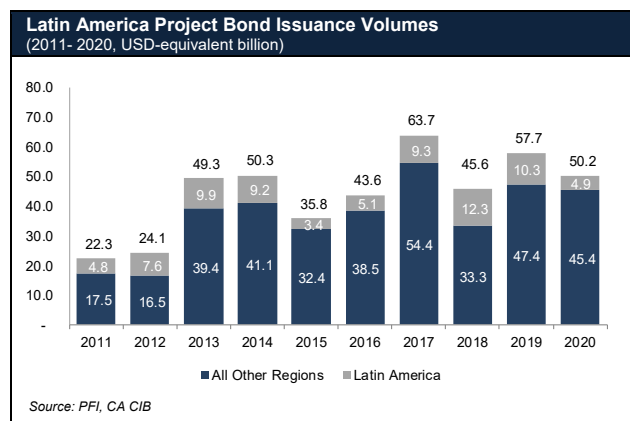




# Project Bonds in Latin America

## LatAm Project Bond Market Overview

Latin America has been a consistent contributor to the global Project Bond market with more than \$76.8BN issued across 16 countries in the region over the past 10 years. Despite a slowdown in 2020 due to the global economic impacts of COVID-19, Latin America represented approximately 17% of the global Project Bond volumes between 2011 and 2020, and accounted for 10% in 2020.



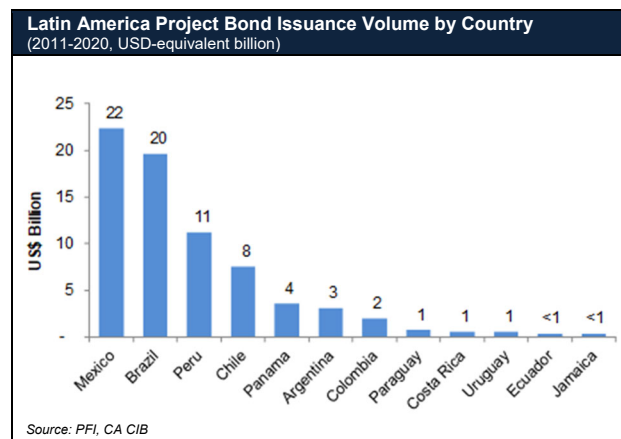
The Latin American Project Bond market has been dominated by investment grade countries whose contribution to local economic activity is the strongest. Mexico, Brazil, Peru, and Chile contributed 29% (\$22.3BN), 25% (\$19.6BN), 14% (\$11.2BN), and 10% (\$7.6BN), respectively, of total Project Bond issuance volume between 2011 and 2020. With the exception of Brazil, which was downgraded in late 2015 / early 2016 to the BB category, these countries historically showed resilient economic activity, supported by strong fiscal and monetary policy supporting their sovereign investment grade. Panama has also seen meaningful and increasingly-frequent capital markets activity among infrastructure and energy issuers with cumulative issuance of \$3.5BN since 2011.

In the past decade, although short lived, bursts of activity in the Project Bond market corresponded with new administration and renewed political activity seeking to stimulate growth as well as investment in infrastructure. This was the case in Argentina between 2017 and 2018, \$2.8BN were issued mostly related to energy issuers, after nearly two decades of no Project Bond activity due to economic and political instability.

Other jurisdictions have seen increase in activity such as Uruguay which has accounted for 20% of total solar and wind issuances from LatAm ex-Brazil, since 2017. In Colombia more than \$1.5BN have been issued anchored in

the country's 4G toll road and 5G infrastructure programs are likely to continue as the country enters election year in 2022 subject to Colombia maintaining its investment grade rating. Mild activity continues to be observed among infrastructure issuers in the Dominican Republic, Costa Rica, Jamaica and, more recently, Ecuador which saw its first Project Bond issuance in March 2019 with the refinancing of the Quito airport.

Total issuance volumes from Latin America were down to \$4.9BN in 2020, a 53% decrease from the \$10.3BN registered in 2019. With \$1.2BN issued in 2020, Brazil took the first place in the region and was closely followed by Chile. Mexico was the third largest market in the region in 2020 at \$953MM, representing half of the 2019 volume. Despite contraction in Project Bond issuance in Latin America, countries like Uruguay (+44%) and Chile (+34%) encountered the largest growth in the region in 2020. The largest Latin American project finance transaction of the year was the \$1.7BN bank bond hybrid financing backing the 1.7GW power portfolio owned by EnfraGen across Colombia, Chile and Panama. \$710MM were financed as project bond.

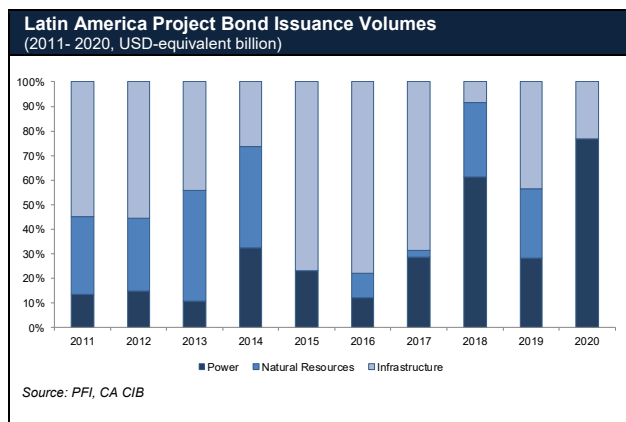


Sector-wise, the Latin American Project Bond market has been historically comprised of a majority of transportation infrastructure assets – with toll roads and airports as the most significant contributors to issuance volume, followed by oil & gas assets – mostly drilling rigs, several of which were issued from Brazil between 2010 and 2014 before the global oil & gas price contraction and Brazil's 2015-2016 economic crisis.

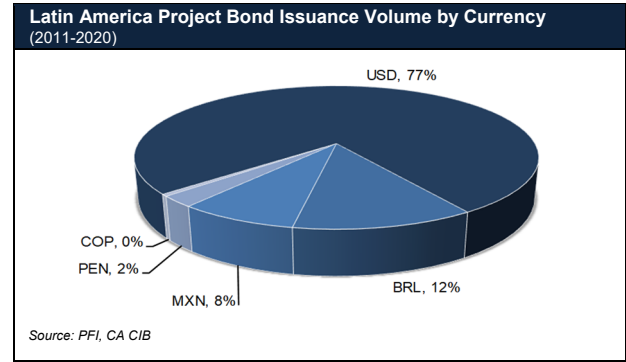
Until 2017, the power sector represented the smallest share of issuance volume in Latin America. However, the region saw an inflection point in 2018 with offerings in power generation and power transmission becoming the largest contributors to issuance volume. Between 2018 and 2020, the power sector has represented over 52% of Latin

America’s Project Bond market, with more than \$6.0BN for conventional power assets, \$2.8BN for wind, solar and hydro and \$2.6BN issued for transmission lines.

The power sector’s increase in relevance in the Project Bond market in Latin America has been fueled by reforms in the energy sector promoting private investment into market segments previously restricted to public investment and an increased emphasis on the deployment of renewables into the region’s grids, anchored in climate change mitigation plans and targeted sustainability policies. In particular, private investment has been meaningfully attracted to select Latin American countries through power purchase agreement (“PPA”) auction programs for renewables across the region.



Project Bonds out of Latin America have been primarily denominated in USD. Currency denomination has been typically determined by offering size and underlying asset type. Large issuances requiring access to ample liquidity pools and targeting international investors are typically issued in USD; while smaller offerings, placed in-country, are more frequently issued in local currency. Energy sector offerings – in particular for assets whose cash flows are closely related to oil & gas commodities (widely traded in USD) or for assets operating in regulated markets with prices indexed to hard currency, are commonly issued in USD. Assets relying on user-pays revenue streams – such as tolled transportation projects, are commonly issued in local currency, in order to avoid currency mismatches. Since 2011, 77% Latin American Project Bonds have been issued in USD, and the majority of local currency offerings have been issued in either Brazilian Reais or Mexican Peso.



## Key Drivers of LatAm’s Project Bond Market Growth

Latin America’s Project Bond market dynamics are underpinned by the following regional fundamentals.

### Population Growth

Latin America’s population growth trends result in structural pressures that provide a robust rationale for investing in infrastructure and energy assets.

The United Nations estimates that by 2050 Latin America’s population will be approximately 780MM, or 1.20x today’s estimated 645MM. Approximately 86% will dwell in urban areas, up from today’s 75%. The increase in urban population may place pressure over existing infrastructure and calls for the construction of new assets across all sectors.

This trend is further supported by population distribution. While regions like North America and Europe display a trend towards an inverted population pyramid (i.e. skewed towards mid-aged and old-age brackets), Latin America’s is concentrated in age brackets under 20 years, suggesting that as younger populations reach productive age increasing pressure over existing infrastructure assets may require additional investment.

### Improving Macroeconomic Conditions

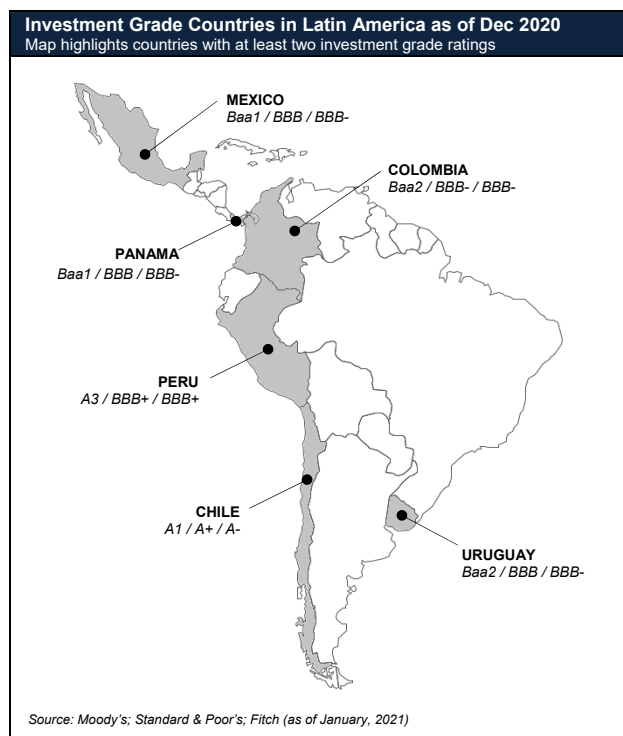
The region’s growth over the past decades has come with requirements for infrastructure investment as countries have migrated from rural economies into industrializing and urbanized economies with higher demand for industry, commerce, and services.

