INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE

Report No.: ISDSC4995

Date ISDS Prepared/Updated: 22-Nov-2013

Date ISDS Approved/Disclosed: 04-Feb-2014

I. BASIC INFORMATION

A. Basic Project Data

Country:	Argentina	**Project ID:**	P133288
Project Name:	Argentina Renewable Energy Project for Rural Areas (P133288)		
Task Team Leader:	Lucia Spinelli		
Estimated Appraisal Date:	10-Feb-2014	**Estimated Board Date:**	10-Jul-2014
Managing Unit:	LCSEG	**Lending Instrument:**	Investment Project Financing
Sector(s):	Other Renewable Energy (100%)		
Theme(s):	Climate change (100%)		

Financing (In USD Million)

Total Project Cost:	275.11	Total Bank Financing:	200.00
Financing Gap:	0.00		

Financing Source	Amount
Borrower	75.11
International Bank for Reconstruction and Development	200.00
Total	275.11

Environmental Category:	B - Partial Assessment
Is this a Repeater project?	No

B. Project Objectives

The development objective for the proposed project is to increase and improve access to sustainable modern energy services in rural areas of Argentina, supporting the Government of Argentina's (GoA) goal of achieving universal Access.

C. Project Description

The proposed Project (USD $ 200 million IBRD plus co-financing for USD $ 38.75 million from the GoA) provides key support to Argentina's plans to achieve universal access to modern energy

services. The Project would build upon the activities conducted under PERMER I, the lessons learned, best practices and experiences obtained from its implementation, as well as from activities in other countries. However, this new operation would also represent an evolution from PERMER I, as its scope, targets and boundaries would be dramatically expanded. As in PERMER I, the proposed operation would continue financing the acquisition of goods to expand the provision of electricity to households and institutions (mainly for lighting, communication, and water pumping); as well as for thermal applications (water heating, cooking and heating). In addition, the proposed Project would also finance goods, their installation (as needed) and works to improve access in rural areas with currently underserved populations, with access to inefficient and/or unreliable electricity services (as little as a few hours a day depending on access to fuels). The proposed Project would considerably increase the number of households to be served with modern energy services, substantially expand the development of thermal and water pumping applications (combined, these represented less than 2% of funding in PERMER I) and provide electrification of health centers. The resources of the proposed Project (PERMER II) would be available for all provinces.

The proposed operation would also incorporate the development of commercially productive activities dependent on electricity provision. This new activity will required a close coordination between SE and provincial productive authorities and a careful monitoring of subprojects to assess the impact of electricity provision on the income generation capacity of targeted rural population. Finally, capacity building activities to strengthen the design of subprojects and to support the implementation of all components as well as for enhancing the country's ability to increase renewable energy use will be financed In order to improve PERMER's monitoring capacity and to better assess the use and the impact of the solar home systems, a remote monitoring mechanism that allows measurement of electricity provision and consumption, will be connected in a sample of systems. This innovation will allow PERMER to have a better understanding of panel and battery performance and of users' behavior.

The proposed lending instrument would be Investment Project Financing for US $200 million. The operation could represent at least one third of the external financing Argentina needs if it is to meet its universal access to modern energy services commitment.

The Project would continue relying on the implementation arrangements developed under PERMER I. This would mean that the Secretariat of Energy would continue functioning as the overall coordinator of the Project, and will be responsible, in most cases, for the bidding processes. The Provinces would be responsible for identifying the demand, designing the subprojects, supervising the implementation in their own territories and assuring that an acceptable operation and maintenance mechanism is in place. Under these "joint but differentiated responsibilities" arrangements, the federal government – through the SE – would coordinate the participation of sub-national entities through institutional agreements. In the case of the Provinces, activities would be developed by local energy authorities and provincial regulators. Finally, the private sector would participate as concessionaires of subprojects and as possible co-financier of hydro mini-grids.

The proposed operation also incorporates relevant lessons learned from the implementation of PERMER I. The original design of PERMER I envisioned that procurement of goods would be done in a decentralized manner, through each participating Province; and that electricity would be provided only by private concessionaires, without taking into account other actors, such as public electric utilities and cooperatives. The economic crisis that hit Argentina shortly after the Project was approved, led to changes to PERMER I's design and implementation, including: i) incorporating public electric utilities and cooperatives as service providers and operators; ii) increasing public-

sector support; iii) adding new actors such as other national institutions and provincial agencies; and iv) allowing more time for the Project to be implemented. In addition, and in order to expedite and make more efficient the acquisition of goods and services, PERMER I was also restructured to allow for centralized procurement activities.

