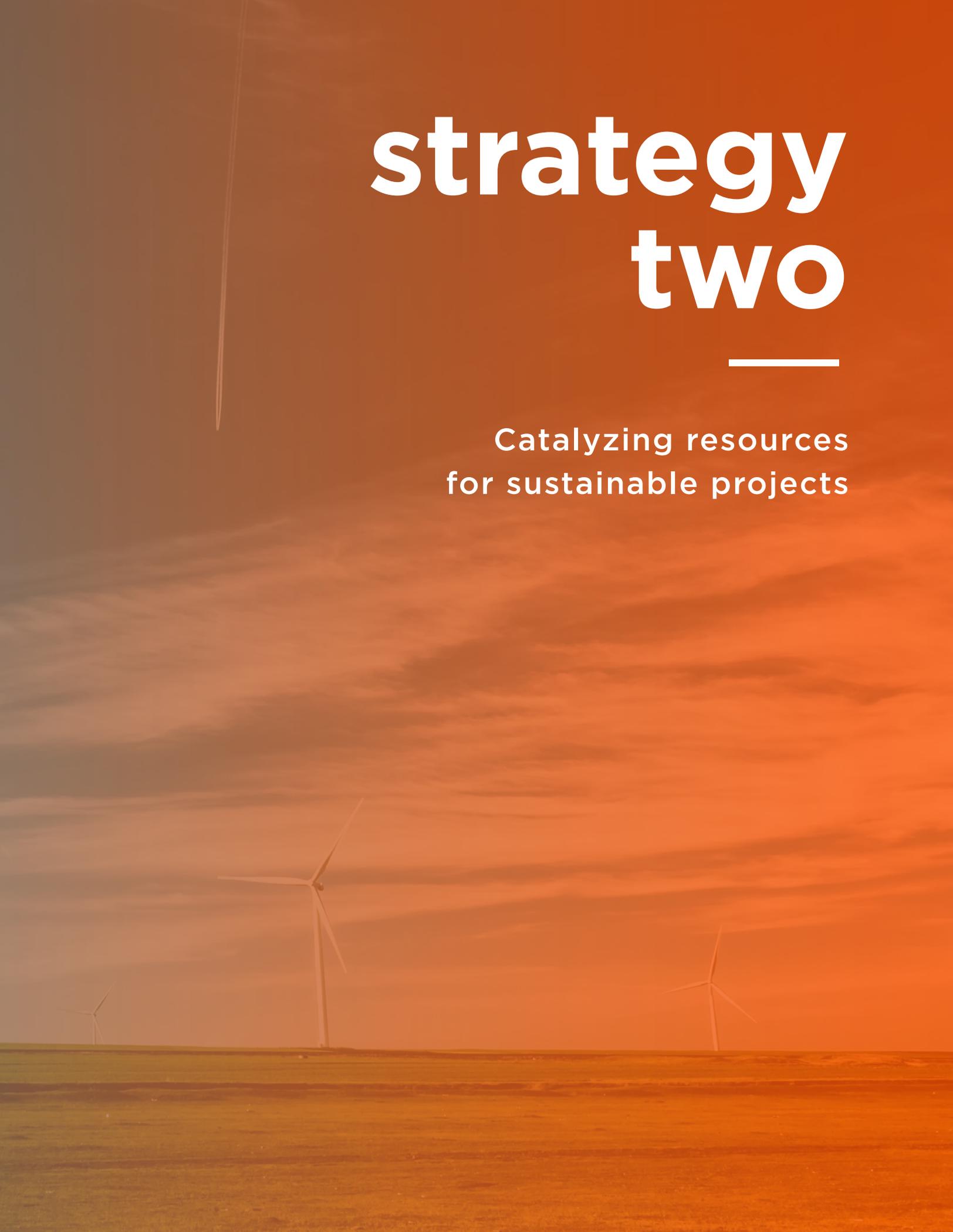
The promotion and development of tools for the adoption of TCFD principles on governance, strategy, risk management, and metrics and objectives. The market expects generic guides for the practical and detailed application of TCFD recommendations, to help financial and non-financial companies provide appropriate information on how climate change impacts their economic results.

The main purpose is to match supply
and demand to create a deep market
of sustainable financial instruments.



strategy two

Catalyzing resources
for sustainable projects



One of IDB Invest's core strategies is the mobilization of as many resources as possible to sustainable projects in the real economy in Latin America and the Caribbean. To that end, it is working on the design of financial products that are attractive for investors that hold assets equivalent to 20% of the region's GDP.

