Investments in Sustainable Infrastructure Roundtable Series - Colombia
20 November 2018, Bogotá

MEETING NOTES

A meeting organized by the Inter-American Development Bank Group (IDBG) in partnership with Mercer, Bolsa de Valores de Colombia (bvc) and the UK Sustainable Infrastructure Program (SIP).

KEY TAKEAWAYS

On Incorporating Sustainability into Public-Private Partnerships (PPP) and Infrastructure Investments:

- **Government policy must include environmental and social considerations:** 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. The lack of a robust pipeline of sustainable infrastructure projects is the biggest challenge.
- **Community relations are a key challenge that Colombia has to address:** Licensing and negotiations with communities still represent the major bottle neck for the advancement of the 4G projects and in general for infrastructure projects. Social considerations need to be understood and addressed.
- **Investors have an aversion to the risks of long-term infrastructure projects**: 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.
- **Dialogue between the public and private sectors is important:** Both stakeholder groups need to share and listen to past experiences in developing and executing infrastructure projects, and reflect learnings in future policy.
- **Colombia can leverage best practices from abroad:** Sustainable infrastructure investing is evolving globally, and leading practices can be leveraged (e.g. Proyectos Mexico infrastructure hub and taxonomy for sustainable infrastructure).

On innovation in Sustainable Capital Markets:

- **The mentality of investors needs to change:** 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. ESG adoption has to become the norm in business and investment.
- **A taxonomy is needed for projects and financial instruments:** It is important for parties to have common and clear criteria to use in classifying projects or investments as green or sustainable. The IDB Sustainable Infrastructure Framework and the Climate Bonds Initiative taxonomy are examples of these type of tools.
- **Local capacity building can support adoption:** Technical training on green and sustainable bonds will raise awareness. Third parties are needed to provide certification of sustainability credentials (e.g. what qualifies as a green bond). The bvc 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).
- **IDB and National Development Banks (NDBs) can support capacity building and financing:** IDB, through its CMF Division, has offered technical support to NDBs across LAC in issuing thematic bonds (green, social, sustainability). NDBs also support capacity and can offer credit enhancement.

BACKGROUND

The Investment in Sustainable Infrastructure (SI) in Colombia roundtable is one in a series of 5 roundtables to be held in the Latin America and Caribbean (LAC) region as part of the LAC Sustainable Infrastructure Financing Network (SIFN). The Network is open to all relevant actors who can contribute to the objective of the LAC SIFN, which is to promote:

- Bankability and Sustainability in PPPs for LAC infrastructure
- Green Protocols and Green Strategies from Lenders and Investors
- Sustainable Capital Markets
- Climate Risk Assessment and Disclosure (specifically the Taskforce on Climate-Related Financial Disclosures [TCFD] in LAC)

Objectives of the Colombia Roundtable

The structure and the objectives of the Colombia roundtable are as follows:

- The first sessions focused on identifying the challenges and opportunities for potential investments in sustainable infrastructure, and solicit input from participants to identify the necessary changes in status quo for Colombia to deliver well-planned bankable sustainable projects, and thus agree on an action plan for advancing investment into sustainable infrastructure (including green projects) in Colombia.
- The latter session enabled sharing of lessons and best practices from issuances of innovative financial instruments in Colombia and other markets, and aimed to define barriers, opportunities and actions for the development at scale of green and sustainable bonds, and other instruments in Colombia.

Agenda	Speakers / Affiliation
Opening Comments	Maria Tapia, IDBG Ángela Valderrama, bvc Greg Houston, British Embassy Colombia
Portfolio of Infrastructure and Sustainability Projects	Pablo Medina, Mercer Maria Tapia, IDBG

Best practices in infrastructure and PPPs: Incorporation of Sustainability Considerations	Carlos Garay, Departamento Nacional de Planeación (DNP) Sergio Forte, Banobras Lina Madrid, SURA AM
Green Financing: The Potential of Green and Sustainable Bonds	Hans-Peter Egler, South Pole Claudia María González Arteaga, Bancóldex Edgar Amador, City of Mexico (former Secretary of Finance)
Innovation in Sustainable Capital Markets: New Instruments and Funds, with a Focus on Renewable Energy Financing	Carlos García, Unidad de Planeación Minero Energética (UPME) Olga de Narvaez, BID Invest

MEETING SUMMARY

Portfolio of Infrastructure and Sustainability Projects

Infrastructure is 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 cities. Colombia has an identified investment gap of $USD 100 billion[1] through 2040. To achieve the objective of reducing the infrastructure gap in Colombia, the mobilization of private funds, especially from institutional investors, is necessary. Further, infrastructure investing has to be focused on sustainable low carbon infrastructure.