The proposed new operation will build upon these updated arrangements, and will incorporate the lessons learned in the implementation completion report for PERMER I. These lessons include:

- A large-scale renewable energy system project is a medium to long-term effort that requires a design flexible enough to adapt to the changing conditions that may arise. The project's experience also casts doubts on the effectiveness of short-term instruments in addressing long-term rural development challenges, which calls for longer implementation schedules.
- Large-scale decentralized renewable energy operations face unique challenges associated with the market dispersion, the large number of players involved, limited knowledge of the terrain, and complex communications that require a delivery model tailored to these needs. Specific lessons made evident by the project are: a) the importance of dissemination; b) the need to promote the use of local resources; and c) that the sustainability of the operation is more a logistical challenge rather than a technical task.

The project is proposed to be implemented over a six year period and comprise four components, supporting the acquisition and installation of goods and services to: (A) increase and improve the provision of electricity services; (B) augment the provision of solar thermal energy; (C) support the design, implementation and execution of subprojects; and (D) Project management. The Project would be implemented by SE, through the existing PERMER implementing unit.

Further information on the four components can be found below:

A – Electricity service provision. This component will finance the acquisition and installation of stand-alone solar (PV) or wind systems and the construction and/or upgrade of mini grids with renewable technologies (for groups of consumers that may include public institutions and population clusters, among others). This component would benefit nearly 560,000 people. IBRD funding would amount to USD $189,950,000, while the GoA would provide around USD $36, 000,000. Planned activities would support the provision of electricity services for residential and public users for multiple purposes:

- Electricity for lighting, entertainment and communication services (among others) for: isolated individual households; dispersed public services institutions; and rural and isolated clusters through mini-grids.
- Electricity for potable water pumping in: individual households; dispersed public services institutions; and rural and isolated clusters.
- Electricity for productive uses for individual purposes or collective subprojects.

B – Solar thermal energy provision. This component will finance the acquisition and installation of mostly solar water heaters as well as other solar thermal applications for which markets are still in an early stage (this includes solar heating systems, cookers and solar ovens). The specific technologies and items to be acquired and/or installed would be further refined during preparation, based on existing markets and the needs of targeted beneficiaries. The component will help provide solar thermal energy in public institutions only, based on some relevant experiences from PERMER I. It is expected that this component could benefit almost 290,000 people. IBRD funding would reach USD

$4,930,000, while GoA's co-financing would be near USD $1,250,000.

C – Activities to support the design, implementation and execution of subprojects and for the development of renewable energy technologies. With funding of about USD $3,300,000 (IBRD), this component would finance activities such as: market studies to determine potential energy demand and technologies, monitoring and evaluation tasks, communication strategies and outreach activities, studies to support Argentina's renewable energy goals, dissemination of lessons learned, best practices and relevant experiences, among others.

D – Project management. This component would finance the incremental costs of the Project, strengthening existing structures, operation and maintenance of monitoring and evaluation (M&E) systems – which would take into account the methodologies being developed by the Bank and the International Energy Agency under the Sustainable Energy for All Global Tracking Framework –, training and travel costs for PIU members, equipment, etc. IBRD funding would reach USD $1,820,000 (IBRD), while GoA's co-financing would be near USD $1,100,000.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project is national in scope, therefore all Argentine Provinces constitute the target area for investment subprojects. The natural environment of these provinces is very 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. The project would focus on two types of rural zones: a) those with small populations located in extremely isolated locales, for which stand-alone generation will be provided and, b) small concentrated communities in isolated locales that are of sufficient size to warrant provision of mini-grids. Specific subprojects are not likely to be identified before appraisal and therefore the specific sites, environmental and social conditions, and impacts of each subproject are not likely to be known. In light of this, an ESMF will be prepared, (updating the existing version of ESMF prepared for PERMER I) that will include a screening process for sub-projects, and an indicative list of potential sub-projects will be provided. In the event that any sub-projects are confirmed for inclusion in the project prior to appraisal, draft EIAs/EMPs and RAPs will be prepared (prior to appraisal).

