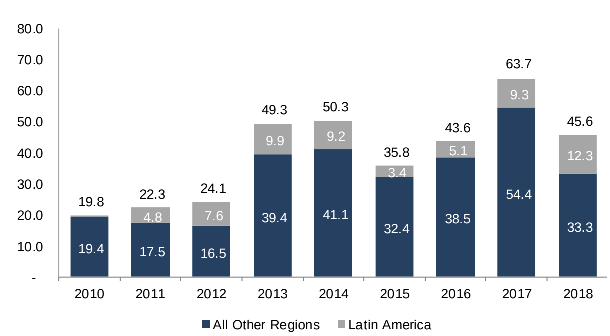
Project Bonds in Latin America

LatAm Project Bond Market Overview

Latin America has been a consistent contributor to the global Project Bond market, with more than $60BN in issuances in 15 countries since 2010. Issuances for assets in Latin America represent approximately 17% of global volumes between 2010 and 2018.

Latin America Project Bond Issuance Volumes
(2010-2018, USD-equivalent billion)



Source: PFI, CA CIB

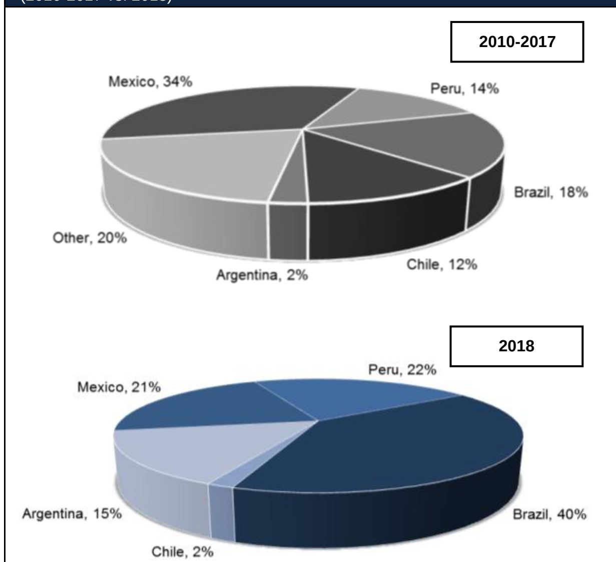
Historically, the Latin American Project Bond market has been dominated by four countries: Mexico, Brazil, Peru, and Chile, which contributed 34% ($19.2BN), 18% ($16.3 BN), 14% ($9.2BN), and 12% ($5.5BN), respectively, of total issuance volume between 2010 and 2018. These are the countries in the region that have maintained their investment grade status the longest (with the exception of Brazil recently downgraded to sub-investment grade) and that contribute the most to the region's total economic activity, in GDP terms.

In the past few years, other countries that had been under-represented in the Project Bond market have seen increased activity. For instance, $2.8BN were issued from Argentina in 2017 and 2018 alone – marking the country's comeback to the Project Bond market after nearly two decades of inactivity. In addition, since 2010 over $5.4BN have been issued in senior secured notes in Panama and $1.2BN in Colombia. Successful transactions took place as well in the Dominican Republic, Costa Rica, Uruguay, 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 in 2018 stood at over $12BN, a record high – 33% ahead of volume for the region in 2017. This is particularly noteworthy, since Project Bond volumes decreased in 2018 for all other regions. Brazil ($3.7BN), Panama ($2.7BN), Mexico ($2.3BN), Peru ($1.7BN) and Argentina ($1.7BN) drove this trend. Brazil, Panama and Mexico also took respectively the 3rd, 5th and 6th global rank in terms of issuing volume in US-dollar equivalent. The region's Project Bond market growth during 2018 was notably led by a recovery of Brazilian issuances, which contributed to 40% of the total Latin America volume with $3.7BN.

On the other hand, market growth in 2018 was tempered by a slowdown in issuances from Mexico – historically, the market's largest contributor. Project Bond volume from Mexico in 2018 dropped to $2.3BN, from $4.6BN in 2017 (i.e. a 50% drop).

Latin America Project Bond Issuance Volume by Country
(2010-2017 vs. 2018)



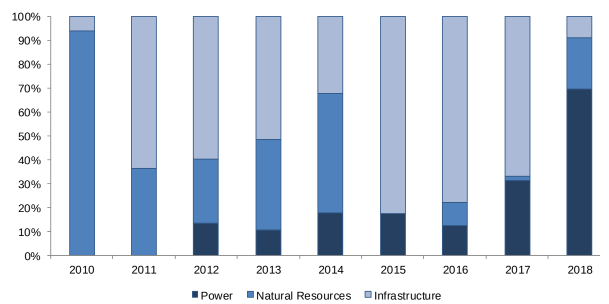
Source: PFI, CA CIB

Sector-wise, the Latin American Project Bond market has been historically comprised of a majority of transportation infrastructure assets – with tollroads 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 economic crisis.

