

Investing in Sustainable Infrastructure in Latin America:

Instruments, Strategies and Partnerships
for Institutional Investors Mobilization

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Climate Change Division

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FINAL REPORT

INVESTING IN SUSTAINABLE INFRASTRUCTURE IN LATIN AMERICA:

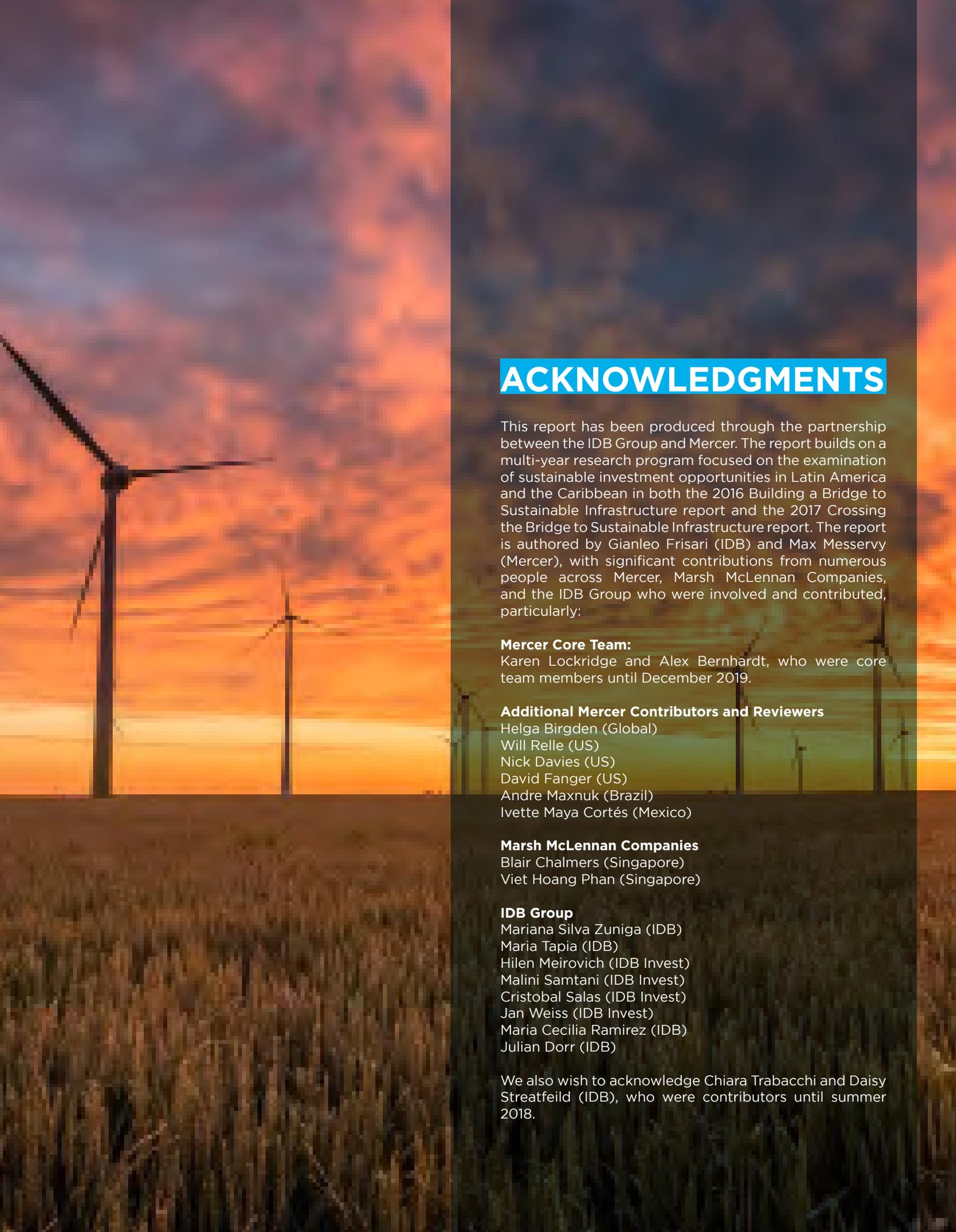
Instruments, Strategies and Partnerships for Institutional Investors Mobilization



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EXECUTIVE SUMMARY



The first two economic quarters of 2020 brought with them the worldwide spread of the coronavirus pandemic, and an unprecedented near-global quarantine and social distancing response, resulting in rapid and significant economic damage to global economies and growth outlooks, that extended to the whole 2020, and will most probably linger over most of 2021. In the Latin American and Caribbean (LAC) region, the International Monetary Fund's (IMF) October 2020 Regional Economic Outlook: Western Hemisphere projected that the region would experience a 8.1% economic contraction in 2020, and a 3.6% expansion in 2021.¹ These figures were significantly changed from an April IMF report, which forecasted a 4.2% contraction in 2020 and a 0.3% expansion in 2021.²

The International Energy Agency (IEA) projected that coronavirus responses and resulting recessions across the globe were projected to lead to a contraction in global energy demand of 6% for the full year 2020, the largest drop in 70 years in percentage terms, and the largest ever decrease in absolute terms.³ With traditional energy markets upended and the global economy at an apparent inflection point, the support of government and public financial institutions has become essential and in many jurisdictions a life-line for economic activities and the private sector. In such

context, a number of international initiatives have coalesced around supporting a “green recovery” model for the global economy, with stimulus money and programs directed toward more sustainable infrastructure projects, rather than traditional infrastructure.

International actors have issued similar calls for any government stimulus funds to be directed toward a green or sustainable recovery. The Inter-American Development Bank (IDB) and International Labour Organization (ILO) released a joint report highlighting that 15 million net new jobs could be created in Latin America and the Caribbean by 2030 if the region were to transition toward a net-zero carbon economy.⁴ Additionally, key members of the European Union issued calls to spend nearly a half-trillion Euros on a green recovery that would accelerate the region's goals of net-zero carbon emissions as of 2050.⁵ These examples of how different global regions may choose to respond to the coronavirus crisis and economic recession have expressly centered on increased investments in green or sustainable infrastructure projects, and the findings, recommendations, and case studies contained in this report provide actionable examples of how a sustainable infrastructure-led recovery might be catalyzed in the LAC region.

¹ International Monetary Fund (2020). Regional Economic Outlook: Western Hemisphere. Available at: <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere>.

² Jo Bruni and Daniel Bases (2020). “FACTBOX 8/19/20: Latin America moves to mitigate impact of COVID-19.” Latin Finance. Available at: <https://www.latinfinance.com/daily-briefs/2020/8/19/factbox-81920-latin-america-moves-to-mitigate-impact-of-covid-19#forecasts>.

³ IEA (2020). Global Energy Review 2020. Available at: <https://www.iea.org/reports/global-energy-review-2020>.

⁴ International Labour Organization (2020). “Zero emission economy will lead to 15 million new jobs by 2030 in Latin America and the Caribbean.” Available at: https://www.ilo.org/global/docs/WCMS_752088/lang--en/index.htm.

⁵ Ewa Krukowska (2020). “European CEOs, Ministers Start Campaign for Green Recovery.” Bloomberg. Available at: <https://www.bloomberg.com/news/articles/2020-04-14/european-ceos-ministers-start-campaign-for-green-recovery>.

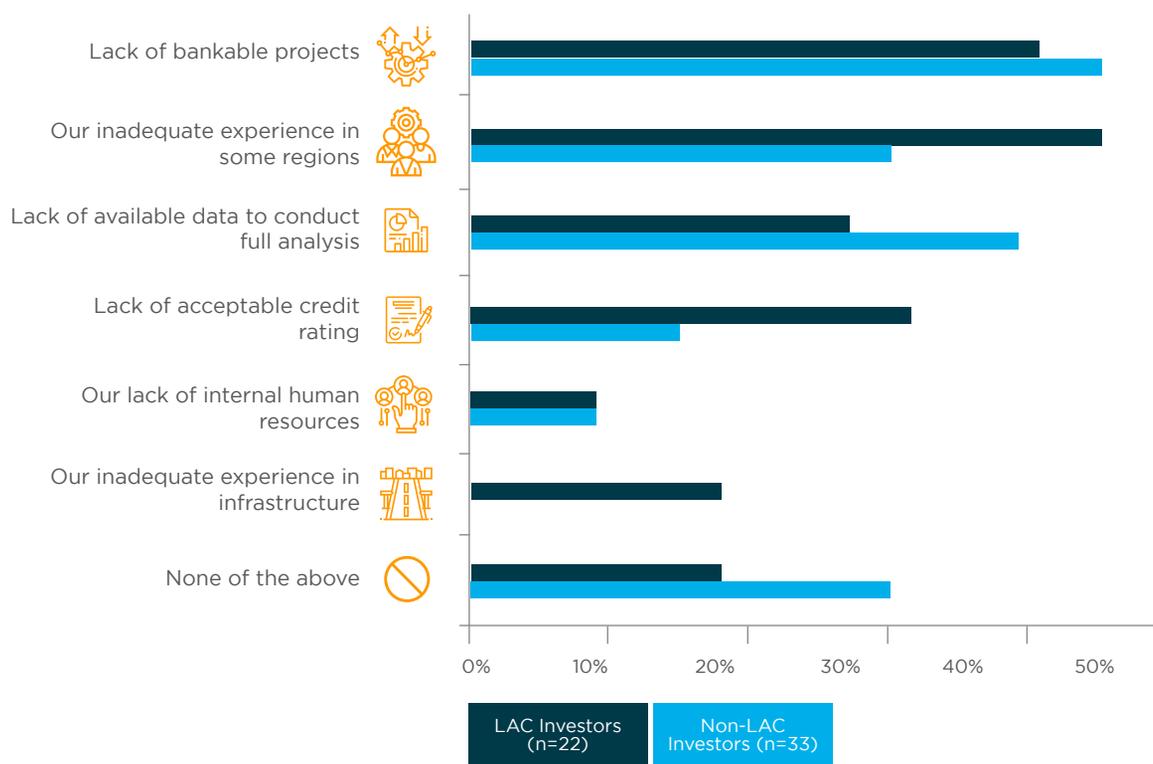
SUSTAINABLE INFRASTRUCTURE: A PATH TO A SUSTAINABLE RECOVER

In emerging economies with significant infrastructure gaps,⁶ governments seeking to drive sustainable recovery efforts could find investments in sustainable infrastructure important points of leverage to re-energize national economies, while providing finance to assets and services necessary to these countries' sustainable long-term development. However, shifting the economies in the LAC region onto a sustainable infrastructure (SI) pathway, where low-carbon, climate-resilient and

inclusive projects are prioritized, is an ambitious task that will require a significant increase in investment. Challenges to mobilizing private investment for infrastructure are not all unique to LAC. Earlier Mercer and IDB research⁷ outlined what investors often see as the key barriers to and solutions for scaling private investment in SI, identifying in particular the need for clear definitions, and visibility in the way assets are classified as sustainable infrastructure.

Figure 1

Barriers to Reaching Emerging Market Infrastructure Targets (n=55)



⁶Inter-American Development Bank (2015). *Financing Infrastructure in Latin America and the Caribbean: How, How much and by Whom?* Available at: <https://publications.iadb.org/publications/english/document/Financing-Infrastructure-in-Latin-America-and-the-Caribbean-How-How-Much-and-by-Whom.pdf>.

⁷IDB and Mercer (2016 and 2017) *Building a Bridge to Sustainable Infrastructure* (2016) & *Crossing the Bridge to Sustainable Infrastructure* (2017).

More recently, IDB and Mercer surveyed investors on the topic of investing in SI in emerging markets, and the LAC region in particular.⁸ Lack of bankable projects remains the top ranked barrier overall, with inadequate experience a close second. Non-LAC investors also notably cite a lack of data as a prominent barrier, given the divergence in responses from LAC investors.

On the positive side, important progress has been made in two key areas:

1. Governments in the LAC region have made impressive progress on PPP frameworks, enabling legislation and project pipeline platforms, to facilitate private capital funding in infrastructure projects

While very few PPPs today are specifically focused on SI projects, there is a largely untapped opportunity to leverage private sector efficiencies and innovations to effectively incorporate sustainability metrics and targets at the contract level – PPPs are a powerful tool for achieving sustainability goals. There are also emerging best practices in incorporating sustainability considerations into infrastructure planning and project design.⁹ A key opportunity is ensuring that international investors are aware of the progress in LAC on PPPs.

- » Argentina introduced a PPP law in 2016 and through the RenovAR program, the country managed to award contracts for 6.5 GW of renewable energy. Beyond the power sector, there is increasing

recognition that environmental risks, such as flooding and droughts, can have significant impacts on the financial profile of transport assets. To this end, supporting climate risk identification, the Ministry of Environment has been working on a platform—the System of Maps for Climate Change Risks (SIMARCC)¹⁰ – to be used with the infrastructure public investment platform, so that such climate risk tools could be applied to the development of PPP plans and tenders.

- » Brazil has developed a well-integrated framework of legislation and regulations supportive of robust public-private partnership infrastructure development. Efforts to drive greater private investment in infrastructure included the creation of a central “Investments Partnership Program” (PPI) to promote and coordinate various PPP functions and increased transparency on the contracting and tendering of infrastructure.¹¹ A further effort related to advancing the state of infrastructure investments in Brazil is the refocus of the Brazilian development bank BNDES’ role away from being the primary lender to PPP projects, and more towards preparing and accelerating projects, an effort which aims to diversify Brazilian capital markets.
- » Chile was ranked the highest in the 2019 Infrascope Index amongst the LAC countries in its capacity to carry out PPPs. Chile has one of the longest histories of private participation in infrastructure projects in the LAC region, having established a Concessions Law and framework for PPPs in 1991. More recently, Chile developed a green bond framework and issued in 2019 the first

⁸ IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

⁹ For more detail on the environment for PPPs in the LAC region, see the Economist Intelligence Unit’s The 2019 Infrascope commissioned by the IDB.

¹⁰ “Attracting investments to build a country of opportunities - Programa de Parcerias de Investimentos” <https://simarcc.ambiente.gob.ar/>

¹¹ <https://www.ppi.gov.br/the-10-guidelines1>

sovereign green bond in the Americas (\$US 2.4 billion in 2019, and \$4.2 billion in 2020), sending a strong signal of Chile's commitment to promoting sustainable finance and the development of a low-carbon, climate-resilient economy in line with the Paris Agreement¹².

- » Colombia has 25 years of experience in working with PPPs and over the last decade has put in place various regulations (most notably the PPP Law in 2012) and financial systems designed to drive major increases in infrastructure development. Climate change is embedded as a priority at the highest levels of the Colombian government and has been included in the country's National Development Plan since 2006. Specific guidelines have been developed to incorporate climate change into the regulatory framework of PPPs in Colombia.
- » Mexico enacted the Law on Public Private Partnerships in 2012 and associated regulations. This law applies to various institutions either sponsoring or involved in PPP projects: federal public agencies, federal public trusts, constitutional autonomous bodies, and any other entity (whether municipal, local, or federal) that uses federal funds. To support project pipeline visibility and private sector participation, Mexico has developed a Projects Hub (Proyectos Mexico¹³) to link investment projects with domestic and foreign potential investors, encouraging long term financing for infrastructure. The platform now includes sustainability assessments for some projects using IDB's Sustainable Infrastructure Framework (see page 38 for more information).
- » Peru has a strong enabling environment for infrastructure PPPs, however history

has shown a persistence of contract renegotiations – recent legislation has set out to address this issue. In 2017, the Ministry of Economy and Finance (MEF) issued regulatory guidance in response to Legislative Decree Number 1251 that reforms the role of ProInversión to allow it to be more autonomous from government ministries, including the MEF, and to accelerate project development processes.¹⁴ Peru recently released its National Infrastructure Plan for which IDB provided input on sustainability and resilience¹⁵.

2. The sustainable infrastructure¹⁶ pipeline in LAC is sizable, offering an estimated \$US 300 billion in infrastructure investment opportunities through 2024

The following table provides an indication of the size of the infrastructure pipeline in past 5 years as well as information regarding the availability of various supportive tools and capabilities across market, to increase investments visibility - please see the *Caisse du Depot du Quebec case study (page 36)* on the importance of pipeline visibility and access to investment opportunities. While policy and political changes in the countries of focus might cause the projects and programs listed in the table to be delayed and/or discontinued, the exercise still allows to highlight the ability of the region to create investment opportunities for sustainable infrastructure projects across a broad spectrum of sectors.

¹² IDB, The IDB supports Chile in a sovereign green bond development (2019).

¹³Proyectos Mexico, Mexico Projects Hub (2020).

¹⁴ProInversión, New PPP Legal Workframe: Leading in Latin America (2017)

¹⁵IDB, Three Good Practices of Peru's National Infrastructure Plan for Sustainable Economic Growth (2019)

¹⁶Please see Appendix A for the definition of sustainable infrastructure used in this analysis. While this definition aligns with the IDB SI Framework criteria, the authors do not claim that every project reflected in the pipeline below meets all attributes of being a "sustainable" project; our intention was to indicate pipelines in sectors with high contribution to the SDGs.

	 Sustainable Infrastructure Pipeline ¹⁷	 National Infrastructure Plan	 Pipeline Visibility Instrument	 Available Capital Market Instruments	 Integration of Sustainability Considerations
Argentina	\$85,500	No single unified plan, but several sector-specific plans.	Participación Pública Privada ¹⁸	IDB Guarantee Facility, IDB Invest B-Bonds.	The BYMA stock exchange launched new indices dedicated to sustainability. CNV has issued green bond guidelines. RenovAR renewable energy program is an essential element of energy transformation agenda.
Brazil	\$197,000	No single unified plan, but several sector-specific plans.	PPI Schedule of Projects ¹⁹	IDB Invest B-Bonds, Total Credit Guarantees, Liquidity Credit Line, Infrastructure funds.	Projeto Crescer (Project Grow) considers the sustainability characteristics of projects as part of evaluation. The Central Bank of Brazil requires banks to develop a sustainability policy in lending processes. Insurance regulator is involved in global sustainability efforts.
Chile	\$4,300	No single unified plan, but several sector-specific plans.	Concessions Agenda 2018-2022. ²⁰	Fondo de Infraestructura (FOINSA), IDB Invest B-Bonds	Renewable energy mandate requires electric utilities to source at least 20% of energy from renewables by 2025. Government established a National Council for the Implementation of the 2030 Agenda for Sustainable Development.

¹⁷ Figures are estimated based on governmental projections and/or tendered RFPs across Transportation, Energy (excluding fossil fuel-based energy), Water and Sanitation, and Social infrastructure plans. The definition of SI as used in this paper is located in Appendix A.

¹⁸ Government of Argentina (2020). <https://www.argentina.gob.ar/jefatura/evaluacion-presupuestaria/ppp>.

¹⁹ PPI (2019). "Schedule of Projects". Available at: <https://www.ppi.gov.br/schedule-of-projects>.

²⁰ Available at: http://www.concesiones.cl/proyectos/Paginas/AgendaConcesiones2018_2022.aspx.

Colombia	\$17,100	Plan Nacional de Desarrollo 2018-2022 ²¹	RUAPP (Single Registry of Public Private Associations) ²²	Bancoldex issued green, social, and orange bonds, IDB Invest B-Bonds	BVC stock market recognizes enhanced sustainability disclosure practices by issuers.
Mexico	\$21,800	Plan Nacional de Desarrollo 2019-2024 ²³	Proyectos Mexico ²⁴	CKDs (Development Fiduciary Securitization Certificates), CERPIs (Investment Project Fiduciary Securitization Certificates), Various private infrastructure funds.	Yes, SHCP-UI (Investment Unit of the Ministry of Finance and Public) considers disaster risk management as well as green budgeting processes. Proyectos Mexico also incorporates sustainability evaluations of each project on the platform.
Peru	\$7,000	Plan Nacional de Infraestructura para la Competitividad ²⁵	Proinversion Projects List ²⁶	ProInversion - the Private Investment Promotion Agency - has authorities to aid project derisking through financial instrument development and issuance. derisking through financial instrument development and issuance. ²⁷	Renewable energy mandate requires electric utilities to source at least 20% of energy from renewables by 2025. Government established a National Council for the Implementation of the 2030 Agenda for Sustainable Development.

3. Investors are increasingly prioritizing ESG and sustainable investing, but tools are needed

In line with global trends, LAC investors are interested in incorporating ESG factors and

sustainability themes into their investment processes; however, these investors have found it challenging to access relevant tools and data to implement ESG strategies. IDB and Mercer’s survey of LAC infrastructure investors in 2018 (noted above) revealed that, while a majority had adopted an ESG

²¹ Departamento Nacional de Planeación (2020). Presupuestos de inversión Plan Nacional de Desarrollo para Pactos. Available at: <https://www.dnp.gov.co/DNPN/Paginas/Presupuestos-de-inversion-Plan-Nacional-de-Desarrollo-para-Pactos.aspx>

²² Programa de Apoyo a la Participación Privada en Infraestructura, Government of Colombia (2019). Informe trimestral del registro único de asociaciones público privadas. Available at: <https://colaboracion.dnp.gov.co/CDT/Participacion%20privada%20en%20proyectos%20de%20infraestructu/Informe%203T%202019.pdf>.

²³ Presidencia de la Republica Mexico (2019). Plan Nacional de Desarrollo 2019-2024. Available at: <https://www.proyectosmexico.gob.mx/wp-content/uploads/2017/03/PLAN-NACIONAL-DE-DESARROLLO-2019-2024.pdf>.

²⁴Proyectos Mexico: <https://www.proyectosmexico.gob.mx>.

²⁵Ministerio de Economía y Finanzas Peru (2019). Plan Nacional de Infraestructura para la Competitividad. https://www.mef.gob.pe/contenidos/inv_privada/planes/PNIC_2019.pdf.