E. Borrowers Institutional Capacity for Safeguard Policies

The implementation arrangements under the Project will be the same as those for the recently closed AR Renewable Energy Rural Markets (P006043, or PERMER I). The implementation of the Project will be carried out through existing management structures, at both the national and provincial level. The implementing agency will be the Energy Secretariat (SE, as per its acronym in Spanish) through its Project Coordination Unit (PCU). The PCU will be responsible for coordinating the various activities of the Project with the other units in Provincial Government Agencies. With regard to safeguard related issues, the social and environmental team (SET) of the PCU will be responsible for identifying and disseminating guidelines for the implementation of actions to ensure compliance with Bank Operational Policies related to safeguards, and to ensure compliance with Government of Argentina rules and regulations. This will be based upon the continued application of the updated Environmental and Social Management Framework (ESMF). The same team will be responsible for the application of the Indigenous Peoples Planning Framework (IPPF) as well the Resettlement Planning Framework (RPF), the Good Practices Guide (GPG), and the Communication Strategy (CS). It is planned that capacity building process for the SE is to be followed, and it is recommended that both an environmental and social specialist be hired, thus enhancing the capacity of the Borrower. There is currently one officer in the SE responsible for environmental and social safeguard

compliance. She has attended training in Bank Operational Policies, also attended a workshop for OP 4.12 held in Chile, and is in the process of obtaining a Masters in Environmental Management. Experience gained during the implementation of the recently closed project will be taken into account in the preparation of this operation.

At the provincial level, the institutional capacity is heterogeneous. The Argentina safeguards GAP analysis focused on legal frameworks rather than capacities by sector. The project will design a protocol to gather information on provincial capacity at the energy sector. That information will be used as a screening mechanism to help identify those provinces that will need more support from the central Project Coordination Unit. It is important to mention that, in general, most of the EIA studies are outsourced by the provinces.

The Borrower's performance can be further assessed analyzing the experiences from the implementation of PERMER. Relevant lessons learned are presented below (based on ICR of PERMER I – Report N° 1336, June 26, 2013)

"Environmental safeguard compliance was rated satisfactory throughout the whole implementation of the PERMER I project. However, an assessment undertaken by the Bank in early 2011 concluded that some sub-projects, particularly mini-grids, could have environmental and social impacts broader than what was foreseen at the design stage. Consequently, the supervision of ongoing sub-projects was strengthened –including a more rigorous review of Environmental Impact Assessments (EIAs)— and data was systematized. No significant negative environmental impacts were detected (ICR, pp. 10-11).

In regards to social safeguards, originally the PERMER I project did not trigger any of them. However, Bank supervision missions concluded that the project was likely to have a broader impact than originally expected and should have triggered additional safeguards (i.e. indigenous people, involuntary resettlement). Consequently, the Additional Financing triggered OP 4.10 on Indigenous Peoples, and the Bank proceeded to intensify its supervision and dialogue on these subjects with the support of local specialists. Considering that in several provinces some beneficiaries belong to indigenous peoples, a framework for the management of indigenous populations was developed in order to guarantee an open consultation process tailored to the characteristics of their culture (ICR, pp. 11).

F. Environmental and Social Safeguards Specialists on the Team

Fernando J. Brunstein (LCSEN)

Noreen Beg (LCSEN)

Lilian Pedersen (LCSSO)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	The project will have a largely positive impact on the environment , by improving the supply of energy in rural areas of Argentina's provinces, thereby reducing the use of fossil fuels for domestic consumption, and the use of firewood (in the case of institutional buildings, i.e.,

		schools and hospitals). The scope, targets and boundaries of PERMER II would be significantly expanded to include provinces not covered by PERMER I. In addition, some of the proposed interventions may be new or different in nature from those supported under PERMER I. The safeguard documents prepared for PERMER I, specifically the ESMF, will be updated to reflect this. Components A (provision of Electric Energy) and B (Thermal Energy Provision) of the Project, will have no significant environmental impacts. These impacts would result from the installation of solar panels (requiring a plan for disposal of batteries), the installation of small wind turbines for individual use (300-600 wp), the retrofitting of existing diesel generation facilities to hybrid solar/diesel back-up systems, the construction of mini hydro (ranging from 100 kW to 4 MW) run-of-river generation facilities, and the construction of low-impact infrastructure (such as low voltage electricity distribution lines).The installation of solar cookstoves and heaters is also part of the Project. Expected potential negative environmental impacts will be primarily during the construction phase of civil work. Cumulative environmental impacts are not expected to be significant, as the project is nationwide but relatively limited in scope. The impacts and relevant mitigation measures will be described in the Project's updated Environmental and Social Management Framework (ESMF). Appropriate mitigation measures will be followed to limit the impact on local fauna, avi-fauna and to protect indigenous plant and tree species, and preserve riverine ecosystems in the case of the mini-hydro schemes. The project is expected to result in positive social outcomes, through its support to improve the quality of life for isolated populations in Argentina's provinces through the provision of