The UK Sustainable Infrastructure Program (SIP) was launched in 2017[2] at COP23 as a partnership between IDB Invest and the Department for Business, Energy and Industrial Strategy of the UK (BEIS). SIP will accelerate sustainable infrastructure development in the region (initially focusing on Brazil, Colombia, Mexico and Peru) by catalyzing private sector investment for the implementation of the Nationally Determined Contributions (NDCs) of the Paris Agreement. SIP represents the largest partnership effort of the IDB Group and the Government of the UK in Latin America and the Caribbean.

The objective of the program is to demonstrate that SI is profitable and that countries can join efforts to reduce global warming. In the UK, the low-carbon sector is growing faster than the rest of the economy. It is important to work with the private sector to reduce the perception of risk and mobilize resources to invest in sustainable infrastructure. The SIP will be carried out through mixed financing to mobilize the private sector with new instruments, PPP models, etc.

Large pensions and sovereign wealth funds in the OECD countries have allocated approximately 1% on average to unlisted infrastructure assets, and over 80% of these infrastructure allocators report being below their targets for the asset class[3]. Infrastructure investors rank governance risk, political / regulator risk and environmental or social risks as the top potential 'deal-breakers' to investing in LAC. Investors generally have yet to adopt a truly 'sustainable infrastructure' focused approach to the selection and execution of projects.

[1] https://www.gihub.org/countries/colombia/ (accessed Dec 16, 2018)
[2] https://www.iadb.org/en/news/news-releases/2017-11-14/idb-and-uk-establish-infrastructure-fund%2C11956.html
[3] OECD. Survey of Large Pension Funds and Public Pension Reserve Funds (2018), available at http://www.oecd.org/finance/private-pensions/survey-largepension-funds.htm

Incorporating Sustainability into PPPs

The law on Public-Private Partnerships (1508/2012) is an instrument for linking private capital with the provision of public goods and services, including the availability and level of service of the infrastructure and / or service. The Law not only focuses on transportation, but also infrastructure in other sectors, and also including SI indicators to prioritize projects. The PPP Law seeks to attract long-term investors with sufficient financial capacity that not only build the infrastructure, but operate it and maintain it. It reinforces the adequate structuring of projects in terms of studies, risk analysis, and clarifies the roles and functions of the entities that participate in the PPP project cycle.

The development of Sustainable Infrastructure through the PPP framework is supported by the following:

- **Development of priority projects:** Projects for PPPs are prioritized in the National Development Plan and / or in Territorial Development Plans.
- **Institutional strengthening:** The DNP continuously provides training to national and regional public entities. The Government created the National Infrastructure Agency, which awarded the most ambitious road program (4G) developed under the PPP mechanism.
- **Clarity of funding sources:** Integral structuring: environmental, legal, institutional, commercial, and financial techniques. Clear definition of investment amounts and sources of financing
- **Standardization of tools and indicators:** Service indicators and quality standards that are used to verify the correct functioning of the infrastructure and its compliance is the basis for the remuneration of the private investor.

The challenges for DNP are to i) incorporate these aspects into all the projects, and ii) to evaluate each type of asset to be developed, considering the long term costs (financing, investment, project definition).

There are also challenges from the investor perspective. With the adoption of Infrastructure Law 1682, the investment landscape has improved; however, there are gaps regarding 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. Regulation is not sufficiently clear to generate the right incentives so that investors internalize environmental and social indicators in their due diligence process to evaluate infrastructure projects. Further, it is challenging to ensure that the process for negotiations with communities in Colombia is not misused through misrepresentation of community membership.