The power sector had historically represented the smallest share of issuance volume in Latin America until recently, but has gradually increased its relevance with offerings in power generation and power transmission to the extent that it became the largest sector in 2018.

The power sector's increase in relevance in the Project Bond market in Latin America has been fueled by reforms in the energy sector allowing private investment into market segments previously restricted to public investment (e.g. Mexico's Energy Sector Reform). Targeted policies with an emphasis in climate change mitigation have also helped channel private investment in renewables through power purchase agreement ("PPA") auction programs across the region.

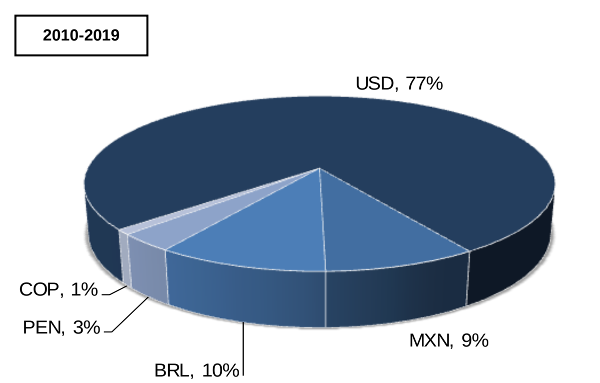
Latin America Project Bond Issuance Volumes
(2010-2018 , USD-equivalent billion)



Source: PFI, CA CIB

Project Bonds out of Latin America have been primarily denominated in USD. Large issuances targeting international investors are typically issued in USD, while smaller offerings, placed in the country, can be issued in local currency.

Latin America Project Bond Issuance Volume by Currency
(2010-2019 YTD)



Source: PFI, CA CIB

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

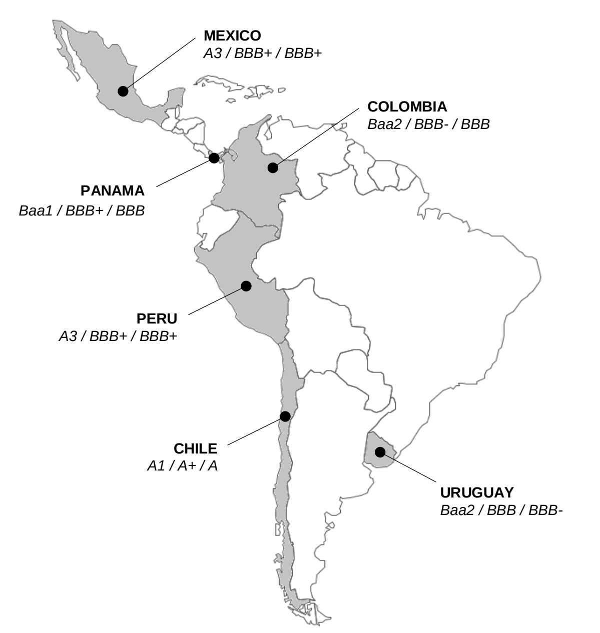
The region's growth over the past decades has come with requirements for infrastructure investment as countries have migrated from rural economies into industrializing and urbanized economies with higher demand for industry, commerce, and services.

Between 2000 and 2014, Latin America experienced an average annual GDP growth rate of 7.5%. This rate was closer to 9.2% for countries in the region currently rated investment grade. Inflation also remained relatively stable at an average of 4.5%. Unemployment was down to 5.7% in 2014 from almost 10% in 2000 for investment grade countries in the region. 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%.

Figures for 2015 and 2016, at an aggregate level for the region, showed signs of slowdown, with GDP contracting in 2015 by 0.11% when compared to 2014, and with GDP growing only 0.23% in 2016. This is largely the result of Brazil's economic and political crisis that unfolded then. These trends were further compounded by the global deceleration in the commodities sector. Notwithstanding, the IMF projects that growth for the region thru 2022 should revert back to an average of 4.75%, as Brazil recovers and certain key sectors bounce back.