²⁶ProInversion (2019). “Electricity Projects”. Available at: <https://www.proyectosapp.pe/modulos/JER/PlantillaProyectosResumenes.aspx?are=1&prf=2&jer=5955&sec=54>

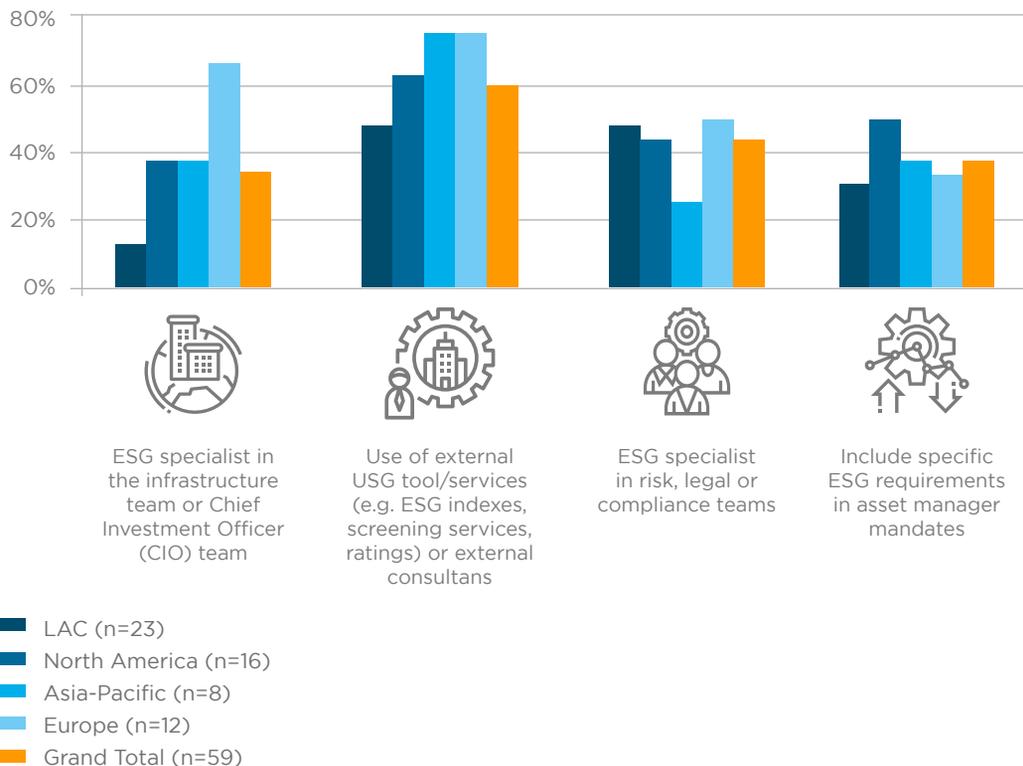
²⁷Further details on ProInversión’s new authorities and structure are available at: http://www.proinversion.gob.pe/modulos/NOT/NOT_DetallarNoticia.aspx?ARE=1&PFL=1&NOT=3758&sec=40.

policy, these investors are much less likely than investors from other regions to have any dedicated ESG resources, speaking to a lack of related expertise in the region. **It is notable that the incorporation of ESG factors into investment decision making is not equivalent to sustainable infrastructure investment but is a stepping-stone toward informing such sustainable investments.** Overall, investor survey responses indicated that they are more likely to outsource ESG assessment or treat ESG as a compliance

issue than embed ESG assessment into core due diligence or investment management functions; see Figure 3. These results indicate that, while there is broad interest in ESG and sustainable investing among investors surveyed, most of those that have adopted ESG policies have not invested in the staff needed to effectively carry through their plans. The **Blue like an Orange and IDB Invest case study on page 31** offers additional context regarding ESG integration into investment strategies.

Figure 2

Resources used for Infrastructure ESG Analysis - by Region of HQ (n=59)



3. Regulators and financial intermediaries are prioritizing ESG and TCFD disclosure

Sustainable finance topics have been rising on supervisors and regulators' agendas throughout the LAC region, and while not all sustainable finance themes are applicable to sustainable infrastructure, there are some key areas of overlap between them. For example, identifying standard disclosure frameworks for ESG topics by companies and investors, and related investment taxonomies and definitions for what constitutes sustainable finance, provides infrastructure investors with additional data and clearly defined metrics for identifying infrastructure projects that could be defined as being sustainable.

To that end, roundtables held in various LAC countries as a partnership between IDB, Mercer, and various local partners revealed that, due to the identified lack of concerted actions on integrating ESG and devoting resources to climate related disclosures in developing SI projects, government policies should promote such considerations. Requiring ESG and climate-related risk disclosures as part of infrastructure development and permitting processes will allow investors to better evaluate the risks of such long-term projects, and to identify where there may be potential for further mitigation.

Argentina's National Securities Commission (CNV), for example, has adopted sustainability into its core mission, and has jurisdiction to regulate ESG-related issues in

the national securities market. CNV co-led a Working Group on Sustainability in Emerging Markets as part of the Growth and Emerging Markets Committee of the International Organization of Securities Commissions (IOSCO) which produced a Consultation Report²⁸ in 2019 on "Sustainable finance in emerging markets and the role of securities regulators". The Brazilian securities regulator, CVM, also served on the working group, an indication of increased focus on such topics among LAC regulators. In Colombia, the financial regulator has issued a strategy on sustainable finance as well as guides for the financial sector on integrating ESG and climate risk and opportunities in their operations.²⁹

In Chile, with the support of IDB, the United Nations Environment Program – Financial Institutions (UNEP FI) and the Government of the United Kingdom, the Ministry of Finance and financial regulators have formed a permanent Roundtable on Green Finance, issued a Declaration on Climate Risks, and issued a Green Agreement with the private sector.³⁰ These actions form a commitment to integrate ESG and climate risks and opportunities into the financial markets infrastructure of the country. Additionally, the Financial Market Commission (regulator and supervisor) issued Rule 386, requiring enhanced ESG disclosure by issuers.³¹

Regulators from Brazil, Chile, Colombia, and Mexico (as well as Costa Rica) are also members of the Network for the Greening of the Financial System (NGFS)³² which has spearheaded international efforts to incorporate climate related disclosures and risk assessments to central bank and

²⁸ IOSCO (2019). "Sustainable finance in emerging markets and the role of securities regulators." Consultation Report. Available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD621.pdf>.

²⁹ Superintendencia Financiera de Colombia (2020). "Finanzas Sostenibles." Available at: <https://www.superfinanciera.gov.co/inicio/industrias-supervisadas/finanzas-sostenibles-10104520>.

³⁰ Mesa publico-privada de finanzas verdes (2020). "Publicaciones de la Mesa". Available at: <https://mfv.hacienda.cl/publicaciones/publicaciones-de-la-mesa>.

³¹ Comision para el Mercado Financiero (2020). "CMF publica en consulta normativa con nuevas exigencias de información económica, social y medioambiental." Available at: <https://www.cmfchile.cl/portal/prensa/604/w3-article-27945.html>.

³² Network for the Greening of the Financial System (2019). Available at: <https://www.ngfs.net/en>.

regulatory practices. The December 2019 NGFS meeting held in Mexico City³³ brought together regulators and academics and oriented toward addressing green finance and climate change issues in the LAC region specifically, indicating the momentum around these topics.

In Mexico, the Association of Mexican Banks (ABM) and the IDB Group have hosted climate risk workshops with a significant focus on the Task Force on Climate Related Financial Disclosures (TCFD) and aligned reporting. Additional groups, such as MEXICO2, a subsidiary of the Mexican stock exchange, have added TCFD onto their sustainable finance initiative agenda, thus increasing awareness of the TCFD standards in Latin America. Additionally, the Council for Financial Stability (CESF) with the support of members of the central bank of Mexico, the Ministry of Finance, and the financial regulators, has created the Sustainable Finance Committee; the committee will support the implementation of ESG and climate risk assessments.³⁴

4. Development banks have key role to play

The Inter-American Development Bank Group (IDB) in partnership with national development banks (NDBs) across the LAC region, has offered technical support for the issuance of thematic bonds (green, social, and sustainability) for public and private investments. Furthermore, IDB can enhance the capacity of NDBs and offer credit enhancement vehicles that assuage investor

concerns about risks, therefore driving further investment into infrastructure.

IDB worked with Colombian public bank Bancoldex in providing technical assistance in the structuring of the bank's green, social, and orange bonds. A green bond issued by Bancoldex on which IDB assisted in 2017 was oversubscribed by 2.5 times at auction, and a social bond issued by the bank in 2018 with IDB's support was oversubscribed by 4 times at auction, indicating a high level of comfort among investors in these bonds. IDB's role in providing such technical assistance, and ultimately, capacity building among national banks, can help ensure that the issuance of bonds to support sustainable infrastructure development become well-embedded tools in the LAC region. The **Actis Energy case study** on page 38 provides an example of how development finance can be focused on sustainable infrastructure investment.

The IDB has launched the "Regional Green Bonds Program for Latin America and the Caribbean"³⁵ in 2019 to support public sector issuers with the initial costs to set up green and sustainable bonds programs, as well as the costs to obtain certification and/or external verification. At the same time, in order to support reporting efforts and transparency in the market, the IDB and a coalition of partners have launched the Green Bond Transparency Platform³⁶ which will promote exchange of information in the thematic bond market and hopefully lower the cost of generating and managing sustainability related information.

³³ Centro de Estudios Monetarios Latinoamericanos (2019). Available at: <https://mailchi.mp/cemla/conference-on-climate-change-and-its-impact-in-the-financial-system>.

³⁴ Miguel Ramirez (2020). "Crear  Comit  de Finanzas Sostenibles: CESF." Dinero, Negocios y Finanzas. Available at: <https://dnf.com.mx/index.php/2020/04/01/creara-comite-de-finanzas-sostenibles-cesf/>.

³⁵ Regional Green Bonds Program for Latin America and the Caribbean, <https://www.iadb.org/en/project/RG-T3368>

³⁶ <https://greenbondtransparency.com/>

RECOMMENDATIONS



Driven by declining global investment yields, investors have been and will likely continue to increase their allocation to real assets – especially infrastructure. At the same time, investors are also increasingly looking for sustainable assets. As evidence grows on the benefits stemming from the integration of environmental, social and governance (ESG) factors into investment decisions, investors are realizing that sustainable assets can deliver better risk-adjusted returns. The following recommendations are derived from IDB and Mercer’s research and engagement with various capital market actors in the LAC region and are intended to provide constructive ideas for beneficial market interventions to scale up SI investments, beyond ESG.



Deliver Better Project Preparation and Pipeline Development

International demand for sustainable assets is increasing, however in many LAC markets, a key missing aspect is a pipeline of well-planned and bankable sustainable infrastructure projects. A lack of bankable projects was ranked first in Mercer’s investor survey, amongst other barriers not specifically related to investment risks. This result aligns with other survey findings, although it may also reflect a lack of awareness amongst international investors regarding the recent progress which has been made in LAC, with many governments developing sweeping infrastructure plans and others running several successful infrastructure auctions. While each of the countries evaluated in this study have devoted resources to promoting

their countries as investment destinations and enacting supportive legislation to enable private investment in infrastructure, research revealed a high level of variation in the availability of transparent public-facing information regarding projects between countries.

The Mexico Projects Hub³⁷ (“Proyectos Mexico”) website is a strong example of multiple stakeholder partners, including IDB Group, collaborating to develop a modern and effective data portal oriented toward attracting foreign private sector investment. In addition to serving as a transparent repository of information regarding individual projects that are at various stages of preparation and tendering, the

³⁷ Proyectos Mexico (2019). Available at: <https://www.proyectosmexico.gob.mx/en/home/>

site has sections that promote Mexico as an investment destination (“Why Mexico?”), information to prospective investors regarding regulations and incentives (“How to Invest?”), and Sustainability Project Profiles for each project which will allow for comparisons by investors. The Sustainability Project Profiles, in particular, utilize a single standard for evaluation, allowing for the creation of benchmarks for comparison of material sustainability metrics across projects, facilitating informed investor evaluation and decision making. The web portal has been recognized with an award from the Latin American Association of Development Financial Institutions (ALIDE) for “best practice of the year in information, technical assistance and social responsibility”, validating the effectiveness of its approach.

IDB could serve an important role in advising other client countries to develop similar infrastructure investment focused data portals, which can reduce significant barriers to attracting investment, particularly through raising investor awareness of opportunities and available financial incentives. IDB has produced a *Framework for Planning, Preparing, and Financing Sustainable Infrastructure Projects*³⁸ that could provide a template for project disclosures through such future web portals. Creating a central clearinghouse of investor-relevant information can facilitate the development of dialogues between government agencies, investment promotion institutions, and prospective investors, ensuring that projects are brought to market with adequate preparation having been completed and supporting documentation developed. However, as part of its due diligence, IDB should interface with the various tool providers identified

in prior research with Mercer to determine which may already have a relevant solution developed for the LAC market³⁹.



Greater Use of Guarantees or Other Credit-Enhancement Tools

The aforementioned investor survey identified that, when considering investing in LAC infrastructure, there is a higher perception of governance and political/regulatory-related risks among non-LAC investors compared to investors based in the LAC region, reflecting (correctly or not) concerns that corruption and shifting regulatory regimes could affect the long-term value of such investments. Multilateral Development Banks (MDBs) including the IDB Group can provide additional risk mitigation to assuage such investor concerns, for example:

- » **To mitigate political risk**, IDB offers political risk guarantees to financiers and investors taking part in PPPs which meet the Facility’s requirements.⁴⁰ These instruments have been designed as a flexible mechanism to support the financial obligations from the government so to reduce credit risk of the projects. The projects or type of sub-industry under PPP will be selected by the government but will have to undergo IDB due diligence and final sign off that demonstrates the relevant assets are acceptable to the IDB Program.
- » **To mitigate financing risk**, IDB Invest offers several products including loan facilities to support project finance structures in the bank market. IDB Invest

³⁸IDB Group (2019). “Attributes and Framework for Sustainable Infrastructure”. Available at: <https://publications.iadb.org/en/attributes-and-framework-sustainable-infrastructure>

³⁹<https://www.mercer.com/our-thinking/building-a-bridge-to-sustainable-infrastructure.html>

⁴⁰IDB (2020). “Guarantees”. Available at: <https://www.iadb.org/en/about-us/public-sector-financing/guarantees>.

also provides guarantees and other structures to support capital market investments. IDB Invest's B-Bond structure can achieve longer tenors and more competitive pricing than a typical A/B Loan⁴¹ by sharing IDB Invest's Preferred Creditor Status and reaching a broader investor base. It broadens the investor base for infrastructure projects by providing investors with the benefits of the IDB Invest umbrella.

The same survey identified that, while most investors are aware of risk mitigation tools to enhance the bankability of infrastructure investments, critically, pension fund respondents indicated that they may not be as familiar with the potential applications of political risk insurance products to protect against corruption or regulatory risks. This finding indicates that a significant group of long-term capital investors may not understand the full scope of risk mitigation products available to support SI investments and may therefore not invest as much as they might otherwise. In prior research asset owners have indicated a lack of awareness regarding risk mitigation tools available in emerging markets, a lack of understanding regarding their functionality and/or concerns about navigating the additional "red tape" associated with acquiring risk mitigation support⁴².

IDB Group could serve an important role in educating asset owners about the risk mitigation tools that are available and facilitating related access, and thereby help to bring more capital off the sidelines to invest in LAC SI.



Use Development Capital to Finance Sustainability Premiums

Engagements with investors revealed that ensuring that SI investments are suitably impactful and sustainable can add significant additional costs to potential transactions. Comments in a roundtable held in Mexico City in 2019 identified that, for example, attaining third party certifications for the use of proceeds of green bond issuances adds time and costs to the underwriting process, however the benefits of the certifications can be significant in attracting a broad range of investors. Moreover, some SI projects may have lower expected returns than equivalent brown assets due to the support of incumbent systems and evolving capital supply and demand dynamics (e.g. renewable power versus gas power). The additional due diligence or potential lower return for ensuring that ESG characteristics of investments are appropriately addressed can thus be considered a "sustainability penalty" added to the costs of SI projects which is offset by sustainability premiums which often are not monetized via markets (e.g. clean air, lower emissions). Roundtable participants identified that federal environmental taxes (in Mexico) could serve as a source of potential financing to offset or subsidize additional certification costs for socially-beneficial projects, as one example.

However, for development banks with mandates to enhance sustainability programs in partnership with client

⁴¹ In a typical A/B loan, the IDB offers the A portion of the loan from its own resources. The Bank partners with other financial institutions to provide the B loan. Under the structure, the IDB is the Lender of Record in the transaction and acts as Lead Lender and Administrative Agent for the entire A plus B loan facility. Such structure offers benefits for both the borrowers and the financial institutions partnering with the Bank because it reduces the risk of the operation. Read more: <https://www.iadb.org/en/about-us/idb-financing/ab-loans-and-syndications%2C6061.html>

⁴² Mercer; African Infrastructure Investment: Challenges and Opportunities; 2018 – page 30-31

countries, offering financing to offset the costs of such certifications as a core component of assistance provided to countries could ensure that projects' beneficial characteristics are properly valued by investors.



Increase Access to Capital Markets to Finance Sustainable Infrastructure Projects

While national governments seem to be able to still attract institutional investors,⁴³ severe challenges emerge for subnational governments in finding capital market financing for their infrastructure projects due to a lack of scale relative to national-level projects. Development banks can support the bundling of such smaller-scale projects to provide the pipeline and financing terms investors are seeking. For example, a MDB-supported vehicle could be issuing debt to finance projects to provide services to municipalities, while entering an agreement between the vehicle and each relevant municipality to isolate its risk from the other municipalities. This would enable small, but productive projects across states or municipalities to be grouped so that they can be financed at scale – while the support from investment grade institutions would enhance the credit profile of subnational entities.

Investor roundtables, particularly in Brazil, identified opportunities around the relatively low participation rate of pension funds in infrastructure projects, and a number of possible financing structures that could help bring such capital into the market.

» **IDB Invest B-Bonds** allow for USD denominated investments from capital markets in projects at the same terms as those negotiated by the IDB Invest. The loan agreement between IDB Invest and the borrower is substantially the same as IDB Invest's standard A/B Loans, with one loan agreement in which IDB Invest acts as the Lender of Record and administers the loan. The structure allows investors to benefit from IDB Invest's privileges and immunities, including preferred credit status. The B Lender is a Special Purpose Vehicle (SPV) or trust that funds itself by selling notes to institutional investors as a private placement. IDB Invest shares project risk with investors and the notes are not guaranteed by the IDB Invest. Such structures could be utilized in various LAC region markets in order to enhance the participation of international institutional investors in infrastructure development.

» **Certificates of Capital Development (CKD)** notes are development equity certificates that finance infrastructure and other real assets development in Mexico, in addition to some private equity. CKDs have been in use for over a decade with varying levels of success, as noted by roundtable participants. Designed to allow pensions to invest in alternative investments, with issuance on public markets and strong regulatory and governance support, CKDs have proven to be a useful vehicle for pensions in Mexico, even if they are restricted to investments in Mexico only. For other national pension systems that are restricted

⁴³See for example the high level of over-subscription of the Chilean green bonds in 2019 and 2020 - <https://www.hacienda.cl/english/work-areas/international-finance/public-debt-office/green-bonds>, as well as the latest sovereign bond transactions in 2020 from the region.

in their investment opportunity set, the CKD structure could offer lessons regarding the development of public, structured vehicles. At the state-level, the number of existing projects is high, but coordination is lacking.

- » The issuance of green bonds could help mobilize resources and focus investor attention on supporting beneficial projects. There is an area of opportunity within climate finance to bundle, finance, and market these projects to both domestic and international investors as green and/or impact bonds, which are in high demand. To the extent state level entities can facilitate the identification of sustainable infrastructure projects early

in the project lifecycle, aid developers in quantifying environmental and/or social impacts of those projects, and support the development of appropriate financial vehicles to issue bonds, those efforts can help to broaden the pool of potential investors and indicate that supporting sustainable development efforts is a state-level priority. From the local perspective, the costs and benefits are attractive as over the long term such efforts can be profitable in several aspects (both social and economic).

The IDB Group could play an important role in facilitating the development of such issuance vehicles in partnership with subnational governments.



A large crowd of people walking on a city street, many wearing face masks. The scene is brightly lit, possibly by sunlight, creating a high-contrast, slightly blurred background. The focus is on the people in the foreground, who are also wearing masks. The overall atmosphere is one of a busy, public space during a health-conscious period.

1

INTRODUCTION



The first two economic quarters of 2020 brought with them the worldwide spread of the coronavirus pandemic, and an unprecedented near-global quarantine and social distancing response, resulting in rapid and significant economic damage to global economies and growth outlooks, that extended to the whole 2020, and will most probably linger over most of 2021. In the Latin American and Caribbean (LAC) region, the International Monetary Fund's (IMF) October 2020 Regional Economic Outlook: Western Hemisphere projected that the region would experience a 8.1% economic contraction in 2020, and a 3.6% expansion in 2021.⁴⁴ These figures were significantly changed from an April IMF report, which forecasted a 4.2% contraction in 2020 and a 0.3% expansion in 2021.⁴⁵

The International Energy Agency (IEA) projected that coronavirus responses and resulting recessions across the globe were projected to lead to a contraction in global

energy demand of 6% for the full year 2020, the largest drop in 70 years in percentage terms, and the largest ever decrease in absolute terms.⁴⁶ With traditional energy markets upended and the global economy at an apparent inflection point, a number of international initiatives have coalesced around supporting a “green recovery” model for the global economy, with stimulus money and programs directed toward more sustainable infrastructure projects, rather than traditional infrastructure. The IEA modeled and proposed just such a project, the Sustainable Recovery Plan, developed in partnership with the International Monetary Fund (IMF), predicting that global investment of about USD \$1 trillion annually over the next three years could “simultaneously spur economic growth, create millions of jobs, and put emissions into structural decline.”⁴⁷ While global growth would increase by 1.1 percentage points annually, the growth rate in developing countries would be 1.3 percent, according to this study. In addition,

⁴⁴International Monetary Fund (2020). Regional Economic Outlook: Western Hemisphere. Available at: <https://www.imf.org/en/Publications/REO/WH/Issues/2020/10/13/regional-economic-outlook-western-hemisphere>.

⁴⁵Jo Bruni and Daniel Bases (2020). “FACTBOX 8/19/20: Latin America moves to mitigate impact of COVID-19.” Latin Finance. Available at: <https://www.latinfinance.com/daily-briefs/2020/8/19/factbox-81920-latin-america-moves-to-mitigate-impact-of-covid-19#forecasts>.

⁴⁶IEA (2020). Global Energy Review 2020. Available at: <https://www.iea.org/reports/global-energy-review-2020>.

⁴⁷IEA (2020). Sustainable Recovery: World Energy Outlook Special Report. Available at: <https://webstore.iea.org/download/direct/3008>. Page 14.

about 420 million people would gain access to cleaner cooking solutions in low-income countries, and almost 270 million people would gain access to electricity, reflecting more broadly shared quality of life improvements in alignment with the Sustainable Development Goals.⁴⁸

Other international actors have issued similar calls for any government stimulus funds to be directed toward a green or sustainable recovery. The Inter-American Development Bank (IDB) and International Labour Organization (ILO) released a joint report highlighting that 15 million net new jobs could be created in Latin America and the Caribbean by 2030 if the region were to transition toward a net-zero carbon economy.⁴⁹ Additionally, key members of the European Union issued calls to spend nearly a half-trillion Euros on a green recovery that would accelerate the region’s goals of net-zero carbon emissions as of 2050.⁵⁰ These examples of how different global regions may choose to respond to the coronavirus crisis and economic recession have expressly centered on increased investments in green or sustainable infrastructure projects, making the findings and recommendations of this report all the more timely.



SI “refers to infrastructure projects that are planned, designed, constructed, operated, and decommissioned in a manner that ensures economic and financial, social, environmental (including climate resilience), and institutional sustainability over the entire life cycle of the project” (IDB Sustainable Infrastructure Framework, 2018).



⁴⁸Ibid.

⁴⁹International Labour Organization (2020). “Zero emission economy will lead to 15 million new jobs by 2030 in Latin America and the Caribbean.” Available at: https://www.ilo.org/global/docs/WCMS_752088/lang--en/index.htm.