These investors have historically felt more comfortable operating in traditional sectors rather than in green projects, especially in markets they are not familiar with. Turning the situation around is a great challenge for IDB Invest, as it is aware that it cannot by itself meet existing demand for resources.

To encourage investors to tread on ground they know very little about or are simply not acquainted with, it is indispensable to offer them safety with regard to potential risks. And this is where IDB Invest can contribute a lot, given its experience in projects of this type, its high sectorial

specialization, its connections with the region and its relationship with the national governments.

The presence of IDB Invest in projects has a catalytic effect and is an unquestionable incentive for investors, who can invest in innovative financial solutions created in recent years, to facilitate their participation in the development of infrastructures aligned with the fight against climate change in Latin America and the Caribbean.

These solutions include the **B-Bonds, Total Credit Guarantee, and blended finance**, whose characteristics are detailed below. When designing them, IDB Invest acts in accordance with Blended Finance Principles by the development finance institutions, following lessons learned from accounts on resource mobilization for infrastructure that are included in reports on New Climate Economy from the Global Commission on the Economy and Climate.



It is indispensable to offer safety to investors to encourage them to tread on ground they know very little about or are simply not acquainted with. This is where IDB Invest can contribute a lot, given its experience, its connections with the region and its relationship with the national governments.

B-Bonds

B-Bonds are an adaptation of A/B loans to reach investors who prefer to buy fixed income instruments (bonds). It is a financing product with a dual instrument, a conventional loan (the so-called A loan), supplemented with a bond issue (the B-Bonds) made by IDB Invest, and placed among institutional investors, many of whom lack prior experience in Latin America and the Caribbean. The collected money helps finance the corresponding project that would otherwise encounter greater difficulties in succeeding.

Thanks to the B-Bonds, IDB Invest does not have to contribute all the capital, enabling it to release resources for other purposes and ultimately do more with less. The bonds have been certified or have obtained a green opinion from rating agencies such as Moody's or another international agency.

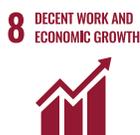
This co-financing structure was first used in 2013 for the construction of the 305MW Reventazón Hydroelectric Plant, developed by ICE, the Costa Rican state-owned company. IDB Invest granted an A loan of US\$200 million, while an additional US\$135 million was contributed by investors through a B-Bond.

Other projects coordinated using this method include:

Campo Palomas

A wind farm in Uruguay that belongs to the state-owned company Administración Nacional de Usinas y Transmisiones Eléctricas. Started in 2017, it has a generation capacity of 70MW per year. IDB Invest contributed US\$67 million to the operation and mobilized another US\$68 million through DNB Bank, a Norwegian bank that is a sustainable investment leader in the region, that subsequently sold its interest in the form of B-Bonds. The

obtained resources were used to reduce the debt acquired for the construction of the farm. **Once it commenced operations, CO2 emissions were reduced by 168,150 tons in 2017 alone.** The goal of increasing the participation of the private sector in the generation of energy in the country was achieved. The B-Bond received a green bond certification from DNV-GL and a Baa3 international rating from Moody's.



La Jacinta

The first solar photovoltaic plant in Uruguay is located in the department of Salto. It has a generation capacity of 50MW and was conceived to diversify the electricity supply from renewable sources in the country. IDB Invest's contribution consisted of structuring a B-Bond for the commercial component of the financial package originally granted by IDB and DNB Bank. US\$93 million of a total cost of US\$102.2 million were mobilized to extend the tenor of the initial facility. Invenergy, one of the largest global investors in renewable energy, collaborated with the

operation, which has a record tenor of 24.5 years from 2017. Its purpose was to increase the interest of capital markets in the sector of unconventional renewable energy, which accounts for over 20% of all energy generated in Uruguay. The original package included a blended finance loan from C2F. This concessional tranche 1 helped the bond obtain an investment grade rating, essential for market acceptance. Moody's rated La Jacinta's bond as GB2, strengthening its green bond framework.