The region's improvement in its macroeconomic and regulatory landscape is evidenced by the evolution of its sovereign credit ratings over the past 19 years. In 2000, the region had only one country with investment grade credit ratings from all Moody's, S&P and Fitch: Chile. Today, there are 6 countries with investment grade ratings from these three rating agencies.

Investment Grade Countries in Latin America 2019
Map highlights countries with at least two investment grade ratings



Source: Moody's; Standard & Poor's; Fitch (as of May 10, 2019)

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 15 years, 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, energy and water. 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 to enhance 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.
- Chile has opened new concessions and permits with an emphasis on economic infrastructure investment, renewable power generation and electricity transmission.
- 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.

More recently, some non-investment grade countries have also made notable progress in setting-up regulatory mechanisms to attract private investment into key sectors, such as Argentina, with auctions designed to help increase the countries power generation installed capacity with an emphasis in grid stability though its "fast power" bids, and a transition to renewables through the RenovAR program.

Efforts throughout the region also include climate change 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.

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, 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 crossborder 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

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 $19.2BN issued since 2010, representing 34% 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 suggesting market's cautious approach to the new administration and ongoing and potential future changes in key policies.

Mexico's leadership in the market has been driven by continued macroeconomic and political stability in the last decade – as reflected by its A3 / BBB+ / BBB+ ratings by Moody's, S&P and Fitch, 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 "firsts" from Mexico, including:

- The first Green Project Bond for a Latin American airport - i.e. the $2BN, dual-tranche bonds issued in 2016 to finance the construction of the Mexico City New International Airport, and its $4BN, follow-on in 2017 (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 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: Mexico City Airport Trust

In 2016, Mexico City Airport Trust issued $2BN non-recourse bonds to help finance the construction of Mexico City's New International Airport. One year later, Mexico City Airport Trust issued a re-tap for $4BN, bringing its total debt outstanding in the debt capital markets to $6BN.

The Mexico City Airport Trust is a special purpose vehicle created to receive future passenger charges collected at Mexico City's existing Benito Juárez International Airport, thus the new projects recent cancelation had limited structural impact.

Both issuances were certified as Green Bond offerings, since the new airport was designed to be carbon-neutral and to run 100% on clean energy.

Mexico Case Study 1
Jumbo Repeat Issuer
Mexico City Airport Trust

PFI AWARDS 2017

Summary Terms & Conditions

Issuer:	Mexico City Airport Trust
Size:	▪ 1st Issuance: US$2 billion, as follows: – $1 billion due 2026 – $1 billion due 2046 ▪ 2nd Issuance: US$4 billion, as follows: – $1 billion due 2028 – $3 billion due 2047
Issue Dates:	▪ 1st Issuance: Sep 2016 ▪ 2nd Issuance: Sep 2017
Maturities:	▪ 1st Issuance: Oct 2026 / Oct 2046 ▪ 2nd Issuance: Apr 2028 / Jul 2047
Amortization:	Bullet
Sponsor(s):	Grupo Aeroportuario de la Ciudad de Mexico S.A de C.V. ("GACM"); a state-owned company
Format:	144 A / Reg S, Green Bonds
Use of Proceeds:	Finance the construction of Mexico City's New International Airport (Now cancelled)
Payment Source:	Collections of certain tariffs charged to passengers for the use of the currently-operating Benito Juárez International Airport. These tariffs, or "passenger charges", are applied to all passengers departing on domestic or international flights as part of the ticket price, and are USD-denominated, inflation-adjusted, and collected directly by each operating airline
Status:	Greenfield
Ratings:	Baa3 / BBB+ / BBB+ by Moody's, S&P and Fitch
Coupons:	▪ 1st Issuance as follows: – 4.250% for the US$1 billion due 2026 – 5.500%for the US$1 billion due 2046 ▪ 2nd Issuance as follows: – 3.875% for the US$1 billion due 2028 – 5.500% for the US$3 billion due 2047

Why Relevant?

Mexico City Airport Trust's innagural $2BN offering in 2016 was the first green bond issued in the airport sector and the largest Green Bond then in Latin America. The follow-on issuance in 2017 was twice the size, confirming investor appetite for Latin American structured credit related to infrastructure assets.

This transaction demonstrated investor appetite from Asian institutional investors as an emerging, key developing trend. Both the 2016 $2BN issuance and the 2017 $4BN issuance had significant ticket sizes taken by Asian investors.

Additionally, the transaction demonstrated that local institutional investors (in Mexico's case, "Afores", i.e. pension fund managers) are a reliable and liquid source of financing for infrastructure assets.

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.

