PROJECT INFORMATION DOCUMENT / INTEGRATED SAFEGUARDS DATA SHEET (PID/ISDS)

CONCEPT STAGE

Report No.: 108232

Date Prepared/Updated: 09-Sep-2016

I. BASIC INFORMATION

A. Basic Project Data

Country:	Argentina	**Project ID:**	P159901
		Parent Project ID *(if any)*:	
Project Name:	Argentina FODER Renewable Energy Fund Guarantee		
Region	LAC		
Estimated Appraisal Date:	10/30/2016	**Estimated Board Date:**	11/31/2016
Practice Area (Lead):	Energy & Extractives	**Lending Instrument:**	IBRD Guarantees
Sector(s):	Other Renewable Energy (100%)		
Theme(s):	Infrastructure services for private sector development (100%)		
Borrower(s)	Republic of Argentina		
Implementing Agency	Ministry of Energy and Mining		
Financing (in USD Million)			
Financing Source			

Size (indicative)	1,000	MW
Estimated Project Cost	2,000	US$ million
Estimated Private Equity @ 25%	500	US$ million
Estimated Debt @ 75%	1500	US$ million
Of which commercial borrowing	1000	US$ million
Of which Development Finance Institutions & Export Credit Agencies	500	US$ million

Environmental Category	FI
Concept Review Decision	To go ahead with project preparation
Is this a Repeater project?	No
Is this a Transferred project? (Will not be disclosed)	No
Other Decision (as needed)	

B. Introduction and Context

Country Context

After taking office on December 10, 2015, the new administration has moved with significant speed to implement core reforms. The Government has unified the exchange rate, effectively ended most foreign exchange restrictions, and has moved from a discretionary system to an automated one to provide import licenses in line with World Trade Organization (WTO) procedures. Electricity tariffs were realigned and export taxes on major crops, beef, and soy have been reduced. Export taxes on most industrial manufacturing exports have also been eliminated. The new scheme reduces energy subsidies while including price incentives to reduce energy consumption and adding a social tariff destined to low income households. The institute for statistics (INDEC) has been exempted from publishing statistics until a more credible methodology to measure inflation is adopted. In INDEC, new staff has been appointed and a review of inflation, economic activity, and poverty statistics is under way. The publication of more credible statistics is expected by mid-2016. Restoring the credibility of statistics will be important for gaining market confidence and designing appropriate economic policies based on robust data.

Policy uncertainty before the elections, a deteriorated business environment, and worsening external conditions slowed down economic growth in 2015 and exacerbated the country's existing macroeconomic imbalances. GDP growth for 2015 was 2.1 percent[1] and it was supported mostly by consumption, especially public consumption. The primary fiscal deficit is large (estimated at 5.4 percent of GDP for 2015, including Provinces)[2] and public spending increased significantly before the elections in 2015. The trade balance kept deteriorating in 2015 due to an overvalued exchange rate and worsening external conditions (economic contraction in Brazil, slowdown in China, and lower commodity prices). In a context of lack of access to international capital markets, the growing fiscal deficit was mainly financed with monetary emission and inflation rose to 29 percent in 2015, according to private sector estimates. In April 2016, after more than a decade, Argentina successfully returned to global debt markets with a US$16.5 billion bond sale (largely oversubscribed with orders of almost US$70 billion) and a lower than expected 7.5% yield for the 10-year tenor. The country and provincial governments could issue up to US$30 billion this year.

2016 will be a year of transition with a projected contraction in economic activity, before growth accelerates in 2017. The much needed adjustment is happening in a context of slow economic activity. The need for fiscal consolidation would imply a reduction of public consumption as a result of lifting capital controls and tariff realignments. In absence of official inflation figures, inflation estimates published by the Congress point to an acceleration of inflation since December 2015. In the City of Buenos Aires, monthly inflation was 6.5 percent in April 2016, bringing the monthly average to 4.3 percent between December 2015 and April 2016.[3] Both inflation and exchange rate depreciation are likely to have a negative impact on private consumption. Economic growth is projected to contract mildly in 2016, before accelerating in 2017, as the positive impacts of recent policy changes take effect and a more stable macroeconomic framework will promote private consumption and investment and facilitate access to capital markets.

During the transition to a more stable macroeconomic environment, short-term adjustments could

[1] Source: INDEC
[2] Source: Ministry of Treasury and Public Finances.
[3] Source: Autonomous City of Buenos Aires

have negative impacts on firms and employment. Small firms and the poor face the greatest risks because they lack instruments and resources to hedge against potential shocks. Therefore, carefully designed policies are key to avoid and compensate negative impacts on the poor and preserve important social milestones attained during the past years.

Going forward, it will be critical to strengthen competitiveness and productivity of the economy in order to be able to fully reap the benefits of greater trade openness. Improved business environment, investment in infrastructure, increased competition in markets and improved regulatory framework in sectors would contribute to this objective. Fourth, for a broad based and inclusive growth, which is important for sustaining reform momentum and equally distributing potential welfare improvements, Argentina needs to improve public goods provision and reduce regional disparities. Attracting private domestic and foreign investments could help addressing infrastructure gaps and increasing the growth potential at a time of fiscal constraint.