El Naranjal and Del Litoral

These two Uruguayan solar photovoltaic plants, located in the department of Salto, generate a total of 135GW of renewable energy per year, with a displacement of 79,000 equivalent tons of CO2. The financial package closed in 2018, included a senior loan of US\$103 million (US\$5.4 million

of which came from IDB Invest's capital; and the rest from an issue of B-Bonds) and a subordinated loan of US\$105 million (US\$600K and US\$104.4 million, respectively). DNB was the co-structuring and placement agent of the B-Bonds.



Total Credit Guarantee

IDB Invest contributes to the financing of investments in Latin America and the Caribbean, guaranteeing the loans granted by credit entities to both the public and private sectors so that each can enjoy better conditions to finance their projects. The default risk is shared by the lenders and IDB Invest or fully taken on by IDB Invest.

The Total Credit Guarantee (TCG) is included in this framework. It is **an instrument created by IDB Invest to reduce the risk of bond issues intended to finance infrastructure and energy projects**. The TCG guarantees the borrower for the collection of the principal and the interest during the entire life of the bond, helping to diversify the investors.

One of the advantages of this financing system is the IDB Group's strong rating, which guarantees the issue. IDB and IDB Invest have AAA International and AA+ International ratings, respectively. The TCG is designed under New York law, which means that the coverage is independent of any political or economic situation occurred in the country where the project is located.

The activation of the guarantee can be partial (when up to two consecutive or three non-consecutive payment dates have been defaulted) or total (when the default affects more than two consecutive or more than three non-consecutive payment dates, or when IDB Invest deems it pertinent to protect the bondholders due to the occurrence of any exceptional circumstance). The disbursements made under the TCG oblige the project to return them to IDB Invest.

From 2017 to date, two operations in Brazil have benefited from this method: the Santa Vitória do Palmar wind farm and the Pirapora solar photovoltaic plants. IDB Invest's participation in both initiatives supports the efforts of the country to limit its dependence on hydroelectric power and comply with its Paris (Agreement) goals of reducing its GHG emissions, with the participation of private capital.

Santa Vitória do Palmar

Located in the Rio Grande do Sul region (Brazil), this wind farm was built by British fund ACTIS. It has power generation of 207MW and cost BRL 1.4 billion. Banco Nacional de Desenvolvimento Econômico e Social (BNDES) and Banco Regional de Desenvolvimento do Extremo Sul (BRDE) are local development banks that were partially responsible for the financing, contributing BRL 680 million. The balance came from the farm's promoter (Atlantic Energias Renováveis), from the cash

generated during its construction and from a bond for BRL 109 million with an amortization tenor of 13.5 years. IDB Invest guarantees this issue with a TCG of up to BRL 125 million, so that bondholders do not have problems recovering their money, even in case of macroeconomic changes that drastically increase the inflation rate. Thanks to the TCG, the bonds were oversubscribed by five times their total amount, well above the usual practice.



Pirapora

The project consisted of construction and start-up of five solar photovoltaic plants in the State of Minas Gerais, with a combined capacity of 191.5MW and a 10.3 km-long transmission line. It was financed in two phases. The first was a bridge loan from IDB Invest to pay for the actual construction cost, supplemented by additional short-term bridge loans

granted by three local banks. In the second phase, the short-term financing structure was replaced with a long-term facility (up to 12 years), composed of a loan from BNDES and bonds subscribed by investors and guaranteed by IDB Invest. This provided the necessary flexibility to make the project viable and profitable.



Blended finance

There are projects with high social impact in which the (actual or perceived) risk is too big to be exclusively handled by commercial financing. There are others that, even making sense from the economic standpoint, have problems gaining access to capital, due to factors such as lack of acquaintance with a certain technology, a limited background in the market, an uncertain flow of income or unsuitable contractual agreements.

In these cases, IDB Invest **facilitates comprehensive blended finance solutions that favor channeling of private capital to the projects**. IDB Invest’s contributions to blended finance include:

- **Subordinated loans** with more favorable conditions for the borrower;
- **Patient (seed) capital** at the initial stages of the company;
- **Risk mitigation instruments**, through aggregation platforms and first loss guarantees, to mobilize private investors;
- **Performance-based financial incentives** (e.g., gender equality), provided that the results are verifiable.

Blended finance examples are listed below.