Considering experiences in other regions, Mexico has developed a Projects Hub (Proyectos Mexico)[4] 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) in close coordination with entities and agencies of the public and private sectors. Proyectos Mexico consolidates information on infrastructure projects in Mexico and 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. Currently there are 700 investment opportunities in infrastructure and energy. For each of these projects, there is a need to identify the relevant sustainability indicators for each stage of a project, determine if the required information is public, and identify what information is needed to assess sustainability 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.

Green Finance and Sustainable Capital Markets

Stock exchanges, as market centralizers, are central to promoting the use of new financial instruments that support the development of markets that integrate environmental and social considerations. The bvc has promoted the development of green bonds through tools that support the development and issuance of these types of bonds. bvc is also looking to promote other types of instruments in the equity market, such as real estate funds and infrastructure funds. bvc recognizes issuers who meet recognized standards for corporate sustainability disclosure through its Investor Relations (IR) Recognition[5]. The bvc IR Recognition is given to issuers who voluntarily decide to comply with better practices in investor relations and disclosure. For example, 32 listed issuers, both from equity and fixed income, currently have this recognition. From the 32 issuers who have the IR Recognition, 27 already provide some disclosure under the Global Reporting Initiative standard. In 2017, the Dow Jones Sustainability MILA Pacific Alliance Index[6] was launched for the 4 MILA markets (Mexico, Peru, Chile,

[4] https://www.proyectosmexico.gob.mx/en/about/
[5] https://www.bvc.com.co/pps/tibco/portalbvc/Home/Empresas/IR
[6] https://ca.spindices.com/indices/equity/dow-jones-sustainability-mila-pacific-alliance-index-usd

Colombia). The Index uses the S&P MILA Pacific Alliance Composite as the underlying universe. The index contains 11 Colombian companies.

Green and sustainable bonds are financial instruments that leverage different projects that aim to meet the United Nation's Sustainable Development Goals[7]. At the end of 2017, there were $895 billion climate-aligned bonds in the world ($221 billion of which are labelled green bonds)[8].

Bancoldex issued its first green bond in August 2017. After a very successful launch with an oversubscribed issuance, the first social bond was put into market in May 2018 (also oversubscribed). Bancoldex has also issued an orange bond[9], to promote projects whose underlying investments are heavily focuses on creativity, innovation and intellectual property.

IDB, through its CMF Division, provided technical assistance in the structuring of Bancoldex's green, social and orange bonds. Bancoldex has taken an institutional decision to make recurring issues of thematic bonds. As a public bank with a clear development goal, the issuance of these socially and environmentally impactful bonds has proven to be a successful strategy, as it attracts new demand while aligning with the bank´s main objectives. Figure 11 provides details of green and social bonds issues by Bancóldex, Bancolombia, Davivienda, and Empresa de Energía del Pacífico (EPSA).

The current challenge of the Colombian market in this regard, is to have a pipeline of relevant projects, to have a valuation curve for these bonds, to reduce the volatility, and to create impact indicators.

The City of Mexico issued its first green bonds in November 2016. The benefits of green and sustainable bonds for local governments are:

- They are an innovative alternative for the financing of climate actions.
- Unlike traditional bonds, green bonds must follow criteria of transparency and environmental responsibility defined by an international entity.
- The technical and financial progress of the projects implemented is monitored annually.
- They can receive higher demand by the private sector (often over-subscribed) than traditional bonds, as demonstrated in the case of Mexico City

Innovation in Financing Instruments and Focus on Renewable Energy Financing

Energy mix and distribution is largely driven by government policy. The historical composition of the energy supply in Colombia has evolved, due to effective policy decisions. Strong changes in the composition of the energy supply have necessarily been driven by policy decisions, e.g. the promotion of renewables, fracking and the use of water resources. The choice of the future energy to follow implies costs and benefits that need to be evaluated. UPME had developed scenarios to 2050 (see figure 14 at the end of this document) to assess these costs and benefits. Colombia would reduce its greenhouse gas emissions by 20% against a business as usual (BAU) scenario by 2030. The energy matrix of the economy is highly dependent on fossil fuel resources (e.g. transport and industrial sectors).