Between 2000 and 2019, Latin America experienced an average annual GDP growth rate of approximately 4.5%. This rate was closer to 8.0% for countries in the region currently rated investment grade. Inflation also has remained relatively stable in the region, within the 2.5-3.5% range for the last 20 years, with the exception of 2008 –

during the global financial crisis. With a growing consumer class and overall improved access to education, health, and other goods and services, Latin America saw more than 70MM people lifted out of poverty and its middle class grow by more than 50%.

The impact of the COVID-19 outbreak in the region is yet to be fully seen, but the latest World Economic Outlook update of the International Monetary Fund (“IMF”) suggests that a GDP contraction in the 7.4% area for 2020. However, the IMF also estimates that the region’s resilience will be underlined by an approximately 4.1% recovery in GDP in 2021, and that growth could carry on at roughly 3.0% per annum thereafter.

The region’s improvement in its macroeconomic and regulatory landscape is evidenced by the evolution of its sovereign credit ratings over the past two decades. In 2000, the region had only one country with investment grade credit ratings from all Moody’s, S&P and Fitch. As of December 31, 2020, there are 6 countries with investment grade ratings from these three rating agencies.



### Supportive Regulation & Policies

Latin America’s growth in infrastructure and energy investment volume has benefited from targeted policy decisions and improving regulatory frameworks. Over the past two decades, innovations and best practices in project procurement and financing have been adopted in Latin America to attract private investment, including an increased emphasis on specific investment goals in

strategic sectors such as transportation and energy – including, in some cases, policies for climate change mitigation and guidelines for energy transition. While making these goals a component of their national development plans, some of these sectors have undergone restructuring with an emphasis on attracting private investment.

Reforms have included overhauling local PPP and concessions laws aiming to improve project bidding and dispute resolution mechanisms, setting up new government agencies and specialized units to support the development of successful infrastructure investment programs, and organizing targeted auctions for awarding offtake agreements related to power generation and transmission assets with the objective of enhancing grid efficiency and reliability.

Some examples include:

- Colombia passed PPP laws to attract investors to the country’s 4G road program – one of the biggest road-building initiatives in Latin America to date. Colombia also launched the 5G multi-modal infrastructure \$13.0BN program in 2020.
- Chile opened new concessions and operating frameworks with an emphasis on economic infrastructure, renewable energy and electricity transmission. In 2020, local government approved a new Energy Efficiency Law focused on reduction of carbon emissions.
- Peru adopted innovative approaches to attract investors to PPPs for transportation, hospitals, water, and power generation and transmission (e.g. through milestone payment schemes labeled “RPICAO” – and its precedent “CRPAO”).
- Mexico passed laws opening the energy market to private investors, allowing for competitive power generation auctions, and reformed its PPP framework to provide greater certainty for investors and contractors.
- Uruguay rolled out a strategic energy transition plan emphasizing wind and solar generation, attracting international private investment while reducing the country’s grid reliance on fossil fuels and mitigating vulnerability to hydro resource risk.

Efforts throughout the region also include policies such as net metering regulations and renewable portfolio standard requirements in countries like Chile, Mexico, and Uruguay – creating the foundation for a green infrastructure marketplace. In addition to regulations setting the stage for local distributed energy industries (e.g. rooftop residential and commercial/industrial solar in Mexico), innovative frameworks have created opportunities for small-scale

renewables benefitting from streamlined interconnection processes and eligibility to sell power at regulated tariffs in the absence of offtake agreements (e.g. Chile's PMGD framework, where small-scale uncontracted generation assets benefit from a "stabilized price" that provides a significantly less volatile source of revenue than spot market sales).

### Liquidity & Investor Appetite

Latin American Project Bonds have been typically anchored by US institutional investors. There are approximately 40 US insurance companies that actively participate in Project Bond offerings, across all assets classes. This investor base has traditionally preferred credits rated BBB- or higher and, thus, has frequently invested in assets located in investment grade countries such as Chile, Mexico, and Peru. These investors buy and hold the bonds until maturity, and typically prefer a 4(a)(2) US Private Placement format.

In addition to US insurance companies, US asset managers and emerging markets investors have demonstrated appetite for structured credit from Latin America – including related to infrastructure & energy assets. This investor base typically either supplements insurance companies' commitments in investment grade offerings, or participates in high yield offerings, including from sub-investment grade countries. They are more commonly seen participating in 144A / Reg S offerings (as opposed to 4(a)(2) US Private Placements) in the region.

In some countries, domestic capital markets are deep enough for additional liquidity to be available from local pension fund managers or local insurance companies. This has historically been the case in Chile, Mexico and Peru, where AFPs and Afores have participated in Project Bond issuances. As these local investors have grown to become more sophisticated, they have also gradually been more comfortable taking lead investment roles. This investor base is also particularly well-suited for local currency-denominated offerings.

Most recently, Asian institutional investors from China, Japan, Singapore and South Korea have emerged as a new investor universe with select appetite for Latin American Project Bonds. This investor base has demonstrated particular interest in debt rated 'BBB' or higher.

The case of Brazil deserves its own separate discussion, since it has historically been one of the most frequent issuers in the region, while showing a very distinct market dynamic to the described above for the rest of the region. With the exception of some cross border offerings issued several years ago related to oil & gas assets such as drilling rigs and FPSOs, Project Bonds issued from Brazil have been executed in local currency as "debentures", for

relatively small sizes and placed locally with retail investors. The reasons behind this include the high level of involvement of the Brazilian development bank ("BNDES") as a source of low-cost project financing and Brazil's favorable tax treatment of income from debentures related to assets deemed to be *critical infrastructure*.

## Country Trends & Highlights

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Below, we focus on the countries that have historically contributed most to the growth of the Latin America Project Bond market, and highlight some others that have more recently become relevant. In particular, we discuss key trends and developments in Mexico, Brazil, Peru, Chile, Colombia, Argentina, and Uruguay.

### Mexico

Mexico has been the country most-consistently leading Project Bond issuance volumes in Latin America with over \$22.3BN issued since 2011, representing 29% of the total amount issued in the region. In 2016 alone, Project Bond issuances from Mexico exceeded \$2.7BN – comprising approx. 50% of the region's total issuance volume. This trend carried on in 2017, with over \$4.6BN issued. However, issuance volume from Mexico halved in 2018 to reach \$2.3BN and further decreased by 9% in 2019 to reach \$2.1BN, confirming market caution given the current administration's signals of revisiting past administrations' supportiveness of private sector participation in the country's infrastructure and energy sectors. With only \$953MM issued in 2020 through a single issuance backing the Tierra Mojada CCGT plant, the market considerably slowed down due to COVID-19, 50% lower than the previous year.

Mexico's leadership in the market has been driven by continued macroeconomic and political stability in the last decade – as reflected by its credit ratings, and its sheer size and relative weight in the regional economy. Mexico is Latin America's second largest economy (surpassed only by Brazil) and has a broad industrial and manufacturing base that has driven substantial investment programs across industries.

The region has seen numerous "groundbreaking" transactions from Mexico, including:

- The first Project Bond guaranteed by an Export Credit Agency ("ECA") in the power sector, globally - i.e. the \$401MM, dual-tranche bond offering (\$250MM guaranteed by the Export-Import Bank of Korea ("KEXIM") and \$151MM uncovered) issued by KST Electric Power Company, S.A.P.I., a Mexican SPV that owns and operates the Norte II combined-cycle power plant (see Mexico Case Study 1);

- The first bank/bond hybrid with a Project Bond issued alongside a bank loan facility related to oil & gas assets restricted from private investment until the comprehensive Energy Reform took place - i.e. the \$531MM bonds issued in 2016 on the back of a sale and lease-back transaction with Petroleos Mexicanos (“PEMEX”) (see Mexico Case Study 2); and
- The first renewables Project Bond in Latin America - i.e. the \$300MM in aggregate senior secured notes issued in 2012 for the Oaxaca II and Oaxaca IV wind farms (see Mexico Case Study 3).

*Mexico Case Study 1: Norte II - KST Electric Power Co.*

In December 2019, KST Electric Power Co. (a Mexican special purpose company controlled by Korea Electric Power Company, “KEPCO”) issued \$401MM in senior secured, non-recourse notes to refinance then-outstanding bank facilities related to the Norte II power plant in Mexico – a 450MW combined cycle asset fully contracted with state-owned utility Comisión Federal de Electricidad (“CFE”). The notes were issued in two tranches as follows:



- \$250MM, 3.30% notes due 2037, benefiting from a full, irrevocable and unconditional financial guarantee from Korea’s export credit agency KEXIM; and
- \$151MM, 5.70% notes due 2037, without any form of external credit enhancement.

The credit enhancement provided by KEXIM to the \$250MM covered tranche was structured to conform with international capital markets standards, thus ensuring that investors could deem credit risk fully transferred to the guarantor, equating the offering’s implied credit rating to KEXIM’s. This was the first-ever Project Bond guaranteed by KEXIM and the first power Project Bond, globally, to benefit from an ECA guarantee.

The transaction was unrated and placed under a 4(a)(2) US Private Placement format with a select group of buy-and-hold institutional investors in Asia, the US, and Europe.

The offering monetizes a long term, USD-denominated PPA awarded to Norte II in 2011 in the context of Mexico’s independent power producer (IPP) framework.

Credit Agricole Securities sole led this ground breaking transaction, which received “Latin American Power Deal of the Year” award by IJGlobal for 2019.

Mexico Case Study 1 ECA-guaranteed Power Project Bond KST Electric Power Co.		 
<b>Summary Terms &amp; Conditions</b>		
<b>Issuer:</b>	KST Electric Power Co.	
<b>Size:</b>	\$401 million in two tranches as follows: <ul style="list-style-type: none"> <li>▪ \$250MM, KEXIM-guaranteed</li> <li>▪ \$151MM uncovered</li> </ul>	
<b>Issue Dates:</b>	December 2019	
<b>Maturities:</b>	December 2037	
<b>Amortization:</b>	Fully-amortizing	
<b>Sponsor(s):</b>	KEPCO (56%), Samsung Asset Management (34%) and Techint S.A de C.V. (10%)	
<b>Format:</b>	4(a)(2) US Private Placement	
<b>Use of Proceeds:</b>	Refinance the Issuer’s previous indebtedness and cover transaction-related costs	
<b>Payment Source:</b>	Payments by CFE per the USD-denominated PPA between the Norte II CCGT (owned and operated by the Issuer) and CFE	
<b>Status:</b>	Operating	
<b>Ratings:</b>	Offering was unrated	
<b>Coupons:</b>	<ul style="list-style-type: none"> <li>▪ 3.30% for the KEXIM-guaranteed notes</li> <li>▪ 5.70% for the uncovered notes</li> </ul>	

**Why Relevant?**

The transaction was the first-ever Project Bond in the power sector, globally, to benefit from a financial guarantee from an ECA (KEXIM) and demonstrated investor appetite for unrated transactions from select issuers. The resulting cost-of-debt for the covered tranche was the lowest-ever achieved for a Mexican Project Bond. Credit Agricole was sole placement agent for the financing.