Sectoral and Institutional Context

Argentina is one of the largest and most important power markets in Latin America. With a total electricity demand of approximately 126 GWh per year, Argentina is the 27th largest power market in the world and the third largest in the region after Brazil and Mexico. Roughly 41 percent of demand is driven by the 40 million residential consumers (98 percent of Argentinians have access to electricity services), 30 percent by industrial users and 28 percent by commercial consumers. Sophisticated power sector regulation, rules and institutions are in place[4] and out of 80 mostly privately-owned generators, the 20 largest generators operate 80 percent of total installed capacity (33 GW). Installed capacity is 60 percent thermal,[5] 34 percent hydro, 5 percent nuclear, and 1 percent wind – while solar represents only 8 MW.

The Argentina power sector is organized into 3 subsectors: generation, transmission, and distribution. Generators are private, public or mixed players, while the transmission and distribution sectors are largely private, but closely regulated as natural monopolies. Generators are subjected to the scheduling and dispatch rules set out in the regulations and managed by wholesale energy market administrator (*Compañía Administradora del Mercado Mayorista Eléctrico Sociedad Anónima*, CAMMESA). Its main functions include the coordination of dispatch operations, determination of wholesale prices, and administration of the economic transactions conducted within the National Interconnected System (SADI), as well as acting as Governmental off-taker in certain power purchase agreements[6].

Transmission companies are prohibited from generating or distributing electricity and are obliged to provide third parties access to the transmission system and collect a fee for transmission services[7]. Power is distributed by multiple companies which operate the distribution network subject to concession rights in specified areas. The concession provides distribution companies

[4] Argentina followed Chile as one of the first countries in Latin America to initiate power sector reforms in 1992 and 1982, respectively. Subsequently, a variety of power sector reforms with different features were carried out in Peru (1993), Colombia (1994), and Brazil (1995).

[5] Thermal technologies' breakdown is 49% combined cycle, 24% steam turbines, 22% gas turbines, and 6% diesel.

[6] In recent years, the mechanism applied for remunerating the electricity generation led CAMMESA to accrue debt with power generators. In some cases, debt was collected through the pledging of funds for the construction of new generation plants with approximately 1,700 MW power generation capacity installed under this mechanism.

[7] Transmission is dominated by TRANSENER, which controls high-voltage lines (500kV and 200kV), 6 regional companies (which manage 220kV and 132kV lines), and 2 independent transmission companies (which manage 500kV lines).

with monopoly rights in their concession area, requires them to satisfy demand at predetermined quality service levels, and establishes maximum tariffs for service. The National Regulatory Agency (*Ente Nacional Regulador Eléctrico, ENRE*) monitors compliance by federal distributors (in the Buenos Aires Metropolitan – AMBA – region) while provincial regulatory agencies monitor compliance by local distributors. ENRE's main functions include the surveillance of regulatory framework compliance, control of service supply standards, stipulation and calculation of rates, authorization of the construction and expansion of new infrastructure, and mandatory initial jurisdiction to hear any disputes arising among the energy market participants. The Ministry of Energy and Mining *(Ministerio de Energía y Minería*, MEyM), through several Secretariats (of Electricity, Economic Policy and Development Planning, Renewable Energy) is responsible for development of power-sector policies and programs.

Tariff setting is regulated by the Ministry of Energy and Mining, ENRE, and provincial regulatory agencies. MEyM and ENRE regulate tariff-setting by federal distributors that cover the Greater Buenos Aires area, namely the *Empresa Distribuidora y Comercializadora Norte S.A.* (EDENOR) and *Empresa Distribuidora Sur S.A.* (EDESUR). Provincial regulatory authorities regulate tariff-setting by local distributors within their respective concession areas. Tariffs vary widely not only across provinces but also within provinces.

The current market structure is the result of reforms undertaken in the early 1990s. Before the reforms, Argentina's power sector was considered a public service provided by the state or state-owned companies. Until early 1990's, the sector was dominated and directly operated by the Government through three publicly-owned utilities, offering generation, transmission, and distribution services at both federal and provincial levels. In 1992, GoA introduced sweeping reforms to establish a private-led power sector and a more competitive market structure. The country became one of the most well-known cases of electricity sector deregulation (Joskow 2000, 2005). The power sector reform involved vertical separation into three basic business units (generation, transmission, and distribution), transfer of at assets to the private sector, establishment of new regulatory frameworks that promote private investment, and introduction of market mechanisms to encourage competition. The reform also aimed to reformulate the existing scheme of subsidies and decrease contributions from treasury. The reforms allowed Argentina to attract first rate international private investors and financiers who undertook major investments in the sector.

The aftermath of the 2001 pesos crisis, however, key sector rules were changed having a detrimental impact on the investors. GoA adopted a National Emergency Law No. 25561 in January 2002 that abrogated the fixed parity between the peso and the US dollar and allowed the peso to float on the exchange markets. In addition, it removed the dollar indexation stipulated in the concession contracts for the provision of public services and allowed the national government to renegotiate the concession contract signed for the provision of public services. In practice, public utility have had rates frozen until 2015 despite high inflation, exchange rate variation, and investments needs. This freeze in all public services rates increased perceived risk by private investors and reduced investments[8]. Several investors took the Argentinian government to the International Centre for Settlement of Investment Disputes (ICSID), still undermining investors' perception.