Cerro Pabellón

The first geothermal energy project in South America promoted by Enel Green Power consists of three electric power plants with a combined capacity of 75 gross MW, an 80 km-long transmission line and other associated installations. Its purpose is to help reduce Chile’s dependence on oil, and its vulnerability to

fluctuations in the price of this commodity. The project’s estimated environmental impact is equivalent to displacement of 232,761 tons of CO2 per year. Drilling activities in the exploration phase are financed with a US\$30 million loan from the CTF that IDB Invest manages. Total cost of the project is US\$502.9 million.

7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



Itelecom

The project promoted by this company sought to improve public street lighting systems and replacement of 81,000 light fixtures, using light-emitting diode (LED) technology in eight municipalities in Chile that did not have sufficient credit rating in the market to address the initiative on their own. The new light fixtures are up to 60% more efficient than the previous ones, saving almost 26,000MWh of electricity per year. The reduction of GHGs reaches 17,500 tons of CO₂ per year. Itelecom was financed in

2017 with an innovative structure including a loan from IDB Invest for US\$7 million and two co-loans from the Canadian Climate Fund for the Private Sector in the Americas and the multilateral Clean Technology Fund (CTF that contributed US\$7 million and US\$4.5 million, respectively). The project has technical assistance and a first loss guarantee of US\$2.5 million of the CTF's PEEERA program that supports scale investments in energy efficiency and renewable energy technologies for self-supply.



Ejido Verde

Two leading companies in the Mexican resin industry, Pinosa SRL and Resinas Sintéticas SA, received a loan from IDB Invest and the Global Environment Facility (GEF) for US\$1.5 million to install and maintain forestry plantations covering an area of 1,250 hectares (ha) with native species of cluster pine (*Pinus pinaster*). The project includes an innovative business model that fights against climate change

by capturing 25,375 tons of CO₂ per year and aspires to provide a recurrent source of income for groups of indigenous people who work on community land in the State of Michoacán. The loan repayment tenor (10 years for the senior and 14 years for the subordinated tranches, respectively) allows for the period required by the planted pines to produce resin.



Looking ahead

IDB Invest has committed to using financial innovations to provide support to countries to comply with the Paris goals, for example, the scheme to decarbonize Chile, which plans to progressively close its 28 thermoelectric power plants from now until 2040. Those power plants that currently account for 40% of the country's electricity production will be replaced with others that use renewable energies. Eight plants will disappear in the first five years of the plan, enabling a 20% reduction of GHG emissions.

IDB Invest supports this transformation, facilitating financing in especially advantageous conditions to the companies that move forward the closure of their power plants, encouraging their replacement and accelerating the process.

Another work area involves facilitating the attraction of investments for fixed income sustainable infrastructure projects (e.g., transmission lines), using transparent and simple tools that guarantee to investors the "green" quality of certain projects. For this purpose, IDB Invest continues to strengthen its work, using as a basis the sustainable infrastructure framework jointly prepared with the IDB, and has developed a methodology to classify green transmission lines. This methodology will be brought to public consultation over the next months, to create an international standard in the market. With this standard, **investors can easily decide where to place their capital, with greater certainty that the green projects they are analyzing are truly green.**





A hand is shown planting a small green seedling into a black plastic seedling tray. The tray contains several other similar seedlings in individual compartments. The background is a soft-focus green field of many more seedlings. The entire image has a semi-transparent green overlay.

strategy three

Incorporating resilience
for a smart investment

The risks resulting from climate change are a threat to the economic development of the region. The agribusiness sector, on which many activities in Latin America and the Caribbean depend, is particularly sensitive. The variability in rainfall patterns, droughts, sea level rise or events such as El Niño can have dramatic consequences for the sector; but other sectors can also be affected. With electricity generation highly dependent on hydrology, the recurrence of droughts and rainfall variability can alter the availability of electricity. To limit its impact and ensure economic growth and social well-being in the region, it is necessary to make investments to increase companies' capacity to respond to climate change, including improvement in the availability of financial instruments and smart designs.

Resilience (i.e., the capacity to overcome adverse circumstances) emerges as a determining factor in the success of any company and, in our case, of companies exposed to climate contingencies that may influence their results and expectations for the future. Hence, **anticipating**

those contingencies and making smart investments that transform threats into opportunities is a key strategic element.

In this context, IDB Invest facilitates financial and technical assistance aimed at making optimal use of resources, perfect value chains, and increase installed capacity and productivity. IDB Invest offers various non-financial solutions such as **studies, methodologies or modeling for those sustainable, competitive and innovative projects** that facilitate increased production and promote the consumption of renewable energies, responsible use of water, and inclusion and diversity in the workplace.