⁵⁰Ewa Krukowska (2020). “European CEOs, Ministers Start Campaign for Green Recovery.” Bloomberg. Available at: <https://www.bloomberg.com/news/articles/2020-04-14/european-ceos-ministers-start-campaign-for-green-recovery>.

Sustainable Infrastructure (SI) is now recognized as an essential foundation to achieve inclusive and sustainable growth, deliver on the Sustainable Development Goals (SDGs), and meet the Paris Agreement targets of holding the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts towards limiting it to 1.5°C. The world needs to dramatically increase public and private investments in SI to tackle large deficits in infrastructure services, especially in emerging markets and developing countries.⁵¹ Infrastructure is also the most important driver of growth in the LAC region. It is expected that in 2030 energy demand will double, and by 2050, 90% of the region's population will live in cities⁵².

Despite this growing demand for infrastructure services, public budgets to finance infrastructure projects are limited, and are frequently not sufficient to close identified infrastructure investment gaps. In this context, mobilizing private sector infrastructure investments is essential for the LAC region to sustain and expand economic development. To that end, many LAC governments have introduced private-public partnership (PPP) and related enabling legislation to support private investment in infrastructure. At the same time, there is growing attention to environmental, social and governance (ESG) considerations within investor organizations through “sustainable finance” frameworks.⁵³

While these trends are important, ESG approaches are still evolving and levels of awareness and commitment vary across markets. Focused collaboration is required to promote and accelerate sustainable infrastructure investment strategies and instruments.

The Inter-American Development Bank (IDB) Group is in an ideal position to convene key global and regional actors, including financial regulators, central banks, and leading financial institutions, for public-private dialogues on challenges and opportunities, and to then support both regulators and investors in implementing strategies to bring sustainability into the core of the investment process.

IDB Group partnered with Mercer to facilitate such dialogues: to gain a better understanding of the size of the sustainable infrastructure investment opportunity in the LAC region, to identify the challenges and opportunities for potential investments in sustainable infrastructure, and to identify the critical next steps in influencing the infrastructure agenda to facilitate increased private investments while integrating sustainability components. This report outlines the key findings from these dialogues and related research, with particular focus on Argentina, Brazil, Chile, Colombia, Mexico and Peru – which collectively generate more than 80% of regional GDP in LAC.

⁵¹IDB, Attributes and Framework for Sustainable Infrastructure (2019)

⁵²IDB Invest, The Region is evolving. So are we. (2016)

⁵³It is worth clarifying that ESG and sustainable investment approaches do not always align in practice. While ESG integration is a method for considering non-traditional yet financially material factors in investment decision-making, sustainable investing approaches often focus on driving positive outcomes from an environmental or social perspective.

2

THE SUSTAINABLE INFRASTRUCTURE INVESTING OPPORTUNITY



In its 2016 report— The Sustainable Infrastructure Imperative⁵⁴—the New Climate Economy (NCE) estimated that US\$90 trillion of investment in infrastructure would be needed by 2030, and further, would not cost much more if it was sustainable. The NCE 2018 report further highlights the urgency of the change, observing that “too much progress today is incremental, piecemeal, and falls short of the pace and scale needed”.



This is our ‘use it or lose it’ moment.

Investing the expected US\$90 trillion to 2030 to build the right infrastructure now will deliver a new era of economic growth. Investing it wisely will help drive innovation, deliver public health benefits and inclusive growth, create a host of new jobs and go a long way to tackling the risks of runaway climate change. Getting it wrong, on the other hand, will lock us into a high-polluting, low productivity, and deeply unequal future.”⁵⁵

2.1 DEFINING SUSTAINABLE INFRASTRUCTURE

At a high level, sustainable infrastructure is infrastructure that is socially, institutionally, economically/ financially and environmentally sustainable. But ultimately, sustainable infrastructure in aggregate is that which will enable the world collectively to meet the Sustainable Development Goals (SDGs) and the Paris Agreement. The SDGs are a collection of 17 global goals set by the United Nations General Assembly in 2015. The goals, together with the 169 individual targets will guide the global community’s sustainable development priorities from now until 2030 and seek to “stimulate action [...] in areas of critical importance for humanity and the planet”. SDG #13 covers Climate Action.

The United Nations Principles for Responsible Investment (PRI) recognizes the SDGs as a clear call to action for the private sector. While government spending and development assistance will contribute, new flows of private sector capital will be key, either through new allocations or by re-routing existing capital flows. In fact, the PRI has articulated the following SDG Investment Case⁵⁶.

⁵⁴New Climate Economy, The Sustainable Infrastructure Imperative: Financing for Better Growth and Development (2016)

⁵⁵New Climate Economy, Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times (2018)

⁵⁶Principles for Responsible Investment, The SDG Investment Case (2017)

Figure 3

The SDG Investment Case (source: PRI)

 Fiduciary duty		
	 <p>Risks</p>	 <p>Opportunities</p>
Macro	<p>By the nature of their investments, asset owners that choose to hold a diversified portfolio, investing in a wide range of asset classes and geographies, will be exposed to the global challenges that the SDGs represent. Failure to achieve the SDGs will impact all countries and sectors to some degree, and as such create macro financial risks.</p>	<p>Achieving the SDGs will be a key driver of global economic growth, which any long-term investor will acknowledge as the main ultimate structural source of financial return.</p>
Micro	<p>The challenges put forward by the SDGs reflect that there are very specific regulatory, ethical and operational risks which can be financially material across industries, companies, regions and countries.</p>	<p>Companies globally moving towards more sustainable business practices, products and services provide new investment opportunities.</p>

Figure 4 Sustainable Development Goals (SDGs)



The IDB Group has developed a four-dimensional framework to define sustainable infrastructure (referred to in this report as the “IDB Sustainable Infrastructure Framework”). This framework addresses two key challenges that Mercer has found in our research on sustainable infrastructure investment. That is, in addition to the importance of environmental and social sustainability:

- Projects must be both **economically viable** in the long term, and provide an **attractive financial return to investors and financiers**, and
- Institutionally, sustainable infrastructure and supporting governance structures must be **aligned with national and international commitments**, including the Paris Agreement and the SDGs.

IDB has adopted the following definition of sustainable infrastructure.

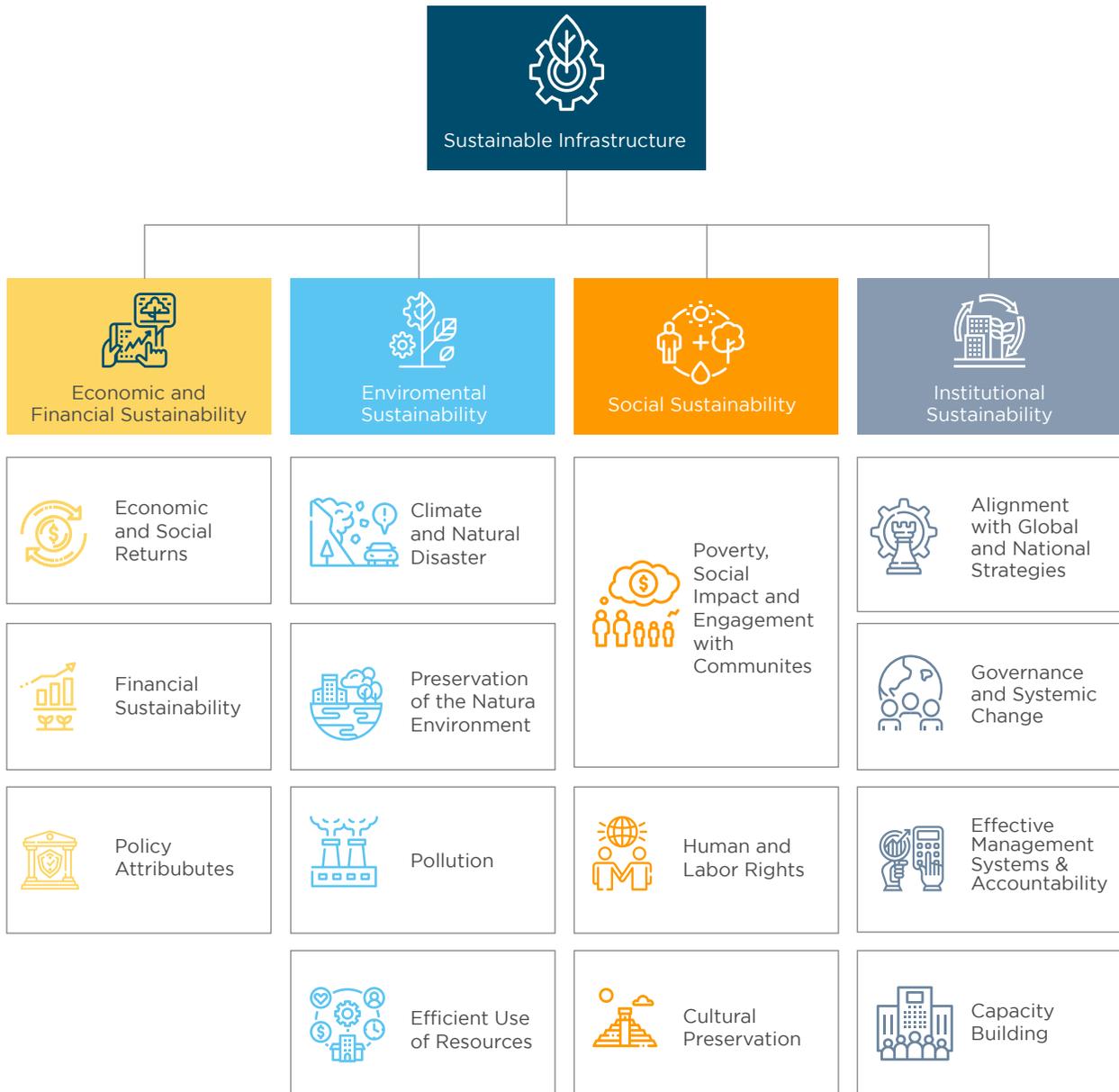


Sustainable infrastructure refers to infrastructure projects that are planned, designed, constructed, operated, and decommissioned in a manner to ensure economic and financial, social, environmental (including climate resilience), and institutional sustainability over the entire life cycle of the project.

The following section will provide an overview of key market developments in each of the six countries evaluated as part of this research.

Figure 5

The Four Dimensions (and sub-dimensions) of Sustainable Infrastructure,
Source; IDB Group⁵⁷



⁵⁷ IDB Group (2019). Attributes and Framework for Sustainable Infrastructure.

2.2 INFRASTRUCTURE DEVELOPMENTS IN KEY MARKETS



MEXICO

While Mexico undertook significant reforms to the energy sector earlier in the decade, which have opened the sector to private investment considerably, the country must make up for the lowest rate of infrastructure investment in the world.

Mexico has the largest infrastructure gap as a percentage of GDP of the countries in this study, standing at an additional 1.9% of GDP required to be invested to meet the SDGs.

The electricity system is highly dependent on fossil fuels, with over 81% of electricity generation coming from carbon based sources in 2017, and natural gas in particular seeing rapid growth. Mexico has instituted renewable portfolio standards for electric utilities that rise to 13.9% in 2022, which should drive additional investment into low-carbon energy sources, and could be a key area of economic growth.



CHILE

Chile has developed a robust enabling environment for private participation in infrastructure, as well as a highly globally integrated economy which provides protection for foreign investors.

Chile has largely decentralized the management of PPP concessions, particularly in the energy sector, where it has established secretariats across each of the 15 states. The country has committed to

70% renewable energy generation by 2050, and has put in place a new office to “unblock” about 200 projects from bureaucratic processes, representing about \$65 billion in total investment. Chile’s infrastructure gap is smaller than most of its peers, at about \$53 billion through 2040, or about 0.5% of GDP, yet facilitating the decarbonization of its energy sector will require strong investor participation in future years.



BRAZIL

Brazil had moderate infrastructure investment levels prior to a major recession in 2015, which has led to reduced overall investment levels and generated a pronounced infrastructure gap.

Brazil has been one of the regional leaders in promoting private participation in infrastructure, however years of underinvestment have led to an infrastructure gap that is the largest in the region, and third-largest as a percentage of GDP. In spite of these challenges, In 2017 the government announced an energy

expansion plan that would invest \$430 billion over 10 years, however only about 26% of the total would go toward electricity investment, with the majority being invested in oil and gas. As part of this initiative, the government has defined a robust pipeline of projects, and envisions rapid growth of renewable energy as a result of this plan, with private capital comprising a significant portion of the overall investment figures. The recent elections have introduced some uncertainty regarding future infrastructure plans.



PERU

Peru has the highest level of infrastructure investment of the countries in this study, yet the country still faces an infrastructure gap, particularly in electricity.

Peru averaged 5.12% of GDP invested annually in infrastructure between 2008-2015, the highest rate of the countries in this study, which reflects the country's commitment to facilitating private investments in infrastructure, including strong investor revenue protections. The country has established renewable energy

production goals for the electric sector, as well as a range of tax and business investment incentives for renewables, which should drive additional investment into the sector. The government identified a pipeline of 50 projects totaling \$11 billion through 2020, with 40% going to transportation and 8% to energy. However, developments in the Odebrecht corruption scandal in 2018 have led to political upheaval and threaten the efficacy of the country's infrastructure program.



ARGENTINA

PPP-related legislative and regulatory initiatives in the recent past created a positive interest and momentum for the country, however Argentina's lack of infrastructure investment in recent years has left a gap that could prove challenging to close.

Since 2015, Argentina placed attracting international infrastructure investment as a top priority, as part of a broader package of reforms undertaken across the economy, by, for example, designating a new executive

role to coordinate PPP tenders, disclosures and ethics evaluations. The government announced a pipeline of 60 PPP projects to be completed by 2022, representing USD\$26 billion in investment, providing guidance and clarity to investors regarding PPP priorities. However, estimates suggest that an additional \$362 billion in investments beyond current levels will be required to bring Argentina's infrastructure in line with best performing peers through 2040, or an additional 1.7% of GDP.

Source: Mercer and Marsh & McLennan Insights

2.3 HISTORICAL INFRASTRUCTURE FUNDING

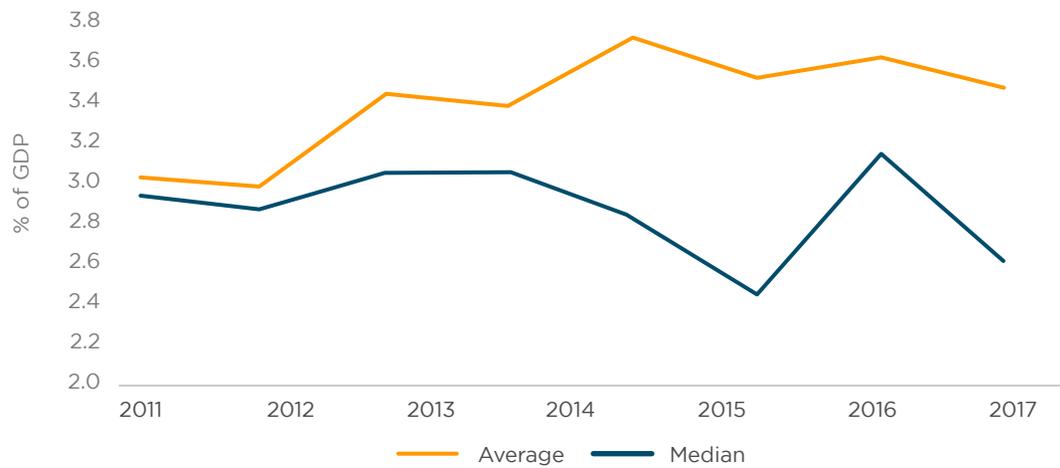
Total infrastructure investment in the LAC region is estimated to have reached \$US 483 billion over the period 2011 to 2015. As a percentage of GDP total infrastructure investment in LAC has risen from about 3.0% of GDP in 2011 to about 3.5% of GDP on average in 2018, though for the median country it remains under 3% of GDP.⁵⁸



⁵⁸ IDB, 2019 Latin American and Caribbean Macroeconomic Report (2019)

Figure 6

Estimated Infrastructure Investment in the LAC region



Source: IDB, LAC Macroeconomic Report (2019)

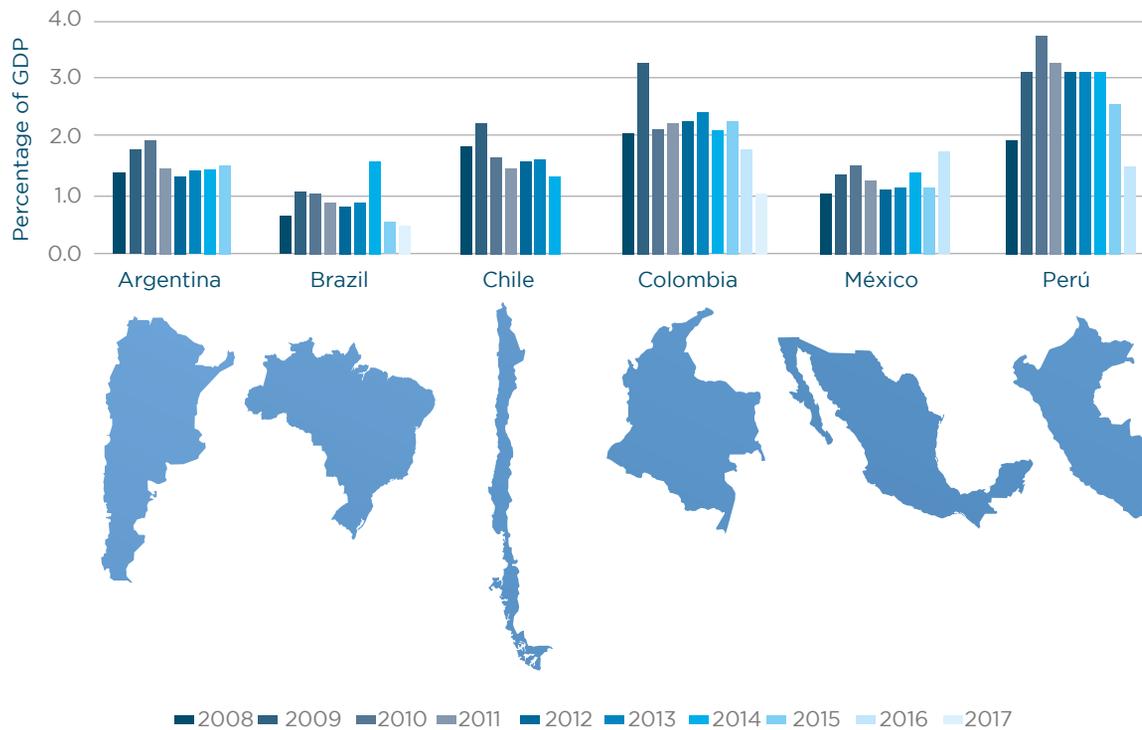
The majority of current infrastructure investment is public (i.e. fiscal accounts and regional public entities). While some

countries have been able to increase public infrastructure investment, for the larger economies it remains low.



Figure 7

Public Infrastructure Investment as a Percentage of GDP



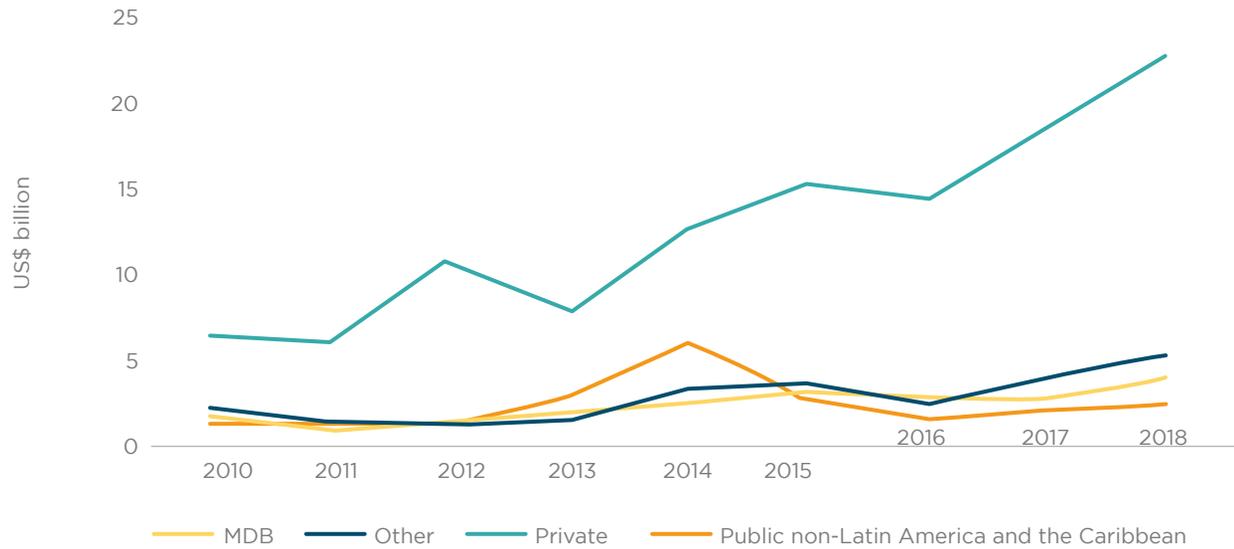
Source: InfraLatam (excludes oil and gas related investment and social infrastructure investment)

Private and other types of investment from outside of the LAC region has been growing; from less than \$US 10 billion in 2010 to \$23 billion in 2015 and to \$US 32 billion in 2018.



Figure 8

Private Infrastructure Investment in Latin America and the Caribbean



Source: IDB, LAC Macroeconomic Report (2019)

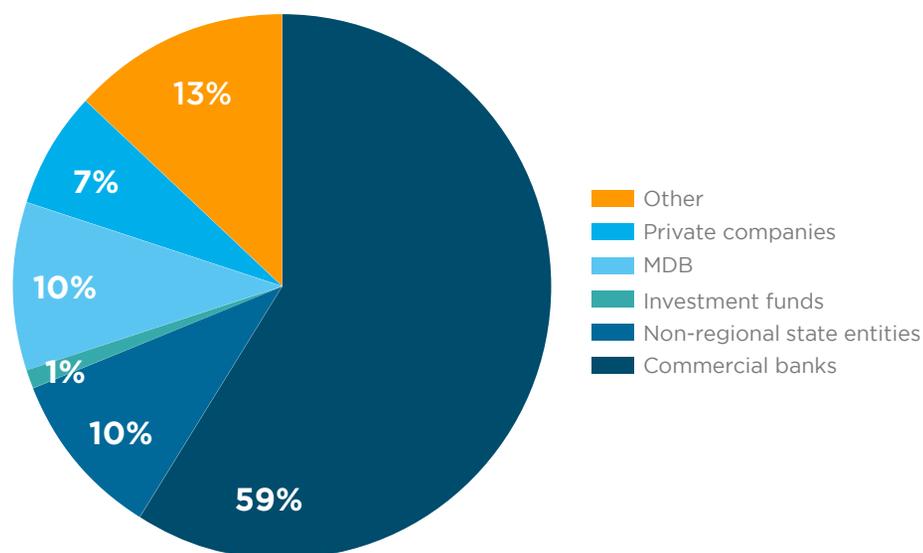
Focusing on the sources of this investment shown above, during the period 2014 to 2018 (excluding local public sources), over \$US 70 billion (or 59%) came from commercial banks (59%) as shown in the pie chart. Non-regional state entities refer to official entities from other countries (e.g. governments, state banks, export credit or other public agencies).