The current administration has started to implement measures to ensure that tariffs reflect

[8] As a result, infrastructure investments took over 30 cases against Argentina to ICSID.

generation and transmission costs, plus an aggregate value of distribution (VAD), as mandated by law[9]. In January 2016, the GoA published two resolutions (6/2016 and 7/2016) which updated pass-through mechanisms so that tariffs reflected actual costs. These resolutions also established that ENRE was to unfreeze and gradually update the VAD charges for EDENOR and EDESUR and asked this same regulator to conduct and finalize an integrated rates review by no later than December 2016. Starting on February 1st, the resolutions drastically increased existing tariffs; wholesale market prices instantly increased roughly 140% while some tariffs for industries, households or commercial customers increased as much as 673% overnight. To offset the impacts of such measures, the Government also created a new "social tariff" that greatly reduced electricity prices for roughly 2 million of the poorest citizens of Argentina, and launched new energy efficiency incentives for residential customers that reduced their consumption[10].

The country is endowed with significant conventional and non-conventional energy resources. These include tight oil recoverable resources estimated at 27 billion barrels, and just over 800 TCF of shale gas (ranking second only to China) (US EIA, 2015), located in the central west part of Argentina in the *Neuquina* basin, which includes the Provinces of Neuquén, La Pampa and Río Negro. Production has started in some areas.[11] The country also has a huge on-shore wind potential and an unexploited hydropower potential of 40.4 GW[12] (OLADE, 2012).

Argentina is highly dependent on natural gas, which provides fifty-three percent of energy consumed. Most of the natural gas (127 MMBTU in 2014) is used for electricity generation and in the residential and industrial sectors. Oil, the country's second energy source, is largely used in the transport sector. The dependence on natural gas – for over one-half of its energy needs – is well above the world average of roughly 25 percent. Approximately 21 percent of gas consumed is imported.

Domestic production of fossil fuels has been declining steadily since the millennium. Total primary energy supply is about 80 TOE while production is roughly 75 TOE. Oil and natural gas consumption has begun to outpace production, while domestic electricity generation has not kept up with demand. Consequently, in the post-crisis decade (2003-2013), Argentina's electricity imports increased substantially. In 2003, electricity imports were three times those of exports, whereas in 2013 electricity imports were 16 times larger than exports. Argentina's electricity exports have declined significantly in this period, dropping from 2.5 billion kWh/yr. to 0.5 billion kWh/yr between 2003 and 2013, respectively (CAMMESA, 2015).

Argentina is not fully taking advantage of its abundant clean energy resources. The country's hydroelectric potential is well known (hydropower already accounts for over one-third of the energy mix). In the case of wind, it has been estimated that at least 6 GW could be developed in the medium-term (wind resources are world class, especially in the southern Patagonia region where capacity factors exceed 45 percent). Solar resources are abundant throughout the country, with the

[9] For example, in the case of the Greater Buenos Aires area (one-third of the country's population), tariffs were frozen (in Argentine peso terms) between 2002 and 2008. Until 2015, only minor increases were allowed for medium and large residential clients. In the Metropolitan Area of Buenos Aires, tariffs remained unchanged for over ten years.

[10] Argentina's energy subsidies were the third highest in the region. In addition to their large fiscal impact (3.9 percent of GDP) (IMF, 2015), they were unevenly distributed. Their elimination should greatly benefit the country's current accounts and trade balances, as well as incentivize energy conservation.

[11] Argentina is the 3rd largest natural gas producer in Latin America – behind Mexico and Trinidad & Tobago – and the 5th largest petroleum – and other liquids – producer in the region – behind Venezuela, Mexico, Brazil, and Colombia (U.S. EIA, 2015). Worldwide, Argentina ranked 24th and 28th in terms of production of natural gas and petroleum, respectively.

[12] Current installed capacity is 32.7 GW.

finest resources located in the northwestern region (at least 11 of Argentina's 23 provinces have over 5 kWh/m^2 of solar irradiation on average per year). In addition, the country is already one of the world-largest producers of biofuels[13]. However, as of 2012, less than 10 percent of total final energy consumed came from renewable sources, lower than most countries in the region. Since 1990, renewable energy consumption has trended downward and the share of renewable energy has not only decreased, but remains well below the world average, the region's average and most economies in the region.

Renewable energy potential remains largely untapped for various reasons. According to Climate Scope (2014), "Argentina reached 20th position among the 55 countries assessed in *Climatescope* 2014 with a 1.24 score out of a possible 5. Compared to its regional neighbors, the country ranked 9th among Latin American and Caribbean countries. Once attractive for non-large hydro clean energy investment, Argentina has recently lost much of its luster. From 2006 to 2012, the country attracted $2.7bn in such funding. However, in 2013, that fell 70 percent from prior year to just $153m. Overall market risk, lack of financing alternatives, subsidies, low tariffs and off-taker counterparty risk and policies not fully implemented are the main hurdles renewables face in Argentina today. As a result, clean energy deployment has slowed, and today the country remains far from achieving a previously announced 8 percent non-large hydro clean energy generation target by the end of 2016. Argentina is still home to important clean energy manufacturing and service provider value chains, but both are more a reflection of the size of its $488bn economy than a currently thriving renewables sector. Looking ahead, there are few signs of substantial near-term clean energy growth unless macroeconomic conditions, conventional power subsidies, or both change significantly."

