

# PROJECT IDENTIFICATION FORM (PIF)<sup>1</sup> PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

**PART I: PROJECT IDENTIFICATION** 

Project Title:	Introduction of energy efficiency and operation of social housing and comm		design, construction and
Country(ies):	Argentina	GEF Project ID: <sup>2</sup>	4861
GEF Agency(ies):	IADB (select) (select)	GEF Agency Project ID:	at an tarred
Other Executing Partner(s):	<ul> <li>National Sustainable Environment and Development Secretariat.</li> <li>Cabinet of Ministers.</li> <li>-Urban Development and Housing Under Secretariat (UDHUS). Public Works Secretariat of the Ministry of Federal Planning, Public Investment and Services.</li> <li>National Institute of Industrial Technology. Ministry of Industry</li> </ul>	Submission Date:	2012-04-03
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Name of parent program (if applicable):  ➤ For SFM/REDD+   □	1 - 33 1 - 3 - 3 3	Agency Fee (\$):	1,028,184

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives		Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCM-1	(select)	1.1. Technologies succesfully demonstrated, deployed, and transferred	1.1.1 Innovative low-carbon technologies demonstrated and deployed on the ground  1.1.2 National strategies for the deployment and commercialization of innovative low-carbon technologies adopted	GEFTF	7,737,800	35,823,307
CCM-2	(select)	2.1. Appropriate policy, legal and regulatory framewroks adopted and enforced  2.2. 67,231 tons CO2 avoided	22.1.1. Energy efficiency policy and regulation in place 2.1.2. Investment mobilized 2.1.3 Energy savings of at least 30% achieved	GEFTF	2,141,038	7,135,168
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(select)	(select)		1,2	(select)		
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(select)	(select)	a Agira	A H DOWN XI	(select)		
(select)	(select)	Others	and the RM of th	(select)		
			Sub-Total		9,878,838	42,958,475
			Project Management Cost <sup>4</sup>	(select)	403,000	1,580,000

It is very important to consult the PIF preparation guidelines when completing this template. Project ID number will be assigned by GEFSEC.

Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

4			
	Total Project Cost	10,281,838	44,538,475

#### B. PROJECT FRAMEWORK

Project Objective: To reduce energy demand and related GHG emissions from the construction of social housing in Argentina through the establishment of a regulatory framework and technological guidelines for the design, construction and operation of social housing and community equipment with energy efficiency (EE) and renewable energy (RE)

operation of social h		community equipment w	ith energy efficiency (EE) and	d renewab		
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Low-carbon social housing pilot projects designed and demonstrated	Inv	1.1.Demonstration of technical, economic and environmental feasibility of social housing pilots  1.2 Social acceptance of new construction technologies and systems (measured by follow up surveys with occupants)  1.3. Strengthened local institutions for pilot	1.1.1.120 pilot social housing units and community equipment showcasing energy efficiency (EE) and renewable energy (RE) technologies  1.1.2. Construction of four hundred and eighty (480) conventional social housing units to serve as control group  1.1.3. Six (6) climate zone	GEFTF	6,972,800	32,627,665
A STATE OF THE STA		project design and construction monitoring	specific EE and RE technological packages			
		1.4. Energy savings of minimum 30% relative to conventional housing due to the application of energy efficiency (EE) and renewable energy (RE)	1.1.4. Occupants of 120 units trained in good use practices of pilot project units  1.2.1. At least twenty (20) local actors from the			
		technologies	Provincial Housing Institute (IPV Spanish Acronym) trained in pilot design and construction monitoring			
2. Carbon monitoring for pilot technologies	TA	2.1. Monitoring of pilot projects  2.2. Definition and validation of local construction standards for social housing  2.3. Strengthened technical local monitoring capacity	2.1.1. Countrywide, standardized energy consumption monitoring protocol for social housing  2.2.1. Six (6) climate specific reference standards for social housing with EE and RE components  2.2.2. General specifications for	GEFTF	1,530,000	6,391,284
			implementation of EE and RE in community equipment  2.3.1. Sixty (60) technicians trained for monitoring			