Additionally, the transaction demonstrated robust investor appetite from Asia, given that the guaranteed tranche was entirely taken by a single Korean investor. The uncovered tranche was circled by six US and Europe-based investors.


*Mexico Case Study 2: Poinsettia Finance Ltd.*

In 2016, Poinsettia Finance Ltd. issued \$531MM senior secured notes to finance a sale and lease back transaction between private equity fund Kohlberg Kravis Roberts (“KKR”) and Petroleos Mexicanos (“PEMEX”). The transaction entailed an operating portfolio of oil & gas assets originally owned by PEMEX, sold to KKR, and leased back to PEMEX on a long term basis. Additional financing sources for the transaction included non-recourse bank credit facilities as follows: a \$100MM 12-year term loan, a \$235MM 10-year term loan, a \$115MM five-year term loan, and a \$50MM five-year revolver. The credit facilities and the senior secured notes rank pari-passu in a first-of-its-kind bank/bond hybrid structure.

The primary source of repayment of the senior secured notes and the credit facilities is a stream of payments from PEMEX pursuant to a 15-year lease agreement. Such payments are fixed, USD-denominated, and unconditional, regardless of the assets’ availability, use or performance – thus eliminating operating, volume, and price risk.



Credit Agricole Securities acted as Joint Bookrunning Manager & Sole Lead Arranger in this transaction, which received a “Deal of the Year” award by IJGlobal for 2016.

Mexico Case Study 2 Bank / Bond Hybrid Financing Poinsettia Finance Ltd.		
<b>Summary Terms &amp; Conditions</b>		
<b>Issuer:</b>	Poinsettia Finance Ltd.	
<b>Size:</b>	\$530.8 million	
<b>Issue Date:</b>	June 2016	
<b>Maturity:</b>	June 2031	
<b>Amortization:</b>	Fully-amortizing	
<b>Sponsor(s):</b>	KKR	
<b>Format:</b>	144 A / Reg S	
<b>Use of Proceeds:</b>	Finance the purchase price of a portfolio of operating oil & gas assets	
<b>Payment Source:</b>	Fixed, hell-or-highwater payments made by PEMEX throughout a 15-year lease agreement, made irrespective of assets use or performance	
<b>Status:</b>	Operating	
<b>Ratings:</b>	Baa3 / BBB+ by Moody's and S&P	
<b>Coupon:</b>	6.625%	

**Why Relevant?**

The transaction was at the time the largest bank/bond hybrid project financing in Mexico and the first to include a private equity firm investing in PEMEX oil & gas assets in the context of Mexico's historic Energy Reform. The transaction was seen as a way for PEMEX to monetize its assets as part of a company-wide asset/liability management strategy. Credit Agricole Securities was a joint-bookrunner for the bond offering and the lead arranger for the bank financing.



The transaction demonstrated complementarities between the project finance bank market and the project finance bond market, tapping into distinct liquidity pockets with different appetite for tenor and risk/reward profiles. This allowed an efficient execution with optimized cost of debt and funding diversification.

**Mexico Case Study 3: Oaxaca II & Oaxaca IV Wind Farms**

In late 2009, Comisión Federal de Electricidad (“CFE”) - Mexico's state power company, launched a tender for the construction and operation of three wind projects (Oaxaca II, Oaxaca III, and Oaxaca IV) to ramp up Mexico's wind generation capacity. In March 2010, the three projects were awarded to Acciona Energia SA. Acciona was granted an agreement with CFE to operate the wind projects for 20 years, pursuant to USD-denominated, long term PPAs.

In August 2012, Oaxaca II issued \$148.5MM senior secured notes to refinance its construction bank facilities. Concurrently, Oaxaca IV issued \$150.2MM senior secured notes, also to refinance its construction-related debt. Both projects are similar in size and technical specifications, with 102MW installed capacity, each.

Credit Agricole Securities acted as Joint Bookrunner in this landmark transaction, which received “Latin American Deal of the Year” award by PFIE for 2012.

Mexico Case Study 3 Fully-contracted Wind Refinancing Oaxaca II & Oaxaca IV		 
<b>Summary Terms &amp; Conditions</b>		
<b>Issuer:</b>	CE Oaxaca Dos, S de RL / CE Oaxaca Cuatro, S de RL de CV	
<b>Size:</b>	\$148.5 million / \$150.2 million	
<b>Issue Date:</b>	August 2012	
<b>Maturity:</b>	December 2031	
<b>Amortization:</b>	Fully-amortizing	
<b>Sponsor(s):</b>	Acciona Energia	
<b>Format:</b>	144 A / Reg S	
<b>Use of Proceeds:</b>	Refinance construction bank facilities related to the 102MW Oaxaca II and 102MW Oaxaca IV wind farms	
<b>Payment Source:</b>	USD-denominated PPAs with CFE	
<b>Status:</b>	Operating	
<b>Ratings:</b>	BBB- / BBB- by S&P and Fitch	
<b>Coupon:</b>	7.250%	

**Why Relevant?**

Oaxaca II and Oaxaca IV were the first wind Project Bonds outside of the United States and the first renewables projects ever in Latin America to tap international capital markets. Credit Agricole Securities was a joint-bookrunner for both issuances.

With the inclusion of local investors in the final order book, Oaxaca II and IV also became the first international Project Bonds to significantly tap local Mexican institutional investors (“Afores”), at a time when commercial banks were unprepared to lend for the refinancings of the projects. The sponsor was able to tap capital markets as an alternative and move forward with refinancing plans.

**Brazil**

Brazil has been the second-largest contributor to the market – with a market share of 25% between 2011 and 2020 (\$19.6MM), and showed particularly-robust activity in 2012 and 2013 with total issuance volumes of \$3.6BN and \$3.4BN respectively (with FPSOs and drilling rigs materially-contributing to USD volume). These trends underline the country's sustained need for infrastructure and energy investment, especially when considering that Project Bonds have been a relatively small share of total investment in the sector given Brazilian state-owned development bank BNDES leading role as lender. In the last 10 years, BNDES has provided approximately 80% of total project financing in the country.

Developments on the political front framed by corruption scandals around Brazil-based infrastructure contractors noticeably tempered Brazil's Project Bond market in 2016 and 2017: issuances from Brazil totaled \$511MM in 2016,


and \$81MM in 2017 (a 98% drop from market highs in 2013). These figures, nonetheless, deserve to be qualified, as many Project Bonds issued from Brazil have been executed in local currency as “debentures”, for relatively small sizes and placed locally with retail investors – who benefit from a favorable tax treatment of income from debentures related to assets deemed to be *critical infrastructure*.

Brazilian issuance volume recovered in 2018, contributing to 40% of the total Latin America volume in 2018 (\$3.7BN) but decreased by 45% in 2019 (\$2.1BN). With \$1.2BN issued in 2020, Brazil took the lead in the Latin American region. The vast majority of these transactions were backing power assets. Most of the issuances since 2017 have been realized in Reais (while they were mainly in USD previously).

*Brazil Case Study 1: Voltalia Wind Farm*

In March 2016, the São Miguel do Gostoso wind farm issued R\$57 million inflation-linked debentures in the local capital markets to finance project completion. The debentures rank pari-passu with a BNDES-provided senior secured credit facility.

The 108MW wind farm benefits from a 20-year PPA with Brazil’s Câmara de Comercialização de Energia Elétrica (“CCEE”) – which represents all electricity users in Brazil’s Sistema Interligado Nacional (“SIN”).

Brazil Case Study 1 Wind Debenture in Local Currency São Miguel do Gostoso	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	São Miguel do Gostoso Participações S.A.
<b>Size:</b>	R\$ 57 million
<b>Issue Date:</b>	March 2016
<b>Maturity:</b>	March 2029
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Voltalia Energia do Brasil; Paranaense de Energia
<b>Format:</b>	Restricted public offering under the CVM rule 476
<b>Use of Proceeds:</b>	Finance the completion of a 108MW wind farm
<b>Payment Source:</b>	Local currency PPA with CCEE
<b>Status:</b>	Greenfield
<b>Ratings:</b>	BrA+ by Fitch
<b>Coupon:</b>	Inflation indexed plus 8.19%

**Why Relevant?**


The transaction illustrates Brazil’s established local capital markets capacity to finance infrastructure and energy assets, including during construction, on a non-recourse basis. The transaction also underlines the country’s reliance on BNDES: the debentures were mostly-placed with BNDESPar – the investment arm of BNDES, and rank pari passu with BNDES as major senior lender. Credit Agricole Securities was sole placement agent for the transaction.

*Brazil Case Study 2: Norbe VIII/IX Finance Ltd.*

In November 2010, Norbe VIII/IX Finance Ltd. issued \$1.5BN to refinance existing debt related to the construction and operation of the Norbe VIII and Norbe IX ultra deepwater drillships, which have been chartered to Petrobras under 10-year agreements.

The drillships are contracted by Petrobras under daily-rate 10-year Charter Agreements, with matching operating agreements in place with Odebrecht.

Original construction financing was provided by a consortium of project finance banks.

Brazil Case Study 2 Ultra Deepwater Drillships USD Project Bond Norbe VIII/IX Finance Ltd.	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	Norbe VIII/IX Finance Ltd.
<b>Size:</b>	\$1.5 billion
<b>Issue Date:</b>	November 2010
<b>Maturity:</b>	June 2021
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Odebrecht
<b>Format:</b>	144A / Reg S
<b>Use of Proceeds:</b>	Refinance existing debt related to the Norbe VIII and Norbe IX ultra deepwater drillships
<b>Payment Source:</b>	10-year Charter Agreements with Petrobras
<b>Status:</b>	Brownfield
<b>Ratings:</b>	Baa3 / BBB by Moody’s and Fitch
<b>Coupon:</b>	6.35%

**Why Relevant?**

The transaction illustrates the liquidity available for jumbo issuances from Brazil if anchored in robust offtakers (e.g. Petrobras). Between 2010 and 2014, nearly \$4 billion USD Project Bonds were issued to finance similar assets in Brazil.

**Peru**

Peru has historically been the third-largest contributor to the Project Bond market in Latin America (after Mexico and Brazil), accounting for approximately 14% of total issuance volume in the region since 2011 with \$11.2BN. Between 2000 and 2010, activity from Peru was relatively consistent in the \$50-600MM range: yearly issuance volume increased from \$950MM in 2011 to over \$1.6BN in 2015. This growth trend was tempered in 2016 with a backdrop of political turmoil leading to only \$0.3BN in issuance, but showed signs of recovery throughout 2017 with \$1.0BN issued and \$1.7BN in 2018. Driven by the expansion of Lima subway (\$900MM in aggregate through 4 tranches) and the slowdown in Brazil and Mexico, Peru took the first place of the LatAm market in 2019 with \$2.3BN issued. No issuance took place in 2020.