Mexico Case Study 2
Bank / Bond Hybrid Financing
Poinsettia Finance Ltd.

Summary Terms & Conditions

Issuer:	Poinsettia Finance Ltd.
Size:	$530.8 million
Issue Date:	June 2016
Maturity:	June 2031
Amortization:	Fully-amortizing
Sponsor(s):	KKR
Format:	144 A / Reg S
Use of Proceeds:	Finance the purchase price of a portfolio of operating oil & gas assets
Payment Source:	Fixed, hell-or-highwater payments made by PEMEX throughout a 15-year lease agreement, made irrespective of assets use or performance
Status:	Operating
Ratings:	Baa3 / BBB+ by Moody's and S&P
Coupon:	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.

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 power purchase agreements ("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.

Mexico Case Study 3
Fully-contracted Wind Refinancing
Oaxaca II & Oaxaca IV

Summary Terms & Conditions

Issuer:	CE Oaxaca Dos, S de RL / CE Oaxaca Cuatro, S de RL de CV
Size:	$148.5 million / $150.2 million
Issue Date:	August 2012
Maturity:	December 2031
Amortization:	Fully-amortizing
Sponsor(s):	Acciona Energia
Format:	144 A / Reg S
Use of Proceeds:	Refinance construction bank facilities related to the 102MW Oaxaca II and 102MW Oaxaca IV wind farms
Payment Source:	USD-denominated PPAs with CFE
Status:	Operating
Ratings:	BBB- / BBB- by S&P and Fitch
Coupon:	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.

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 was the most meaningful contributor to Latin America Project Bond issuance volume in 2018, at $3.7BN. Brazil had also been the second-largest contributor to the market – with a market share of over 22% between 2010 and 2016, 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 had 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) suggesting prospects of improving macro and political conditions.

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

Summary Terms & Conditions

Issuer:	São Miguel do Gostoso Participações S.A.
Size:	R$ 57 million
Issue Date:	March 2016
Maturity:	March 2029
Amortization:	Fully-amortizing
Sponsor(s):	Voltalia Energia do Brasil; Paranaense de Energia
Format:	Restricted public offering under the CVM rule 476
Use of Proceeds:	Finance the completion of a 108MW wind farm
Payment Source:	Local currency PPA with CCEE
Status:	Greenfield
Ratings:	BraA+ by Fitch
Coupon:	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.

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 Odebrect.

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.

Summary Terms & Conditions

Issuer:	Norbe VIII/IX Finance Ltd.
Size:	$1.5 billion
Issue Date:	November 2010
Maturity:	June 2021
Amortization:	Fully-amortizing
Sponsor(s):	Odebrecht
Format:	144A / Reg S
Use of Proceeds:	Refinance existing debt related to the Norbe VIII and Norbe IX ultra deepwater drillships
Payment Source:	10-year Charter Agreements with Petrobras
Status:	Brownfield
Ratings:	Baa3 / BBB by Moody's and Fitch
Coupon:	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 Brazi.

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 2010 with $9.2BN. 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.

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

PFI AWARDS 2015

Summary Terms & Conditions

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

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 Fría de Generacíon de Eten S.A.

Summary Terms & Conditions

Issuer:	Planta de Reserva Fría de Generacíon de Eten SA
Size:	$132.8 million
Issue Date:	December 2013
Maturity:	December 2033
Amortization:	Fully-amortizing
Sponsor(s):	Grupo Cobra (subsidiary of Grupo ACS) and Empresa de Mantenimiento, Construcción y Electricidad,S.A. de C.V. ("EMCE")
Format:	144 A / Reg S
Use of Proceeds:	Finance construction of a 224 MW, diesel-fired, simple-cycle power plant
Payment Source:	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.
Status:	Greenfield
Ratings:	BBB- / BBB- by S&P and Fitch
Coupon:	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

Summary Terms & Conditions

Issuer:	ABY Transmision Sur S.A.(fka. Abengoa Transmision Sur S.A.)
Size:	$432 million
Issue Date:	April 2014
Maturity:	2043
Amortization:	Fully-amortizing
Sponsor(s):	Atlantica Yield
Format:	144 A / Reg S
Use of Proceeds:	Refinance existing bank debt, repay some of Abenoa's subordinated debt, fund the reserve accounts and terminated the swap agreements
Payment Source:	Payment rights under sponsor-support agreement
Status:	Operating
Ratings:	BBB- by S&P and Fitch, at closing; upgraded to BBB due to better-than-expected performance
Coupon:	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 12% of total issuance volume between 2010 and 2018 with $5.5BN.