The GoA has tried in the past – with limited success – to address the key barriers for increasing renewable energy generation in the country. Since 2007, both the Federal and Provincial Governments have issued policies and incentives in support of renewable energies. At the Federal level, the enactment of Law No. 26190 (2007) for the promotion of renewable sources of energy for electricity production superseded Law No. 25019 (1998) for the promotion of wind and solar energy. Law No. 26190 established the legal framework for the national promotion for the use of renewable energy sources, declaring the production of electricity from renewables of national interest and setting incentives for renewable energy production. Law No. 26190 also introduced feed-in-tariffs ("*primas*") awarded for 15 years for power generation from wind, biomass, small-scale hydro, tidal, geothermal, and solar sources. In 2010, the Government launched the Program for the Generation of Electricity through Renewable Sources (GENREN) which mandated ENARSA[14] to execute tenders for 1GW of renewable energy capacity to be sold into the grid under power purchasing agreements (PPAs) awarded for a period of 15 years. Guaranteed by the national treasure, this program only managed to produce roughly 130 MW of new wind capacity and 7 MW of solar photovoltaic (PV) facilities at 123 to 134 $US/MWh and 547 to 598 $US/MWh respectively[15]. The limited scope of the GENREN program, was due to the difficulties project sponsors faced when they tried to reach financial closure in a context of limited access to international markets. The then Secretariat of Energy also tried to increase renewable generation by establishing long-term (15 years) supply contracts with CAMMESA. This new drive for

[13] The understanding of the country's geothermal resource is still at an early stage.

[14] In 2004 the Federal Government created Energía Argentina S.A. (ENARSA Law No. 25943) with the purpose of carrying out on its own or in association with private companies the exploration and production of oil and natural gas as well as industrialization, transport and trade of oil, natural gas and electricity.

[15] The wind projects included Rawson I and II (combined 77.4 MW) and Loma Blanca IV (51 MW) in Chubut; while the solar PV facilities were Cañada Honda I and II and Chimbera I (combined 7 MW) in San Juan.

renewables only fostered new installed capacity of 31.8 MW, presumably, because of the lack of confidence on the offtaker's (CAMMESA) capacity to honor its commitments[16]. CAMMESA was facing instable flow of funds from the utilities - due to the low tariffs -, high level of subsidies from the treasury and constant regulatory changes.

Law 27191, passed in September, 2015, seeks to overcome these shortcomings. The fact that the vote happened in the midst of a fierce presidential campaigned and obtained overwhelming, multi-party support reflects strong national commitment to its goals and objectives. This new law has established mandatory renewable energy targets of 8% of electricity consumption by the end of 2017 and 20% by 2025 for all consumers. It represents a complete overhaul of the renewable energy regulatory framework and also seeks to: create competitive and transparent market rules and contract mechanisms; establish mandatory pass-through of PPAs costs to consumers; create fiscal incentives for independent power producers (*productores independientes de electricidad*, PIEs[17]) and local supply chains, among others. Particularly relevant is the creation of a new trust fund (the *Fondo para el Desarrollo de Energías Renovables* – Fund for the Development of Renewable Energy – FODER) to enhance and foster renewable energy throughout the country. The Government's determination, successful experiences in the region, and the global decrease in costs for renewables offer a favorable context for this law to be more successful than previous ones.

FODER should become the key instrument for dramatically increasing renewable energy generation in Argentina and achieving the ambitious targets set by Law 27191. Through FODER, the GoA expects to revert previous intents, providing – among other support – debt financing and payment guarantees (for liquidity or termination obligations) to renewable energy projects. FODER is to be capitalized with: i) resources from the national treasure, equal or higher to 50% of the savings achieved by switching from fossil fuels to renewable energy sources; ii) specific taxes to energy demand (to be determined); iii) revenues from the issuance of trust securities by the Fund's trustee and; iv) other external sources that wish to contribute to the Fund. FODER's activities are determined by MEyM (through its Secretariats for and Economic Policy and Development Planning). The "*Banco de Inversión y Comercio Exterior*" (Investment and Foreign Trade Bank, BICE) acts as trustee, and carries-out day-to-day management activities on behalf and under orders from the Ministry.

The Fund will be initially capitalized with resources from the "*Tesoro Nacional*" (national treasury) and later on with a specific tax to electricity demand[18]. According to Law 27191 bylaws, FODER should initially count with $AR12,000 million (about US$800 million) and resources from a new $AR60 per MWh charge to demand to be utilized solely for guaranteeing PPAs. It is expected these resources would be enough to cover any liquidity obligation FODER may incur into when guaranteeing renewable energy PPAs (under such cases, the twelve month obligations would be placed by GoA ex-ante in an escrow account). The new $AR60 per MWh charge could collect over US$4 billion by 2025[19], as shown below:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Demand (TWh)	135	137	140	143	146	149	152	155	158	161
FODER $AR (million)	5,925	6,593	6,725	6,859	6,997	7,137	7,279	7,425	7,573	7,725
FODER $US (million)	395	440	448	457	466	476	485	495	505	515

[16] Necochea (0.3 MW, Buenos Aires), Arauco (25.2 MW, La Rioja), and Diadema (6.3 MW, Chubut) wind projects.
[17] To avoid potential misunderstandings throughout the text, independent power producers will be called PIEs, as per their acronym in Spanish (*Productores Independientes de Electricidad*).
[18] The team is waiting for more information on how the tax will be implemented and collected.
[19] The government is likely to provide a direct subsidy to FODER for 2016 and implement the tax in 2017.