Only 1% (or \$US 1.1 billion) over this period came from investment or infrastructure funds.



Figure 9

Providers of Infrastructure Financing (excluding public entities in the LAC region and financing through the fiscal budget)



Source: IDB, LAC Macroeconomic Report (2019)

3.3. THE INFRASTRUCTURE FUNDING GAP

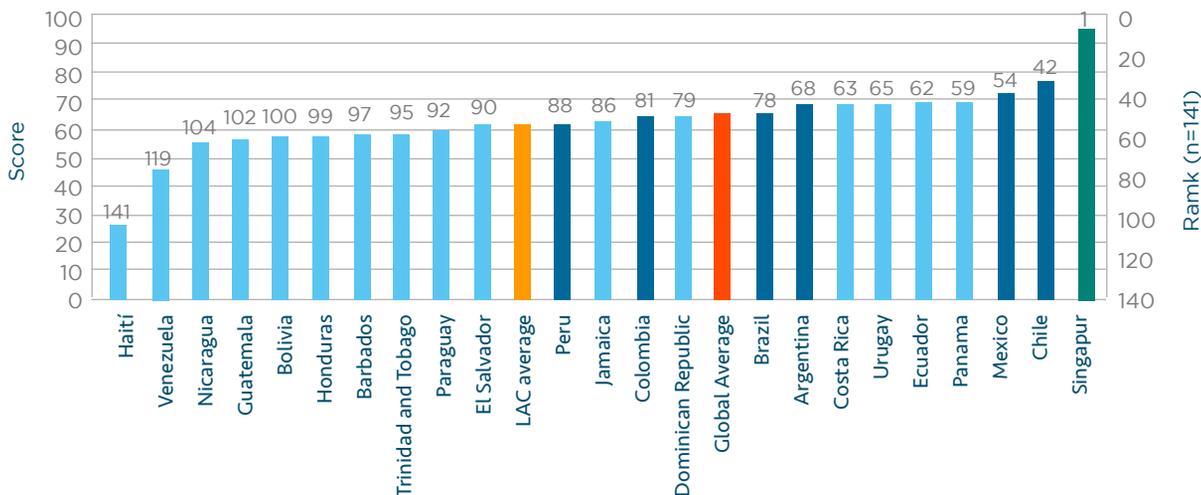
Globally, LAC countries fare below average with respect to infrastructure competitiveness, according to a component of the World Economic Forum’s 2019 Global Competitiveness Report rankings⁵⁹. The LAC region received an average score on this

particular metric of about 7% lower than the global average. Chile, the highest ranking LAC country in the index, was ranked 42th out of 141 countries in the study with most LAC countries falling in the bottom half of all index constituents.

⁵⁹ World Economic Forum, Global Competitiveness Report 2019: How to end a lost decade of productivity growth (2019)

Figure 10

World Economic Forum Global Competitiveness Ranking, 2nd Pillar: Infrastructure (2019)



The infrastructure gap in Latin America is believed to be significant. A range of studies estimate that the region needs to invest at least 5% of GDP in infrastructure per annum to meet current demand (variously defined). Although the results vary widely depending on the data and methodology, most estimate the gaps to be around 2.5% of GDP or about \$US 150 billion per annum.

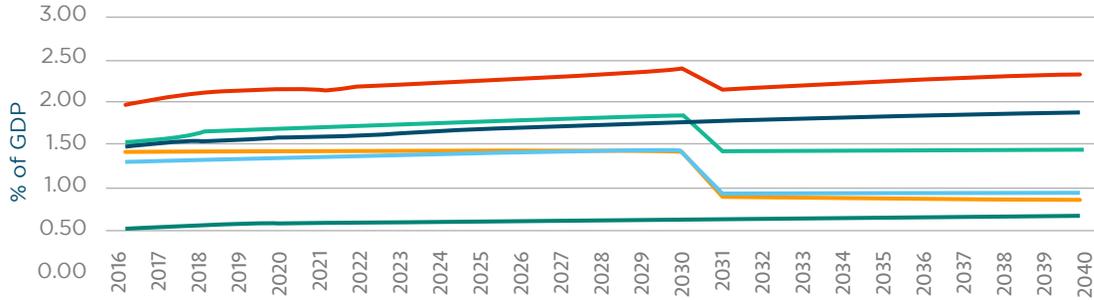
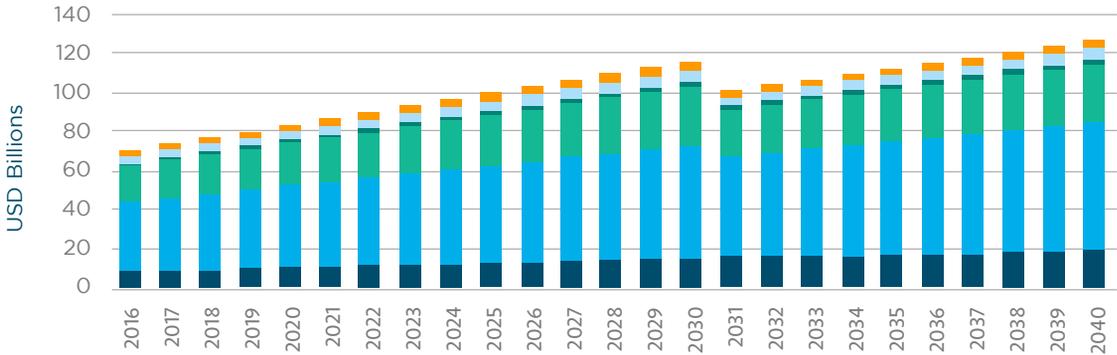
As an example, GI Hub data⁶⁰, projects a total need of just over 4% on average across the 6 main countries focused on in this report, with an average aggregate gap of 1.8% over the 25-year period ending 2040.

The charts below show a number of indicators regarding the infrastructure gap between current investment projections and achieving the SDGs across the six countries included in this study, through 2040. Argentina, Brazil, and Mexico have the largest gaps in absolute terms, as well as in terms of the percentage of GDP the gap comprises in each country, with Brazil's projected gap exceeding 2%. The SDGs were agreed to sunset in 2030, which is the reason for the decline in the figures between 2030 and 2031 below – the additional investment to meet the SDGs is no longer applicable in those years.

⁶⁰ GI Hub, Global Infrastructure Outlook

Figure 11

GI Hub Projections of Infrastructure Investment Needs and Gaps



2.5. SUSTAINABLE INFRASTRUCTURE INVESTMENT PIPELINE

While all six LAC countries reviewed in this report have issued some indications of their investment pipelines in the near and longer-term, either through national development plans, discrete infrastructure investment announcements by governments, or through PPP-focused websites that aggregate requests for proposals (RFPs) and project tenders in order to facilitate efficient bidding processes. The table below provides an indication of announced or tendered country pipelines across different sustainable infrastructure industry sectors. There are strong opportunities to advance the development of sustainable infrastructure across these six countries. These figures represent a mix of announced RFPs/tenders for PPP infrastructure, as well as national development plan announcements, however it is important to note that there may be some uncertainty with respect to government plans in countries where governments have changed since the projects were announced.

The below estimates of the sustainable infrastructure pipeline for each of the six countries represent the portion of the Total Announced or Tendered Pipeline that would fall under the classification of sustainable based on the following general guidelines. These are meant to be indicative and illustrative, rather than precise).

» **Transport:** The general orientation to classifying transport projects as being sustainable relates to whether those projects provide more efficient transportation that reduces reliance

upon fossil fuels. In general, these guidelines include mass transit projects, cable car/tram systems, and freight rail, but does not include airports, road projects, or port developments.

» **Energy:** In general, energy projects that involve renewable energy and/or low carbon sources, including onshore and offshore wind, solar (both photovoltaic and solar thermal), geothermal, nuclear, biomass, waste-to-energy, transmission and distribution lines (which generally seek to increase efficiency and expand energy access) and small hydroelectric developments. Excluded are any fossil fuel developments, including extractive activities, coal, natural gas, or oil-fired electric plants, and any related fossil fuel distribution infrastructure, including pipelines.

» **Water and Sanitation:** Projects that enhance clean water access and improve public health are generally considered sustainable in this report, including development of drinking water reservoirs, and upgrades to water distribution systems and wastewater treatment plants. Not included are agricultural irrigation projects, which, unless they are expressly developed with water efficiency in mind, can create increased water stress and competition in certain regions.

» **Social:** Healthcare and educational facilities are generally considered sustainable for the purposes of this report, as they contribute to the advancement of strong societies. Penal facilities and other municipal buildings were not considered sustainable, as their impacts on society are not as uniformly positive.

Table 4

Infrastructure Investment Pipelines, in USD \$ Millions

	 Total Announced or Tended Pipeline	 Sustainable Infrastructure Pipeline ⁶¹	 Sustainable Infrastructure Pipeline Overview (All figures in U.S. Dollars)
Argentina	\$129,100	\$85,500	In 2015 the government announced \$33 billion in transportation sector investments, and \$36 billion for the energy sector. ⁶² In addition, the Plan Belgrano directs \$16 billion in investment into social, water, and sanitation infrastructure. ⁶³
Brazil	\$563,000	\$197,000	In 2013 the government announced a \$100 billion, 20 year plan to extend sanitation services to 90 percent of Brazilians, averaging \$5 billion per year. ⁶⁴ In 2017 the government announced a 10-year, \$430 billion Energy Expansion Plan, ⁶⁵ and currently has a robust pipeline of tendered sustainable infrastructure projects on its Investments Partnership Program (PPI) website, totaling over \$8 billion as of July 2019. ⁶⁶
Chile	\$23,300	\$4,300	The government launched the Fondo de Infraestructura (FOINSA) in 2018, a \$9 billion fund that will provide financing to PPPs in infrastructure across all sectors. Utilizing the new Fondo de Infraestructura as a key element of Chile’s infrastructure development plans, the government has outlined 24 highway projects worth about \$10 billion in total, 18 hospital concessions requiring total investment of between \$3 and \$10 billion, seven airport enhancement projects totaling more than \$500 million, and other transportation projects including port facility expansions and public transit investments. ⁶⁷

⁶¹ Figures are estimated as at July 2019 based on governmental projections and/or tendered RFPs across Transportation, Energy (excluding fossil fuel-based energy), Water and Sanitation, and Social infrastructure plans. The definition of SI as used in this paper is located in Appendix A.

⁶² S&P (2017). “Are The Pillars Of Argentina’s Infrastructure Investment Program Sturdy Enough?” Available at: https://www.spratings.com/documents/20184/1634005/CO_IFR_April5_2017_AreThePillarsOfArgentinasInfrastructureInvestmentProgramSturdyEnough/1591499d-7f19-4d5e-a007-76415a8234c5.

⁶³ Presidencia de la Nación, <http://www.efinl.mrecic.gov.ar/en/content/infrastructure-program-belgrano-plan> | http://www.efinl.mrecic.gov.ar/userfiles/Unidad%20Plan%20Belgrano_3.pdf.

⁶⁴ Federal Republic of Brazil (2013). National Basic Sanitation Plan. Available at: http://www2.mma.gov.br/port/conama/processos/AECBF8E2/Plansab_Versao_Consehos_Nacionais_020520131.pdf.

⁶⁵ Empresa de Pesquisa Energética (2017). Plano Decenal de Expansão de Energia 2027. Available at: <http://www.epe.gov.br/pt/publicacoes-dados-abertos/publicacoes/plano-decenal-de-expansao-de-energia-2027>.

⁶⁶ PPI (2019). “Schedule of Projects”. Available at: <https://www.ppi.gov.br/schedule-of-projects>. Accessed May 28, 2019.

⁶⁷ Tapia and Perez (2018).

Colombia	\$181,500	\$17,100	The government released its proposed 2018-2022 national development plan in February, 2018, estimating that about USD\$110 billion of total infrastructure investment would be needed during that four-year period, across transportation, water, sanitation, health, and energy infrastructure sectors. ⁶⁸ While a significant portion of that overall budget will be dedicated to continuing the 4G highways development program, water and wastewater infrastructure are estimated to receive funding of 29.2 trillion pesos (approximately \$9 billion) and 12.2 trillion pesos (approximately \$4 billion) respectively.
Mexico	\$192,900	\$21,800	In support of the goals of the 2014-2018 NIP, the Mexican government had developed <i>Proyectos Mexico</i> (Projects Hub) in order to generate increased visibility of essential energy and infrastructure projects across the country. As of this writing, projects were tendered or in development totaling (approximately) \$12 billion in the electricity sector, \$10 billion in transportation, \$7 billion in telecommunications, \$2 billion in water and environment, and \$1.8 billion in social infrastructure. The government is currently developing a new National Development Plan that will be in effect through 2023, which may shift some sectoral plans.
Peru	\$11,000	\$7,000	In 2018, ProInversión, the Private Investment Promotion Agency, which plays an especially important role in the Peruvian government's outreach to the private sector - identified a portfolio of infrastructure projects that it intends to seek private financing for through 2020, with 50 projects totaling approximately \$11 billion across a range of key sectors. In the sectoral breakdown, 40% of the investment, or about \$4.4 billion, would go to transport-related projects, and another 8%, or \$920 million, would be directed toward energy projects. ⁶⁹ ProInversión also curates a list of infrastructure projects tendered, or in development, for transparent access for investors. ⁷⁰
Total	\$1,100,800	\$332,700	

For further details on criteria with which to assess and categorize sustainable infrastructure projects, see the IDB Sustainable Infrastructure Framework paper⁷¹.

⁶⁸Javiera Gracia (2019). "Colombia sets infra goals in 2018-22 development plan." BN Americas. Available at: <https://www.bnamericas.com/en/news/privatization/colombia-sets-infra-goals-in-2018-2022-development-plan>.

⁶⁹ProInversión (2018). "Peru: Investment Opportunities." Presentation deck. Available at: https://www.proinversion.gob.pe/RepositorioAPS/1/2/JER/PROJECT_PRESENTATION/2018/ProInversion-Cartera-18-09-INGLES.pdf.

⁷⁰ProInversión (2019). "Electricity Projects". Available at: <https://www.proyectosapp.pe/modulos/JER/PlantillaProyectosResumenes.aspx?are=1&prf=2&jer=5955&sec=54>. Accessed May 28, 2019.

⁷¹IDB, What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Lifecycle (2018)



3

**KEY CHALLENGES
AND OPPORTUNITIES**

While there is wide awareness of the infrastructure funding gap, both globally and in LAC, making progress in a given region requires understating the current national and sub-national dynamics. For that reason, IDB Group and Mercer convened a number of roundtable discussions in Brazil, Argentina, Colombia and Mexico. In addition, IDB Group and Mercer conducted a survey of investors regarding the investment in infrastructure in LAC.⁷²

While good progress is being made (e.g. particularly around the evolution of PPP enabling legislation in many LAC countries), the discussions highlighted that challenges remain, and opportunities identified. While many of the challenges are common across regions, progress and best practices can be leveraged across regions.

1. Government policy must incorporate and remain committed to sustainable infrastructure.

Government policy dictates the type of infrastructure that is developed and financed. Governments must adopt policies and guidelines that incentivize the mitigation of environmental, social and financial risks, and that promote investment in low-carbon, resilient and inclusive projects. Lack of sustainable infrastructure pipeline is the biggest challenge. Investors are also concerned about political risk and lack of commitment to sustainable infrastructure.

- » In Argentina, the focus of the PPP program has been **on mitigating credit and political risk**, with climate and sustainability getting less attention. That

said, there is awareness in Argentina that several risks (such as flooding and droughts) could have significant impacts on the financial profile of the transport assets recently tendered.

- » In Colombia, as well as in the rest of the region⁷³, **community relations are a key challenge** on infrastructure projects. Licensing and negotiations with communities still represent the major bottleneck for the advancement of the 4G (road) projects and in general for infrastructure projects. Social considerations need to be understood and addressed, while dialogue between the public and private sectors is important.

2. Effective policy implementation is critical to success.

Project planning, preparation and execution must be done effectively and with sustainability criteria and considerations throughout.

- » **Clearly defined supportive policies and economic incentives** are needed to ensure that infrastructure development and investment are prioritized. It was cited that in Mexico, governors and mayors speak of the importance of infrastructure development and investment, yet the incentives and development plans are lacking; some countries have implemented favorable tax policies to support investments in beneficial infrastructure and attract private sector capital.

⁷²IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

⁷³IDB (2017). "Lessons from Four Decades of Infrastructure Project-Related Conflicts in Latin America and the Caribbean" <https://publications.iadb.org/en/lessons-four-decades-infrastructure-project-related-conflicts-latin-america-and-caribbean>

- » **Capacity building** is necessary for the people who prepare the projects. With different priorities, not everyone understands why they need to embrace the concept of sustainable infrastructure. Development plans must include programs to improve public management and establish strategies and project planning to support successful execution as well as a transversal axis covering sustainability considerations.
- » **Weak financial management** can hinder progress. Projects must be financially viable and well managed as a first priority; if that concern is addressed, then the stakeholders (investors and financiers specifically) can prioritize sustainability.
- » Green bond certification processes require additional time and cost, but they have clear benefits (e.g. certified use of proceeds, etc.). In one instructive example, the Monetary Authority of Singapore⁷⁴ subsidizes independent verifications for green bonds issued within its jurisdiction. If a similar program were to be launched in the LAC region, environmental taxes gathered from businesses could be used to cover such costs. Alternatively, self-financing projects have a lower risk of being politicized (e.g. states not relying on federal financing).⁷⁵

3. Regulatory uncertainty and corruption represent the most significant risks to investing in emerging market infrastructure. While regulatory

uncertainty is a common concern for infrastructure investors globally, it is a more significant issue in emerging markets than globally.

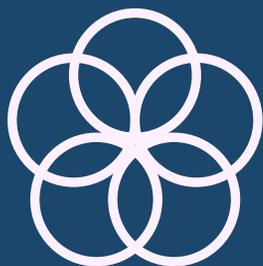
- » Transparency in the use of resources helps to depoliticize the financing process. If the destination of these resources is explained, it is possible to increase interest and support for projects.
- » There must be reliable government signals that a project will prosper and that it will follow a clear path. This can be particularly important when there is a change in government.
- » One way to address the top concerns identified by survey respondents would be to educate them on improvements being made in LAC to address political risk and to shore up project pipelines.
- » Regulatory risks can readily be addressed through the thoughtful application of political risk insurance which is readily available through DFIs and private insurers in certain countries. However, some survey respondents – notably pension funds – indicated a lack of awareness of political risk management tools.

One approach to overcoming identified obstacles is for investors to seek to create durable partnerships with separate institutions that can facilitate mutually beneficial outcomes. The case study example below of Blue like an Orange Sustainable Capital's partnership with IDB Invest provides useful insights for others.

⁷⁴Monetary Authority of Singapore (2019). "Sustainable Bond Grant Scheme." Available at: <https://www.mas.gov.sg/schemes-and-initiatives/sustainable-bond-grant-scheme>.

⁷⁵IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

17 PARTNERSHIPS FOR THE GOALS



Blue like an Orange Sustainable Capital (“Blue like an Orange”) is a pioneering asset manager targeting in a first step mezzanine debt investments in companies across Latin America and the Caribbean through its Blue like an Orange Sustainable Capital Latin America Fund I (“Fund”). The Fund is targeting investments in multiple sectors including sustainable infrastructure and technology enabled services, agriculture, education, healthcare and access to finance. The Fund was developed explicitly to advance the SDGs at scale and to achieve market rate returns for investors.

One of the distinguishing aspects of Blue like an Orange’s approach is its partnerships with different institutions, including with Development Finance Institutions (DFIs). The Fund entered into a co-financing framework agreement with the private sector arm of the Inter-American Development Bank Group, IDB Invest⁷⁶. Through this agreement, transactions that meet certain eligibility criteria may be co-financed by the Fund and IDB Invest.

SDG 17 - Partnerships for the Goals includes a target (17.3) which seeks to “mobilize additional financial resources for developing countries from multiple sources”⁷⁷. In working with IDB Invest, Blue like an Orange is seeking to do just that. Specifically, the IDB Invest co-financing framework agreement affords the Fund a **variety of benefits** including the following:

Co-financing: IDB Invest has an existing network of partners and investees throughout the LAC region with \$11.6B in funds under management. Through this co-financing agreement, transactions that meet certain eligibility criteria may be co-financed by the Fund and IDB Invest.

Preferred Creditor Status: When participating with IDB Invest under an A/B Loan structure, the Fund will benefit from IDB Invest’s *de facto* preferred creditor status which provides several benefits including preferred access to foreign currency in times of foreign exchange crisis, transfer and convertibility risk and other privileges and immunities.

⁷⁶<https://www.idbinvest.org/en/news-media/iic-collaboration-blueorange-capital-aims-mobilize-1-billion-latin-america-and-caribbean>

⁷⁷<https://www.globalgoals.org/17-partnerships-for-the-goals>



Deal Process: As part of Blue like an Orange’s arrangement with IDB Invest both organizations can co-finance opportunities from each parties’ respective pipeline within certain parameters.

Sustainability: Blue like an Orange is able to benefit, on top of the use of the in-house tool developed by Blue like an Orange’s team “SDG Blue”, from IDB Invest’s proprietary DELTA tool to assess and monitor the development impact generated by the investments.

The Fund is also differentiated amongst other investment vehicles focused on LAC due to its positioning in the private debt

asset class. While investors in general strongly prefer to invest in EM infrastructure via equity, certain classes of investor (e.g. banks and insurers) are primarily interested in debt⁷⁸. As such a private debt vehicle may face different benefits/challenges in crowding in institutional investor capital than private equity vehicles which are more prevalent in the infrastructure fund market⁷⁹.

See the full Blue like an Orange case study [LINK TO BE ADDED] for more information on Blue like an Orange’s sustainable investment process and examples of its deal level implementation of sustainable solutions.

⁷⁸IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

⁷⁹See Figure 1 of the following document: <https://docs.preqin.com/reports/Preqin-Special-Report-Infrastructure-Debt-September-2016.pdf>



IDB Invest’s Impact Management Framework includes a series of tools to support the investment process from beginning to end, helping to guide project selection and structuring, manage and evaluate portfolio performance, add value to clients, and ensure continuous learning. The SDGs are embedded throughout this process.

At the origination stage, a *Strategic Selectivity Scorecard* is used to identify areas with the highest potential development impact, in line with sector, institutional, and country strategies.

Next, the ex-ante development impact potential and additionality of each transaction is scored using the *Development Effectiveness Learning, Tracking, and Assessment tool (DELTA)*, and the *Financial Contribution Rating (FCR)* measures the financial contribution of each transaction to IDB Invest. Together, the DELTA and the FCR make up IDB Invest portfolio approach, balancing impact and financial sustainability to guide strategic decision-making. The DELTA is also used during the supervision phase to track project impact performance against targets and identify areas where corrective action may be needed. All projects receive a final evaluation to assess if they achieved the expected development impact targets, and some projects are selected for more in-depth evaluations to better understand what approaches work best and why.