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, and (more recently), power transmission (see Chile Case Study 1).

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 have proven 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.

Chile Case Study 1: Celeo Redes Transmision 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

Summary Terms & Conditions

Issuer:	Celeo Redes Operacion Chile SA
Size:	Aggregate US$593 million: • $379 million International Bond • UF5.41 million (≈US$214MM) Local Bond
Issue Date:	May 2017
Maturity:	June 2047
Amortization:	Fully-amortizing
Sponsor(s):	Elecnor, APG Asset Management NV
Format:	Two *pari-passu* tranches: • 144 A / Reg S International Bond • Locally-placed bond
Use of Proceeds:	Refinance construction credit facilities
Payment Source:	Fixed transmission tariff from Chilean generation companies under long-term agreements
Status:	Brownfield
Ratings:	Baa2 / BBB / BBB- by Moody's, S&P and Fitch
Coupon:	• 5.200% (International Bond) • 3.350% (Local Bond)

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.

Summary Terms & Conditions

Issuer:	Ruta del Maipo Sociedad Concesionaria S.A.
Size:	$421 million
Issue Date:	August 2001
Maturity:	June 2022
Amortization:	Fully-amortizing
Sponsor(s):	Currently Intervial (ISA) Chile; originally Cintra.
Format:	144 A / Reg S
Use of Proceeds:	Finance rehabilitation construction works in a toll road connecting Talca with Santiago
Payment Source:	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)
Status:	Brownfield
Ratings:	Baa3 / BBB- by Moody's and S&P
Coupon:	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. though 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.

Colombia

Colombia has not been typically a large contributor to Latin America's Project Bond market – representing less than 2% of total issuance volume between 2010 and 2018 with $1.2BN, and showing only meaningful activity in 2014 and 2016, almost exclusively due to toll road related issues.

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. Pacífico Tres

PFI AWARDS 2016

Summary Terms & Conditions

Issuer:	Fideicomiso P.A. Pacífico Tres
Size:	Aggregate $492 million: • $272 million International Bond • UVR COP635,000 (≈$220 million)
Issue Date:	January 2016
Maturity:	January 2035
Amortization:	Fully-amortizing
Sponsor(s):	El Condor, MHC, MECO
Format:	144 A / Reg S
Use of Proceeds:	Finance the construction of short road stretches and improvement of existing roads, two tunnels and several bridges, to connect the Pacífico Dos and Autopista del Café toll roads
Payment Source:	The issuance is backed by availability payments from government agency ANI, and user-pay toll revenues
Status:	Greenfield / Brownfield
Ratings:	• BBB- by Fitch (USD tranche) • BBB- / AA+(local) by Fitch (UVR tranche)
Coupon:	• 8.250% (USD tranche) • 7.000% (UVR tranche)

Why Relevant?

Pacífico 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 of B2 / B / B.

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 is 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.

Argentina's recent return to the Project Bond market disproves the common misconception that capital markets investors only participate in project financings when offerings can be deemed to be investment grade. The recent $400MM bond offering related to the Quito international airport in Ecuador (also a sub-investment grade country) further refutes this common misconception. Project Bonds issued out of Argentina are generally capped by the sovereign rating, making the offerings high yield in nature. In only two years, over $2.8BN have been issued in Project Bonds since 2017.

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

Summary Terms & Conditions

Issuer:	Stoneway Capital Corp.
Size:	▪ 1st Issuance: $500 million ▪ 2nd Issuance: $165 million
Issue Date:	▪ 1st Issuance: Feb 2017 ▪ 2nd Issuance: Nov 2017
Maturity:	March 2027, for both tranches
Amortization:	Fully-amortizing
Sponsor(s):	Araucaria Energy S.A., SPI Energy S.A. and Araucaria Generation S.A.; ultimate parent Stoneway Capital Corp.
Format:	144 A / Reg S
Use of Proceeds:	Finance the construction of the four power plants
Payment Source:	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
Status:	Greenfield
Ratings:	B3 / B by Moody's and Fitch
Coupon:	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.

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 with $0.4BN issued since 2010, arguably due to its relative small size in terms of population and GDP. However, recent activity in the renewables front deserves a closer look: between August 2017 and June 2018, a $136MM wind offering, a $65MM solar PV offering and a $108MM solar portfolio offering in two tranches were placed in the US private placement market in the context of the Inter-American Development Bank Group's A/B Bond program (through either of its operating arms the Inter-American Investment Corporation, or IDB Invest). All transactions received "Green" certifications – i.e., as Green Project Bonds.