FODER acc. $US (million)	395	835	1,283	1,740	2,207	2,682	3,168	3,663	4,168	4,683

Through FODER, the GoA is seeking to create and increase potential investors and financiers trust and confidence in renewable energy. By supporting PPAs (to be guaranteed by FODER, launched by MEyM and undertaken by CAMMESA), Argentina could reach its ambitious renewable energy targets. The FODER energy consumption charge should adequately deal with any monthly PPA obligations incurred, but also guaranteeing the termination of PPAs would further enhance financing terms. Such additional mechanism would increase participation and interest of potential renewable energy PIEs. To develop such instruments, the GoA has requested World Bank support in the form of guarantees to enable private investment and subsequent development of renewable energy installed capacity.

The proposed operation will thus help mitigate key political risks and support the GoA's main instrument to foster renewable energy generation. Despite Argentina's strong economy and overall advanced development, investors (developers and lenders) have a high political risk perception for projects in Argentina. This is the result of some of the policies since 2002 that led to freeze in tariffs, default on bond repayments and several international disputes. Along with other instruments put in place by GoA (including a 12 month liquidity security for the projects), the World Bank support will help initially mitigate some of those risks.

The envisioned Project would help Argentina and FODER build a track record. The World Bank support in Round 1 will help build a track record of meeting contractual obligations and enhancing (and possibly providing) financing for renewable energy generation infrastructure. The World Bank support will reduce over time as investors gain confidence and are ready to take uncovered risk or access other risk mitigating instruments.

The proposed guarantee will be a key element of the World Bank Group support to Argentina's energy sector. It is fully aligned to and complemented by other operations, such as the Renewable Energy for Rural Areas Project (PERMER II, P133288), which seeks to provide and enhance access to modern energy services in selected rural areas of Argentina through renewable energy technologies. Through its Component 3: project deployment support, PERMER II could help enhance renewable energy development in Argentina and finance studies to support the country's renewable energy goals. At the same time, IFC Advisory is supporting MEyM in the drafting of needed documents (such as PPAs and request for proposals – RfPs). Overall, the Project will support the GoA's objectives to improve energy security, diversify the energy matrix, and reduce environmental impacts.

Relationship to CAS

The Project is fully aligned with the World Bank Group's Country Partnership Strategy (CPS) for Argentina. The CPS focuses on promoting shared prosperity and reducing poverty by working on nine results areas set within three broader themes: (a) employment creation in firms and farms; (b) availability of assets for people and households; and (c) reducing environmental risks and safeguarding natural resources. The Project will directly contribute to the second theme by expanding asset – energy – availability of households and people in an efficient and sustainable manner. It will also support the other two themes as it will foster private investment and strengthen its enabling environment, improve financing for firms and scale-up the country's clean energy industry as well as reduce environmental risks and safeguard natural resources by reducing the use of fossil fuels.

The support to FODER is also in line with the guiding principles included in the WBG paper "*Toward a Sustainable Energy Future for All: Directions for the World Bank Group's Energy Sector*". In particular, to the objective of seeking market solutions to leverage financial resources and help governments to foster private sector participation and investments.

Finally, the proposed operation is also complementary to activities financed by other international institutions. The CAF Development Bank of Latin America is supporting the refurbishment of generation facilities and the Inter-American Development Bank is financing the Norte Grande and other grid extensions. The proposed operation will rely on the transmission infrastructure supported by these initiatives[20].

C. Proposed Development Objective(s)

The proposed development objective is to increase renewable generation capacity through private investment in the energy sector.

Key Results

Progress towards achieving the PDO will be measured by monitoring the following indicators:

(a) Generation Capacity of Renewable Energy (other than hydropower) constructed under the Project (MW) – Core
(b) Private capital mobilized (USD) – Core

Intermediate outcome indicators could include:

(c) Direct Project beneficiaries (Number) - (Core)
(d) Female beneficiaries (Percentage - Subtype: Supplemental) - (Core)
(e) GHG emissions avoided (tCO2)
(f) Number of activities supported to enhance and boost the development of renewable energy sources in the country

The proposed Project's direct beneficiaries will mainly be public and private institutions. SADI (national system) and CAMMESA (dispatcher) will benefit from an increased, clean and endogenous power supply at competitive prices, which will reduce the use of mostly imported and expensive fossil fuels. Private projects' sponsors and financiers will benefit from the lower financing costs generated by the guarantee. The GoA – and particularly the MEyM – will be able to reach its renewable energy targets by helping attract private capital and increasing electricity supply. And FODER will gain expertise in the creation and design of financial instruments to incentivize renewable energy generation. The ultimate and indirect beneficiaries would include all current and future grid-connected customers who will benefit from a cleaner and enhanced electricity provision.

Description

The proposed operation consists of an IBRD guarantee to FODER that will backstop certain FODER payment obligations to private sector renewable PIEs. In the short term, the IBRD

[20] None of this or any other transmission infrastructure was built or done specifically for this Project.

guarantee will indirectly mitigate country risks (including lack of payments, change in policy, expropriation, convertibility, and transferability risks) to PIEs, and thus reduce financing costs for PIEs. It will also help reduce the risks associated to signing PPAs with CAMMESA. In the medium term, the guarantee will allow Argentina to rebuild a good track record with investors and thus facilitate future private investment in renewable generation. The Bank received a request from the GoA for such guarantee support on March 21, 2016. In initial discussions, MEyM has asked the guarantee to be structured to backstop the termination payment obligations under the PPA and FODER's guarantee agreement.[21]