Growth in the Peruvian Project Bond market has been fueled by PPP innovations first introduced in 2006, designed to transfer construction and performance risk to the Government of Peru. These innovations, such as the CRPAO and the RPICAO structures, entail the issuance of payment certificates backed by the Government of Peru, subject to pre-defined project completion milestones, payable regardless of subsequent milestone completions and regardless of asset performance or use, once in operation. CRPAOs are direct obligations of the Peruvian government and have been construed as sovereign indebtedness, whereas RPICAOs are contingent obligations – thus avoiding treatment as direct sovereign indebtedness. Both structures result in highly-visible cash flow streams that have been received in the capital markets as credit-derivate to the Peruvian sovereign (see Peru Case Study 1).

Peru’s robust concession framework has also enabled other innovations, such as partially-credit enhanced offerings, to be well-received (see Peru Case Study 2).

The success of Peru’s PPP framework has been frequently used as a point of reference in the region. Other countries, including most recently Argentina, have based their concession models on the RPICAO mechanism, with the goal of attracting investor appetite to critical infrastructure assets.



*Peru Case Study 1: Lima Metro Line 2 Finance Ltd*

In April 2014, the Peruvian Ministry of Transport and Communications entered into a concession agreement with Metro de Lima Linea S.A. (a consortium comprised of ACS Iridium, Vialia (FCC), Salini Impregilo, AnsaldoBreda, Ansaldo STS, and COSAPI) for the construction and operation of Line 2 and part of Line 4 of the metro system in Peru’s capital city, Lima – running nearly 35 kms across

the city and connecting the Jorge Chavez International Airport.

The awarded concession agreement conforms to Peru’s RPICAO PPP structure and entails a fixed schedule of USD-denominated compensation rights, assigned by the Peruvian government as certain pre-agreed construction milestones are achieved (and independently verified). The related RPICAOs represent irrevocable and unconditional payment guarantees from the Ministry of Transport and Communications but do not constitute direct sovereign obligations: the primary source of revenue is a master trust whose funding source is subway user-pay tariffs and certain government-levied taxes. In the event that such collections are insufficient to cover the payments established by the RPICAO schedule, the Government of Peru steps-in to cover the difference, regardless of if the project is completed and, once operational, regardless of use.

In 2015, Lima Metro Line 2 Finance Ltd issued \$1.15BN senior secured notes backed by the future cash flows to be derived from assigned RPICAOs, in order to finance the construction of the underground railway lines.

Peru Case Study 1 Milestone Payments-backed Offering Lima Metro Line 2 Finance Ltd			
<b>Summary Terms &amp; Conditions</b>			
<b>Issuer:</b>	Lima Metro Line 2 Finance Ltd.		
<b>Size:</b>	\$1,155 million		
<b>Issue Date:</b>	June 2015		
<b>Maturity:</b>	July 2034		
<b>Amortization:</b>	Fully-amortizing		
<b>Sponsor(s):</b>	ACS Iridium, FCC, Salini Impreglio, Ansaldo Breda, Ansaldo STS, and Cosapi		
<b>Format:</b>	144 A / Reg S		
<b>Use of Proceeds:</b>	Finance the construction of subway lines 2 and 4 in Lima		
<b>Payment Source:</b>	Unconditional and irrevocable payments throughout the bonds tenor backed by the Government of Peru, under Peru’s RPICAO (milestone-linked) concession structure		
<b>Status:</b>	Greenfield		
<b>Ratings:</b>	Baa1 / BBB / BBB+ by Moody’s, S&P and Fitch		
<b>Coupon:</b>	5.875%		

**Why Relevant?**

The project is one of many transactions in Peru made possible by RPICAO payments. Market-reception of this form of co-financing has been very favorable, as it transfers project completion risk and revenue risk to the sovereign. Credit Agricole Securities was a joint-bookrunner for the bond offering.

The notes drew significant interest from Asset Managers and local Peruvian investors – who comprised the majority of the final order book at over 30% of total allocations.


This transaction demonstrated that RPICAO-backed projects can benefit from ample liquidity – given that the transaction size was over \$1.0BN.



*Peru Case Study 2: Eten Cold Reserve Power Plant*

In 2010, project company Planta de Reserva Fria de Generacion de Eten S.A. was awarded a 20-year concession to build and run a 224MW thermal power plant in Peru's north west. The plant is intended to be used as a backup generator for the country (or "cold reserve") in order to help meet excess energy needs in the event of grid shortages or unplanned power demand increases.

The concession grants USD-denominated, fixed capacity payments throughout its tenor and variable payments when called to dispatch, made from the entire Peruvian electrical generation system – a counterparty risk profile deemed by investors to be consistent with the Peruvian sovereign.

Peru Case Study 2 Credit-enhanced Transaction Planta de Reserva Fria de Generacion de Eten S.A.	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	Planta de Reserva Fria de Generacion de Eten SA
<b>Size:</b>	\$132.8 million
<b>Issue Date:</b>	December 2013
<b>Maturity:</b>	December 2033
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Grupo Cobra (subsidiary of Grupo ACS) and Empresa de Mantenimiento, Construcción y Electricidad, S.A. de C.V. ("EMCE")
<b>Format:</b>	144 A / Reg S
<b>Use of Proceeds:</b>	Finance construction of a 224 MW, diesel-fired, simple-cycle power plant
<b>Payment Source:</b>	Fixed availability payments under a 20-year concession agreement awarded by the Peruvian government and variable revenues when the plant is called to dispatch into the grid. Additionally, bondholders benefit from an irrevocable and unconditional partial credit guarantee from a development bank, equivalent to 20% of the bonds' outstanding balance.
<b>Status:</b>	Greenfield
<b>Ratings:</b>	BBB- / BBB- by S&P and Fitch
<b>Coupon:</b>	7.650%

**Why Relevant?**

The transaction incorporated external credit enhancement provided by a regional development bank (CAF) in a sufficient amount to help investors feel comfortable with the exposure to construction delay risk – given the project's relatively long construction period (approx. 2 years).

CAF's participation gave comfort to bondholders that if project completion were to be delayed and, thus, no operating cash flows were available to cover interest and principal once scheduled debt service were due, the partial credit guarantee would be available to cover the shortfall. The 20% cover was deemed to be sufficient to mitigate delay risk, as an independent engineer offered an opinion that the likelihood that delays would extend beyond what the partial credit guarantee could sustain was low.

In 2013, the project company issued nearly \$133MM non-recourse 144A / Reg S bonds to finance the power plant's construction. In order to help mitigate completion and



operation risk, regional development bank Corporacion Andina de Fomento ("CAF") provided credit enhancement in the form of an unconditional and irrevocable partial credit guarantee equivalent to 20% of the outstanding debt. The guarantee is exercisable on a pre-default basis, and including during the project's construction period, to cover any shortfall in principal or interest due. Guarantee amounts exercised may be repaid on a subordinated basis in subsequent periods, replenishing the liquidity available to the notes.

In this sense, although CAF's partial credit guarantee did not entirely address completion risk, rating agencies viewed the sponsors' completion guarantees together with CAF's partial enhancement as sufficient to achieve investment grade.

*Peru Case Study 3: ABY Transmisión Sur*

In 2014, Abengoa refinanced the Transmisión Sur project in what became the largest ever dollar-denominated project bond in Peru at the time and the first in the region to reach a 29-year tenor.

The project, located in the region of Chilca, consists of three 500kV power transmission lines that run for 900km to provide connectivity from Lima to the fast growing south of Peru. The project includes the construction of three new substations and the expansion of three other.

Peru Case Study 3 Transmission Line Project Bond ABY Transmisión Sur	
 	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	ABY Transmisión Sur S.A. (fka. Abengoa Transmisión Sur S.A.)
<b>Size:</b>	\$432 million
<b>Issue Date:</b>	April 2014
<b>Maturity:</b>	2043
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Atlantica Yield
<b>Format:</b>	144 A / Reg S
<b>Use of Proceeds:</b>	Refinance existing bank debt, repay some of Abengoa's subordinated debt, fund the reserve accounts and terminated the swap agreements
<b>Payment Source:</b>	Payment rights under sponsor-support agreement
<b>Status:</b>	Operating
<b>Ratings:</b>	BBB- by S&P and Fitch, at closing; upgraded to BBB due to better-than-expected performance
<b>Coupon:</b>	6.875%

**Why Relevant?**

The issuance was the largest single-asset Transmission Line Project Bond in Latin America. At the time of its issuance, it had also been the longest transmission line offering in the region, with a 29-year tenor due to its underlying 30-year concession agreement.

### Chile

Historically, Chile has been the fourth-largest contributor to the Project Bond market in Latin America – accounting for approximately 9% of total issuance volume between 2011 and 2020 with \$7.6BN. 2020 was a very good year for the Chilean Project Bond market which grew by 34% since last year to reach \$1.2BN and the second rank in Latin America for the year.

Chile's Project Bond market has been characterized by issuances in the \$200-500MM range, but with occasional offerings as small as \$50MM privately-placed transactions and as large as \$1.0BN 144A / Reg S offerings, for a wide array of assets including toll roads, gas transportation, power generation (incl. renewables), and power transmission.

Growth in the Chilean Project Bond Market has been supported by the country's strong macroeconomic environment and overall stability – as reflected in its credit ratings of A1 / A+ / A- (i.e. the highest in Latin America), and noteworthy PPP structure innovations such as the use of government-guaranteed revenue floors and caps designed to help mitigate demand risk, and flexible-term concession mechanisms designed to limit equity downside. These mechanisms proved to be particularly well-suited for transportation infrastructure with revenues relying on user-paid tariffs or tolls. For instance, mechanisms where a project's present value of revenue is guaranteed by way of making the concession's term variable (i.e. "Total Guaranteed Revenue" or "MDI") or where if revenue is below a pre-agreed fixed threshold, the government makes up for the shortfall (i.e. "Minimum Guaranteed Revenue" or "IMG") have been used in the past in Chilean toll roads and airports. In some instances, both mechanisms have been used in conjunction (see Chile Case Study 2).

Profit-sharing mechanisms have also been implemented in Chile, where in addition to minimum revenue guarantees, if revenues exceed a pre-agreed threshold, the surplus will be split between the concessionaire and the government to incentivize availability and service quality.

The Chilean market has also seen meaningful Project Bond issuance activity related to the power sector, with issuances related to portfolios of transmission lines anchored in the country's long term concession framework for transmission and distribution, and off the back of PPAs with the country's distribution companies ("DistCos") in the context of public auctions aimed at enhancing Chile's grid reliability and cost efficiency.

