

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA2531

Project Name	Argentina Renewable Energy Project for Rural Areas (P133288)
Region	LATIN AMERICA AND CARIBBEAN
Country	Argentina
Sector(s)	Hydropower (5%), Other Renewable Energy (75%), Transmission and Distribution of Electricity (15%), General energy sector (5%)
Theme(s)	Social Inclusion (50%), Rural services and infrastructure (50%)
Lending Instrument	Investment Project Financing
Project ID	P133288
Borrower(s)	Ministerio de Economía y Finanzas Públicas
Implementing Agency	Secretaría de Energía
Environmental Category	B-Partial Assessment
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Decision	

I. Project Context

Country Context

After the 2002 crisis, which gravely affected the country's social safety nets and programs – including the electrification agenda – Argentina's growth rebounded, achieving one of the highest growth rates in the Latin America and the Caribbean (LAC) region. Argentina's post-crisis gross domestic product (GDP) growth rates averaged 6 percent annually from 2003 to 2013, exceeded in LAC only by Panamá and Perú. It was well above the 1.6 percent average annual growth rate Argentina achieved during 1980-2000. Especially in the period till the global financial crisis, Argentina's exports grew as a consequence of increased competitiveness from currency depreciation, economic growth in main trading partners, and high international commodity prices. Domestic demand was supported primarily by internal consumption and private investment. Until 2010, export growth and improved tax revenue led to fiscal and external surpluses, allowing Argentina to accumulate international reserves, reduce debt, and build fiscal space as buffers against shocks. Following the global financial turmoil of 2008, Argentina's economy slowed, with growth averaging 4.3 percent from 2009 to 2013 and with further weakening expected in 2014. Inflation has varied according to different estimates. The official national inflation figure for 2013 was 10.9 percent (inflation figures are based on Argentina's official price index (CPI-GBA). The IMF has called on Argentina to adopt remedial measures to address the quality of the official

inflation data. Market analysts have contested official inflation numbers since 2007, releasing their own estimates).

Economic growth during 2003-2013 was inclusive, making Argentina one of the top two Latin America and the Caribbean region performers in terms of poverty reduction and improvements in shared prosperity. The 2002 crisis was impoverishing. Since then, Argentina has recovered lost ground and expanded the size of the middle class. Along with proactive social protection policies, economic growth enabled the country to reduce poverty and unemployment. Poverty measured at \$4-a-day declined from 31 percent in 2004 to 10.8 percent in 2013 (poverty measured at \$1.25-a-day declined from 6.3 percent in 2004 to 1.3 percent in 2012; data from: SEDLAC: Socio-Economic Database for Latin America and the Caribbean; CEDLAS and World Bank). Inequality was reduced (the Gini coefficient fell from 50.2 in 2004 to 42.5 in 2012), and the middle class grew from 34 percent of the population to 53 percent between 2000 and 2011. Gains in poverty reduction over the past decade have been driven largely by improved labor market outcomes as both earning increases and new job creation benefited lower-skilled groups. More than two-thirds of poverty reduction derived from improved job opportunities and earnings.

President Fernandez's administration has worked on the promotion of economic development, focusing on social inclusion and shared prosperity. Living conditions have improved for many Argentinians, yet many families in rural areas still lack adequate access to basic infrastructure and social services. This calls for the development of infrastructure, emphasizing expansion of the poor's access to basic services, including energy, water supply and sanitation and transport, the creation of social safety nets, and fostering employment.

Today, more than 40 percent of the Argentine population remains at risk of falling into poverty (those considered "vulnerable" to falling into poverty in the event of an adverse shock constitute those living on \$4 to-\$10 per day; in 2012 that figure was 33 percent of Argentina's populace, with another almost 10.9 percent already living in poverty; hence the "more than 40 percent" above. The vulnerability measure is uni-dimensional and does not include non-monetary poverty indicators). Three challenges stand out for the poor and vulnerable population: (i) during periods of economic crises or prolonged sluggish growth; (ii) although Argentina is a broadly inclusive society endowments and opportunities continue to vary for different groups in society and across regions; and (iii) the country's economy depends on natural capital; and environmental degradation represents a significant cost to the economy.