The Project would be implemented by the Ministry of Energy and Mining and BICE, as trustee of FODER, and comprise an up to US$500 M IBRD guarantee for new renewable energy power plants. Such instrument would, in principle and subject to further discussions with GoA, backstop part of the termination payment obligations taken by FODER through guarantee agreements between FODER and the winning bidders. Private capital would also be mobilized and will be tracked during Project implementation. The table below summarizes estimated Project costs and financing structure as per initial discussions with the GoA and subject to further refinement:

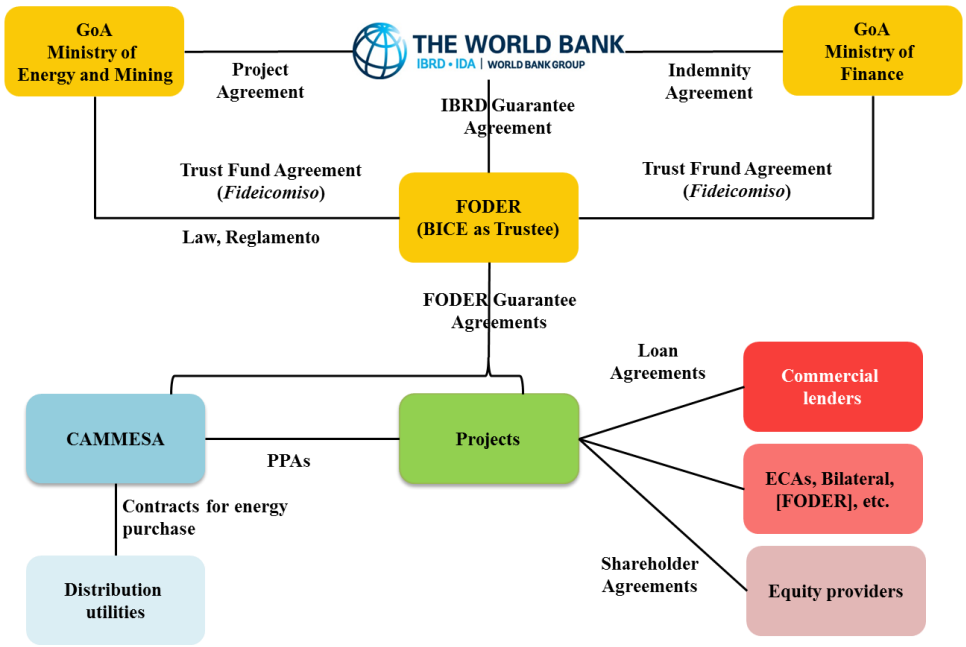
Size (indicative)	1,000 MW
Estimated Project Cost	2,000 US$ million
Estimated Private Equity @ 25%	500 US$ million
Estimated Debt @ 75%	500 US$ million
Of which commercial borrowing	1000 US$ million
Of which Development Finance Institutions & Export Credit Agencies	500 US$ million
Estimated Private Capital Raised[22]	1,000 US$ million

Through the Ministry of Energy and Mining, the GoA will launch "auctions" for renewable energy generation by PIEs throughout the country[23]. CAMMESA would be the off-taker and signatory of the corresponding PPAs when awarded. FODER, with the resources from the AR$60 per MWh charge (which would be deposited into a separate escrow account) would guarantee CAMMESAS' liquidity and termination payment obligations. A termination payment would be due if the contract is terminated by one party following the breach of certain key contractual obligation by the other party (such as expropriation by GoA).

The IBRD guarantee would enhance FODER's creditworthiness by partially supporting termination payments due and payable to PIEs. Investors and lenders have expressed interest to finance projects but Argentina's/FODER's creditworthiness is an obstacle for projects to be financed on a non-recourse basis at reasonable rates. To mitigate the risks expressed by the private investors, GoA requested the World Bank to backstop certain termination payment. In practice, if CAMMESA does not pay a termination amount due, FODER would have to pay the claim under its guarantee agreement with the PIE. If there is a shortfall, the GoA would have to fund FODER. If this does not happen, FODER or the project companies on its behalf could make a demand under the IBRD guarantee[24]. IBRD would pay FODER or the project companies and then ask GoA to

[21] The Ministry intends to propose a 12 month liquidity security in the PPA and to secure the corresponding amount in an escrow account. Therefore the World Bank guarantee does not need to backstop this liquidity security.
[22] Taking into account the private equity and commercial borrowing only.
[23] It is expected that technological and regional requirements would be established in such "auctions".
[24] Termination payments that would be covered under the IBRD guarantee could arise from breaches to established obligations to project sponsors such as CAMMESA not covering its payment obligations, change in law, expropriation, and currency convertibility and transferability issues.

reimburse it under the Indemnity Agreement. The figure below shows the structure and agreements as currently designed[25]:



In order to achieve the 2025 renewable energy target, the GoA would need to launch auctions for roughly 11,000 MW in the next 10 years. Preliminary estimates on new capacity and generation needed are as follows:

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
New capacity (MW)	600	672	753	843	944	1,057	1,184	1,326	1,486	1,664
Accumulated capacity (MW)	600	1,272	2,025	2,868	3,812	4,869	6,053	7,380	8,865	10,529
New generation (GWh)	1,840	2,060	2,308	2,585	2,895	3,242	3,631	4,067	4,555	5,101
Acc. generation (GWh)	1,840	3,900	6,208	8,792	11,687	14,929	18,560	22,627	27,181	32,283
PPA cost (USD M)	184	202	222	243	267	293	322	353	388	425
Acc. PPAs cost (USD M)	184	386	607	851	1,118	1,411	1,732	2,085	2,473	2,898
Demand %	1%	3%	4%	6%	8%	10%	12%	15%	17%	20%

II. SAFEGUARDS

A. Project location and Salient physical characteristics relevant to the analysis of environmental and social risks and impacts (if known)

The exact locations of the Project's sub-projects (i.e., private sector renewable PIE projects) have not been determined since the bidding processes are still pending. In theory the sub-projects could be anywhere in Argentina. The MEyM would launch "auctions" (or Request for Proposals, RfPs) for renewable energy generation throughout the whole country[26]. The Argentinean natural

[25] Further details on the claims mechanics can be found in Annex 3.