More recently, Project Bonds off the back of private offtake agreements have been well-received by investors (see Case Study 3), in particular as an attractive alternative to projects with DistCo PPAs which have been negatively impacted by the confluence of increased grid curtailment


due to transmission network limitations and the compression of electricity spot prices fueled by low energy commodity prices and the entry of low-to-no marginal cost of dispatch sources such as wind and solar.

#### *Chile Case Study 1: Celeo Redes Transmission Lines*

In 2017, Celeo Redes Operacion Chile SA – a newly created SPV, issued a dual-currency, dual tranche (pari passu) transaction entailing \$593MM 144A / Reg S senior secured notes placed in the international capital markets, and the equivalent to \$214MM (at the time of financial close) bonds denominated in local currency/inflation-linked investment units ("UFs") and placed in the Chilean market. Issuance proceeds were used to refinance the then-outstanding construction facilities of a portfolio of overhead power transmission lines, spanning 454km in the Chile's Central Interconnected Electrical System ("SIC") – which serves approximately 92% of the country's population.

The transmission lines in the portfolio operate pursuant to long-term concession agreements granted by Chile's Ministry of Energy, which entitle them to receive availability-based transmission tariffs, paid by a diversified pool of Chilean power generation and distribution companies. Such payments are due regardless of actual electrical volume throughput – thus fully mitigating demand risk.

A noteworthy feature of this transaction is that the bonds mature 10 years after the fixed tariff term of the transmission lines concession agreements – which establish a fixed tariff during the first 20 years of the concession life, but have tariffs re-set thereafter. Once in the resettable tariff period, the new tariff remains fixed for an initial four-year period. Afterwards, tariffs are re-calculated according to the results of an independent transmission study commissioned by the grid regulator to estimate the cost of constructing a new transmission line in that point in time – exposing the projects to tariff re-set risk. In spite of this risk, investors and rating agencies developed a favorable long term view of the likely stability of the tariff regime, allowing the issuer to monetize 30 years of concession revenues.

Chile Case Study 1 Transmission Portfolio Refinancing Celeo Redes Operación Chile SA	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	Celeo Redes Operacion Chile SA
<b>Size:</b>	Aggregate US\$593 million: <ul style="list-style-type: none"> <li>• \$379 million International Bond</li> <li>• UF5.41 million (≈US\$214MM) Local Bond</li> </ul>
<b>Issue Date:</b>	May 2017
<b>Maturity:</b>	June 2047
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Elecnor, APG Asset Management NV
<b>Format:</b>	Two <i>pari-passu</i> tranches: <ul style="list-style-type: none"> <li>• 144 A / Reg S International Bond</li> <li>• Locally-placed bond</li> </ul>
<b>Use of Proceeds:</b>	Refinance construction credit facilities
<b>Payment Source:</b>	Fixed transmission tariff from Chilean generation companies under long-term agreements
<b>Status:</b>	Brownfield
<b>Ratings:</b>	Baa2 / BBB / BBB- by Moody's, S&P and Fitch
<b>Coupon:</b>	<ul style="list-style-type: none"> <li>• 5.200% (International Bond)</li> <li>• 3.350% (Local Bond)</li> </ul>

**Why Relevant?**

The Celeo Redes offering was the first Project Bond refinancing of a portfolio of transmission line assets in Latin America. This transaction demonstrates that, given transmission lines' mostly-standardized technology and low operating risk profile, portfolio (re)financings are particularly well-suited for this asset type.

This approach allows issuers to take advantage of transaction economies of scale and to reach critical mass to tap a broader, more liquid investor base.


**Chile Case Study 2: Ruta del Maipo Toll Road**

In 2001, project company Ruta del Maipo Sociedad Concesionaria S.A. issued \$421MM 144A / Reg S senior secured notes to finance the rehabilitation of a 193km stretch of the Ruta 5 highway connecting the Chilean cities of Santiago and Talca.

The project company also issued local currency bonds, placed with Chilean institutional investors, comprising approximately 55% of total project debt in US dollar terms at closing (based on then-current exchange rates).

The issuer operates the road pursuant to a concession agreement including, both an IMG mechanism and a MDI mechanism. Under the IMG awarded to Ruta del Maipo, the project has certainty of receiving a fixed, pre-agreed revenue stream directly paid by the Chilean government in the event that revenues from toll collections are below a pre-agreed minimum. If toll collections exceed the period's IMG, then no payment is made by the Chilean government. If collections are lower than the period's IMG, the Chilean government makes-up for the revenue shortfall.

The MDI mechanism in this project, on the other hand, helps investors enhance the project's recovery profile. This is particularly useful to mitigate revenue risk in the event of extended downside scenarios. Under the MDI, the concession agreement's term is linked to cumulative revenue performance, instead of being pegged to a specific date: the concession ends when the present value (discounted at 9.5%) of actual revenues equals a pre-agreed target value.

Chile Case Study 2 Revenue Floors & Caps Ruta del Maipo Sociedad Concesionaria S.A.	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	Ruta del Maipo Sociedad Concesionaria S.A.
<b>Size:</b>	\$421 million
<b>Issue Date:</b>	August 2001
<b>Maturity:</b>	June 2022
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Currently Intervial (ISA) Chile; originally Cintra.
<b>Format:</b>	144 A / Reg S
<b>Use of Proceeds:</b>	Finance rehabilitation construction works in a toll road connecting Talca with Santiago
<b>Payment Source:</b>	First, by toll collections from users and, second, payments from the Government of Chile under a revenue-floor guarantee mechanism (i.e. IMG), pursuant to a variable term concession (i.e. under a MDI mechanism)
<b>Status:</b>	Brownfield
<b>Ratings:</b>	Baa3 / BBB- by Moody's and S&P
<b>Coupon:</b>	7.373%

**Why Relevant?**

Ruta del Maipo is one of several toll roads in Chile that have benefited from the IMG and MDI mechanisms, in conjunction.


The IMG and MDI structures in Chile demonstrate that governments can move away from directly-backing project revenues (e.g. through availability payments schemes) in order to attract investor appetite, and can, instead, provide contingent forms of support triggered only in downside scenarios, while still relying primarily on user-pay revenues.

**Chile Case Study 3: Atlas Renewable Energy Chile**

On March 2020 and in spite of the COVID-19 outbreak, Atlas Renewable Energy (a developer formed by private investment firm Actis focused in the Brazilian, Chilean, and Mexican renewables markets) issued \$253MM senior secured Green Bonds to refinance two of the company's solar PV projects in northern Chile: (i) the operating 70MW Javiera Solar project which has a bilateral PPA with Antofagasta Minerals' Minera los Pelambres (one of the largest copper mines in Chile's Antofagasta region and one of the largest and most competitive copper mines in the world), and (ii) the 244MW greenfield Sol del Desierto solar project which is expected to supply energy to Engie Energia Chile S.A. by 2022.

The notes were placed with buy-and-hold investors under a 4(a)(2) US Private Placement format and were rated BBB- by Fitch. This precedent shows that construction risk is not a limitation for Project Bond issuers to obtain an investment grade rating, and that Project Bonds can be issued for projects with private offtakers (even if unrated) with the rating of the offering typically capped by the offtaker's. In cases where the offtaker is not rated (as was the case for the Atlas Renewables Energy Chile offering), investors and rating agencies typically conduct an internal credit assessment of the offtaker's credit quality and anchor their views on pricing and structure accordingly.

This transaction is the largest solar PV Project Bond from LatAm to-date, demonstrating robust investor appetite for the asset class and for private PPAs in the Chilean market.

Chile Case Study 3 Corporate PPAs for Renewables Atlas Renewable Energy Chile	
	
<b>Summary Terms &amp; Conditions</b>	
<b>Issuer:</b>	Javiera SpA and Parque Solar Fotovoltaico Sol del Desierto SpA, as co-issuers
<b>Size:</b>	\$253 million
<b>Issue Date:</b>	March 2020
<b>Maturity:</b>	December 2036
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Atlas Renewable Energy Chile
<b>Format:</b>	4(a)(2) US Private Placement, Green Bond
<b>Use of Proceeds:</b>	Refinance previous indebtedness and cover transaction costs
<b>Payment Source:</b>	PPAs with corporates in the energy and mining sector deemed to be investment grade (Minera los Pelambres for Javiera Solar and Engie Energia Chile for Sol del Desierto)
<b>Status:</b>	70MW operating, 244MW greenfield
<b>Ratings:</b>	BBB- by Fitch
<b>Coupon:</b>	Confidential

**Why Relevant?**

The offering demonstrates investor appetite for Chilean corporate PPAs, regardless of the transaction's exposure to construction risk, and for security structures with cross-collateralization between two co-issuers – which differ from more commonly-seen single issuer structures where a new SPV (or HoldCo) is created to jointly hold the security package for a portfolio of assets.

The timing of the issuance (i.e. in the midst of the COVID-19 outbreak) also underlined investor receptiveness to renewables offerings providing relative value and sound credit metrics – as suggested by the offering's BBB- rating.

**Colombia**

Colombia has not been typically a large contributor to Latin America's Project Bond market – representing 3% of total issuance volume in the last 10 years with \$2.0BN, almost exclusively due to toll road related issues except the \$710MM EnfraGen portfolio which included assets in

Colombia (as well as in Chile and Panama to a lesser extent) and the \$415MM private placement backing Bogota Airport (El Dorado) in 2019.

Toll road Project Bonds in Colombia have been anchored in the 4G Program: a highway concessions program under which over 30 projects have been awarded since its inception in 2013, of which six are currently under construction. 4G-related USD Project Bonds' size has been constrained by the fact that the projects under the 4G program are substantially reliant on local currency revenues through user-pay tolls, complemented by availability payments and certain revenue top-ups made directly by government agency Agencia Nacional de Infraestructuras ("ANI").

Issuances related to the 4G program have been able to attract international institutional investors anchored in ANI's payment obligations and on external credit enhancement provided by Colombia's development bank Financiera de Desarrollo Nacional ("FDN") in the form of subordinated revolving liquidity facilities.

*Colombia Case Study: Pacifico Tres Toll Road*


In 2016, Fideicomiso P.A. Pacifico Tres secured a multi-tranche, dual-currency, hybrid financing for the improvement and construction of 146km of roads, 3.4km of tunnels, and approximately 1.7km of bridges and viaducts, to connect the Pacifico Dos and the Autopista del Café toll roads, across the regions of Antioquia, Caldas, and Risaralda.

The \$650MM-equivalent financing package was comprised of \$260MM senior secured notes issued in the 144A / Reg S market, a local currency bond (denominated in inflation-linked investment units, "UVRs") for \$220MM-equivalent listed in the Luxembourg exchange, and several local currency debt facilities led by local commercial banks.