Finally, completing the learning cycle, an analytics platform captures project performance data and lessons learned to inform the design of future operations, and produces portfolio-level insights.

4. Financial institutions (FIs) are working on sustainability tools but lack scale and coordination.

While FIs are showing increased knowledge of sustainability certifications, there is more progress needed on coordination at the sector and market level on how the standards and labels could be used, clarity of the definition of the opportunities, and increased awareness of the market (primary and secondary) of sustainable assets that could be generated.

- » Local capacity building can support adoption. Technical training on green and sustainable bonds can raise awareness. Third parties are needed to provide certification of sustainability credentials (e.g. what qualifies as a green bond).
- » In Colombia, the BVC (the stock exchange) has promoted the development of green bonds through tools that support the development and issuance of these types of bonds, and is looking to support sustainability in equity issuances as well (real estate funds and infrastructure).⁸⁰
- » In Argentina, the CNV (the national securities commission) released guidelines for green, social and sustainable bonds⁸¹ in 2019, following a consolidation process. In addition, the BYMA stock exchange has launched new indices dedicated to sustainability. Although the listed market in Argentina is still very small, the index and related ESG protocols will provide guidance to companies on what and how to report on sustainability metrics.

- » In Mexico, the government and the national development bank for infrastructure (Banobras) have been working with the IDB on taxonomy and indicators to identify sustainable characteristics of projects and/or public expenditures. Having an effective methodology to evaluate sustainability is important in the financing process, while it is important to consider that any indicator and/or taxonomy for Mexico must also consider international practices and benchmarks. See box for more information.



⁸⁰ BVC (2020). “Sustainable Instruments: Bonds”. Available at: <https://bvcsostenible.bvc.com.co/instrumentos?lang=en>.

⁸¹<https://www.boletinoficial.gob.ar/detalleAviso/primera/203933/20190322>



Mexico's infrastructure platform incorporates sustainable infrastructure taxonomy

Mexico has developed a Projects Hub (Proyectos Mexico) to link investment projects with domestic and foreign potential investors, encouraging long term financing for infrastructure. This hub is managed by Banobras (Mexico's state owned development bank for infrastructure) in close coordination with entities and agencies of the public and private sectors.

Proyectos Mexico consolidates information on infrastructure projects in Mexico, provides information about the economic situation of the country, the development of projects and the current stage of each one. The project hub will reduce the cost of research and it will promote investment in infrastructure. The objective of the project hub is to provide vision, transparency, and comparability of projects to investors. As of the third quarter of 2020 there are more 700 investment opportunities in infrastructure and energy. For each of these projects, there is a need to identify the relevant indicators for each stage of a project, determine if the required information is public, and identify what information is needed but not yet known.

Based on the experience of Banobras with Proyectos Mexico, key success factors in developing such an infrastructure project platform are:

1. Establish a dedicated team,
2. Start with a simple design, and grow by stages,
3. Promote the web page, and
4. Commit to continuous improvement.

Banobras is working with some states in Mexico on collaboration agreement to include state projects on the Proyectos Mexico site. This collaboration is formalized through mutual agreements (e.g. that the state will ensure adequate due diligence on projects before they are added to the site, and maintain the data on the site; and Banobras will support the states on loading and administering the data). So far, Banobras has entered into 3 such agreements (with Quintana Roo, Aguascalientes and Durango) and is in talks with 9 other states.

In theory, every project must be sustainable and the idea of the platform is to establish the criteria for classifying and structuring them. In collaboration with the IDB, Banobras took a sample of 20 projects and has carried out a sustainability analysis (using the four dimensions of IDB's Sustainable Infrastructure Framework: economical, environmental, social, institutional) and for

the 4 investment phases (pre-investment, bidding, execution, operation). Some of the resulting Project Sustainability Datasheets are already available on the platform.

Following this phase is the training stage to carry out this same analysis with other projects in order that the information is well structured. That way, investors will be able to identify if a project has completed a pre-feasibility study and how the project aligns with Mexico's national planning.

In the meantime, the Proyectos Mexico platform identifies projects to be "Green Projects" if they fall under one of four categories: (i) Renewable Energy; (ii) Energy Efficiency; (iii) Water Efficiency and Wastewater Management; and, (iv) Prevention and Control of Pollution.



5. Some investors have an aversion to the risks of long-term infrastructure projects;

though declining global investment yields present an opportunity for investors to increase their allocation to real assets – especially infrastructure.⁸³

- » Methodologies are needed to support improved understanding of risk exposure, risk appetite, and risk mitigation actions and instruments. Improved understanding, including eliminating information asymmetry, amongst stakeholder groups would enable more informed deal structures, resulting in better outcomes for sustainable projects.
- » The mentality of some investors on ESG needs to change. ESG adoption has to become the norm in business and investment. ESG considerations enhance risk mitigation. In the long-term, sustainable projects will be more profitable. Investors need to look beyond the short-term for the real value in ESG approaches.
- » LAC investors are much less likely than investors from other regions to have any dedicated ESG resources speaking to a lack of related expertise in the region. Many investors are still more likely to outsource ESG assessment or treat ESG as a compliance issue than embed ESG assessment into core due diligence or investment management functions.⁸⁴
- » International investors are increasing their ambition and expectations on ESG which can have a positive influence on LAC domiciled investors. Direct cross-border partnerships between international investors with



ESG resources and domestic investors with in-country presence and local investment pipelines could promote positive knowledge transfer on ESG strategies and best practices towards an implementation in emerging economies. See the box below on a case study about CDPQ as an example of potential partnership models.

⁸³ BlackRock (2021). “2021 Global Real Assets Outlook.” Available at: <https://www.blackrock.com/institutions/en-zz/literature/whitepaper/global-real-assets-outlook-2021.pdf>.

⁸⁴ IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

CDPQ supports capacity building through local partnerships

Caisse de dépôt et Placement du Québec (CDPQ) is Canada's second largest institutional investor with assets under management of \$CDN 365 (\$USD 287) billion as at December 31, 2020. CDPQ has a strategic focus on sustainable, long-term investing, and since 2017 has prioritized climate change. In 2019, CDPQ and an alliance of the world's largest pension funds and insurers committed to carbon-neutral portfolios by 2050 (the Net-Zero Alliance⁸⁵). This longer term commitment is supported by shorter term targets which include increasing the fund's low carbon investments to \$CDN 32 (\$USD 25) billion by 2020, and a 25% reduction in carbon intensity between 2017 and 2025. These targets are part of CDPQ's broader climate change strategy that was released in 2017⁸⁶. These commitments have direct implications for CDPQ's investments in growth markets which based on current trends promise to make up a larger portion of the investor's portfolio going forward.



*“The **Net-Zero Alliance** is the recognition that institutional investors collectively have an important role to play in fostering the energy transition the world needs. For investors like CDPQ, there are so many opportunities to earn commercial returns by investing in low-carbon solutions and to work with portfolio companies to decarbonize. Combined with the necessary changes in public policies, investors’ actions will induce real change in every sector.”*

CDPQ CEO, Michael Sabia

⁸⁵<https://www.cdpq.com/en/news/pressreleases/investors-make-unprecedented-commitment-to-net-zero-emissions>

⁸⁶https://www.cdpq.com/sites/default/files/medias/pdf/en/investment_strategy_climate_change.pdf

CDPQ holds the view that its contribution as an investor extends beyond the investments in its portfolio and reciprocally that the success of its investments depends upon the broader economic context in which they are situated. Therefore, CDPQ seeks to promote economic development around the world and greater integration of non-financial issues into investment decision-making processes in an effort to make its portfolio more resilient. CDPQ has identified five growth market regions for strategic focus, including three in Latin America – Brazil, Colombia and Mexico.⁸⁷

In these growth markets CDPQ’s strategy is to invest with local partners for two reasons: i) to help develop local capital markets, and ii) reduce political risk (e.g. local governments are less likely to cancel a project if a local pension fund is invested). CDPQ’s partnership approach to investment in growth markets offers a potential win-win opportunity; CDPQ benefits from the involvement of a trusted local partner with strong local networks and an ability to source local ideas whereas the local partner has the opportunity to learn from and gain access to the experience of one of the largest and most sophisticated private infrastructure investors globally. CDPQ’s commitment to sustainable investing is also expected to “trickle down” to local investors providing a further benefit for the region since Latin American investors are much less likely to have sustainable investment policies in place versus investors in other

regions⁸⁸. Some of CDPQ’s key strategic partnerships in Latin America are as follows:

- In November 2018, an infrastructure co-investment was officially launched, led by Financiera de Desarrollo Nacional (“FDN”) and including all Colombian pension fund administrators (AFPs) to co-invest in infrastructure with CDPQ. The objective of the joint investment platform is to make long-term equity investments up to a total \$USD 1 billion in infrastructure projects and companies.⁸⁹
- Since 2015, CDPQ and Grupo SURA have participated in the financing of infrastructure projects in Colombia and elsewhere. In December 2018, they announced a region-wide strategic partnership for Latin America through the acquisition by CDPQ of a strategic minority interest in Grupo SURA’s subsidiary SURA Asset Management (SURA AM), for a total amount of US\$247 million, following regulatory approval.⁹⁰
- In 2015 CDPQ and CKD Infraestructura México, S.A. de C.V. (CKD IM) created a co-investment platform to invest in infrastructure opportunities in Mexico. The platform aims to invest up to MXN 35.1 billion (CAD 2.8 billion) over five years. CDPQ will hold a 51% interest in the co-investment vehicle. CKD IM, whose shares are listed on the Mexican Stock Exchange, will hold the remaining 49%.⁹¹

⁸⁷ CDPQ is among the 10 largest institutional investors in infrastructure in the world, with an infrastructure portfolio of \$CDN 27.8 (\$USD 21) billion at December 31, 2019 (8.1% of the total portfolio) in 13 countries. CDPQ makes direct investments in companies involved in various types of infrastructure, including ports, airports, highways, wind farms, public transit systems, and energy transportation and distribution networks.

⁸⁸ IDB and Mercer (2020). Investing in Sustainable Infrastructure in Latin America: Survey Results 2019. Available at: <https://publications.iadb.org/en/investing-sustainable-infrastructure-latin-america-survey-results-2019>.

⁸⁹ <https://www.cdpq.com/en/news/pressreleases/creation-of-a-private-capital-fund-led-by-fdn-and-including-all-colombian>

⁹⁰ <https://www.cdpq.com/en/news/pressreleases/cdpq-and-sura-announce-a-region-wide-strategic-partnership-for-latin-america>

⁹¹ <https://www.cdpq.com/en/news/pressreleases/cdpq-and-leading-mexican-institutional-investors-create-co-investment-platform>

6. Particular attention from development finance institutions to the investment structuring process could support investors to scale up commitments.

- » Standardization of well-structured de-risking instruments is important. This makes it easier for investors to analyze and they are better received. The instruments / projects should be homologated in format and that they are easy to read (i.e. standard format for key elements of the project and/or financing structure).
- » Bundling of projects is needed to bring investment opportunities to the

market of sufficient size. Investors look for large pipelines (e.g. 10 - 15 years, \$USD 50 million or more). For example, renewable energy and/or energy efficiency projects can be bundled. Project banks at the state / municipal level can support planning, securing the relevant technical knowledge and coordination with the federal level. Public financing models can be used to isolate / insulate risks when projects across different municipals are bundled (e.g. so that a missed obligation in one municipality does not affect another).

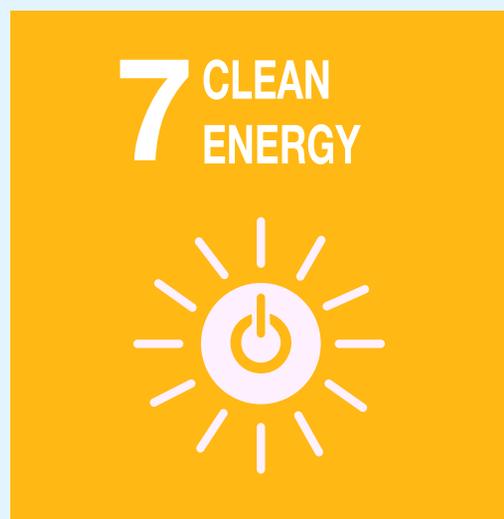
- » As revealed in the IDB-Mercer investor survey a large portion of investors prefer to access infrastructure via intermediate private equity investments, particularly pension funds. Infrastructure funds can facilitate that type of investment. See box for Actis case study.



Actis Energy funds represent an excellent example of how institutional investors access sustainable infrastructure in emerging markets

With over US\$5 billion committed across four energy funds – a sizeable portion of which has or will be deployed in low-carbon assets that have undergone ESG review – Actis is one of the leading private sustainable infrastructure investors active in emerging markets today.

Actis⁹² has an unparalleled heritage in emerging markets, investing in private equity, real estate and energy infrastructure. Actis was established in 2004 when it spun out from CDC Group plc (“CDC”), the UK government-owned development finance institution (“DFI”). Since its spin out in 2004, Actis has grown to become one of the leading independent fund managers focused exclusively on investing in growth markets. The Firm has raised US\$16 billion from over 360 institutional investors⁹³



including pension funds, endowments, sovereign wealth funds, fund of funds, insurance companies, corporates, family offices and high net worth individuals.

The Actis Energy Funds, Actis Energy 3 and Actis Energy 4 (“AE3” and “AE4”), have a high exposure to renewables and Latin America (“LAC”). AE3 closed in 2013 with US\$1.1 billion in commitments. This fund is now fully committed, with over 90% exposure to renewable technologies⁹⁴ and over 50% exposure to LAC⁹⁵. AE4, the successor fund to AE3, reached final close in 2017 of US\$2.75 billion in commitments. The fund’s exposure to renewables is 73% and its exposure to LAC is expected to be similar to AE3.

⁹² <https://www.act.is/>

⁹³ As at 30 June 2019

⁹⁴ Based on pledged capital (as at September 2019)

⁹⁵ Defined as committed capital (as at September 2019)

⁹⁶ Based on pledged capital (as at September 2019)



As revealed in the IDB-Mercer investor survey a large portion of investors prefer to access infrastructure via intermediate private equity investments, particularly pension funds. We also know that much of the investment needed in the LAC region to achieve alignment with the Paris Agreement goals will require significant new equity capital to support the development of greenfield infrastructure assets. Thus Actis' ability to garner private capital for this purpose is potentially illustrative of what other fund managers (and DFIs as support)

might do to crowd-in additional private capital. From a sustainability standpoint, Actis is also well-recognised for its ESG integration efforts, which stem in part from the organisation's DFI pedigree. Moreover, Actis' Energy funds are notable for their high exposure to renewables relative to other energy infrastructure funds available in the market.⁹⁷

See the full Actis case study for more information.

⁹⁷ According to Preqin, renewable energy deals have accounted for about 40% of total private infrastructure deals in the market for the years 2012-2016 (Source: Preqin Infrastructure Deals 2016 Data Pack) and this percentage has increased notably in 2017. On a volume adjusted basis the percentage of renewables is likely somewhat lower (e.g. in the ranges of 30% in 2016).

Many of the challenges and opportunities raised by roundtable or survey participants, can be addressed through robust application of the fourth dimension of the IDB Sustainable Infrastructure Framework (Institutional Sustainability) as outlined in the figure below:

- » An alignment of pipelines and investments to national and international commitments would reduce policy risks and uncertainty across political cycles.
- » Strong anticorruption rules and policies would reduce the perception of the possibility of disruptions due to corruption and embezzlement that have led to financial losses and many project cancellations.
- » Transparency on projects' design and features, as well as strengthening the bidding processes would increase investors' participation into the markets and increase competition for projects.

Figure 12

Sub-Dimensions and Attributes of Institutional Sustainability⁹⁸

	 Alignment with Global and National Strategies	 Governance and Systemic Change	 Effective Management Systems and Accountability	 Capacity Building
Fourth Dimension: Institutional Sustainability	<ul style="list-style-type: none"> • National and international commitments • Sector, land use and urban planning integration 	<ul style="list-style-type: none"> • Corporate governance structures • Anti-corruption and transparency framework 	<ul style="list-style-type: none"> • Project design and feasibility • Project compliance • Sustainable bidding and procurement <ul style="list-style-type: none"> • Integrated environmental and social impact assessment • Management systems and accountability • Project information monitoring and sustainability tracking • Management of existing liabilities 	<ul style="list-style-type: none"> • Integration of technological advances • Knowledge transfer and collaboration <ul style="list-style-type: none"> • Regulatory, institutional and local capacity • Data collection, monitoring and local evaluation • Capacities for implementation

⁹⁸ IDB, Attributes and Framework for Sustainable Infrastructure (2019)

NTD: These spotlights on Colombia, Brazil, Argentina and Mexico (from the roundtables can each be a full page spread or in the appendix).



SPOTLIGHT ON COLOMBIA

Colombia has made significant progress towards attracting additional private capital for investment in domestic infrastructure over the past two decades with legal frameworks evolving substantively in favor of PPPs – notably in the Transport sector – and low-carbon development – notably in the energy sector.

Climate change is embedded at the highest levels of the Colombian government and has been included in the country's National Development Plan since 2006, with the latest version for 2018-2022 being fully aligned with the Sustainable Development Goals⁹⁹. In 2016 Colombia's National System of Climate Change (SISCLIMA) was formalized as the main institutional arrangement to coordinate and oversee climate change planning and implementation across multiple levels of government. During 2020, Colombia announced the country has been preparing a sovereign green bond program to be launched in 2021 to support low carbon and climate resilient investments part of the 2018-2022 National Development Plan.

Colombia has 25 years of experience in working with PPPs and over the last decade has put in place various regulation (most notably the PPP Law in 2012) and financial

systems designed to drive major increases in infrastructure development, and to attract and retain private investment for high quality projects across a range of sectors. The net effect of all of these regulatory advances has been to increase infrastructure investment in Colombia significantly since 2012, relative to GDP. Specifically, infrastructure investment increased to 6.5% of GDP in 2015, up from 3% in 2012. Specific guidelines have been developed to incorporate climate change into the regulatory framework of PPPs in Colombia.

Community relations are a key challenge that Colombia has to address. With the adoption of Infrastructure Law 1682, the investment landscape has been improved; however, there are gaps in sustainability issues. For example, the Infrastructure Law provides tools to support land acquisition obligations under PPP contracts, but licenses and negotiations with communities still represent the major bottle neck for the advancement of the 4G projects and in general for infrastructure projects.

The Unidad de Planeación Minero Energética (energy ministry) had developed energy transition scenarios to 2050 to assess the costs and benefits of future energy choices. Colombia's energy mix is highly dependent on fossil fuel resources (e.g. transport and industrial sectors). Going forward, electric power will increase, and the way to produce and consume electrical energy will be fundamental in any of the possible energy futures. Colombia currently produces the majority of its electricity from hydroelectric generation but is looking to diversify its power supply. Colombia has moved forward on renewable energy auctions.

Finding long-term financing to support the energy transition (e.g. green transmission lines) is another key challenge for Colombia. Although the great potential of renewable energy in Colombia is in its northern tip (La

⁹⁹ <https://www.oecd.org/dev/americas/Colombia-Country-Note-Leo-2019.pdf>

Guajira), developing projects of any nature there represents a challenge due to the major lack of connectivity (“Electricaribe”). In Colombia the association of energy services companies is very limited and there are very few companies that offer integrated energy efficiency services.

SPOTLIGHT ON BRAZIL

Brazil has faced challenging economic and political conditions in recent years, including a recession and economic austerity, widespread scandals, including Odebrecht, and a slow recovery overall. The outlook for sustainable infrastructure in the country has nonetheless improved, as the country has developed a robust regulatory support framework for private participation in infrastructure, has invested heavily in the development of a robust renewable energy pipeline, and appears set to support further investments in the clean energy economy going forward.



Brazil has been an early proponent of PPP frameworks for infrastructure development, and a combination of laws allow both federal and subnational governments to implement PPPs across all sectors. In addition, these laws promote transparency in procurement, protection from unilateral contract disputes for investors,

and dispute resolutions are all addressed in detail.¹⁰⁰

In 2017, EPE (Empresa de Pesquisa Energética) the government energy research agency, **unveiled a 10-year, \$430 billion (1.4 trillion-real) Energy Expansion plan¹⁰¹**, aimed at helping to drive the country’s economy out of recession through focused infrastructure investment in the energy sector, totaling 1 trillion reais in oil and gas, 370 billion reais in electric power, and another 33 billion reais in biofuels, with funding anticipated to come from both public and private sources.¹⁰² In order to facilitate the development of a robust pipeline of investment into the energy sector, EPE has a list of upcoming energy capacity auctions on its website¹⁰³, across both renewable energy and other energy sources.

Looking ahead, some of the challenges facing Brazil’s sustainable infrastructure market noted by investors are:

- » **For Institutional Investors:** There is currently a “suitability problem” between infrastructure projects and institutional investors. Infrastructure projects are difficult to govern if there are many small individual direct investors (as it might be with the retail debentures). Brazilian pension funds need a vehicle that provides diversification in infrastructure investments, but also the expertise and clear governance structure for infrastructure projects (without having to rely on input on project decisions from the investors themselves). BNDES is creating such a fund to help catalyze private investment in renewable energy, but more development will be needed.

¹⁰⁰ The Economist Intelligence Unit (2018). “Infrascope: Brazil.” Available at: <https://infrascope.eiu.com?country=BR>
¹⁰¹ Empresa de Pesquisa Energética (2017). Plano Decenal de Expansão de Energia 2027. Available at: <http://www.epe.gov.br/pt/publicacoes-dados-abertos/publicacoes/plano-decenal-de-expansao-de-energia-2027>.
¹⁰² Michael Place (2017). “Brazil publishes US\$430bn 10-year energy plan.” BN Americas. Available at: <https://www.bnamericas.com/en/news/electricpower/brazil-publishes-us430bn-10-year-energy-plan>.
¹⁰³ The list of auctions is available here (in Portuguese): <http://www.epe.gov.br/pt/leiloes-de-energia/leiloes>.

- » **For the Government:** A further innovation needed in Brazil is creating instruments to bring in foreign money and international investors, to create a bridge between investors and Brazilian assets. As it can be easier to create a USD dollar denominated fund outside of Brazil, due to strict Brazilian financial regulations, a plan for an offshore-listed ETF structure was discussed that could allow access to Brazilian domestic assets with some flexibility. This would still need support from the regulatory framework, and most probably an appropriate index in the secondary market, but it would be a step in the right direction.
- » **For the Capital Markets:** Given the large fixed income exposure in Brazilian pension funds (and that Brazilian pension funds have risk aversion to infrastructure in equity), the first step is to address how to increase the credit allocation to infrastructure (i.e. take more risk on infrastructure through credit risk), given that also the allocation to corporate bonds is low. There is a need for financing structures that are able to provide credit enhancement at specific stages of project, making the investment more attractive to private sector investors. Several potential solutions are being tested in the market, however this area will likely continue to require attention and innovation.

SPOTLIGHT ON ARGENTINA

Infrastructure was a key focus area for Argentina during its G20 presidency in 2018. Of the six LAC countries with the largest infrastructure investments, Argentina's

investments as a percentage of GDP are one of the lowest in the LAC region.