<sup>&</sup>lt;sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

			energy savings (and related GHG emissions reduction) at local level	According to the second		
			2.3.2. Six (6) measuring instruments packages for monitoring energy consumption			
3. Adoption of regulatory framework at national level regarding EE and RE in social housing	TA	3.1. Definition of National plans for including RR and RE in social housing construction	3.1.1. Nationwide standards and norms for the construction of social housing with EE and RE developed	GEFTF	122,000	324,908
		3.2. Strengthening of institutional structure for the application and enforcement of regulatory framework	3.2.1. At least 20 public local, provincial, and national agents trained to promote and enforce the new regulatory framework			
4. Building expert capacity for local/regional production of EE and RE technologies	TA	4.1. Implementation of instruments for the promotion and adoption of local EE and RE technologies in social housing	4.1.1. Technical and legal bidding documents focusing on the application of EE and RE technologies in social housing adapted for each climate zone	GEFTF	254,038	589,060
	ŧ	4.2.Strengthening of public and private actors' capacities for the implementation of EE and RE	4.2.1. Local training program for best practices and technologies in EE and RE in the construction sector			
		technologies	4.2.2. Local actors (private and interested municipality personnel) trained (120) in EE and RE technologies			
5. Outreach and dissemination	TA	5.1. Countrywide inclusion of EE and RE technologies in social housing	5.1.1. Public information campaign about implementation of EE and RE, including workshops and promotional materials	GEFTF	1,000,000	3,025,558
		5.2. Acceptance of EE and RE technologies in social housing	5.1.2. Web based platform with pilot project data, materials and technology database	***************************************		
	(select)			(select)		
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	(select)			(select)		
	(select)			(select)		
	(serect)		Sub-Total	(aciect)	9,878,838	42,958,475
CONTRACTOR OF THE PROPERTY OF			Project Management Cost <sup>5</sup>	(select)	403,000	1,580,000
			Total Project Costs	`,	10,281,838	44,538,475

<sup>&</sup>lt;sup>5</sup> Same as footnote #3.

#### C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Urban Development and Housing Under Secretariat (UDHUS). Public	In-kind	32,220,262
	Works Secretariat of the Ministry of Federal Planning, Public Investment and Services		
National Government	National Sustainable Environment and Development Secretariat (NSEDS).Cabinet of Ministers	In-kind	2,250,241
National Government	National Institute of Industrial Technology (NIIT). Ministry of Industry	In-kind	6,391,284
Other Multilateral Agency (ies)	IADB	Hard Loan	3,676,688
(select)		(select)	
Total Cofinancing			44,538,475

#### D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
Total Grant	Resources			0	0	0

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

2 Please indicate fees related to this project.

#### PART II: PROJECT JUSTIFICATION

### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the GEF focal area/LDCF/SCCF strategies /NPIF Initiative:

The aim of this project is to establish regulatory and technical guidelines for the design, construction and operation of low-carbon social housing throughout Argentina. The expected result of the project is the establishment of a regulatory framework that will govern the construction of social housing and community equipment (facilities for common use such as social and recreational activities or school tutoring) with energy efficiency (EE) and renewable energies (RE), aimed at reducing consumers' energy demand and related GHG emissions.

The project is consistent with the GEF focal area of Climate Change in two of its objectives. First, it is consistent with "CCM-1 Technology Transfer", as it aims to promote the demonstration, deployment and transfer of low-carbon technologies through the deployment and testing of prototypes that will help develop a normative and technical framework for the introduction of EE and RE technologies in the construction of social housing in Argentina. Second, it is consistent with "CCM-2 Energy Efficiency", as it promotes market transformation for energy efficiency in the construction sector for social housing in Argentina. This will be achieved through the implementation of low-carbon social housing construction regulations/standards at the national level that will increase energy efficiency and reduce GHG emissions. The project will also facilitate innovation, catalyzing support for last generation low-carbon technologies and policy reforms in order to allow its reproduction and replication, in accordance with the strategy of CCM.