Pacifico Tres' capital structure was designed to address currency mismatch risk by allocating issuance amounts proportionally to the project's revenue streams' denomination. Pacifico Tres revenues are comprised 60% by toll collections, 34% of USD-denominated, availability payments made by ANI, and 6% true-up payments.

Additionally, senior debt tranches benefit from a credit enhancement facility provided by FDN, structured to cover liquidity shortfalls for up to 15% of outstanding principal, with draws repaid on a subordinated basis.



Colombia Case Study Availability Revenues Toll Road Fideicomiso P.A. Pacifico Tres			
<b>Summary Terms &amp; Conditions</b>			
<b>Issuer:</b>	Fideicomiso P.A. Pacifico Tres		
<b>Size:</b>	Aggregate \$492 million: <ul style="list-style-type: none"> <li>• \$272 million International Bond</li> <li>• UVR COP635,000 (≈\$220 million)</li> </ul>		
<b>Issue Date:</b>	January 2016		
<b>Maturity:</b>	January 2035		
<b>Amortization:</b>	Fully-amortizing		
<b>Sponsor(s):</b>	El Condor, MHC, MECO		
<b>Format:</b>	144 A / Reg S		
<b>Use of Proceeds:</b>	Finance the construction of short road stretches and improvement of existing roads, two tunnels and several bridges, to connect the Pacifico Dos and Autopista del Café toll roads		
<b>Payment Source:</b>	The issuance is backed by availability payments from government agency ANI, and user-pay toll revenues		
<b>Status:</b>	Greenfield / Brownfield		
<b>Ratings:</b>	<ul style="list-style-type: none"> <li>• BBB- by Fitch (USD tranche)</li> <li>• BBB- / AA+(local) by Fitch (UVR tranche)</li> </ul>		
<b>Coupon:</b>	<ul style="list-style-type: none"> <li>• 8.250% (USD tranche)</li> <li>• 7.000% (UVR tranche)</li> </ul>		

**Why Relevant?**

Pacifico Tres demonstrated that investors can be comfortable with exposure to local currency revenues and traffic risk to the extent that currency mismatch mechanism and sufficient liquidity provisions are in place. This was accomplished by matching the bonds currency to the revenue streams' denomination and by obtaining a subordinated partial credit cover from FDN.

By placing a dual-currency transaction, the project became the first UVR-denominated issuance ever to be placed in the international market.

**Argentina**

Argentina had been excluded from international capital markets for several years until the sovereign's inaugural \$16.5BN issuance in April 2016, across 3-year, 5-year, 10-year and 30-year tranches; and had not seen a Project Bond issuance in nearly two decades until 2017 (see Argentina Case Study 1). Since then, investor appetite for Argentinian credit, both sovereign and corporate, has been confirmed in several cases, in spite of the country's sub investment grade ratings. Recent developments on the political and economic front, unfortunately, resulted in the Argentina Project Bond market closing off again, for the time being. Argentina's return to the Project Bond market (albeit short-lived) disproved the common misconception that capital markets investors only participate in project financings when offerings can be deemed to be investment grade. It also underscores 144A investors' focus on point-in-time sovereign ratings as indicators of country risk (a reliance that is typically less generalized across 4(a)(2) USPP executions). The \$400MM bond offering related to the Quito international airport in Ecuador in 2019 (also a

sub-investment grade country) further refutes this common misconception.

The return of Argentinean issuers to the international capital markets was framed by market optimism surrounding the administration of President Mauricio Macri and key sector policy reforms pushed during his term, including tax code changes, liberalizing the power sector, introducing clear renewables targets, new PPP frameworks modeled after success case studies in the region (e.g. the Peruvian milestone-linked framework), and eliminating foreign exchange controls, among others.

President Macri's administration was also credited for successfully reaching an agreement with "hold-out" investors that had been ruled in favor by a US court in 2014 to demand full repayment of certain restructured sovereign obligations that had been subject to litigation for more than 10 years, as a consequence of Argentina's credit default in the early 2000's. The ruling prohibited the Argentinean government from paying its restructured debt holders without paying in full (i.e., without any haircuts).

Argentina first defaulted on its debt obligations in 2001 amid a sharp economic downturn that eased off until 2005 – allowing the country to return to the B rating category; only to fall into selective default status in 2014, after failing to reach an agreement with holdout investors. In May 2020, S&P downgraded Argentina, again, to Selective Default, shortly after Fitch downgraded the country to Restrictive Default status.

Since 2011, a volume of \$3.1BN Project Bond have been issued in Argentina, the bulk of which occurred in 2017 and 2018.

*Argentina Case Study: Stoneway Power Plants*

In 2017, Stoneway Capital Corp. issued the first Project Bond in Argentina in nearly two decades. The \$500MM offering was placed in the 144A / Reg S market in February and was followed-on by a \$165MM re-tap in November, that same year. Issuance proceeds were destined to finance the construction of four thermal power plants in the Province of Buenos Aires with an aggregate expected installed capacity of more than 806MW: Las Palmas, Lujan II, Matheu III and San Pedro.


Stoneway is a Canadian private company constituted with the purpose of building, owning and operating the portfolio of power plants, through its three operating subsidiaries incorporated in Argentina.

The power plants benefit from 10-year PPAs with Argentina's wholesale electricity market administrator ("CAMMESA") – which is partially controlled by the Argentinian government. The PPAs grant US dollar-denominated, fixed price, capacity payments (which



represent approx. 82% of the projects’ aggregate revenues) and certain variable payments including excess output sales into the spot market and certain pass-through charges for operating expenses from running the plants while available and called to dispatch. The capacity payments under the PPAs are due irrespective of actual dispatch (i.e. are strictly based on asset availability). Additionally, under the PPAs, fuel will be directly supplied by CAMMESA – thus eliminating supply risk.

Investor appetite for these bond offerings was anchored in the view that CAMMESA offtake risk is credit-linked to the Argentinean sovereign – in spite of the fact that CAMMESA obligations are not explicitly guaranteed by the Government of Argentina, and by liquidity provisions structured during the projects’ construction period to mitigate completion risk.

Argentina Case Study Sub-investment Grade Country Offering Stoneway Capital Corporation		PFI AWARDS 2017	
<b>Summary Terms &amp; Conditions</b>			
<b>Issuer:</b>	Stoneway Capital Corp.		
<b>Size:</b>	<ul style="list-style-type: none"> <li>▪ 1<sup>st</sup> Issuance: \$500 million</li> <li>▪ 2<sup>nd</sup> Issuance: \$165 million</li> </ul>		
<b>Issue Date:</b>	<ul style="list-style-type: none"> <li>▪ 1<sup>st</sup> Issuance: Feb 2017</li> <li>▪ 2<sup>nd</sup> Issuance: Nov 2017</li> </ul>		
<b>Maturity:</b>	March 2027, for both tranches		
<b>Amortization:</b>	Fully-amortizing		
<b>Sponsor(s):</b>	Araucaria Energy S.A., SPI Energy S.A. and Araucaria Generation S.A.; ultimate parent Stoneway Capital Corp.		
<b>Format:</b>	144 A / Reg S		
<b>Use of Proceeds:</b>	Finance the construction of the four power plants		
<b>Payment Source:</b>	Fixed price PPAs with CAMMESA (state-owned entity in charge of the management of the wholesale market and the dispatch of electricity into the country’s power grid) as sole offtaker		
<b>Status:</b>	Greenfield		
<b>Ratings:</b>	B3 / B by Moody’s and Fitch		
<b>Coupon:</b>	10.00%, both tranches		

**Why Relevant?**

Stoneway was the first issuer in approx. two decades to tap the international capital markets with a Project Bond offering out of Argentina. Credit Agricole Securities was joint-bookrunner for the transaction.

The transaction confirmed investor appetite for Latin America infrastructure & energy assets, incl. in high yield contexts, and dispels the common misconception that Project Bonds cannot be issued to finance construction.

**Uruguay**

Uruguay has historically been a marginal contributor to Latin America’s Project Bond market, arguably due to its relative small size in terms of population and GDP. However, recent activity in the renewables front deserves a closer look. Since 2017, approx. \$614MM have been issued for Project Bonds in Uruguay of which 85% were on the back of renewable assets; \$224MM have been raised for 118MW wind assets and \$300MM for 309MW solar projects. With \$127MM issued, 2020 was a very good year for the Project Bond market in Uruguay which encountered the fastest growth in Latin America at 44%.

The first Project Bond for a Uruguayan wind farm was the \$136MM offering issued in 2017 for the 70MW Campo Palomas project. This offering was placed under the Inter-American Development Bank Group’s A/B bond program and was followed by two solar offerings (Jacinta Solar and Naranjal / Del Litoral) in 2018. All transactions received “Green” certifications – i.e., as Green Project Bonds.


The most recent Uruguayan Renewable Project Bond closed in December 2020 for \$97MM is backing a solar portfolio owned by Hudson Sustainable Group. The most recent Uruguayan wind Project Bond closed in December 2019 for \$88MM, backed by the 49MW Kiyu wind farm. This transaction, sole led by Credit Agricole Securities, was the first-ever Project Bond from Uruguay without reliance on an A/B bond structure and was placed directly with one blue-chip institutional investor, achieving the lowest cost-of-debt for a Uruguayan Project Bond to date.

*Uruguay Case Study 1: Campo Palomas Wind Farm*

In August 2017, Campo Palomas Finance Limited announced the issuance of \$136MM investment-grade Green Project Bonds, in order to refinance existing construction loans related to a 70MW wind farm in the Salto Department in Uruguay. This transaction was the first international Project Bond offering from Uruguay.

The bonds were placed in the context of an A/B bond program. The A/B bond structure entails a financing sequencing where an A/B loan is provided by the development bank to finance a project’s construction– with the participation of a commercial bank on the “B portion” of the facility, and a bond refinancing follows after project completion to take-out the commercial bank’s commitment and reduce the development bank’s long term hold. This results in a “B bond” benefitting from the development bank’s umbrella.

The wind farm benefits from a USD-denominated, 20-year Operating Lease agreement with Uruguayan government-owned Administración Nacional de Usinas y Trasmisiones Eléctricas (“UTE”) - effectively eliminating wind resource risk and generation risk.

Uruguay Case Study IIC A/B Bond Offering Campo Palomas Finance Limited	
	
Summary Terms & Conditions	
<b>Issuer:</b>	Campo Palomas Finance Limited
<b>Size:</b>	\$136 million
<b>Issue Date:</b>	August 2017
<b>Maturity:</b>	2037
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Invenergy Wind Global
<b>Format:</b>	A/B Bond, Green Bond
<b>Use of Proceeds:</b>	Refinancing of construction facilities
<b>Payment Source:</b>	Fixed, USD, monthly lease payments from UTE under a 20 year lease agreement
<b>Status:</b>	Operating
<b>Ratings:</b>	Baa3 by Moody's
<b>Coupon:</b>	5.20%

**Why Relevant?**

The issue marked the second-ever A/B bond and underscores the effectiveness of development bank participation in capital markets structures in a market-enabling role, instead of as direct and ultimate lender.