While in office from 2015 to 2019, the government of President Mauricio Macri placed infrastructure development as one of the country's top priorities, and as a consequence, an infrastructure initiative targeting \$33 billion in investment for the transportation sector and a \$36 billion for the energy sector until 2025 was announced. The energy program aimed to add 20 GW of renewable energy by 2025 to meet Argentina's target of 20% renewable within the power sector by 2025. In keeping with the administration's broader goal of fiscal responsibility, the government made PPP a major component of its infrastructure development plan establishing a new PPP law in November 2016.

Argentina's PPP program was received favorably by the international community including credit rating agencies¹⁰⁴ insofar as it establishes clear rules for project preparation and procurement, dispute resolution and financing. However, many aspects of the law remain untested in practice and questions remain as to the ability of the government to attract the amount of private capital needed to meet its spending goals.

Since 2016, Argentina's government awarded contracts for 6.5 gigawatts (GW) of new renewable energy capacity (including RenovAR 3.0 in 2019)¹⁰⁵. The RenovAR program was launched in 2016 to facilitate the achievement of the target mentioned above of at least 20 percent of Argentina's national power supply from renewable sources by 2025.



¹⁰⁴ Standard & Poor's, Are The Pillars Of Argentina's Infrastructure Investment Program Sturdy Enough? (2017)

¹⁰⁵ Forbes, Argentina May Be the Hottest Renewable Energy Market You Haven't Heard Of (2019)

Beyond RenovAR, the focus in PPPs has been on mitigating credit and political risk, but more needs to be done with climate and sustainability. Environmental risks, such as flooding and droughts, could have significant impacts on the financial profile of the transport assets tendered in recent years. On climate risk identification, the Ministry of Environment has been working on a platform—the System of Maps for Climate Change Risks (SIMARCC)—to be used with the infrastructure public investment platform, so that such climate risk tools could be applied to the development of PPP plans and tenders.

Going forward the key challenges for Argentina are:

- » **For the project sponsors,** to secure financing to enable financial closing. Under the PPP model, the financial risks are borne by the sponsor and many projects financial structures will depend on the ability to close using bank financing and/or capital markets using a project bond model. Argentina’s Productive Financing Law passed in May 2018 introduces significant reforms to Capital Markets Law No. 26,831 with the aim of modernizing the financial regulatory framework, and will enable the capital markets to better support project financing. So far there has been limited use of capital markets to raise funds but there are concerns amongst some participants about the sponsors’ ability to readily secure the required financing going forward.
- » **For the insurance industry,** to modernize its approach to pricing and underwriting environmental and catastrophe risks. Catastrophic exposures and potential options of insurance coverage are not

considered in the current regulation and so are regulated by ‘analogy’ to related exposures, but do not have due consideration for the magnitude of impact of a major catastrophic event and no consideration as to the role of state in such situations.

- » **For the insurance industry,** to modernize its approach to pricing and underwriting environmental and catastrophe risks. Catastrophic exposures and potential options of insurance coverage are not considered in the current regulation and so are regulated by ‘analogy’ to related exposures, but do not have due consideration for the magnitude of impact of a major catastrophic event and no consideration as to the role of state in such situations.

SPOTLIGHT ON MEXICO

Shifting Mexico’s economy onto a sustainable infrastructure pathway, where low-carbon, climate-resilient and inclusive projects are prioritized, is an ambitious task that will require significant commitment. Climate resilient infrastructure is particularly critical to Mexico, as according to the World Bank 71% of its economy is vulnerable to climate-related disasters¹⁰⁶. International demand for sustainable assets is increasing, the missing part is the supply of well-planned bankable sustainable pipeline of projects. If Mexico capitalizes on this trend if could set the country towards long term economic growth. There is some positive momentum. **From a finance perspective, Mexico has already demonstrated global leadership to promote sustainable finance.** For example, in 2016, Mexico’s Advisory Council for Climate Finance (*Consejo Consultivo de*

¹⁰⁶ See <http://www.worldbank.org/en/news/press-release/2017/08/04/bonos-del-banco-mundial-proporcionarana-mexicous360-millones-en-proteccion-ante-catastrofes>

Finanzas Climáticas - CCFC) was launched: the CCFC is a private sector led initiative seeking to create a green finance market by promoting dialogue among various market players financing green projects in the country. In terms of innovative capital markets instruments, Mexico City has pioneered the use of green bonds since 2016; the Mexico Federal government has issued the first multi-peril multi-region catastrophe bond globally¹⁰⁷, and in 2020 the first SDG-aligned sovereign bond for Latin America. Furthermore NAFIN was the first regional public bank to issue a green bond (USD 500m in 2015 to finance nine wind projects)¹⁰⁸, and Banobras issued its first sustainable bond on September 2017¹⁰⁹.

Taxonomy for Sustainable Infrastructure for Mexico is also progressing. The Investment Unit of the Ministry of Finance and Public Credit (SHCP-UI) and Banobras have been working with the IDB on taxonomy and indicators to identify sustainable characteristics of projects and/or public expenditures (see Box “x” on *Proyectos Mexico* platform).

The SHCP-UI is particularly focused on the Sustainable Development Goals (SDGs) number 9 (Industry, Innovation and Infrastructure) and 17 (Partnerships for the Goals). For example, the SHCP-UI is participating in the Global Initiative on Disaster Risk Management (GIDRM)¹¹⁰ organized by the German federal government, the objective broadly is to have regional stakeholders working in networks to jointly develop and strengthen approaches to improving disaster risk management worldwide. In Mexico, the road sector is the sector most affected by disasters.

The Mexican government is working on a Green Budgeting process

reflecting Mexico’s “Transversal Annex of the Budget of Expenditures of the Federation in Climate Change” (AT-CC). SHCP is leveraging a model proposed by the OECD¹¹¹ for green budgeting and the classification criteria of INEGI-CEPAL for the Expenditure on Environmental Protection. The aim is to link Mexico’s international commitments to the budget process¹¹². To this end, the SHCP is working with the IDB on a Prioritization and Allocation Methodology that can facilitate a prioritization of infrastructure projects where there is verifiable link between the PPI and the public environmental sustainability policies of Mexico.



¹⁰⁷ <http://www.artemis.bm/news/mexico-returns-with-new-fonden-2017-multi-peril-cat-bond/>

¹⁰⁸ <https://www.climatebonds.net/certification/nacional-financiera>

¹⁰⁹ https://www.gob.mx/cms/uploads/attachment/file/385766/Banobras_SB_Annual_Review_FINAL_ENG.PDF

¹¹⁰ <https://www.giz.de/en/worldwide/40120.html>

¹¹¹ <https://www.oecd.org/environment/green-budgeting/>

¹¹² <https://www.oecd.org/gov/budgeting/SHCP-Mexico-Jose-Francisco-Perez-De-La-Torre.pdf>

4

THE ROAD AHEAD



Driven by declining global investment yields, investors have been and will likely continue to increase their allocation to real assets – especially infrastructure. At the same time, investors are also increasingly looking for sustainable assets. As evidence grows regarding the benefits stemming from the integration of environmental, social and governance (ESG) factors into investment decisions, they are realizing that sustainable

assets can deliver better risk-adjusted returns. The following recommendations are derived from IDB and Mercer’s research and engagement with various capital market actors in the LAC region, and are intended to provide LAC investors and policymakers with constructive ideas for beneficial market interventions to scale up sustainable infrastructure investments, beyond ESG.



RECOMMENDATIONS



Deliver Better Project Preparation and Pipeline Development

International demand for sustainable assets is increasing, however in many LAC markets, a key missing aspect is a pipeline of well-planned and bankable sustainable infrastructure projects. A lack of bankable projects was ranked first in IDB/Mercer’s investor survey, amongst other barriers not specifically related to investment risks. This result aligns with other survey findings, although it may

also reflect a lack of awareness amongst international investors regarding the recent progress which has been made in LAC, with many governments developing sweeping infrastructure plans and others running several successful infrastructure auctions. While each of the countries evaluated in this study have devoted resources to promoting their countries as investment destinations and enacting supportive legislation to enable private investment in infrastructure, research revealed a high level of variation in the availability of transparent public-facing information regarding projects between countries.

The Mexico Projects Hub¹¹³ (“Proyectos Mexico”) website is a strong example of multiple stakeholder partners, including IDB Group, collaborating to develop a modern and effective data portal oriented toward attracting foreign private sector investment. In addition to serving as a transparent repository of information regarding individual projects that are at various stages of preparation and tendering, the site has sections that promote Mexico as an investment destination (“Why Mexico?”) and information to prospective investors regarding regulations and incentives (“How to Invest?”). The Sustainability Project Profiles, in particular, utilize a single standard for evaluation, allowing for the creation of benchmarks for comparison of material sustainability metrics across projects, facilitating informed investor evaluation and decision making. The web portal has been recognized with an award from the Latin American Association of Development Financial Institutions (ALIDE) for “best practice of the year in information, technical assistance and social responsibility”, validating the effectiveness of its approach.

IDB and development finance institutions could serve an important role in advising other client countries to develop similar infrastructure investment focused data portals, which can reduce significant barriers to attracting investment, particularly through raising investor awareness of opportunities and available financial incentives. IDB has produced a *Framework for Planning, Preparing, and Financing Sustainable Infrastructure Projects*¹¹⁴ that could provide a template for project disclosures through such future web portals. Creating a central clearinghouse of investor-relevant information can facilitate the development of dialogues between government agencies,

investment promotion institutions, and prospective investors, ensuring that projects are brought to market with adequate preparation having been completed and supporting documentation developed. However, as part of due diligence processes, development finance institutions should interface with the various tools providers identified in prior research to determine which may already have a relevant solution developed for the LAC market¹¹⁵.



Greater Use of Guarantees or Other Credit-Enhancement Tools

The aforementioned investor survey identified that, when considering investing in LAC sustainable infrastructure, there is a higher perception of governance and political/regulatory-related risks among non-LAC investors compared to investors based in the LAC region, reflecting (correctly or not) concerns that corruption and shifting regulatory regimes could affect the long-term value of such investments. Multilateral Development Banks (MDBs) including IDB can provide additional risk mitigation to assuage such investor concerns; for example:

- » **To mitigate political risk**, the IDB Guarantee Facility instrument can be used to issue political risk guarantees to financiers and investors taking part in PPPs which meet the Facility’s requirements. The instrument has been designed as a flexible mechanism to support the financial obligations from the government so to reduce credit risk of the projects. The projects or type of sub-industry under PPP will

¹¹³ Proyectos Mexico (2019). Available at: <https://www.proyectosmexico.gob.mx/en/home/>.

¹¹⁴ IDB Group (2018). “Framework for Planning, Preparing, and Financing Sustainable Infrastructure Projects”. Available at: <https://publications.iadb.org/en/publication/12946/idbg-framework-planning-preparing-and-financing-sustainable-infrastructure>

¹¹⁵ <https://www.mercer.com/our-thinking/building-a-bridge-to-sustainable-infrastructure.html>

be selected by the government but will have to undergo IDB due diligence and final sign off that demonstrates the relevant assets are acceptable to the IDB Program. The guarantee would be priced according to the risk of the project, but with a significant de-risking projects, the overall financing costs will be lower.

- » **To mitigate financing risk**, IDB Invest offers several products including loan facilities to support project finance structures in the bank market. IDB Invest also provides guarantees and other structures to support capital market investments. IDB Invest's B-Bond structure can achieve longer tenors and more competitive pricing than a typical A/B Loan¹¹⁶ by sharing IDB Invest's Preferred Creditor Status and reaching a broader investor base. It broadens the investor base for infrastructure projects by providing investors with the benefits of the IDB Invest umbrella.

The same survey identified that, while most investors are aware of the potential use of risk mitigation tools to enhance the bankability of infrastructure investments, critically, pension fund respondents indicated that, in contrast to other respondents, they may not be as familiar with the potential applications of political risk insurance products to protect against corruption or regulatory risks. This finding indicates that a significant group of long-term capital investors may not understand the full scope of risk mitigation products available to support SI investments, and may therefore not invest as much as they might otherwise. In prior research asset owners have indicated a lack of awareness regarding risk mitigation tools

available in emerging markets, a lack of understanding regarding their functionality and/or concerns about navigating the additional “red tape” associated with acquiring risk mitigation support¹¹⁷.

IDB Group could serve an important role in educating asset owners about the risk mitigation tools that are available and facilitating related access, and thereby help to bring more capital off the sidelines to invest in LAC SI.



Use Development Capital to Finance Sustainability Premiums

Engagements with investors revealed that ensuring that SI investments are suitably impactful and sustainable can add significant additional costs to potential transactions. Comments in a roundtable held in Mexico City in 2019 identified that, for example, attaining third party certifications for the use of proceeds of green bond issuances adds time and costs to the underwriting process, however the benefits of the certifications can be significant in attracting a broad range of investors. Moreover, some SI projects may have lower expected returns than equivalent brown assets due to the support of incumbent systems and evolving capital supply and demand dynamics (e.g. renewable power versus gas power). The additional due diligence or potential lower return for ensuring that ESG characteristics of investments are appropriately addressed can thus be considered a “sustainability penalty” added to the costs of SI projects which is offset by sustainability premiums

¹¹⁶ In a typical A/B loan, the IDB offers the A portion of the loan from its own resources. The Bank partners with other financial institutions to provide the B loan. Under the structure, the IDB is the Lender of Record in the transaction and acts as Lead Lender and Administrative Agent for the entire A plus B loan facility. Such structure offers benefits for both the borrowers and the financial institutions partnering with the Bank because it reduces the risk of the operation. Read more: <https://www.iadb.org/en/about-us/idb-financing/ab-loans-and-syndications%2C6061.html>

¹¹⁷ Mercer; African Infrastructure Investment: Challenges and Opportunities; 2018 – page 30-31

which often are not monetized via markets (e.g. clean air, lower emissions). Roundtable participants identified that federal environmental taxes can serve as a source of potential financing to offset or subsidize additional certification costs for socially-beneficial projects, as one example.

However, for development banks with mandates to enhance sustainability programs in partnership with client countries, offering financing to offset the costs of such certifications as a core component of assistance provided to countries could ensure that projects' beneficial characteristics are properly valued by investors. The IDB has launched the "Regional Green Bonds Program for Latin America and the Caribbean"¹¹⁸ in 2019 to support public sector issuers with the initial costs to set up green and sustainable bonds programs, as well as the costs to obtain certification and/or external verification. At the same time, in order to support reporting efforts and transparency in the market, the IDB and a coalition of partners have launched the Green Bond Transparency Platform¹¹⁹ which will promote exchange of information in the thematic bond market and hopefully lower the cost of generating and managing sustainability related information.



Increase Access to Capital Markets to Finance Sustainable Infrastructure Projects

While national governments seem to be able to still attract institutional investors,¹²⁰ severe challenges revealed by engagements with LAC investors and infrastructure market participants emerge for subnational governments in finding capital market financing for their infrastructure projects due to a lack of scale relative to national-level projects. Development banks can aid in the bundling of such smaller-scale projects to provide the pipeline and financing terms investors are seeking. For example, an issuance vehicle could be created whereby an entity that issues debt for a project to provide services would enter an agreement between the vehicle and relevant municipalities. The risk of the municipalities is isolated because none will assume a risk for another municipality. This would enable small, but productive projects across states or municipalities to be grouped so that they can be financed at scale.

Investor roundtables, particularly in Brazil, identified opportunities around the relatively low participation rate of pension funds in infrastructure projects, and a number of possible financing structures that could help bring such capital into the market.

¹¹⁸ Regional Green Bonds Program for Latin America and the Caribbean, <https://www.iadb.org/en/project/RG-T3368>

¹¹⁹ <https://greenbondtransparency.com/>

¹²⁰ See for example the high level of over-subscription of the Chilean green bonds in 2019 and 2020 - <https://www.hacienda.cl/english/work-areas/international-finance/public-debt-office/green-bonds>, as well as the latest sovereign bond transactions in 2020 from the region.

- » B-Bonds allow for USD denominated investments from capital markets in projects at the same terms as those negotiated by the IDB Invest. The loan agreement between IDB Invest and the borrower is substantially the same as IDB Invest's standard A/B Loans, with one loan agreement in which IDB Invest acts as the Lender of Record and administers the loan. The structure allows investors to benefit from IDB privileges and immunities, including preferred credit status. The B Lender is a Special Purpose Vehicle (SPV) or trust that funds itself by selling notes to institutional investors as a private placement. IDB Invest shares project risk with investors and the notes are not guaranteed by the IDB Invest. Such structures could be utilized in various LAC region markets in order to enhance the participation of international institutional investors in infrastructure development.
 - » Certificates of Capital Development (CKD) notes are development equity certificates that finance infrastructure and other real assets development in Mexico, in addition to some private equity. CKDs have been in use for over a decade with varying levels of success, as noted by roundtable participants. Designed to allow pensions to invest in alternative investments, with issuance on public markets and strong regulatory and governance support, CKDs have proven to be a useful vehicle for pensions in Mexico, even if they are restricted to investments in Mexico only. For other national pension systems that are restricted in their investment opportunity set, the CKD structure could offer lessons regarding the development of public, structured vehicles. At the state-level, the number of existing projects is high, but coordination is lacking.
 - » The issuance of green bonds could help mobilize resources and focus investor attention on supporting beneficial projects. There is an area of opportunity within climate finance to bundle, finance, and market these projects to both domestic and international investors as green and/or impact bonds, which are in high demand. To the extent state level entities can facilitate the identification of sustainable infrastructure projects early in the project lifecycle, aid developers in quantifying environmental and/or social impacts of those projects, and support the development of appropriate financial vehicles to issue bonds, those efforts can help to broaden the pool of potential investors and indicate that supporting sustainable development efforts is a state-level priority. From the local perspective, the costs and benefits are attractive as over the long term such efforts can be profitable in several aspects (both social and economic).
- The IDB Group could play an important role in facilitating the development of such issuance vehicles in partnership with subnational governments.





APENDICE A

SUSTAINABLE INFRASTRUCTURE CATEGORIES

The IDB released *What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Lifecycle* in March 2018¹²¹ which delineates the Bank’s approach to defining what infrastructure projects can be considered to be “sustainable”. In order to align the categorization of sustainable infrastructure projects identified in this paper with the IDB’s prevailing framework, we have developed the descriptions below, with reference to the relevant section(s) of the IDB Framework. These general guidelines informed how Mercer classified sustainable infrastructure projects across different industry sectors for the purposes of the figures shown in Appendix A. All references to the IDB Framework in the following paragraphs correspond to Appendix 1 of the IDB Framework document, beginning on page 31, and are intended to be indicative of the considerations taken into account in classifying sustainable infrastructure for this report, yet not exhaustive of all possible criteria considered.



Transport

The general orientation to classifying transport projects as being sustainable relates to whether those projects provide

more efficient transportation that reduces reliance upon fossil fuels. In general, these guidelines include mass transit projects, cable car/tram systems, and freight rail, but does not include airports, road projects, or port developments.

For this infrastructure category, the sustainability determination corresponds to Framework Criterion 2.1: “Project design for low GHG emissions”. The preference in this taxonomy is for more GHG-efficient forms of transportation of people and goods by, for example, substituting passenger rail trips in place of individual automobile trips. A second related sustainability determinant corresponds to Criterion 1.4: “Service access and affordability”, as expanding the availability of passenger rail, for example, may allow citizens to avoid assuming the expense of purchasing an individual automobile in favor of potentially more affordable transportation options. An additional consideration is Criterion 3.8: “Project design to maximize community mobility and connectivity”, which encourages the use of urban mobility and non-motorized transportation.



Energy

In general, energy projects that involve renewable energy and/or low carbon sources, including onshore and offshore wind, solar (both photovoltaic and solar thermal), geothermal, nuclear, biomass, waste-to-energy, transmission and distribution lines

¹²¹ Available for download at the following link: <https://publications.iadb.org/en/what-sustainable-infrastructure-framework-guide-sustainability-across-project-cycle>.

(which generally seek to increase efficiency and expand energy access) and small hydroelectric developments. Excluded are any fossil fuel developments, including extractive activities, coal, natural gas, or oil-fired electric plants, and any related fossil fuel distribution infrastructure, including pipelines.

The primary sustainability determinant in this infrastructure category corresponds to Criterion 2.15: “Project design to minimize energy consumption and maximize use of renewables”, which applies to primary generation as well as transmission and distribution activities. A secondary consideration is Criterion 1.2: “Economic and social return over project life cycle”, which seeks to maximize the social returns of a project and minimize negative externalities. Compared to conventional resource-intensive energy generation projects, appropriately structured renewable energy and energy efficiency projects can avoid significant negative externalities.



Water and Sanitation

Projects that enhance clean water access and improve public health are generally considered sustainable in this report, including development of drinking water reservoirs, and upgrades to water distribution systems and wastewater treatment plants. Not included are agricultural irrigation projects, which, unless they are expressly developed with water efficiency in mind, can create increased water stress and competition in certain regions.

The primary sustainability determinant in this infrastructure category corresponds

to Criterion 4.2: “Project alignment with national and sectoral infrastructure plans”, which outlines how projects contribute to the advancement of societal infrastructure goals, which often include enhancing access to potable drinking water and/or sanitation services. Secondary considerations correspond to Criterion 2.13: “Efficient use of water resources”, and 2.6: “Project design and systems optimization to minimize water contamination”. Both criteria help to define different water and sanitation project characteristics which can be considered sustainable, focusing on efficient use of resources.



Social

Healthcare and educational facilities are generally considered sustainable for the purposes of this report, as they contribute to the advancement of strong societies. Penal facilities and other municipal buildings were not considered sustainable, as their impacts on society are not as uniformly positive.

The primary sustainability determinant in this infrastructure category corresponds to Criterion 3.2: “Social sustainability and development plan”, which seeks to expand access to social infrastructure projects to disadvantaged groups. Secondary considerations include Criteria 4.2: Project alignment with national and sectoral infrastructure plans”, and 4.4: “Project alignment with economic, territorial, and urban strategies”. Taken together, these criteria reflect the fact that social infrastructure projects will have the greatest positive impacts when developed as part of broader political and economic development strategies.

APPENDICE B

CASE STUDIES

1. Direct Sustainable Investments in Emerging Markets – The case of Actis Energy 3 & 4

This case study highlights a number of solutions which other fund managers and development finance institutions might be able to replicate to support the scale up of additional private investment into sustainable infrastructure in the LAC region.

Background

Actis is a leading investor with an unparalleled heritage in emerging markets, investing in private equity, real estate and energy infrastructure. Actis was established in 2004 when it spun out from CDC Group plc (“CDC”), the UK government-owned development finance institution (“DFI”). Actis draws its 70-year heritage through the UK government founding CDC in 1948 in order to provide development finance to businesses located in former British colonies across Africa, Asia and the Caribbean. Over time, CDC was granted authority to invest in countries beyond the Commonwealth where there was a need for CDC’s expertise and capital, thereby making Actis one of the oldest private equity direct investors in many of today’s fastest growing global economies. Sharing in this legacy, Actis benefits from a history of deep local networks with a broad geographic footprint, a strong reputation

and a history of landmark transactions in the markets in which it invests.