Financial assistance is especially important when access to finance faces difficulties due to meteorological events. In these cases, IDB Invest tries to remove these barriers by designing specific solutions to increase financial resilience, such as contract clauses that help companies to recover, and working side-by-side with credit institutions, agricultural cooperatives and key agribusinesses in each respective country.

Our operations include a risk analysis that considers the exposure of projects to climate change and plans steps to safeguard flows of income against those eventual changes.

Sustainable agriculture

Attracting funding always involves a risk analysis that has been traditionally based on historic information on a company's yields. Particularly in the agribusiness area, climate change involves a departure from that analysis to include projections of crop yields in the future, by applying alternative scenarios of meteorological conditions. These scenarios and the response measures allow overcoming the so-called "tragedy of the horizon"³ of allocating capital for a vision that rewards a forecast of long-term yields based on a reduction of negative impacts in the present.

But credit analysis is only one component of resilience. **It is necessary to take into account the exposure of projects to climate changes and to include financial**

resilience clauses that safeguard production flows in case of those eventual changes. In some cases, projects include coverage for specific incidents, such as the El Niño event given its potential impact on agribusiness and on infrastructure projects and those from other sectors.

The measures to mitigate climate change effects include loan repayment facilities, either by granting longer tenors or by extending those initially planned, if necessary.

The inclusion of clauses that contemplate these options such as credit analysis by using future scenarios has been possible in some projects in which IDB Invest has participated, as follows.

³ | The "tragedy of the horizon" refers to a concept coined by Mark Carney, governor of the Bank of England, that allocation of capital currently lacks incentives to resolve a problem that will impose a cost on future generations.

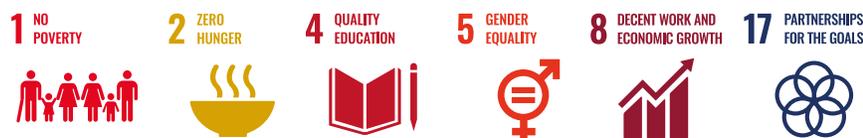
Danper Trujillo

This leading company of the Peruvian agro-industrial sector produces, processes and exports non-traditional food products to the United States, Europe and Asia. To increase agricultural production through building new plants to process asparagus and avocados, improve the irrigation infrastructure, buy agricultural machinery, and adopt energy efficiency measures, among other objectives, the

company forecast investment needs of US\$66 million. As a past El Niño event impacted the area where the company is located, IDB Invest's credit team included this factor when it analyzed projected future income. For the first time creating financial scenarios that included climatic considerations, IDB Invest granted Danper Trujillo a corporate loan of US\$38.5 million at ten years, a tenor longer than the

average for its sector in Peru. In addition, the company received advice on the implementation and execution of a water management action plan, and **technical assistance to weigh the viability of efficiency measures on the use of water,**

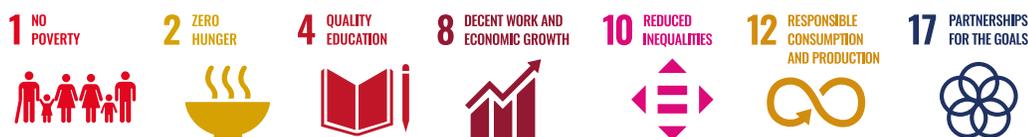
taking into account the water footprint on agricultural and industrial production and the evaluation of the water balance in river basins. The proposed measures could mean an increase of US\$4.6 million per year in income.



Desdelsur

This Argentine company engages in trading and export of agricultural products. It is a source of employment in areas with high poverty, unemployment and labor informality rates. The project had various objectives: to complete Desdelsur’s comprehensive livestock breeding plan, increase its production of vegetables and oilseed plants for export, expand its agricultural and livestock value chain and increase its financial flexibility. The required investment, set at US\$30 million, was financed by IDB Invest and a commercial bank in equal shares in 2019, with a seven-year amortization tenor. IDB Invest included a **financial resilience clause** and committed to offer technical assistance in two areas: one to create

an engagement and training plan for the neighboring indigenous communities, aimed at identifying possible crops resilient to future climate scenarios and their integration into regional economy; and the other, to improve Desdelsur’s governance structure, providing greater operational efficiency and strengthening its decision-making process. In addition, IDB Invest designed and included a financial resilience clause in the contract that sets forth a 12-month grace period, once an emergency has been declared by a national authority. The clause was approved by other financial entities, showing that the resilience financial method was accepted by the market.