Access to electricity has a direct impact in alleviating poverty and boosting shared prosperity. It also enhances social inclusion by improving the lives of the poor, in particular of the rural poor and reduces negative environmental impacts by limiting the use of biomass and mostly foreign fossil fuels. In rural areas, sustainable access to this basic service can foster equity and sustained poverty reduction. Lack of access to electricity and other energy services results in a low quality of life, poor medical care and education, and limited opportunities for economic development. Schools have limited access to modern educational resources and students less time available to read or do homework at home. Health clinics do not have adequate access to light, water pumps, refrigeration for drugs and vaccines, medical instruments or fans, and sterilizers. Thus, the importance of making available this service to households and people to reduce extreme poverty. Without electricity, people in the rural environment have limited hours to complete their work or undertake employment possibilities, limiting entrepreneurship. Mobile phone coverage, if available, cannot be leveraged as there is no way to recharge mobile phone batteries and overall, investments and

productivity cannot be raised. Access to these services then can also help sustain employment creation by promoting productive uses of electricity. Finally, when families do not have electricity services usually cover their energy needs with batteries (for flashlights and radios), kerosene burners and candles, and wood (for cooking and heating), which have high relative costs for the low-income segment but also contribute to respiratory illnesses, and degrades available natural resources. In turn, the provision of energy services reduces environmental risks and safeguards precious resources.

Limited access to modern energy services is especially burdensome for women. Lack of electricity forces them to spend most of the day performing outdoors work that could be done indoors, ruthlessly overloading them. This prevents them from participating in educational and employment possibilities or even community affairs and creates health risks given the indoor air pollution provoked by the use of biomass for heating and cooking. In addition, lack of lighting fosters a lack of safety that is particularly affects women.

Sectoral and institutional Context

By the end of 2013, Argentina's electricity system, also called SADI (Sistema Argentino de Interconexión), had an installed capacity of 31,072 MW, 60 percent of which was thermal (the thermal technologies breakdown is 49 percent combined cycle, 24 percent steam turbines, 22 percent gas turbines, and 6 percent diesel.), 36 percent hydro, 3 percent nuclear and 1 percent wind (solar represents only 8 MW). The Greater Buenos Aires region provides 44 percent of the supply capacity, followed by Comahue with 20 percent. The Northeast accounts for 10 percent, while the Central and Northwestern territories absorb 9 and 8 percent, respectively; 5 percent of the installed capacity is in Cuyo and the remaining 3 percent in Patagonia. During 2013, generation was predominantly thermal (64 percent), followed by hydropower (31 percent). Residential, commercial and small and medium industries are served by more than 70 distributors and cooperatives. Most of the large industries, along with the big commercial and service users acquire their energy directly from generators and/or marketers. Demand is concentrated in the Greater Buenos Aires (39 percent), Coastline (12 percent), Buenos Aires Province (12 percent) and Central Argentina (9 percent).

Universal access to modern energy services is still one of the Government of Argentina's (GoA) main sectorial priorities. As in most middle income countries, Argentina's level of electrification is high. However, three typical barriers to the supply of conventional on-grid electricity at reasonable costs are still present: Argentina's large size, its topography, and the low population density in rural areas. Even though the country's electrification rate has increased from 95 percent in 2001 to 98 percent ten years later, roughly 145,000 households in Argentina (according to government estimates) still don't have access to modern energy services (this is, access to reliable and affordable energy, including at least electricity and additional energy-related services, such as potable water, cooking or heating), while many others only have partial, inadequate and inefficient access (few hours a day and dependent on access and costly transportation of fossil fuels). This means that at least 500,000 low-income people from extremely isolated areas have lower quality health, education and other services, as well as reduced access to economic opportunities.