Since its spin out in 2004, Actis has grown to become one of the leading independent fund managers focused exclusively on investing in growth markets. The Firm has raised US\$16 billion from over 360 institutional investors¹²² including pension funds, endowments, sovereign wealth funds, fund of funds, insurance companies, corporates, family offices and high net worth individuals.

The Actis Energy Funds, Actis Energy 3 and Actis Energy 4 (“AE3” and “AE4”), have a high exposure to renewables and Latin America (“LAC”). AE3 closed in 2013 with US\$1.1 billion in commitments. This fund is now fully committed, with over 90% exposure to renewable technologies¹²³ and over 50% exposure to LAC¹²⁴. AE4, the successor fund to AE3, reached final close in 2017 of US\$2.75 billion in commitments. The fund’s exposure to renewables is 73%¹²⁵ and its exposure to LAC is expected to be similar to AE3.

Actis’ Energy funds were selected for this case study due in part to the firm’s position as a leading EM private equity investment manager and its track record attracting a variety of institutional LPs, including several new to the EM infrastructure space. As revealed in IDB’s recent investor survey¹²⁶ a large portion of investors prefer to access infrastructure via intermediate

¹²² As at 30 June 2020

¹²³ Based on pledged capital (as at 30 June 2020)

¹²⁴ Based on pledged capital (as at 30 June 2020)

¹²⁵ Based on pledged capital (as at 30 June 2020)

¹²⁶ <https://publications.iadb.org/en/investing-in-sustainable-infrastructure-in-latin-america-survey-results-2019>

private equity investments, particularly pension funds. We also know that much of the investment needed in the LAC region to achieve alignment with the Paris Agreement goals will require significant new equity capital to support the development of greenfield infrastructure assets. Thus Actis' ability to garner private capital for this purpose is potentially illustrative of what other fund managers (and DFIs as support) might do to crowd-in additional private capital. From a sustainability standpoint, Actis is also well-recognised for its ESG integration efforts, which stem in part from the organisation's DFI pedigree. Moreover, Actis' Energy funds are notable for their high exposure to renewables relative to other energy infrastructure funds available in the market.¹²⁷

Crowding-in Private Capital

Actis' Energy funds represent an excellent example of how institutional investors access sustainable infrastructure in emerging markets. With over US\$5 billion committed across four energy funds – a sizeable portion of which has or will be deployed in low-carbon assets that have undergone ESG review – Actis is one of the leading private sustainable infrastructure investors active in emerging markets today.

While institutional investors make investment decisions for a variety of reasons, some of the following key factors appear to have driven Actis' commercial success in emerging market infrastructure to date:

- **Experience/heritage/track record:** The initial support of CDC, as well as the experience of the original CDC investment team in emerging markets, is a strong credential for an EM-focused

firm. Actis' successful track record, enabled by initial key support from CDC, is demonstrative of the team's ability to generate returns for LPs. Actis has a proven track record of investing in the energy sector, having built, operated or contracted over 25GW of generating capacity, serving over 125 million customers.

- **High returns:** Actis' target returns are a function of both the markets in which Actis invests (many of which suffer from a scarcity of investment capital), Actis' investment strategy and its value-add approach to asset management that includes a comprehensive ESG strategy. Actis' target returns enable the energy funds to qualify for allocations from asset owners out of both infrastructure and private equity buckets.
- **Risk mitigation:** Actis has a deep understanding of the markets in which it operates and the technologies in which it invests. Operationally, Actis seeks to contract with high-quality western developers under fixed-price, turnkey contracts to mitigate construction risk. Actis seeks to secure non-recourse debt (using supranational lenders), pursuing projects supported by sovereign guarantees, political risk insurance packages and long-term PPAs (denominated in USD wherever possible) to mitigate financial risk¹²⁸.
- **ESG integration:** Actis places significant emphasis on ESG-related enhancements in its platform companies, as a way of adding value, providing societal benefit, and increasing the appeal to buyers at exit. This ESG integration approach is holistic and comprehensive (see Sustainable Investment Process

¹²⁷ According to Preqin, renewable energy deals have accounted for about 40% of total private infrastructure deals in the market for the years 2012-2016 (Source: Preqin Infrastructure Deals 2016 Data Pack) and this percentage has increased notably in 2017. On a volume adjusted basis the percentage of renewables is likely somewhat lower (e.g. in the ranges of 30% in 2016). <https://docs.preqin.com/reports/Infrastructure-Deals-2016.pdf>.

¹²⁸ Of these structural elements, only obtaining a long-term PPA (either through public auction processes or acquisition from an existing project developer) is a requirement for Actis' equity commitment to provide visibility of long-term predictable cash flows. A PPA is also a requirement for securing non-recourse financing.

section). Actis has 4 full time centralised ESG resources and the firm’s responsible investment policies assure a level of involvement in ESG integration from internal portfolio teams and at the asset level. Many of Actis’ energy investments are wholly owned platforms and Actis is thus able to ensure a Head of ESG is appointed at the platform level and an ESG sub-committee to the Board is established.

- **Pipeline:** For AE4, Actis came to market with a pre-vetted pipeline in excess of US\$9 billion for a US\$2.75 billion fund. From this pipeline, Actis signed two deals in advance of the initial fund close using a warehousing structure for one of the investments. A high level of visibility into prospective investment opportunities provided momentum to the AE4 fundraise and gave asset owners comfort regarding strategy execution potential.

While these characteristics are not easily replicable by all asset managers, some of the key takeaways include:

- Actis’ CDC history provided it with a heritage to draw upon and helped to demonstrate the manager’s value proposition to private investors. For DFIs looking to attract more private investors to sustainable EM infrastructure, it may be fruitful to identify high quality infrastructure managers looking to increase their commitment to sustainability, provide them with technical assistance to develop new strategies and seed new funds/spinoff ventures focused on attracting private capital.

- The manager’s willingness/ability to focus on infrastructure in emerging markets with a risk mitigated deal structure and integrated ESG assessment offers investors both return potential, as well as progress towards sustainable development and impact investment goals.

Sustainable Investment Process

Renewable Energy Dynamics

AE3 and AE4 are predominantly renewables focused, with 94% in AE3 and 73% in AE4¹²⁹. There is more thermal energy in AE4, which is a result of:

- More utilities and strategic investors entered the LAC market and started investing in renewables. Governments also worked to develop project pipelines and to run energy auctions, all of which served to create more competition and decrease the return potential for the sector/region¹³⁰.
- Interest in increasing thermal baseload generation rose in several LAC markets, particularly Mexico.

Actis does not invest in thermal coal power generation. Otherwise, by being technology agnostic in its energy funds Actis is able to be opportunistic regarding portfolio construction thus providing investors with greater assurance of meeting target returns. Forecast demand in non-OECD markets is forecast to reach 28TWh by 2040.¹³¹ To meet current and future demand, Actis’ markets require a secure supply of energy that is available all day, every day.

¹²⁹ Based on pledged capital (as at 30 June 2020)

¹³⁰ Brazil was a notable exception to this trend. Because of the economic slowdown in the country at the time some owners of renewable assets looked to recycle or to sell assets for cash to address liquidity issues creating a buying opportunity for Actis. But in Mexico and Chile prices were driven too low for Actis due to auctions.

¹³¹ IEA World Energy Outlook 2018 (TWh = Terawatt hour)

A combination of energy from renewables and gas-fired thermal generation could be seen to offer this. Actis sees the role of gas as a bridging fuel to a low carbon economy.

Renewables will nevertheless make up a large share of the portfolio since the potential for such technologies in emerging markets versus OECD markets is higher due to stronger production fundamentals.

Brazil for instance has a much higher capacity factor for wind than the US or Europe and Brazil's high winds correspond with the dry season when hydropower (which makes up 60%+ of Brazil's installed capacity) is most challenged. USD-denominated PPAs are also often available in Actis' target markets which mitigate FX risk. Actis' potential renewables investments are also further supported by the availability of long-term debt financing and credit risk mitigation options.

Drawing upon its DFI heritage, Actis has always had a high commitment to sustainability.

Actis also recognises that active owners, particularly those in emerging markets, can have transformational impacts on workers and society in addition to the environment. Across the firm's investments, management teams have been mindful of inclusive development and how it can be used to tackle global challenges (e.g. the UN SDGs) always in addition to supporting the delivery of market returns. Actis has developed a proprietary impact measurement framework, called the Actis Impact Score™, to measure the positive social and environmental impacts of its investments. In line with this, investing in a thermal gas power plant makes sense if the return warrants and if from an ESG perspective the plant provides a clear bridge to a low carbon economy alongside a social benefit in the form of enhanced energy access, quality jobs, etc.

This broad commitment is operationalised via **five written policies** focused on Environmental, Climate Change, Health and Safety, Business Integrity and Social issues (the "Actis Five Policies" – see climate change policy summary in Figure 1). These policies are enforced and evaluated throughout Actis' investment process as follows:

- Actis assesses the **impact of all new investments** in each of the Actis Five Policies as an integral **part of the appraisal process**.
- Actis gives new investments a **risk rating** in environmental, climate change, health & safety, business integrity and social issues to determine the appropriate level of management and monitoring required.
- Actis requires the **management of investee companies to sign an undertaking** confirming that it will operate in line with the Actis Five Policies.
- Actis assists **investee companies in developing action plans** to address areas of non-compliance with the Actis Five Policies.
- Actis encourages the managers of investee businesses to **adopt and implement policies** relating to the areas of the Actis Five Policies particularly where the business entails specific risks.
- Actis encourages the managers of investee businesses to work towards continuous **improvement** in these areas¹³².

¹³² Source: Actis' RI Policy

Figure 1

Actis Climate Change Policy Summary

 <p>Policy</p>	 <p>Objective</p>	 <p>Operational approaches</p>	 <p>Investments aims</p>
<p>Climate Change Policy</p>	<ul style="list-style-type: none"> • To minimise Actis’s contribution to climate change, both from its own direct operational emissions and the indirect emissions of its investee companies; and • to encourage investment in climate change related sector 	<ul style="list-style-type: none"> • Actis is cutting the amount of energy it consumes by continuing to use energy-saving measures and by following recognised climate change/ environment guidelines and codes of practice in its property management; • Actis is reviewing its use of transport, especially air travel, with a view to cutting emissions and setting lower targets in the future; and • Actis is calculating how best to offset its direct emissions with a view to the ultimate goal of becoming carbon neutral • Actis is starting to include in its annual reports: (i) an estimate of carbon emissions in tonnes of CO2 emitted per gigawatt hour of power generation per year for all power generating assets 	<ul style="list-style-type: none"> • When identifying suitable prospective investments, Actis will: <ul style="list-style-type: none"> - seek investment opportunities that have a positive impact on climate change; - ensure that for each investment the impact on climate change is taken into consideration by the investment Committee preinvestment; and - categorise the carbon impact of each investment that is made by Actis and take appropriate action based on the degree of impact upon the climate.

ESG considerations inform Actis’ initial due diligence, asset management and client reporting processes. The Responsible Investment team at Actis is comprised of four full time resources, with over 50 years of combined experience, and the firm’s ESG-related policies ensure such considerations are embedded in portfolio and asset management practices. Investment opportunities may be sought in certain markets where the government’s response to climate change and the Paris Agreement commitments has been to create favourable regulatory and fiscal frameworks to encourage the development of renewable power ahead of more carbon intensive sources of power.

At the asset level these policies are further enforced by the establishment of an ESG subcommittee at all of the companies in which Actis invests. This subcommittee will typically meet quarterly before board meetings to make sure material ESG issues are vetted and, if appropriate, discussed by the full board as necessary. Actis’ ESG framework is a key element of its approach, driving improvements and highlighting priorities. Performance is monitored quarterly via a dashboard. ESG excellence supports increased shareholder value and the delivery of positive societal impacts.

Figure 2

Actis’ approach to analysing ESG in Energy investments



Deal Level Implementation of Sustainability Solutions

Actis has supported a number of transactions in the region which have taken advantage of DFI financing to make investments more attractive to private investors, including the following two examples:

- Santo Vitoria do Palmar Wind Farm** (Brazil) – Actis’ realised investment Atlantic Energias Renováveis was the lead equity investor in this BRL1.4 billion wind energy project in Brazil. Approximately 50% (BRL680 million) of the project cost was supported by loans from Banco Nacional do Desenvolvimento (BNDES) and Banco Regional de Desenvolvimento do Extremo Sul (BRDE) and an additional ~10% (BRL105 million) was supported by debentures made available to local investors via a domestic capital markets listing. The debentures were made possible by a BRL125 million Total Credit Guarantee (“TCG”) provided by IDB Invest “that, in addition to covering the principal and interest payments of the bondholders, [included] an additional margin to the holders of debentures, as well as a cushion to protect covering the possible payment of fluctuations in inflation, during the life of the debenture. significantly lowering the cost of the issuance, increasing the tenor up to 13.5 years and increasing appetite from the market.”¹³³ The overall cheaper cost of debt financing resulted in improving returns to the project’s equity investor. According to IDB’s Environmental and Social Review Summary, this project was

rated Category A¹³⁴ primarily because of its potential impact on migratory bird routes/habitat. The underlying project had a total installed capacity of 207MW, composed of 69 wind turbines model AWP125 3.0MW hub height at 120m, supplied by Nordex Acciona, a European wind power developer. For projects transacted in local currency, Actis typically approaches exchange (FX) risk with a multipronged approach: i) enshrining inflation-adjusted tariffs in the PPA, ii) deploying over time smooths out the blended effective exchange rate at entry and, iii) embedding depreciation assumptions into the investment case at the time of approval. At the portfolio level, diversification across EM currencies also helps with FX risk management.

- Reynosa Wind Farm** (Mexico) – Actis launched and owned 80% of Zuma Energia which reached financial close on the Reynosa wind farms in Mexico in Q3 2017¹³⁵. Actis and Mesoamerica (the 20% owner of Zuma) provided equity for the deal and Zuma secured US\$600 million of debt financing from Mexican banks and from international development and commercial banks including Santander, Banobras, Bancomext, Nafin, EKF and KFW. The project is one of the largest renewable energy projects in the region providing enough energy for approximately 1 million homes and avoiding 739,000 tons of carbon emissions. To design and construct this project, Zuma contracted with European companies Vestas and Acciona Industrial, a subsidiary of

¹³³ <https://idbinvest.org/en/news-media/idb-invest-provides-r125-million-total-credit-guarantee-santa-vitoria-do-palmar-wind-farm>

¹³⁴ According to the IIC Environmental and Social Sustainability Policy, these are projects that can result in environmental or social risks and impacts that are potentially significant and diverse, irreversible or unprecedented, and that frequently extend beyond the boundaries of the locality or the actual project installations.

¹³⁵ <https://www.act.is/media-centre/press-releases/actis-energy-platform-zuma-energ%C3%ADa-reaches-financial-close-on-one-of-latin-america-s-largest-wind-farms-in-mexico/>

¹³⁶ <https://engze.zumaenergia.com/2reynosa>

¹³⁷ <https://www.acciona.com/pressroom/news/2017/august/acciona-build-mexicos-largest-wind-farm-tamaulipas/>

Nordex Group^{136,137}. According to Actis, the project presented a ‘medium risk’ from an ESG point of view. One of the key issues assessed was physical security due to the site’s proximity to areas affected by cartel/gang activity. Though the cartels do not typically target windfarms or their workers, it is critical for those working at site, and commuting to site, to be aware of the security protocols to follow to avoid incidents. Zuma made security a priority and has a Head of ESG who is has substantial experience managing security issues for infrastructure/manufacturing companies across Mexico. Zuma also receives security advice from a third party to stay abreast

of relevant issues. In addition to this, strict security protocols are in place and regular training sessions are provided to the portfolio company’s team members.

Safety is a priority during construction and the World Bank Group EHS Guidelines, as well as Actis’ in-house Occupational Health and Safety Guidelines, are the benchmarks against which performance is measured. The project has been subject to third party ESG audits, and health and safety performance is discussed in detail at each quarterly ESG subcommittee meeting. According to Actis, there have been no significant environmental or social issues at Zuma to date.

Barriers to Sustainable Infrastructure Investing

- **Lack of viable funding models/inadequate risk adjusted returns**

- Founding and initial long-term financial backing from a DFI to support proving the value proposition
- Regular use of debt financing and risk mitigation mechanisms via DFIs at the deal level
- Utilisation of various additional risk mitigation mechanisms in their investment process including a preference to contract with developed market project developers under fixed-priced agreements denominated in USD etc.

- **Unfavorable and uncertain regulations and policies**

- Comprehensive ESG integration approach rules out some negative impact industries such as extractives and concentrates investment idea generation on assets which are likely to produce positive environmental and social outcomes
- Requirement of company management teams to establish an ESG subcommittee and to monitor progress against a set of ESG objectives inculcates company management teams with the importance of ESG issues to overall business strategy success
- Regular use of risk mitigation mechanisms via DFIs to address concerns regarding default risk for instance

- **Lack of transparent project pipelines**

- For Actis, a lack of transparent project pipelines in renewable energy proved an advantage in AE3 as it enabled the firm to find opportunities which produced a higher return

Conclusion

Actis' energy funds, AE3 and AE4, illustrate how private, return-seeking capital can be directed to invest in sustainable infrastructure in LAC. This case study has highlighted a number of solutions which other fund managers and DFIs might be able to replicate to support the scale

up of additional private investment into sustainable infrastructure in the region. These solutions have been identified in the concluding table below, interspersed below are key barriers identified in previous research by Mercer and IDB¹³⁸.

2. Cross-border Partnerships – The case of CDPQ

This case study demonstrates that, for development banks, brokering partnerships between sustainability-aligned asset owners like CDPQ and domestic investors in Latin America represents an opportunity to significantly increase both foreign direct and domestic investment in sustainable infrastructure.

Background

“The Net-Zero Alliance is the recognition that institutional investors collectively have an important role to play in fostering the energy transition the world needs. For investors like CDPQ, there are so many opportunities to earn commercial returns by investing in low-carbon solutions and to work with portfolio companies to decarbonize. Combined with the necessary changes in public policies, investors' actions will induce real change in every sector.”

- CDPQ CEO, Michael Sabia

Partnerships for Mutual Success

CDPQ's partnership approach to investment in growth markets offers a potential win-win opportunity; CDPQ benefits from the involvement of a trusted local partner with strong local networks and an ability to source local ideas whereas the local partner has the opportunity to learn from and gain access to the experience of one of the largest and most sophisticated private infrastructure investors globally. CDPQ's commitment to sustainable investing will also “trickle down” to local investors providing a further benefit for the region since Latin American investors are much less likely to have sustainable investment policies in place versus investors in other regions¹³⁹.

CDPQ recognizes that its contribution as an investor extends beyond the investments in its portfolio and reciprocally that the success of its investments depends upon the broader economic context in which they are situated. Therefore, CDPQ seeks to promote economic development around the world and greater integration of non-

¹³⁸ Mercer & IDB; Crossing the Bridge to Sustainable Infrastructure; 2017

¹³⁹ IDB and Mercer; Sustainable Infrastructure Survey Results; 2020 - <https://publications.iadb.org/en/investing-in-sustainable-infrastructure-in-latin-america-survey-results-2019>

¹⁴⁰ <https://www.investorleadershipnetwork.org/>

financial issues into investment decision-making processes in an effort to make its portfolio more resilient. This commitment is evidenced by CDPQ's membership in the Investor Leadership Network of the G7¹⁴⁰ which aims to achieve the following three objectives:

1. Enhancing expertise in infrastructure financing and development in emerging and frontier economies;
2. Opening opportunities for women in finance and investment worldwide; and
3. Speeding up the implementation of uniform and comparable climate-related disclosures under the FSB-TCFD framework.

To help fill the gap in markets where infrastructure needs are most critical, the partner institutions have launched a Sustainable Infrastructure Fellowship Program¹⁴¹. The program will promote a mutual understanding between emerging market public-sector officials responsible for infrastructure planning and developed market investors. The 8-week program offers academic and practical training for senior public-sector infrastructure managers from developing markets. The program will include training on the SIF-SOURCE platform¹⁴².

In addition to CDPQ's high-level commitment above the organization's approach to infrastructure investment portfolio development in Latin American has also led to capacity development and knowledge/financial transfer. CDPQ has identified five growth market regions for strategic focus, including three in Latin

America – Brazil, Colombia, and Mexico. This has included some key strategic partnerships as follows:

- In November 2018, an infrastructure co-investment was officially launched, led by Financiera de Desarrollo Nacional (“FDN”) and including all Colombian pension fund administrators (AFPs) to co-invest in infrastructure with CDPQ. The objective of the joint investment platform is to make long-term equity investments up to a total \$USD 1 billion in infrastructure projects and companies. Investments will be made in energy (including renewable energy), transportation, social infrastructure, telecommunications, water and basic sanitation, among other sectors. The FDN and the AFPs have created a new private capital fund of \$USD 490 million. CDPQ will contribute up to \$USD 510 million. The minimum size of each investment will be \$USD 50 million, split between the fund and CDPQ¹⁴³.
- Since 2015, CDPQ and Grupo SURA have participated in the financing of infrastructure projects in Colombia and elsewhere. In December 2018, they announced a region-wide strategic partnership for Latin America through the acquisition by CDPQ of a strategic minority interest in Grupo SURA's subsidiary SURA Asset Management (SURA AM), for a total amount of US\$247 million, following regulatory approval¹⁴⁴. This ownership stake demonstrates CDPQ's interest in and commitment to supporting the development of local capital markets via capacity building which eventually should expedite project development and transactions.

¹⁴¹ https://www.investorleadershipnetwork.org/wp-content/uploads/2019/01/INL_INFRA-Brochure8.5x11_72DPI.pdf

¹⁴² <https://public.sif-source.org/> - The Sustainable Infrastructure Foundation (SIF) is a non-profit organization based in Geneva which manages SOURCE, a project preparation and management platform led and funded by multilateral development banks in response to the G20's goal of addressing the global infrastructure gap.

¹⁴³ <https://www.cdpq.com/en/news/pressreleases/creation-of-a-private-capital-fund-led-by-fdn-and-including-all-colombian>

¹⁴⁴ <https://www.cdpq.com/en/news/pressreleases/cdpq-and-sura-announce-a-region-wide-strategic-partnership-for-latin-america>

- In 2015 CDPQ and CKD Infraestructura México, S.A. de C.V. (CKD IM) created a co-investment platform to invest in infrastructure opportunities in Mexico. The platform aims to invest up to MXN 35.1 billion (CAD 2.8 billion) over five years. CDPQ will hold a 51% interest in the co-investment vehicle. CKD IM, whose shares are listed on the Mexican Stock Exchange, will hold the remaining 49%. At the time of launch, the shareholders of CKD IM were Mexican pension fund managers (Afores) XXI Banorte, SURA, Banamex, Pensionisste and infrastructure fund Fonadin.¹⁴⁵ The co-investment platform is pursuing a wide range of investment opportunities in several sectors of the infrastructure market, such as energy generation (including renewable energy), transmission and distribution, transportation and public transit, among others. The aim is to have CDK IM and CDPQ share in investments 50/50, but each investor has their own governance structure and makes its own decision. That said, they share deal flow, collaborate on the due diligence and may share third-party advice. Many of the opportunities originate via CKD IM through local contacts, fewer are brought to CDPQ directly. Though for some prospective counterparties (e.g. large companies) CDPQ's involvement can give them added comfort and increase the likelihood of a deal.