		electric and thermal energy, safe water supply for families, and the opportunity to undertake commercially productive activities and enhance the secure and timely provision of social services (e.g., security of electricity supply for refrigeration of vaccines). The Project is classified as Category B, this is, a Project with environmental impacts that are easily identified and mitigated-requiring a partial environmental assessment in accordance with the World Bank's Environmental and Social Safeguards Policies. The Borrower will prepare an Environmental and Social Management Framework (ESMF), an Indigenous Peoples Planning Framework (IPPF), a Resettlement Policy Framework (RPF), a Good Practices Guide (GPG), and a Communication Strategy (CS). As previously mentioned, the ESMF will be updated using as a basis the ESMF prepared for PERMER I. This updating process will consider, among others, the following issues: i) Reflect the new environmental and social baseline conditions; ii) Incorporate the full range of subprojects proposed under PERMER II; iii) Ensure that it contains the latest legal and institutional provisions (for example, new PCUs and respective SETs in new provinces; capacity building for the Energy Secretariat (SE) and, if applicable, for new provinces new entities responsible, at the provincial level, for managing environmental and social issues during operation and maintenance (e.g. management of waste generated by the maintenance and repair of equipment, including battery disposal management); iv) Include a screening process for sub-projects; v) Update the environmental management tools and mitigation measures applicable to the new sub-projects (including those specific subprojects if location has already been

		identified prior to appraisal as mentioned earlier– e.g. mini grids and mitigation measures to be applied during the design of the sub-projects, considering the lessons learned from PERMER I and included in that project's ICR); vi) Include the results of public consultations on the updated draft ESMF(see below); In addition, the team will again evaluate the adequacy of the previous ESMF through verification and accountability of previous sub-projects (from PERMER I), and will take into consideration findings from the Gap Analysis that was approved in 2013. The Energy Secretariat as the Borrower will carry out public consultations on the draft ESMF with local and provincial government representatives, representatives of stakeholders in local communities, and local NGOs. The ESMF will document the results of the consultations and will take into account and address stakeholder concerns. Sub-project EMPs will be prepared for this project.
Natural Habitats OP/BP 4.04	Yes	This policy is triggered because many sub-projects will be located in or close to natural habitats and/or protected areas. For example, in the case of retrofitting existing diesel generation facilities to hybrid solar/diesel back-up systems, sub-projects may be located within National Parks and Reserves, at government offices and lodges located within the Parks or Reserves. While the project will not support or lead to the conversion of natural habitats, and the ESMF will explicitly forbid any project activities inducing significant conversion or degradation of critical natural habitats, this policy is triggered to ensure that minor construction works have EMPs that will protect biodiversity and water resources. The most significant impacts will result from the construction of low-voltage distribution lines and construction of related infrastructure, and appropriate mitigation measures will be followed to limit the impact on local fauna, birdlife and to protect indigenous plant and tree species, and preserve riverine

		ecosystems in the case of mini-hydro schemes. The team will work to ensure that the ESMF has appropriate screening criteria to ensure that impacts on natural and critical natural habitats are properly evaluated. Furthermore, the ESMF will be clear in rejecting subprojects which involve significant conversion of natural habitats. In addition, it will ensure that any investments undertaken in designated protected areas are consistent with approved management plans where feasible.
Forests OP/BP 4.36	TBD	While some mini-hydro schemes may be located within forests, the ESMF will explicitly forbid any project activities that would lead to the significant degradation and conversion of critical forest areas and forest ecosystems. However, considering that the project may traverse natural forests, and that some construction will take place for the mini-hydro schemes in rivers that may run through forest areas, this safeguard policy may be triggered. This policy will remain TBD until the full scope of project activities are defined since it is unlikely that project investments would affect the management of forests, the use of forests for livelihoods or would support investments such as plantations or other industrial uses. The ESMF will address the potential impact of the project on forests and/or the rights and welfare of local communities, and suggest appropriate mitigation measures. Consequently, the team will make sure the ESMF incorporates screening mechanisms to ensure that no sub-projects which affect the management of forests or the welfare of forest dependent communities be eligible and to ensure that any impacts on forests be mitigated through measures defined as part of the broader approach on natural habitats.
Pest Management OP 4.09	No	The project will not finance any activities that would result in procurement or significant use of pesticides. There will be no pesticide use in construction of works. Any land clearing for rehabilitation of existing buildings or for