Going forward, electric power will see an increase in the energy market, and the way to produce and consume electrical energy will be fundamental in any of the possible energy futures.

[7] https://www.un.org/sustainabledevelopment/sustainable-development-goals/

[8] https://www.climatebonds.net/files/reports/cbi-sotm_2017-bondsclimatechange.pdf Green Bonds are those labelled as 'green' by the issuer and are financing green assets and [rojects. Unlabeled 'climate-aligned' bonds are those issued by entities enabling a low-carbon economy but are not labelled green. Source: Climate Bonds Initiative

[9] https://publications.iadb.org/en/publication/17433/orange-economy-infinite-opportunity

Colombia currently produces the majority of its electricity from hydroelectric generation, but is looking to diversify its power supply. Colombia has therefore moved forward on renewable energy auctions.

Although the great potential of renewable energy in Colombia is in its northern tip (La Guajira), developing projects of any nature there represents a challenge due to the major lack of connectivity ("Electricaribe"). Therefore the issue of power transmission infrastructure will need to be addressed, in order to promote renewable energy projects in Colombia. In terms of energy efficiency, in Colombia the association of energy services companies is very limited and there are very few companies that offer integrated energy efficiency services.

Finding long-term financing to support the energy transition (e.g. green transmission lines) is one of the main challenges for Colombia. It is important to develop instruments that can mitigate the risks that investors face in this space. For example, IDB Invest has developed a B Bond structure that can achieve longer tenors and more competitive pricing than a typical A/B Loan[10] by sharing IDB Invest's Preferred Creditor Status and reaching a broader investor base.

MEETING PARTICIPANTS

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[10] 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

About the Inter-American Development Bank Group

The Inter-American Development Bank Group (IDBG) is a leading source of long-term financing for economic, social and institutional projects in Latin America and the Caribbean. Besides loans, grants and guarantees, the IDBG conducts cutting-edge research to offer innovative and sustainable solutions to our region's most pressing challenges. Founded in 1959 to help accelerate progress in its developing member countries, the IDBG continues to work every day to improve lives.

About IDB Invest

IDB Invest, the private sector institution of the Inter-American Development Bank (IDB) Group, is a multilateral development bank committed to supporting Latin America and the Caribbean businesses. It finances sustainable enterprises and projects to achieve financial results that maximize economic, social and environmental development for the region. With a current portfolio of $11.2 billion under management and 330 clients in 23 countries, IDB Invest works across sectors to provide innovative financial solutions and advisory services that meet the evolving demands of its clients. As of November 2017, IDB Invest is the trade name of the Inter-American Investment Corporation.

About Bolsa de Valores de Colombia

Bolsa de Valores de Colombia S.A. (bvc) is the Capital Market Infrastructure Company of Colombia and one of the most relevant at regional level as a result of the corporate integration between Bolsa de Valores de Colombia and Deposito Centralizado de Valores, deceval. bvc is a multi-product and multi-market exchange that manages trading and recording systems for the stock, fixed-income, derivatives, currency, OTC and issuer services markets. It is a public limited company based in Bogota, Colombia, a strategic ally in the financial and the securities industries. bvc provides market access and information services, as well as pricing procurement, asset valuation and risk management services (Precia). It also provides specialized technology and innovation solutions for the financial industry (Sophos).

About the UK Sustainable Infrastructure Program (SIP)

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About Mercer

Mercer is a global consulting leader in talent, health, retirement and investments. Mercer helps clients around the world advance the health, wealth and careers of their most vital asset — their people. Mercer's more than 20,000 employees are based in 43 countries and the firm operates in over 140 countries. Mercer is a wholly owned subsidiary of Marsh & McLennan Companies (NYSE: MMC), a global professional services firm offering clients advice and solutions in the areas of risk, strategy and people. With annual revenue of $13 billion and 60,000 colleagues worldwide, Marsh & McLennan Companies is also the parent company of Marsh, a leader in insurance broking and risk management; Guy Carpenter, a leader in providing risk and reinsurance intermediary services; and Oliver Wyman, a leader in management consulting. For more information, visit www.mercer.com. Follow Mercer on Twitter @Mercer.