While some of these partnerships are very recent and have not yet been field tested, they represent a major foray for some of CDPQ's partners into infrastructure as an asset class. In Mexico aggregate investment

in infrastructure CKDs by Afores was \$MXN 52 billion as of 2018¹⁴⁶. The CDPQ/CKD IM co-investment platform aims to invest up to \$MXN 35.1 billion (CAD 2.8 [USD 2.1] billion) over five years, 49% of which or roughly \$MXN 17 billion would come from CKD IM. This represents nearly a third of aggregate private investments made in infrastructure via CKDs to date and indicates the success of this partnership in "crowding in" local pension capital for infrastructure development.

The impact of these partnerships on infrastructure investment in their respective countries is clear though their impact on sustainable development remains to be seen. Some of CDPQ's partnerships predated the release of CDPQ's climate change strategy and so may not have been focused on sustainable investment opportunities originally. This said in addition to Ituango, CDPQ made further renewable energy investments via its co-investment agreement with CKD IM. In October 2017 the partnership added renewable energy to its collaborative platform announcing the acquisition of 80% of a portfolio of eight special purpose vehicles ("SPVs") representing five wind and three solar assets owned previously by Enel Green Power (Enel)¹⁴⁷. The enterprise value of 100% of the SPVs is equal to about \$USD 2.6B, with the equity value amounting to about \$0.3B, the project financings accounting for about \$0.8B and the related party loans for a total of \$1.5B. CDPQ and CKD IM acquired stakes of 40.8% and 39.2%, respectively.

Three other investments have been made through the CDK IM and CDPQ co-investment platform:

¹⁴⁵ <https://www.cdpq.com/en/news/pressreleases/cdpq-and-leading-mexican-institutional-investors-create-co-investment-platform>

¹⁴⁶ Mexico Infrastructure and Sustainability Review: 2018 Highlights - http://mexicobusinesspublishing.com/sites/default/files/2018-09/MIUSR_2018_Highlights.pdf

¹⁴⁷ <https://renewablesnow.com/news/enel-closes-sale-of-80-in-18-gw-mexican-renewables-portfolio-628355/> | <https://lavca.org/2018/09/28/cdpq-and-ckd-infraestructura-mexico-invest-us1-4b-in-renewables-from-enel/>

¹⁴⁸ <https://www.cdpq.com/en/news/pressreleases/cdpq-and-leading-mexican-institutional-investors-create-co-investment-platform>

¹⁴⁹ <https://www.altanredes.com/en/consorcio-altan-ganador-de-la-licitacion-internacional-de-la-red-compartidaen/>

- The first transaction was in 2015 at the time of the launch of the platform when CKD IM acquired 49% of CDPQ's equity investment in the ICA OVT platform, a 450km toll road portfolio with ICA as operating partner¹⁴⁸.
- Investment in Altán Redes, a mobile wholesale network company, in consortium with Morgan Stanley Infrastructure, among others¹⁴⁹.
- Investment in Circuito Exterior Mexiquense, a 110km core toll road¹⁵⁰.

In addition to the above, CDPQ's infrastructure investment activity in other partnership markets has included the following:

- In October 2017, CDPQ made its first direct private investment in Colombia, a senior loan to Pacifico 2, a toll highway sponsored by Colombian

concessionaire Odinsa under the Colombian government's PPP program for transport infrastructure¹⁵¹.

- In January 2018, CDPQ participated with IDB Invest and other global institutional investors in a US\$1 billion loan facility to Empresas Publicas de Medellin (EPM) to build the Ituango hydropower plant (HPP)¹⁵².

Sustainable Investment Process

Sustainable investing is at the heart of CDPQ's investment strategy, and its approach covers the entire investment chain. CDPQ's approach is detailed in its responsible investment policy¹⁵³ and its climate change investment strategy¹⁵⁴ and is summarized in the following table (commentary excerpted or adapted from CDPQ's 2017 Stewardship Report¹⁵⁵):

¹⁵⁰ <https://lavca.org/2018/03/13/cdpq-ifm-investors-acquire-mexicos-conmex-en-espanol/>

¹⁵¹ <https://www.cdpq.com/en/news/pressreleases/cdpq-supports-epm-a-leading-electricity-producer>

¹⁵² <https://www.cdpq.com/en/news/pressreleases/cdpq-supports-epm-a-leading-electricity-producer> | https://www.iadb.org/en/news/Largest_renewable_energy_project_in_Colombia

¹⁵³ https://www.cdpq.com/sites/default/files/medias/pdf/en/politique_investissement_responsable_en.pdf

¹⁵⁴ https://www.cdpq.com/sites/default/files/medias/pdf/en/investment_strategy_climate_change.pdf

¹⁵⁵ https://www.cdpq.com/sites/default/files/medias/pdf/en/ra/id2017_rapport_investissement_durable_en.pdf

 Overall Approach		 Climate Change Strategy	
Climate Change Policy	<ul style="list-style-type: none"> › Leadership in the fight against climate change › Participation in joint ESG initiatives › Influence in the finance industry 	Factoring in climate change into all our investment activities and decisions	CDPQ is working to develop tools to measure climate-related risks and opportunities to allow portfolio managers to appraise long-term, climate-related risks and opportunities associated with all of its asset classes to enable informed decisions.
ESG Analysis	<ul style="list-style-type: none"> › Analysis of ESG profiles of potential investments or reinvestments › Integration of analyses into the investment process › Close collaboration with investment teams 	Increasing low carbon investments by 80% by 2020	As at December 31, 2017, CDPQ's low carbon investment portfolio was valued at \$18 billion using the taxonomy of the Climate Bonds Initiative. The organization's target is to increase its low carbon investment portfolio to \$34 billion by 2020.
Engagement and Vote	<ul style="list-style-type: none"> › Monitor ESG profiles of portfolio companies and collaborate with investment teams › Engagement with companies › Exercise of shareholder right to vote 	Reducing the portfolio's carbon footprint per dollar invested by 25% by 2025	CDPQ was the first institutional investor in North America to adopt a target that covers virtually all of its asset classes. Carbon intensity reductions will come from increasing green investments, reducing exposure to carbon intense assets and working with select companies to reduce emissions. To achieve these targets while maintaining investment returns, CDPQ has set carbon intensity budgets (similar to risk budgets) for its portfolios. Compliance with the carbon intensity budgets will also influence employee performance evaluations.
		Exercising stronger climate leadership within the industry and with the companies in our portfolio	In addition to voting and engagement to support the publication of sustainable development reports, disclosure of GHG emissions and improved reporting of corporate climate-related risks, CDPQ has demonstrated leadership via signing several public letters and supporting various public initiatives including the Montreal Carbon Pledge, PRI, TCFD, Portfolio Decarbonization Coalition and Climate Action 100+.

CDPQ’s approach to sustainable investment is advanced and progressive amongst its peer asset owners in North America. Few other organizations of CDPQ’s size and caliber have made such strong commitments to address ESG factors across its portfolio and to commit to public targets to address climate change. CDPQ’s commitment is most comparable to the similar commitments made to sustainable investment and climate change by major

asset owners in Europe (e.g. PGGM¹⁵⁶) and New Zealand (e.g. NZ Super¹⁵⁷).

CDPQ’s partnership model effectively addresses several of the key barriers to sustainable infrastructure investment in LAC. The solutions engendered by CDPQ’s approach have been identified in the following table interspersed below key barriers identified in previous research by Mercer and IDB¹⁵⁸.



Barriers Addressed to Sustainable Infrastructure Investing

- **Lack of viable funding models/inadequate risk adjusted**

- CDPQ’s strategic partnership approach is designed to help the organization to source high quality sustainable infrastructure investment ideas in the region through its local partners which are well connected locally; this should include deals that meet its desired risk/return profile.
- CDPQ’s capital base is large and can dramatically alter the amount of private funding available for infrastructure projects in countries where it chooses to operate.

- **Unfavorable and uncertain regulations and policies**

- By working with a local partner CDPQ gains access to local teams with governmental and industry relationships who can help navigate the political landscape.
- Indirectly CDPQ is also able to work through local partners to influence policy discussions ongoing in the region.

- **Lack of transparent project pipelines**

- CDPQ is strategic in the selection of its target growth countries. It seeks countries that already or will soon have a strong pipeline. However, partnering with a local firm may also give the investor access to proprietary deal flow.

- **High development and transaction costs**

- CDPQ’s approach is to support development of local capital markets via capacity building which eventually should expedite project development and transactions.

¹⁵⁶ <https://www.pggm.nl/english/what-we-do/Pages/Focus-areas.aspx>

¹⁵⁷ <https://www.nzsuperfund.co.nz/news-media/nz-super-fund-announces-multi-faceted-climate-change-strategy>

¹⁵⁸ Mercer & IDB; Crossing the Bridge to Sustainable Infrastructure; 2017

Conclusion

For development banks, brokering partnerships between sustainability-aligned asset owners like CDPQ and domestic investors in Latin America represents an opportunity to significantly increase both foreign direct and domestic investment in sustainable infrastructure. Developed market investors with a track record of investing in infrastructure and a strong sustainable investment framework can provide the appropriate intellectual and

financial capacity for local partners to invest in infrastructure with confidence and with sustainability criteria firmly considered. In return these developed market investors benefit from the idea generation and risk protections afforded by partnering with local partners. Though monitoring execution of these relationships remains an imperative given ESG challenges can arise even with strong ongoing intentions.

3. Partnering with Development Finance Institutions – IDB Invest and Blue like an Orange

This case study demonstrates how public-private collaboration can crowd private investor capital into under-served segments of the market while achieving market-rate returns and SDG-aligned impact.

Background

Blue like an Orange Sustainable Capital (“Blue like an Orange”) is a pioneering asset manager targeting in a first step mezzanine debt investments in companies across Latin America and the Caribbean through its Blue like an Orange Sustainable Capital Latin America Fund I (“Fund”). The Fund is targeting investments in multiple sectors including sustainable infrastructure and technology enabled services, agriculture, education, healthcare and access to finance. The focus on mezzanine debt is a reflection of several factors including: relatively low availability of bank financing in several

countries and sectors as well as equity or quasi-equity; greater structuring flexibility than senior debt; higher returns versus senior debt which is likely to attract a wider array of investors.

The Fund was developed explicitly to advance the Sustainable Development Goals (SDGs) at scale and to achieve market rate returns for investors. To this end, sustainability assessments are central to the investment process from preliminary screening through to asset management. Blue like an Orange aims to have the investee company commit to goals, targets and indicators in line with relevant SDGs and they will monitor and engage with the company to progress towards the agreed-upon targets.

One of the distinguishing aspects of Blue like an Orange’s approach is its partnerships with different institutions, including with Development Finance Institutions (DFIs). Most of Blue like an Orange’s founding partners’ work experience includes working at the World Bank Group and/or the UN and so they have intimate familiarity with DFI approaches to financing. The Fund entered

¹⁵⁹ <https://www.idbinvest.org/en/news-media/iic-collaboration-blueorange-capital-aims-mobilize-1-billion-latin-america-and-caribbean>

¹⁶⁰ In transactions co-financed by the Fund and IDB Invest, as well as in certain transactions financed directly by the Fund.

into a co-financing framework agreement with the private sector arm of the Inter-American Development Bank Group, IDB Invest¹⁵⁹. Through this agreement, transactions that meet certain eligibility criteria may be co-financed by the Fund and IDB Invest. The Fund also benefits¹⁶⁰ from IDB Invest's proprietary DELTA tool, which assesses the development impact potential of each transaction upfront and measures impact performance against targets throughout the life of each transaction.

The Fund is also differentiated amongst other investment vehicles focused on LAC due to its positioning in the private debt asset class. While investors in general strongly prefer to invest in EM infrastructure via equity, certain classes of investor (e.g. banks and insurers) are primarily interested in senior debt¹⁶¹. As such a private debt vehicle may face different benefits/challenges in crowding in institutional investor capital than private equity vehicles which are more prevalent in the infrastructure fund market¹⁶². Moreover, Blue like an Orange's focus on mezzanine debt was attractive to IDB Invest, which has in the past few years developed and implemented a new strategy to focus on this asset class.

Partnerships for Development

SDG 17 - Partnerships for the Goals includes a target (17.3) which seeks to "mobilize additional financial resources for developing countries from multiple sources"¹⁶³; in working with IDB Invest, Blue like an Orange is seeking to do just that. Specifically, the IDB Invest co-financing framework agreement affords the Fund a variety of benefits including the following:

- **Co-financing:** IDB Invest has an existing network of partners and investees throughout the LAC region with \$11.6B in funds under management. Through this

co-financing agreement, transactions that meet certain eligibility criteria may be co-financed by the Fund and IDB Invest.

- **Preferred Creditor Status:** When co-investing as a participant with IDB Invest under an A/B Loan structure, the Fund will benefit from IDB Invest's de facto preferred creditor status which provides several benefits including preferred access to foreign currency in times of foreign exchange crisis, transfer and convertibility risk and other privileges and immunities.
- **Deal Process:** As part of Blue like an Orange's arrangement with IDB Invest both organizations can co-finance within opportunities from each parties' respective pipeline within certain parameters.
- **Sustainability:** Blue like an Orange is able to benefit, on top of the use of the in-house tool developed by Blue like an Orange's team "SDG Blue", from IDB Invest's proprietary DELTA tool to assess and monitor the development impact generated by the investments.

Importantly this partnership yields benefits for IDB Invest as well. IDB is able to supplement its debt financing expertise and effectively move down the capital structure by leveraging Blue like an Orange's capabilities and higher risk appetite for mezzanine financing. The partnership also enables IDB to point to the mobilization of private sector capital and the role for public-private collaboration in meeting the SDGs and IDB's specific country development priorities. At the same time, the partnership also offers IDB Invest the possibility of participating in deals originated in the private sector by Blue like an Orange's investment professionals and network.

¹⁶¹ IDB SURVEY LINK PENDING

¹⁶² See Figure 1 of the following document: <https://docs.preqin.com/reports/Preqin-Special-Report-Infrastructure-Debt-September-2016.pdf>

¹⁶³ <https://www.globalgoals.org/17-partnerships-for-the-goals>



IDB Invest's **Impact Management Framework** includes a series of tools to support the investment process from beginning to end, helping to guide project selection and structuring, manage and evaluate portfolio performance, add value to clients, and ensure continuous learning. The SDGs are embedded throughout this process. At the origination stage, a *Strategic Selectivity Scorecard* is used to identify areas with the highest potential development impact, in line with sector, institutional, and country strategies. Next, the ex-ante development impact potential and additionality of each transaction is scored using the *Development Effectiveness Learning, Tracking, and Assessment tool (DELTA)*, and the *Financial Contribution Rating (FCR)* measures the financial contribution of each transaction to IDB Invest. Together, the DELTA and the FCR make up our portfolio approach, balancing impact and financial sustainability to guide strategic decision-making. The DELTA is also used during the *supervision* phase to track project impact performance against targets and identify areas where corrective action may be needed. All projects receive a *final evaluation* to assess if they achieved the expected development impact targets, and some projects are selected for more in-depth evaluations to better understand what approaches work best and why. Finally, completing the learning cycle, an analytics platform captures project performance data and lessons learned to inform the design of future operations, and produces portfolio-level insights.

Sustainable Investment Process

Sustainability is central to the Blue like an Orange investment process. In addition to taking advantage of the IDB Invest DELTA assessment tool mentioned above, Blue like an Orange also uses IFC's Performance Standards and its own SDG impact assessment to determine investment eligibility and performance. Each of these assessments is described in more detail in the following bullets:

- **DELTA¹⁶⁴:** The Development Effectiveness Learning, Tracking and Assessment (DELTA) tool is a flexible, fact-based scoring system that assesses all IDB Invest investments in terms of their development impact potential and level of IDB Invest additionality (project score). It also ensures the investment's alignment with the strategic priorities of the IDB Group and IDB Invest, and identifies to which SDGs the transaction is expected to contribute. In addition, it assesses the quality of project design at entry to ensure proper results measurement. Finally, the DELTA is used to track impact performance throughout the lifetime of the investment, measuring progress against targets and identifying opportunities to take corrective action as needed.
- **IFC Performance Standards¹⁶⁵:** Each opportunity is evaluated, before an investment is made and throughout the investment period. If Blue like an Orange is in the lead, a third party reputable firm is hired to complete an ESG assessment in line with IFC's performance standards; if IDB Invest is in the lead, the team performs an internal assessment

also aligned with IFC's performance standards, and shares the results with Blue like an Orange. Each investment receives an Environmental and Social Action Plan (ESAP) that it must comply with.

- **SDG Alignment:** Blue like an Orange launched SDG Blue in the fall of 2020, its proprietary approach to assessing every prospective deal in terms of its impact on achieving the SDGs, moving beyond simple "alignment" given the breadth of the SDGs. An assessment of the impact of each investment is conducted at the goal, target and indicator levels¹⁶⁶. Blue like an Orange also carries out a quantitative and qualitative assessment of the degree of impact and assigns an internal SDG impact rating to every potential investment, which accompanies an investment's shadow credit rating. Alignment of an investment at least at the goal level is required for preliminary due diligence to progress. Alignment at the target and indicator levels is sought along with agreement from investees to report their impact in line with pre-identified indicators, with baseline data collection and recurrent reporting.

These tools are used throughout the Blue like an Orange investment process. Per a profile written about Blue like an Orange by the Global Impact Investing Network (GIIN)¹⁶⁷, these evaluations enter the due diligence and asset management process at various stages (emphasis added):

"In a preliminary investment memo, the Fund's deal sourcing team must demonstrate to the investment committee how potential investments will contribute

¹⁶⁴ See the 2019 Development Effectiveness Overview (DEO) for more information on the DELTA and IDB Invest's Impact Management Framework.

¹⁶⁵ https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards

¹⁶⁶ <https://unstats.un.org/sdgs/indicators/indicators-list>

¹⁶⁷ <https://thegiin.org/research/publication/financing-sdgs>

to the SDG, mapping to the goals, targets, and indicators. A second investment memo that includes additional ESG and impact data must explain how the loan will fit into the overall portfolio, given the SDGs it addresses and the sector of investment. Finally, the Fund estimates the projected SDG impact at the target level. To reach a final decision, the investment committee examines the projected SDG impact, along with the investment thesis.

For each investment it makes, Blue like an Orange will work with company management to set impact targets using the SDGs and their underlying targets and indicators. Blue like an Orange emphasizes the importance of setting objectives according to these underlying SDG targets and then managing an investment's impact toward those targets.

Blue like an Orange will compare an investment's actual impact to its projected impact, and track progress against the SDG targets and indicators. If a company is not meeting expectations on its contributions to the SDGs, the Fund will engage with company management directly, or through IDB Invest to develop a plan for improvement. Annual reports of progress against the SDG targets will be provided to the fund's LPs."

Deal Level Implementation of Sustainability Solutions

Deal flow for sustainable infrastructure with attractive returns has been challenging due to increasing pressure on renewable project returns from more ready access to capital in key markets. This is in part being driven by more prevalent and efficient public auctions for renewable power in some countries. These efficiencies are attracting commercial bank capital, pushing down equity returns and squeezing out the need for mezzanine

debt. In addition to looking for investments in these sectors, Blue like an Orange also assesses investments in areas related to infrastructure e.g. companies providing technology and/ or financing solutions to support sustainable outcomes in transport, industrial systems and other technology related sectors.

Blue like an Orange has nine announced investments to date, with the first three announced as follows¹⁶⁸:

- **Produbanco:** Blue like an Orange provided Produbanco with financing enabling the bank to on-lend to small and medium sized enterprises (SMEs) and green projects in Ecuador. "The latter promotes environmentally friendly production, by financing energy efficiency projects or updating machinery with the aim of improving infrastructure and encouraging industry growth"¹⁶⁹.
- **Cabify:** Blue like an Orange provided growth financing to Cabify, a ride-hailing company operating in LAC. The financing will enable Cabify "to reduce carbon emissions through the reduction of the average age of the fleet of vehicles the company operates with; increase... the number of women among Cabify's drivers; and improve the employment conditions of drivers including help in obtaining social benefits."¹⁷⁰
- **Grupo Cimcorp:** Blue like an Orange financing enabled Grupo Cimcorp, a Brazilian information and communication technology company, to acquire a related entity and expand its reach in Brazil. Specifically the transaction will expand Cimcorp's reach into the SME market and is expected to support the technological advancement of many

¹⁶⁸ <https://bluelikeanorangecapital.com/press-releases>

¹⁶⁹ <https://static1.squarespace.com/static/58541e436b8f5bf3f77426fd/t/5c459edf7924e87e3c70dc5d/1548066528377/Press+release+Produbanco+-+2019-01-17.pdf>

¹⁷⁰ <https://static1.squarespace.com/static/58541e436b8f5bf3f77426fd/t/5c62cb970852295fe33ff8a3/1549978520482/Press+release+Cabify+-+2019-02-11+%28002%29.pdf>

other enterprises which Cimcorp may partner with in future¹⁷¹.

Of these transactions, one (Grupo Cimcorp) was done by Blue like an Orange independent of IDB Invest; the other two were done by way of a participation in an

IDB Invest financing to those companies. Going forward Blue like an Orange expects their pipeline of opportunities to grow on the strength of the founders' networks as well as leads from their broader ecosystem which is also very well connected.



Barriers Addressed to Sustainable Infrastructure Investing

- **Lack of viable funding models/inadequate risk adjusted returns**
 - Blue like an Orange is focused on mezzanine debt which is a reflection of several factors including: relatively low availability of bank financing in several countries and sectors; greater structuring flexibility than senior debt; higher returns versus senior debt which is likely to attract a wider array of LP investors.
- **High development and transaction costs**
 - The relationship between Blue like an Orange and IDB Invest will drive some synergies during the opportunity screening and due diligence process, leveraging the structured investment process of a DFI with the more agile approach of a truly private sector asset manager.

Conclusion

Blue like an Orange demonstrates how public-private collaboration can crowd private investor capital into under-served segments of the market while achieving market-rate returns and SDG-aligned impact, leveraging the strength of a structured investment process with high emphasis on development impact, with an agile, alpha-seeking investment approach from a private manager.

It also challenges the belief held by some investors that DFIs' processes are too slow,

overly bureaucratic and fickle with shifts in regional strategy/priority affecting their risk appetites - making them out of tune with private investors. Overall however the level of understanding of DFIs in the private sector is wide which means perceptions are highly varied. The Blue like an Orange/IDB Invest co-financing arrangement may help skeptical investors to overcome negative DFI perceptions and to educate others with no strong views on the merits of DFI associations.

¹⁷¹ https://static1.squarespace.com/static/58541e436b8f5bf3f77426fd/t/5d01266dad06b80001bde/dd2/1560356461645/Press+release+Cimcorp_2019.06.11_clean.pdf

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