		placement of distribution poles will be undertaken manually. Minor use of pesticides to control pests in construction areas or in workers' lodgment sites will be addressed in the new ESMF.
Physical Cultural Resources OP/ BP 4.11	Yes	During the PERMER I project it was verified that many sub-projects were located at on sites of ancient indigenous settlements, and numerous utensils and tools of historical and archaeological importance were found during the progress of works. Considering that PERMER II will operate in the same areas, this policy is triggered. A chance finds procedure will be inserted into construction contracts and included in the ESMF, and the local and national Cultural Patrimony, Archeology Departments, and/or Museums authorities will be notified when chance finds are made. The ESMF will include specific screening provisions for evaluating potential impacts on cultural resources and will provide specific guidance on the chance finds procedures.
Indigenous Peoples OP/BP 4.10	Yes	Based on the PERMER I experience and considering targeted areas are primarily rural areas, it is possible that members of one or more of Argentina's indigenous peoples could be present within the project's geographical influence area. In order to guarantee the inclusion of such groups in project benefits, or otherwise to avoid that project activities affecting them in an adverse way, the project would trigger OP/BP 4.10. The Borrower is preparing an Indigenous Peoples Planning Framework (IPPF), based on the current IPPF for PERMER I, to strengthen and coordinate overall attention to indigenous peoples' participation. The IPPF will include an analysis of the lessons learned from the participation of Indigenous Peoples in PERMER I. At the moment, available information allows to conclude that more than 13,000 indigenous peoples benefited from individual SHS systems in: Salta (over 5,000 members of the Diaguitas Calchaquíes,

		Tupi, Guaraníes and Kollas groups), Tucumán / over 1,700 Diaguitas Calchaquíes), Chaco (roughly 2,000 Wichi and Tobas), Mendoza (approximately 1,000 Mapuches and Huarpes), Neuquén (1,200 Mapuches), and Jujuy (1,700 Quechuas, Kollas, Atacama, Ocloyas and Omaguaca). The PERMER I team conducted an identification and consultation process of indigenous populations in different provinces. These included both inhabitants of indigenous communities as well as those that identify themselves as indigenous but are integrated into non-indigenous communities. The communication and organizational factors of the different communities and different peoples was a key factor to consider when designing communication activities and determining beneficiaries. Given the nature of the operation (which provided individual solar systems), the project was very well received since it is considered by the community as an improvement in the living conditions and opportunities for development. Finally, the specific sub-project Environmental Management Plans to be developed under the project would include pre-screening. In the case that IP are present in a specific subproject's area of influence, a site-specific Indigenous Peoples Plan (IPP) would be developed based on the IPPF guidelines. IPPF would be submitted to Indigenous People organization consulting process.
Involuntary Resettlement OP/BP 4.12	Yes	Subprojects financed by PERMER II (such as mini-grids, hydropower, small dams or farming activities) are likely to require land easement and/or acquisition, including potential investment that might entail resettlement as defined by OP 4.12 (loss of assets, physical displacement, or livelihood losses). The Borrower will prepare a Resettlement Policy Framework (RPF), based on the PERMER I experience, to ensure that analysis of alternatives and appropriate compensation and support to potentially affected persons are

		incorporated into the subproject design. Given that due to the nature of the sub-projects potential cases of voluntary land donations might take place, the ESMF will include robust criteria to clearly document these.
Safety of Dams OP/BP 4.37	No	The mini-hydro electricity generation facilities that are under consideration (ranging from 100 kW to 4 MW) will be run-of-river, and for those that require a small weir or pondage to provide water for the penstock, the dam height will not exceed 10 meters. For these small dams, the task team will agree on appropriate safety measures with the Borrower, will ensure the involvement of qualified engineers, and will confirm that the EMPs for each sub- project have determined that there would be no risk of significant adverse impacts due to potential failure of the structure on local communities and assets, including assets to be financed as part of the proposed project. Based on such determination, potential adverse impacts will be addressed through OP/BP 4.01, Environmental Assessment and not OP/BP 4.37, and measures will be included in the ESMF and in EMPs.
Projects on International Waterways OP/BP 7.50	TBD	While the exact location of sub-projects is still being determined, it is likely that the project will include run of river hydro electricity generation facilities located on rivers that are tributaries of rivers that flow into international waterways. In such instances, this policy will be triggered. The Project Team will confer with the Borrower as to whether they wish to provide Notification to Riparian States, or if it is the Borrower's preference to exclude these sub-projects from PERMER II. This will be determined prior to appraisal.
Projects in Disputed Areas OP/BP 7.60	No	No subprojects will be located in disputed areas.

III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 01-Nov-2013

B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing[1] should be specified in the PAD-stage ISDS:

ESMF, IPPF and RPF would be ready by January 31st, 2014 (prior to appraisal).

IV. APPROVALS

[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.

Task Team Leader:	Name: Lucia Spinelli	
Approved By:		
Regional Safeguards Coordinator:	Name: Glenn S. Morgan (RSA)	Date: 24-Jan-2014
Sector Manager:	Name: Malcolm Cosgrove-Davies (SM)	Date: 04-Feb-2014