Under the leadership of the Secretaría de Energía (Secretariat of Energy – SE – part of the Ministerio de Planificación Federal, Inversión Pública y Servicios – Ministry of Federal Planning, Public Investments and Services, MINPLAN), the GoA has implemented projects to increase access

to energy services in rural areas. Of these, PERMER I is the most successful experience. This project focused on providing rural areas with reliable electric supply in a sustainable manner – using mostly renewable energy technologies and supporting thermal applications and water pumping in public buildings. The Project (US\$30 million IBRD loan plus a US\$10 million Global Environment Facility – GEF – grant) was approved on March 1999, but the crisis of 2002 delayed its implementation. The GoA was able to overcome reduced budget allocations and restructure the operation, which allowed the project to address the needs of the rural poor and even obtain additional financing for US\$50 million in 2008 (which meant the Project remained active until December 2012). Overall, the project addressed the needs of more than thirty thousand customers (households, institutions and facilities, which represent over 150,000 people) in fifteen provinces with the following outcomes: 25,071 residential solar home systems (SHS); 1,894 schools electrified with solar panels; 361 public services buildings electrified; 2,407 households electrified through minigrids (solar, wind power, but mostly diesel-powered units); 350 solar thermal systems installed (mostly in schools) and 188 solar water pumps. Given the use of renewable off-grid technologies and the implementation of a solid operation and maintenance (O&M) scheme, the PERMER I project proved to be a valuable mechanism to increase electricity access in rural areas in a sustainable manner.

Nevertheless, further and coordinated efforts between the Federal Government and the Provinces need to be pursued if Argentina is to achieve meaningful progress towards universal access to modern energy services. Even though the Federal Government manages generation and backbone transport of electricity as well as distribution in the city of Buenos Aires, Provinces are in charge of defining contracts for concessions (including area or zone, rates, quality of service, sanctions, among others) and also control distribution through provincial regulators. In addition, the provision of modern energy services has a direct impact on other sectors. As electricity is a vital input for almost all other basic services (e.g. health, water, education, etc.), the SE will need to build upon the relationships already established with stakeholders through PERMER I (from the education sector, for instance) and incorporate new institutions (such as water utilities and the health sector) which were not part of the previous operation.

II. Proposed Development Objectives

The development objective is to increase and improve access to modern energy services in rural areas of Argentina.

III. Project Description

Component Name

Component 1 – Renewable electricity service provision

Comments (optional)

Component Name

Component 2 – Solar thermal energy service provision

Comments (optional)

Component Name

Component 3 – Project deployment support

Comments (optional)

Component Name

Component 4 – Project management

Comments (optional)**IV. Financing (in USD Million)**

Total Project Cost:	240.09	Total Bank Financing:	200.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			10.85
International Bank for Reconstruction and Development			200.00
Local Govts. (Prov., District, City) of Borrowing Country			5.74
Local Sources of Borrowing Country			23.50
Total			240.09

V. Implementation

The Project will be implemented over a five-year period; overall coordination and implementation will be the responsibility of the SE, through the Project Coordinating Unit. The proposed operation will continue relying on the implementation arrangements developed under PERMER I. This means that the Secretariat of Energy, will have a vital role in implementing and supervising to ensure that the operation is implemented as agreed (including tasks to be developed by other stakeholders – mainly Provinces), and that the Project achieves its objectives.

The Project Coordinating Unit – located in SE and tasked with overall Project implementation in coordination with Provinces and other stakeholders – has proven to be effective and adequate for the envisioned activities under the proposed Project. Through PERMER I the PCU managed to build a core of qualified staff to handle all procurement and financial management issues. Given the magnitude of the current operation, the unit will be strengthened in order to have sufficient and trained staff on technical issues (as it would define technical standards for technologies to be deployed), safeguards compliance and monitoring.