Climate modeling optimization

A smart infrastructure plan that shields construction from climate risk is essential when channeling private capital to development. The future availability of water or the demand for deeper port dredging were taken into account for the following projects.

Hidrowarm

IDB Invest participated in financing construction and start-up of a hydroelectric power plant with a capacity of 48.15 MW in the Upano river basin, in Morona Santiago province (Ecuador), in addition to a transmission line of approximately 85 kilometers. The objective was to increase the supply of renewable energy, reduce dependence on thermal energy and displace 126,781 tons of polluting emissions per year. The financial package that closed in 2017 included a senior debt loan of US\$68 million (of which IDB Invest contributed US\$10 million with the balance mobilized from other institutions), another US\$10 million of subordinated debt from C2F and US\$33.4 million in capital. IDB Invest's participation was decisive in obtaining long-term financing (11 years) and attracting resources from the private sector. The design of the Hidrowarm project, promoted by Ecuadorian company Hidronormandía SA,

includes an adaptive management plan for the water resource that supplements the management of the water's ecological

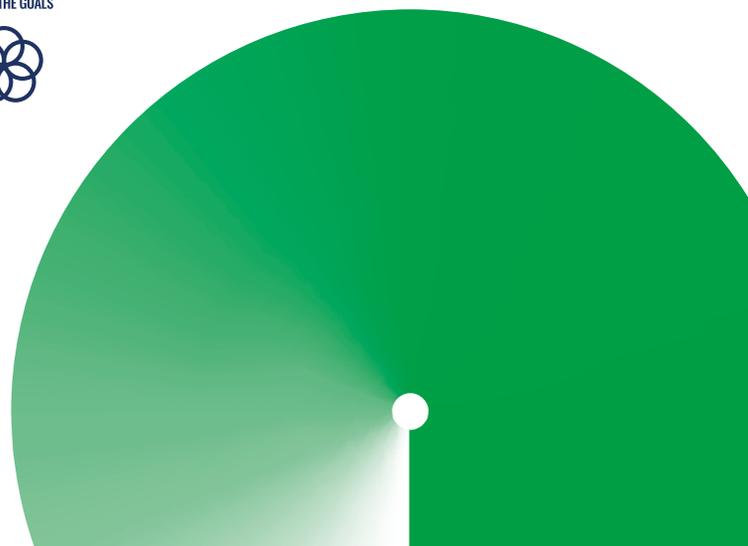
flow, including repeated scientific **estimates of the future water balance.**



Posorja

An operation planned for the construction, start-up and maintenance of a new multipurpose terminal in the port of Posorja closed in 2018. The objective is to expand and eliminate loading limitations in the port of Guayaquil, the largest in Ecuador. The terminal has the capacity to move 750,000 containers per year. It speeds up entry and exit of goods from the country, thanks to an increased depth and reduction in the mean traffic time. Its cost has been estimated at US\$538.6 million. IDB Invest's participation consists of a loan of US\$147 million at 15 years, a tenor that is not available in Ecuador. The remaining US\$230 million correspond to

various investors, including the China Co-Financing Fund for Latin America and the Caribbean. The project creates more than 480 stable jobs, includes the best social and environmental practices, for example, reforestation of 100 ha of mangroves, well-above the 60 ha required by the local law. IDB Invest modeled the increase in future sea levels and **its possible impact on the current engineering designs to identify changes that could shield the infrastructure in those scenarios.** IDB Invest's main recommendation focused on the depth of dredging required for the effective port operation.



Sustainable value chains

It is no longer enough for companies to handle the environmental and social impacts they directly generate. There is a growing awareness of the need to consider their value chains. The lack of an appropriate follow-up on these chains may involve latent risks in a company's operations, given climate variability. If these risks are not included in the design of the operations, this could be detrimental to the company and its chain. Hence, the requirement to carry out inclusive and collaborative work that benefits both parties.