Uruguay Case Study: Campo Palomas Wind Farm

In August 2017, Campo Palomas Finance Limited announced the issuance of $136MM investment-grade Green Project Bonds, placed in the US private placement market in order to refinance existing construction loans related to a 70MW wind farm in the Salto Department in 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

Issuer:	Campo Palomas Finance Limited
Size:	$136 million
Issue Date:	August 2017
Maturity:	2037
Amortization:	Fully-amortizing
Sponsor(s):	Invenergy Wind Global
Format:	4(a)(2) Private Placement
Use of Proceeds:	Refinancing of construction facilities under an A/B loan structure
Payment Source:	Fixed, USD, monthly lease payments from UTE under a 20 year lease agreement
Status:	Brownfield
Ratings:	Baa3 by Moody's
Coupon:	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 US private placement investors have appetite for small renewables offerings in Latin America, dispelling the common misconception that Project Bonds in Latin America need to be executed in a 144A / Reg S format.

Conclusion

Investor appetite for infrastructure and energy assets in Latin America remains strong, underpinned by improving macroeconomic conditions, 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.

Latin America is well-positioned to remain an active and relevant contributor to the global Project Bond market.

Select Latin America Project Bond Issuances
(2015 – 2019 YTD)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
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
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 Paraiso de Energia SA	Brazil	Power	Transmission	BRL	287	IPCA + 653bps	10.0	--	brAAA (Fitch)	Sep-18
Energia del Valle de Mexico 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 Energia S.A. De C.V. (Saavi Energia)	Mexico	Power	Gas and Wind portfolio	USD	860	6.375%	17.0	--	Baa3 / -- / --	May-18

Select Latin America Project Bond Issuances (Continued)

(2015 – 2018 YTD)

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
MSU Energy Bond	Argentina	Power	CCGT	USD	600	6.875%	7.0	--	--	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 Estevao	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
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

Select Latin America Project Bond Issuances (Continued)

(2015 – 2018 YTD)

Project	Country	Sector	Asset Type	Currency	Size (USD-equiv. MM)	Coupon	Tenor (Years)	WAL (Years)	Credit Ratings (Moody's / S&P / Fitch)	Issuance Date
TEN Transmission	Chile	Power	Transmission	USD	50	--	--	--	Private	Dec-16
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
Aeris Holding Costa Rica SA	Costa Rica	Infrastructure	Airport	USD	127	7.250%	10.0	8.0	NAIC-3 (BB)	Dec-15
Panama Canal Auth.	Panama	Infrastructure	Bridge	USD	450	4.950%	20.0	--	A2 / A- / A	Sep-15
Colombia 4G UW	Colombia	Infrastructure	Tollway	USD eq.	1200	Infl. + 700bps	20.0	--	--	Aug-15
AES Gener	Chile	Power	Power Plant	USD	425	5.000%	10.0	bullet	Baa3 / BBB- / BBB-	Jul-15
Punta de Rieles Prison	Uruguay	Infrastructure	Social	UI	90	--	--	--	--	Jul-15
AES Panama	Panama	Power	Utility	USD	300	6.000%	7.0	bullet	-- / BB- / BB+	Jun-15
Lima Metro Line 2 Finance Limited	Peru	Infrastructure	Metro	USD	1155	5.875%	19.1	12.8	Baa1 / BBB / BBB	Jun-15
Electrica Guacolda	Chile	Power	Power Plant	USD	500	4.560%	10.0	0.0	-- / BBB- / BBB-	Apr-15
Red Dorsal	Peru	Infrastructure	Fibre Optic	USD	274	5.875%	16.5	9.5	Baa1 / -- / BBB	Apr-15
Sociedad Concesionaria San Jose Tecnocontrol	Chile	Infrastructure	Social	USD	249	2.950% & 4.000%	7.0	3.1	AAA local (Fitch & Feller) & A+ / AA local (Fitch & Feller)	Apr-15
Atlantic Energias Renovaveis	Brazil	Power	Other	BRL	63	--	--	--	--	Apr-15
Junco 1 & Junco 2 Usina Eolica Junco	Brazil	Power	Wind	BRL	49	BZDI + 214bps	1.0	Bullet	Private	Feb-15
Lima Metro 1	Peru	Infrastructure	Metro	PEN	202	4.750%	24.8	16.0	AA+ (pe)	Feb-15

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DISCLAIMER

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