The overall institutional and implementation arrangements will consist of a centralized unit (the PCU) which will be responsible for most technical, fiduciary, management and monitoring and evaluation tasks. The PCU will launch the bidding processes for the acquisition and installation of all goods, works and services. For the activities under components 1 and 2, it will transfer the assets to the Provinces once the works have been finalized and/or the goods have been installed. The Unit will also monitor compliance with Bank environmental and social safeguards and monitor implementation of the subprojects, compiling information from the various Project implementation areas.

Provinces would participate through Provincial Executing Units – PEUs – typically located in the Province’s energy agencies (and fully funded by these) and would be responsible for identifying demand, designing the subprojects, ensuring safeguards compliance and supervising implementation

in their jurisdictions as well as assuring that an acceptable operation and maintenance mechanism is in place. It would be the Provinces' responsibility to ensure said mechanism is in place during the subprojects life cycle and that enough co-financing resources are available to guarantee project operation. However, as some of the poorest Provinces (which didn't participate in PERMER I) will now be included, the PCU will work with them to increase and build their capacities to implement agreed activities (through Component 3). Provinces will also provide all necessary information to the PCU for monitoring and evaluation purposes.

Provincial regulators would be responsible for overseeing and regulating concessionaires, supervising the appropriate provision of the electricity service, and reporting any breach of relevant agreements to the PCU (as it is their obligation per Argentinian law).

The previously mentioned tasks, roles and responsibilities of each stakeholder will be further defined through new inter-institutional agreements to be signed between each participating province and the SE. Framework agreements including all technical, economic, financial and environmental and social aspects of the operation that parties need to take into account and implement are already under preparation and will be part of the Operations Manual (these Framework Agreements will be subscribed by the National Government (SE) and all Provinces. When a qualified provincial service provider such as a concessionaire or an entity with legal personality separate from the Province is present, the execution of implementation agreements with those qualified service providers for the O&M&R of subprojects will be required. In such cases, the obligation to enter into an implementation agreement for the O&M&R of the subproject will be reflected under the Framework Agreements.).

The Project would also rely on the participation and involvement of other agencies and relevant actors which would identify demand (in their respective sectors) propose projects, indicate requirements so as to assess the electricity capacity needs and co-finance the initial investments (when appropriate), such as:

(a) Ministerio de Educación (Ministry of Education): Would be involved in the execution of activities linked to rural schools. MINPLAN has already signed a collaboration agreement with the Ministry.

(b) Ministerio de Turismo, Administración de Parques Nacionales (Ministry of Tourism, National Parks Administration): Would participate in activities to be developed in public services facilities located in national parks and those related to the fostering of rural tourism. MINPLAN and the National Parks Administration have already signed a collaboration agreement.

(c) Ministerio de Salud (Ministry of Health): Would be involved in those activities linked to rural health centers.

Additional stakeholders include:

(d) Municipalities: These will collaborate with Provinces – as needed – to provide relevant information regarding energy needs in their jurisdictions.

(e) Distribution Concessionaires: These (both public and private) are responsible for the provision of the electricity distribution service, as well as operation and maintenance of energy in their respective areas.

(f) Private sector: Would participate as concessionaires of subprojects (where applicable) and as potential co-financiers of hydro powered minigrids (only grids being financed by the Project).

Other Provincial agencies whose participation will be sought (and further defined in the Operations Manual) include:

(g) Provincial environmental agency: Will enforce any environmental policies and regulations (all permits are granted at this subnational level).

(h) Provincial water authorities: Could support the development of activities focusing on providing access to potable water, as agencies tasked with ensuring water provision and enforcing local quality regulations and guidelines.

(i) Agencies focused on the promotion of productive uses in rural areas: These mostly public sector agencies will provide technical and/or financial support for the development of productive activities and would sponsor those subprojects under which the Project would support the provision of the electricity service to productive activities.

(j) Water utilities: Would oversee the operation and maintenance of water supply and sanitation activities, as defined by local laws and regulations.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04	x	
Forests OP/BP 4.36		x
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11	x	
Indigenous Peoples OP/BP 4.10	x	
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50	x	
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)

VII. Contact point

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