[26] It is expected that technological and regional requirements would be established in each of such "auctions". However, at this concept stage, it is foreseen that eligible technologies would comprise in average medium scale wind (mainly) and solar power generation, as well as, in a much lesser extent, biomass, biogas, and small-hydro (the latest one, kinetic or potential energy technologies). Further details below.

environment is quite varied, as it includes ecosystems ranging from forests to desert and from the Andes Mountains to the large rivers of the Rio de la Plata valley. However, considering the nature of desired/eligible sub-projects, more probable locations would be in the interior of the country, in peri-urban and, principally, in rural areas. Since the RfPs to be launched by MEyM would prioritize wind and solar energy generation proposals, it is expected that most of sub-projects would be located in areas with the highest wind and solar energy generation potential which are southern Patagonia region and northwestern region, respectively. It is important to highlight that Indigenous Peoples are actually likely to be present in these areas.

Proposals will need to demonstrate land-use legal rights for sub-project specific locations, including land that may be needed for the right of way for transmission lines to the nearest connection point. It is expected that in the majority of cases land transactions will be conducted in a fully voluntary – willing buyer-willing seller – basis, but it is possible that in some cases sub-projects would require land easement and/or acquisition that might entail involuntary resettlement.

B. Borrowers Institutional Capacity for Safeguard Policies

The energy sector in Argentina has a relatively strong and consolidated environmental legal framework. There are diverse legal instruments which define the environmental requirements for thermal generation, transmission and distribution of energy. For example, Resolutions Nº 15/92 and Nº 153/93 (issued by the former Secretariat of Energy (SoE) on Sep 25, 1992 and Jun 4, 1993, respectively), provides a legal status to the Environmental Management Manual for Energy Transmission and the Environmental Management Manual for Thermal Energy Generation – 1988, as well as the Resolution Nº 555/01 (issued by ENRE on Oct 24, 2001 and ratified by the former SoE through Resolution SE 402/02), which requires that certain (although the majority) agents of the wholesale energy market (*Mercado Eléctrico Mayorista*)(i.e. generation, transmission and distribution agents) *"will elaborate and implement an Environmental Management System on a documentary basis that includes, as a minimum, the organizational structure; the planning activities; the responsibilities; the practices, procedures and processes; as well as the resources to develop, implement, review and maintain the Environmental Policy of such agents."*[27] As the authority of application of the sectorial environmental legal framework, the former SoE, upgraded at present in the Ministry of Energy and Mining (MEyM), has developed capacities for the environmental and social management of the diverse activities related to the sector, including the knowledge of and coordination with the different jurisdictional EIA systems given that Argentina is a federal country. MEyM already has social and environmental staff, with experience including Bank's safeguards management (e.g., PERMER II, P133288). The specific sub-projects will be developed by private companies (i.e., private companies and sponsors will be in charge of sub-project's design, construction/installation, and operation & maintenance, including the environmental and social assessments, assurance of legal compliance and risk management). During Project preparation, the Bank will assess the capacities of the MEyM in connection with Bank environmental and social safeguards. As needed, strengthening of the social and environmental unit at MEyM will be defined and established in the Project Operation Manual. Private sector company capacity needs will be established in the Project's Environmental and Social Management Framework to be developed by MEyM.

C. Environmental and Social Safeguards Specialists on the Team

[27] From that time, most of targeted agents from the *Mercado Eléctrico Mayorista* have been developing, implementing and certifying EMSs according to ISO 14001.

Elba Lydia Gaggero (GEN04)
Santiago Scialabba (LCC7C)

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)

Environmental Assessment OP/BP 4.01	Yes	The proposed Project will have a largely positive impact on the environment by promoting the supply, through private companies, of renewable energy in Argentina, thereby reducing the demand for use of fossil fuels for energy generation. In this sense, ambitious objectives have been established[28]: mandatory renewable energy targets of 8% of electricity consumption by the end of 2017 and 20% by 2025 for all consumers. Overall, the Project will support the GoA's objectives to improve energy security, diversify the energy matrix, and reduce environmental impacts. OP/BP 4.01 is triggered for the Project and the Project is proposed to be classified as FI since the Project involves a guarantee structure via a financial entity (FI). In practical terms, the FI consists of two entities: a) the MEyM, as the actual GoA's counterpart organism, responsible for all the fiduciary and safeguards aspects of the operation; and b) the FODER, managed by BICE as trustee, solely in charge of funds mobilization according to the instructions provided by pertinent involved entities (see flowchart above). Presently, the expected Project's sub-projects would involve a limited number of relatively standard/typical renewable energy generation infrastructure projects / works. These are anticipated to be of small-to-medium scale[29] with relatively moderate, localized and site-specific negative environmental and social impacts which are non-irreversible, not significant, and that can readily be prevented or mitigated with routine/standard measures. During construction stage, potential negative environmental impacts related to renewable sub-projects generation and connectivity would be related to civil works at project site/area, access roads, substations, distribution lines and distribution networks. Construction activities may lead to temporary change/loss in vegetation and natural habitat (land clearance, for example), air emissions (dust and vehicle emissions), noise related to excavation, construction and vehicle transit, transportation of materials, solid waste generation and wastewater generation from temporary building sites and worker accommodation (construction camps). During operation stages, potential impacts will depend on the different sub-projects technologies. In general terms, risks and potential adverse impacts could be, for example, on landscapes, local fauna, avifauna, indigenous plants and trees, and riverine ecosystems in the case of the small-hydro schemes. Cumulative environmental impacts are not expected to be significant, as the

[28] Law 27191, passed in September, 2015.