This offering demonstrated that international investors have appetite for small renewables offerings in Latin America, dispelling the common misconception that Project Bonds in emerging markets need to be executed in a 144A / Reg S format.


*Uruguay Case Study 2: Kiyu Wind Farm*

In December 2019, the operating 49MW Kiyu Wind Farm in Uruguay issued \$88MM 4.86% senior secured notes due 2041 to refinance its then-outstanding commercial bank credit facilities. The transaction was the fourth Uruguayan Project Bond in the international Capital Markets and the second wind offering from Uruguay, but the first-ever to be issued without relying on a development bank's product (i.e. a pure 4(a)(2) US Private Placement) and without a financing tail versus its underlying offtake contract.

Kiyu benefits from a PPA with UTE for 100% of the project's energy output (in contracts with Campo Palomas' Operating Lease structure) which at the time of issuance had 23 years remaining tenor.

The transaction was publicly rated BBB- by Standard & Poor's and achieved the lowest cost-of-debt for a Uruguayan Project Bond issuer to-date (4.86%). Its successful placement in the private placement market demonstrates that there is investor appetite for renewables assets from emerging markets, particularly when their revenue structure is anchored in robust offtake agreements and in the context of highly supportive policy frameworks,

such as Uruguay's, without requiring support from multilateral agencies.

Uruguay Case Study First USPP Project Bond Parque Eolico Kiyu S.A.	
	
Summary Terms & Conditions	
<b>Issuer:</b>	Parque Eolico Kiyu S.A.
<b>Size:</b>	\$88 million
<b>Issue Date:</b>	December 2019
<b>Maturity:</b>	2041
<b>Amortization:</b>	Fully-amortizing
<b>Sponsor(s):</b>	Zero-E Dollar Assets, S.L. (F/K/A BowPower S.L.)
<b>Format:</b>	4(a)(2) Private Placement
<b>Use of Proceeds:</b>	Refinancing of construction bank facilities
<b>Payment Source:</b>	USD-denominated, inflation-indexed PPA with state-owned utility UTE
<b>Status:</b>	Operating
<b>Ratings:</b>	BBB- by S&P
<b>Coupon:</b>	4.86%

**Why Relevant?**

The offering was the first-ever Project Bond issued without reliance on a development bank's program, dispelling the perception that a development bank's umbrella is a necessary condition to attract investor appetite for Project Bonds from smaller Latin American jurisdictions. Precedent Uruguayan Project Bonds had been placed under the Inter-American Development Bank's A/B Bond program.

The execution achieved the lowest interest rate for a Uruguayan issuer to-date, underscoring investors appetite for UTE offtake agreements regardless of bond execution format.

**Conclusion**

Investor appetite for infrastructure and energy assets in Latin America remains strong, underpinned by improving macroeconomic conditions and supportive regulatory frameworks while still being periodically impacted by political uncertainty.

The region has seen the development of innovations benefiting project economics and bankability that have established working templates with reliable examples of best-practices. Countries are adopting lessons learned from its peers, and creating broad interest from investors that some years ago were still not active in Latin America.

Despite sovereign rating changes potentially looming in some countries in Latin America, the region is well-positioned to remain an active and relevant contributor to the global Project Bond market in 2021 and in the long term.

Select Latin America Project Bond Issuances

(2016 – 2020)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
Hudson Uruguayan Solar Portfolio	Uruguay	Power	Solar	USD	97	4.650%	22.0	15.0	NAIC-2 (BBB-)	Dec-20
EnfraGen Energia Sur SAU / EnfraGen Spain SAU / Prime Energia SpA	Chile, Colombia, Panama	Power	Power	USD	710	5.375%	10.0	10.0	Ba3 / BBB- / --	Dec-20
UEP Penonome II	Panama	Power	Wind, Solar	USD	263	6.500%	18.0	--	Ba3 / -- / --	Dec-20
Linhas de Taubate Energy Transmission Line	Brazil	Power	Transmission	BRL	77	--	--	--	--	Nov-20
FEL Energy VI S.à r.l.	Mexico	Power	CCGT	USD	953	5.750%	20.0	14.6	Baa3 / BBB- / BBB-	Nov-20
ENA Master Trust	Panama	Infrastructure	Tollway	USD	400	4.000%	28.0	19.0	Baa1 / BBB+ / BBB+	Nov-20
Solaria Energia y Medio Ambiente	Uruguay	Power	Solar	USD	30	--	20.0	--	-- / BBB / --	Nov-20
Usina Termelétrica Pampa Sul S.A.	Brazil	Power	Coal	BRL	88	7.250%	16.0	--	AAA (local)	Sep-20
Usina Termelétrica Pampa Sul S.A.	Brazil	Power	Coal	BRL	86	6.250%	8.0	--	AAA (local)	Sep-20
Porto Primavera Hydro	Brazil	Power	Hydro	BRL	270	--	--	--	--	Aug-20
Águas Cuiabá and Paranaguá Saneamento	Brazil	Infrastructure	Sanitation	BRL	169	--	10.0	--	--	Aug-20
TME Transmission Lines Lot E	Brazil	Power	Transmission	BRL	37	--	2.0	--	--	May-20
Guaimbe and Ouroeste Solar	Brazil	Power	Solar	BRL	227	--	10.0	--	--	May-20
Folha Larga 1 Wind Farm	Brazil	Power	Wind	BRL	27	0.520%	1.4	--	--	Apr-20
Ruta del Algarrobo	Chile	Infrastructure	Highway	UF	324	3.000%	25.0	13.0	A+ (local)	Mar-20
Dracena Solar PV Plants	Brazil	Power	Solar	BRL	75	--	17.0	--	--	Mar-20
Atlas Chilean Solar Portfolio	Chile	Power	Solar	USD	253	--	17.0	10.0	-- / -- / BBB-	Mar-20
Transmissora de Energia Linha Verde II SA	Brazil	Power	Transmission	BRL	45	--	24.0	--	AA+(bra)	Mar-20
Janauba Transmissora de Energia Eletrica	Brazil	Power	Transmission	BRL	132	4.830%	25.0	--	--	Feb-20
TransJamaica Highway Ltd	Jamaica	Infrastructure	Tollway	USD	225	5.750%	16.0	10.7	-- / B+ / BB-	Feb-20
CRC Transmision SpA	Chile	Power	Transmission	USD	365	--	30.0	--	--	Jan-20
KST Electric Power Company SAPI de CV	Mexico	Power	CCGT	USD	151	5.700%	18.0	10.0	NR	Dec-19
KST Electric Power Company SAPI de CV	Mexico	Power	CCGT	USD	250	3.300%	18.0	10.0	NR	Dec-19
Line One Peru Metro Expansion Company Limited	Peru	Infrastructure	Subway	USD	72	3.483%	13.9	--	--	Dec-19

Select Latin America Project Bond Issuances

(2016 – 2020)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
TAG Norte Holdings, S de RL de CV	Mexico	Natural Resources	Gas Pipeline	USD	332	5.040%	20.0	14.0	Private	Dec-19
Parque Eolico Kiyu SA	Uruguay	Power	Wind	USD	88	4.860%	23.0	14.0	-- / BBB- / --	Dec-19
Celeo Redes	Chile	Power	Transmission	USD	365	5.150%	30.0	--	IG	Dec-19
Braskem Idesa	Mexico	Natural Resources	Petrochemical	USD	900	7.500%	10.0	--	-- / BB- / BB	Dec-19
AES Mexico Generation Holdings	Mexico	Power	Other	USD	280	5.620%	--	--	--	Nov-19
Ventos do Sul	Brazil	Power	Wind	BRL	80	--	--	--	AAA(bra)	Nov-19
Empresa Electrica Cochran	Chile	Power	Coal	USD	450	5.500%	7.5	4.3	Ba1 / -- / BBB-	Oct-19
Prumo Participacoes e Investimentos (Prumopar)	Brazil	Infrastructure	Port	USD	350	7.500%	12.0		-- / -- / BB	Oct-19
Rutas 2 and 7 Finance PPP	Paraguay	Infrastructure	Tollway	USD	290	5.000%	16.0	9.7	Ba1 / BB / BB+	Oct-19
El Dorado International Airport	Columbia	Infrastructure	Airport	USD	415	4.090%	6.4	--	-- / -- / BBB	Aug-19
MV24 Capital B.V.	Brazil	Natural Resources	Oil & Gas	USD	1100	6.748%	14.8	--	-- / BB / BB	Aug-19
EDP Transmissão SP-MG	Brazil	Power	Transmission	BRL	213	IPCA + 4.45%	20.0	--	AA+(bra)	Aug-19
Lima Subway Line 2	Peru	Infrastructure	Metro	USD	563	4.350%	17.0	--	Baa1 / BBB / BBB	Aug-19
Ergon Peru S.A.C.	Peru	Power	Solar	USD	222	4.870%	15.0	--	0	Jul-19
Tropicalia Transmissora de Energia S.A.	Brazil	Power	Transmission	BRL	109	IPCA + 5.09%	25.0	--	Ba1 / -- / --	Jul-19
Red de Carreteras de Occidente ("RCO")	Mexico	Infrastructure	Tollway	MXN	146	9.670%	19.0	--	-- / BBB+ / BBB	Jun-19
Red de Carreteras de Occidente ("RCO")	Mexico	Infrastructure	Tollway	MXN	365	6.000%	21.0	--	-- / BBB+ / BBB	Jun-19
La Bufa Wind	Mexico	Power	Wind	USD	225	5.770%	18.0	12.0	--	May-19
Equatorial Energia's Brazilian Transmission Line Portfolio	Brazil	Power	Transmission	BRL	96	--	20.0	--	--	May-19
Corredor Bioceanico Highway	Paraguay	Infrastructure	Tollway	USD	732	5.375%	15.0	9.0	Ba1 / BB / --	May-19
Summit LDC Holdings US Pipeline Portfolio Refinancing	Brazil	Power	Wind	BRL	26	--	11.0	--	--	May-19
Sao Paulo and Parana Transmission Lines	Brazil	Power	Transmission	BRL	54	--	11.5	--	--	Apr-19
Rodovias do Tiete Toll Road Refurbishment PPP	Brazil	Infrastructure	Tollway	BRL	27	--	12.0	--	--	Mar-19
Mariscal Sucre International Airport in Quito	Ecuador	Infrastructure	Airport	USD	400	12.000%	14.0	10.7	B2 / -- / --	Mar-19
Line 1 Peru Metro Expansion Company Ltd	Peru	Infrastructure	Metro	USD	156	4.737%	14.0	7.8	NAIC-2 (BBB)	Mar-19
Line 1 Peru Metro Expansion Company Ltd	Peru	Infrastructure	Metro	USD	117	4.373%	14.0	7.8	NAIC-2 (BBB)	Mar-19