This work can **help reduce the consumption of energy and commodities, capitalize on opportunities for innovation, increase the efficiency of processes, and create quality employment, among other benefits.** IDB Invest helps obtain those advantages by contributing models that facilitate the calculation of climate change consequences like the effects on commodity supplies, in addition to providing financing. Here is one example:



Tropicalia

This is a tourism complex developed by Cisneros Real Estate in Miches, 80 kilometers from Punta Cana, on the northeastern coast of the Dominican Republic. This is an innovative tourism project, designed to have a positive impact on employment and the environment of the region. The project integrates gender equality criteria into the hiring process and a type of ecological construction that reduces up to 20% of water and energy consumption. The supply chain will be composed of dozens of local entrepreneurs and farms. Seventy percent of the food served in the complex will come from the Dominican Republic, and more than one-third from Miches and its surrounding areas. In 2015 the IDB Group financed construction of highway 104 that

joins Punta Cana and Miches, opening that area to private sector investment. In 2018 IDB Invest granted a loan of US\$40 million at 12 years to realize Tropicalia. Part of the success of this operation will come from a supply chain resilient to climate change impacts on the island. For this purpose, **IDB Invest supplemented the financing with a study that identified risks associated with agricultural production and proposed a group of best practices aimed at increasing resilience.** This included the design and recommendation of financial methods, like insurance and loans. Finally, an implementation strategy was designed for Tropicalia. This development aspires to be the first sustainable tourism destination in the Dominican Republic.



IDB Invest explores various innovative solutions that address problems resulting from insurance coverage of risks related to climate change. Among other topics, IDB Invest works with an insurance group, one of the leading companies in the insurance sector, to create a sustainable infrastructure resilience fund endowed with approximately US\$500 million.

IDB Invest is studying formulas to create a mutual water organization in the Caribbean. Its operation would be similar

to the region's existing aid fund to face losses caused by hurricanes. IDB Invest is conducting the viability study for this project and proposes to attract donors to obtain seed capital required for the launch. The new entity would resolve coverage problems for water utility companies that are not insured against climate event risks because they ignore how to value them.

Looking ahead

Epilog

Latin America and the Caribbean particularly require projects that help increase the level of sustainability of their respective economies. But those projects need resources that are not always available. The lack of experience, the risks resulting due to change of governments and the distinct exposure of the region to climate change impacts have a dissuasive effect on many investors.

To offset this effect, **IDB Invest offers a broad range of solutions intended to mobilize resources, coming from its network of donors and from the private sector.** These solutions always help to achieve the environmental goals set at the Paris Climate Conference and the social and governance goals stated in the U.N. SDGs.

These solutions are part of a triple strategy:

- 1. To fully involve financial entities in environmental and social projects,** convincing them of the business opportunities for them and their clients.
- 2. To channel as many resources as possible to sustainable projects in the real economy,** offering innovative financial products that facilitate the participation of institutional investors.
- 3. To shield infrastructures and agricultural production with smart investments** to promote resilience to climate events that affect their flows of income and value chains.

We know that working with our clients is part of the answer. IDB Invest commits to elevate its ambition by strengthening its action areas to impact climate change in the coming years. Starting from 2020 when its climate change action plan ends, under study is the feasibility of making the current maximum goal of 30% climate finance a mandatory minimum threshold of compliance. IDB Invest proposes placing greater emphasis on adaptation projects (those that reduce vulnerabilities concerning climate change consequences), mobilizing new private sector players, diversifying its product portfolio and designing a methodology to measure the impact of its activities.

Because we firmly believe that we must not only support private sector companies, but we must also lead by example, in 2019 we became signatories to the principles of the TCFD on governance, strategy, risk management, metrics and objectives.

However, our work by itself is not enough. It is necessary that all the involved players (governments, development organizations, financial institutions, companies and individuals) show their commitment to achieving these goals. The improvement of the planet and of living conditions of its inhabitants depends on none other than all the involved players.

Latin America and the Caribbean is an extraordinarily fertile land for those who are willing to carry out or collaborate in

innovative projects, with well-founded and high impact business models. There is no doubt that the road ahead is full of obstacles; but this is why institutions like IDB Invest exist, which puts all its

commitment, knowledge and solvency at the service of those who need support, to put their two cents in to build a world we are all increasingly proud of.

In 2019 we became signatories to the principles of the TCFD on governance, strategy, risk management, metrics and objectives.





Let's continue the conversation



www.idbinvest.org

 idbinvest.org/blog

 idbinvest.org/linkedin

 idbinvest.org/twitter

 idbinvest.org/facebook