[29] Likely nominal power ranges in MW, by technology, are: i) wind: from 1 to 100 MW; ii) solar: from 1 to 100 MW; iii) biomass: from 1 to 65 MW; iv) small-hydro: from 1 to 20 MW; and, v) biogas: from 1 to 15 MW.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage ISDS:

September 10, 2016

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

September 15, 2016

The MEyM will develop an Environmental and Social Management Framework (ESMF) that will include the mechanisms and procedures for MEyM to assess renewable energy proposals according to eligibility criteria and compliance with WB's Performance Standards, define and establish applicable environmental and social project-specific requirements, and supervise sub-projects during Project implementation. The ESMF will include both an Indigenous Peoples Planning Framework (IPPF) and a Resettlement Policy Framework (RPF).

An advanced draft version of the ESMF, separately from the IPPF and the RPF, will be consulted by MEyM with project-affected groups and local nongovernmental organizations (NGOs), particularly those groups/organizations who have interests or potential concerns about the Project. MEyM has already identified an ample sample of institutions –state bodies, academia and private associations & NGO-, that could be part of the consultation: ***i) public***: Servicio Meteorológico Nacional (Mediciones del recurso solar); CNEA (Comisión Nacional de Energía Atómica. Pruebas de instalaciones de energía distribuida, convenio con IRESUD); INTI (Instituto Nacional de Tecnología Industrial, Dirección de Renovables; E-Renova; Laboratorio eólico; Laboratorio hidráulico); Subsecretaria de Recursos Hídricos; Autoridades de Cuenca Hídricas; Departamento Irrigación de Mendoza; Dirección de Recursos Energéticos de San Juan; Departamento Hídrico Provincial de Río Negro; EPEN (Ente Provincial de Energía del Neuquén); EPEC (Empresa Provincial De Energía De Córdoba); PROBIOMASA; CAMMESA; INVAP (Investigación Aplicada - Sociedad del Estado, Provincia de Río Negro); ENHIDRO (Emprendimientos Hidroeléctricos Sociedad Del Estado Provincial Del Neuquén); ***ii) academia***: Universidad Nacional de la Plata (Estudios eólicos, solares e hidráulicos; Banco de pruebas Hidráulicas); Universidad Nacional de Lujan (Estudios eólicos y solares); Universidad tecnológica Nacional (Estudios eléctricos y de ingeniería); Universidad de Cuyo (Facultad de Ingeniería - Convenio con SIRJ S.R.L); Universidad de Santiago del Estero (Estudios del recurso forestal y subproductos); and, ***iii) private associations & NGOs***: CADER (Cámara Argentina de Energías Renovables); Cámara De Comercio Alemana (Desarrollos solares); Cámara de Generadores eólicos; CIPIBIC (Proyectos e Ingeniería de Bienes de Capital); Cluster Eólico Argentino; CREE (Centro Regional de Energía Eólica); and, Red de Comunidades Rurales. Feedback received during consultations will be incorporated, as appropriate, into the ESMF and the Project design.

The IPPF and the RPF will be also published as stand-alone documents to facilitate access for Indigenous Peoples and any other potential affected people of communities. In the case

of the IPPF, the document will be specifically consulted with the indigenous authorities at the national level. Relevant feedback received during such consultations will be incorporated into a revised version of the instrument that will be published again. The feedback will also be used to inform project design accordingly.

Once site identification has been completed and private sponsors have been selected, the sponsors will undertake all the necessary risks assessments, identify and implement the mitigation measures, and develop an appropriate monitoring framework to ensure that the power plants supported under the Project are in compliance with World Bank's Performance Standards for Private Sector Activities.

III. CONTACT POINT

World Bank

Name: Lucía Spinelli
Title: Senior Energy Specialist
Email: lspinelli@worldbank.org

Name: Arnaud Braud
Title: Infrastructure Finance Specialist
Email: abraud@worldbank.org

Borrower/Client/Recipient

Name: Martín Félix Soto
Contact:
Title: Deputy Secretary for international Financial Relations

Implementing Agency

Name: Ministry of Energy and Mining
Contact: Sebastián Kind
Title: Deputy Secretary for Renewable Energy
Email: skind@minem.gob.ar

IV. FOR MORE INFORMATION CONTACT:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

V. Approval

Task Team Leader(s):	Name: Lucia Spinelli and Arnaud Braud	
Approved By:		
Safeguards Advisor:	Name: Agi Kiss	Date: 18/Aug/2016
Practice Manager:	Name: Antonio Barbalho	Date: 12/May/2016
Country Director:	Name: Jesko S. Hentschel	Date: 09/Sep/2016

[1] Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.