Select Latin America Project Bond Issuances (Continued)

(2016 – 2020)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
Tropicalia Transmission Line	Brazil	Power	Transmission	BRL	24	--	15.0	--	--	Feb-19
Equatorial Transmissora 3	Brazil	Power	Transmission	BRL	12	IPCA+4.65%	15.0	--	--	Feb-19
Equatorial Transmissora 2	Brazil	Power	Transmission	BRL	12	IPCA+4.85%	14.0	--	--	Feb-19
Equatorial Transmissora 1	Brazil	Power	Transmission	BRL	12	IPCA+4.85%	14.0	--	--	Feb-19
Vila do Conde Transmissora de Energia (VCTE) and LT Triângulo (LTT) transmission projects	Brazil	Power	Transmission	BRL	150	CDI + 750bps	--	--	--	Jan-19
Concesionaria Vial Sierra Norte	Peru	Infrastructure	Tollway	USD	293	5.230%	15.0	9.0	NAIC-2	Dec-18
Concesionaria Vial Sierra Norte	Peru	Infrastructure	Tollway	USD	40	5.230%	17.0	9.0	NAIC-2	Dec-18
MSU Energy CCGT plants	Argentina	Power	CCGT	USD	250	L + 1125bps	5.0	--	--	Dec-18
Parnaiba II Thermoelectric Power Plant	Brazil	Power	CCGT	BRL	178	DI index + 250bps	7.0	--	--	Dec-18
Parque Eólicos Tres Hermanas & Marcona	Peru	Power	Wind	USD	250	5.590%	18.3	10.3	-- / -- / BBB-	Nov-18
Parnaiba I	Brazil	Power	Thermal	BRL	146	DI index + 250bps	7.0	--	brAA- (Fitch)	Nov-18
Parnaiba I	Brazil	Power	Thermal	BRL	84	IPCA + 7,223%	7.0	--	brAA- (Fitch)	Nov-18
Paranatinga - Canarana Transmission Line	Brazil	Power	Transmission	BRL	16	--	--	--	--	Oct-18
Santa Catarina Transmission Line	Brazil	Power	Transmission	BRL	329	IPCA + 6,720%	10.0	--	brAA (Fitch)	Oct-18
Sobral I Solar	Brazil	Power	Solar	BRL	37	NTN-B + 195bps	15.0	--	brAAA (Fitch)	Sep-18
Sertão I Solar	Brazil	Power	Solar	BRL	35	NTN-B + 120bps	14.3	--	brAAA (Fitch)	Sep-18
Transmissora Paraíso de Energia SA	Brazil	Power	Transmission	BRL	287	IPCA + 653bps	10.0	--	brAAA (Fitch)	Sep-18
Energía del Valle de México II (EVMII)	Mexico	Power	CCGT	USD	469	6.020%	22.3	17.0	BBB-	Sep-18
Cajamarca Transmission Line	Peru	Power	Transmission	USD	100	5.620%	29.0	19.0	-- / BBB- / --	Sep-18
Pirapora I PV Solar Plant	Brazil	Power	Solar	BRL	60	IPCA + 5,766%	16.0	--	brA+ (Fitch)	Aug-18
Naranjal/Litoral	Uruguay	Power	Solar	USD	11	6.750%	15.0	9.4	Ba2 / -- / --	Jun-18
Naranjal/Litoral	Uruguay	Power	Solar	USD	98	5.750%	24.0	15.3	Baa3 / -- / --	Jun-18
El Encino (Fermaca Pipeline El Encino, S. De R.L. De C.V. )	Mexico	Natural Resources	Pipeline	USD	450	5.465%	23.0	18.0	BBB- (Kroll)	Jun-18
Hunt Oil Company of Peru	Peru	Natural Resources	Oil	USD	600	6.375%	10.0	8.1	Ba1/BBB	May-18
Aeropuerto Internacional de Tocumen, S.A.	Panama	Infrastructure	Airport	USD	225	6.000%	30.0	--	-- / -- / BBB	May-18
Mulungu do Moro Wind Portfolio	Brazil	Power	Wind	BRL	29	--	--	--	--	May-18
Cometa Energía S.A. De C.V. (Saavi Energía)	Mexico	Power	Gas and Wind portfolio	USD	860	6.375%	17.0	--	Baa3 / -- / --	May-18



## Select Latin America Project Bond Issuances (Continued)

(2016 – 2020)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
Sergipe LNG-to-power Project	Brazil	Natural Resources	Power	BRL	832	9.775%	14.0	9.0	brAAA (Fitch)	May-18
Developer Centrais Elétricas de Sergipe (Celse)	Brazil	Power	LNG Terminal	BRL	977	9.850%	14.0	--	Private	Apr-18
MSU Energy	Argentina	Power	Natural Gas	USD	600	6.875%	7.0	--	B3 / B / --	Apr-18
Mesa La Paz Wind Farm	Mexico	Power	Wind	USD	304	5.900 to 6.000%	26.0	15.0	Baa3 / BBB / --	Apr-18
Santa Vitoria do Palmar Wind	Brazil	Power	Wind	BRL	31	IPCA + 5,955%	13.5	--	AAA (Fitch Local)	Mar-18
Genrent Iquitos Thermal Power Plant	Peru	Power	Thermal	USD	107	5.880%	19.0	--	--	Feb-18
Concessionária ViaRio S.A.	Brazil	Infrastructure	Tollway	BRL	191	DI index + 290bps	10.0	--	brA- (Fitch)	Feb-18
La Jacinta Solar Farm Finance	Uruguay	Power	Solar	USD	65	--	24.5	14.5	Baa3 / -- / --	Jan-18
Eletrans SA	Chile	Power	Transmission	USD	180	4.060%	20.0	12.0	-- / A- / --	Jan-18
Concessionária de Rodovias Minas Gerais Goiás S.A.	Brazil	Infrastructure	Tollway	BRL	28	IPCA + 9.000%	12.0	--	--	Dec-17
Stoneway Capital Corporation	Argentina	Power	Power Plant	USD	165	10.000%	10.0	6.0	BB / -- / B	Nov-17
Ventos de Santo Estevo	Brazil	Power	Wind	BRL	22	IPCA + 6,988%	2.0	--	Private	Oct-17
Mexico City Airport	Mexico	Infrastructure	Airport	USD	4000	3.875% & 5.500%	10.0 and 30.0	--	Baa1 / BBB+ / BBB+	Sep-17
Panama Metro Line 2	Panama	Infrastructure	Metro	USD	619	3.875%	5.3	bullet	-- / BBB / BBB	Aug-17
Greenfield SPV 1	Mexico	Infrastructure	Coal Storage	USD	125	5.500%	15.0	12.0	Private	Aug-17
Cerro de Aguila	Peru	Power	Hydro	USD	650	4.125%	10.0	bullet	Baa3 / -- / BBB	Aug-17
Campo Palomas	Uruguay	Power	Wind	USD	136	--	19.5	12.0	Baa3 / -- / --	Aug-17
Celeo Redes Chile	Chile	Power	Transmission	USD	379	5.200%	30.0	--	Baa2 / -- / BBB-	May-17
Ventos de Sao Jorge Holding	Brazil	Power	Wind	BRL	13	IPCA + 9.000%	2.0	--	Private	May-17
Poinsettia Finance Limited	Mexico	Oil & Gas	Oil & Gas Asset Portfolio	USD	150	6.990%	14.0	8.0	NAIC-2	May-17
Autopista del Sol	Costa Rica	Infrastructure	Tollway	USD	300	7.375%	13.6	9.3	Ba2 / -- / BB	May-17
Banco Davivienda SA	Colombia	Power	Renewable Portfolio	COP	150	IBR + 2.130%	10.0	--	Private	Apr-17
South Jamaica Power Company	Jamaica	Power	Power Plant	USD	90	--	--	--	Private	Mar-17
LF Wade International Airport	Bermuda	Infrastructure	Airport	USD	285	--	25.0	--	Private	Mar-17
Stoneway Capital Corporation	Argentina	Power	Power Plant	USD	500	10.000%	10.0	7.0	B3 / -- / B	Feb-17
Aeropuertos Dominicanos Siglo XXI	Dominican Republic	Infrastructure	Airport	USD	317	6.750%	12.0	--	Ba3 / BB- / --	Jan-17
TEN Transmission	Chile	Power	Transmission	USD	50	--	--	--	Private	Dec-16

Select Latin America Project Bond Issuances (Continued)

(2016 – 2020)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
Mexico City Airport	Mexico	Infrastructure	Airport	USD	2000	4.250% & 5.500%	10.0 & 30.0	bullet	Baa1 / BBB+ / BBB+	Sep-16
Bahia Sul Holdings GmbH	Brazil	Infrastructure	Pulp Mill	USD	500	5.750%	10.0	bullet	--	Jul-16
Fideicomiso PA Costera	Colombia	Infrastructure	Tollway	COP	111	6.250%	17.5	--	-- / -- / BBB-	Jul-16
Fideicomiso PA Costera	Colombia	Infrastructure	Tollway	USD	151	6.750%	17.5	--	-- / -- / BBB-	Jul-16
Poinsettia Finance Limited	Mexico	Oil & Gas	Oil & Gas Asset Portfolio	USD	531	6.625%	15.0	11.4	Baa3 / BBB+ / --	Jun-16
AES Andres and Empresa Itabo	Dominican Republic	Power	Power Assets	USD	370	7.950%	10.0	bullet	-- / B+ / B	May-16
Aeropuerto Internacional de Tocumen SA	Panama	Infrastructure	Airport	USD	575	5.625%	20.0	15.9	-- / BBB / BBB	May-16
Sao Miguel Do Gostoso	Brazil	Power	Wind	BRL	16	IPCA + 8.190%	13.0	7.9	brA+ (Fitch)	Mar-16
Autopista Perote	Mexico	Infrastructure	Tollway	MXP	80	8.600%	23.0	--	AA- (S&P and HR)	Mar-16
Pacifico 3	Colombia	Infrastructure	Tollway	UVR & USD	375	7.000% & 8.250%	19.0	--	AA+ local (Fitch) / BBB- (Fitch)	Feb-16
Demex Oaxaca 1	Mexico	Power	Wind	MXP	126	8.850%	15.0	7.0	AA local (S&P) / AA local (HR Ratings)	Jan-16

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