- A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:
- A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:
  - A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The proposed project is consistent with the following policies and national and regional strategic documents for the reduction of GHG emissions, including:

- 1. Second National Communication of Climate Change (SNC): The SNC presented to the UNFCCC in December 2007, identifies GHG emissions from the energy sector are 47% of the country's total emissions. Of those, 13% comes from the residential sector. The SNC has developed a portfolio of cost-effective measures that would reduce the consumption of natural gas and electricity for air conditioning and heating, according to the climate location of buildings. Implementation of EE measures would decrease consumption by 497.8 KToe/year with a yearly mitigation potential of 1,170 Gg of CO<sub>2</sub>e in the entire residential sector.
- 2. National Strategy on Climate Change (NSCC): The NSCC in its first phase in 2011 establishes that energy efficiency and bioclimatic construction are actions that contribute with the national GHG mitigation policy. In 2012, the second phase will establish specific targets and indicators for the implementation of this strategy, including those related to the construction sector.
- 3. Third National Communication of Climate Change (TNC): The TNC is currently in its national approval stage. The TNC includes the development of specific research guidelines, policy recommendations and EE measures in the construction of buildings and houses.

### **B.** PROJECT OVERVIEW:

- B.1. Describe the baseline project and the problem that it seeks to address:
  - (1) The residential sector in Argentina at a glance

Argentina is one of the most urbanized countries in Latin America. The country's pattern of territorial occupation has favored the concentration of population in large urban areas. These agglomerations concentrated 50% of the urban population of Argentina. The expansion of demand not been matched by the corresponding increase in supply in the formal housing market, resulted in the construction of informal habitat solutions with poor quality and without access to basic services. For that reason, Argentina faces deficits of quantity and quality in the provision of housing services. There is a 10% deficit in the formation of new homes from existing ones and an 18% deficit in housing built with precarious materials. This deficit specially affects the poor, 70% of whom live in urban areas.

As part of a solution to the housing deficit, the Government of Argentina, through the Urban Development and Housing Under Secretariat (UDHUS) implemented a Federal Social Housing Program (FSHP) entirely funded with public funds. According to statistics from the past decade the FSHP has built an average of 54,000 homes per year. This program prioritizes communities and social sectors with the highest poverty indices, in order to improve their quality of life and their urban and social inclusion in a sustainable manner.

The purpose of this project is to incorporate into the implementation of the FSHP the deployment of pilot projects in different regions of Argentina to help establish regulatory and technical guidelines for the design, construction and operation of social housing throughout Argentina that are consistent with low-carbon design. The UDHUS will establish guidelines for the construction of social housing that incorporates EE and RE, aimed at reducing consumers' energy demand and related GHG emissions. The expected long term impacts of the GEF project is that all social housing built under the will be built under the EE and RE standards established under this GEF project.

#### (2) Energy Consumption in Argentina's residential sector

According to the GHG emissions inventory from the SNC, total emissions in 2000, excluding land use, land use change and forestry (LULUCF), were 282,001 Gg of CO<sub>2</sub>e. The sector that contributed the most was energy (47%); within energy, the main emitting categories were transportation, energy industries and residential use. Overall, the residential category represented 13% of the total emissions from the energy sector.

Most of the residential energy consumption comes from fossil fuels (National Energy Balance, 2009). Assuming this energy supply remains similar in the future (mostly non-renewable), and considering the annual demand growth, it is expected that CO<sub>2</sub> emissions from the residential sector will continue to grow at a 3.7% annual rate in the coming years. At the same time, Argentina's residential energy consumption as a fraction of its National Energy Balance (25.8%) was greater than the average from its neighbors (OLADE, 2010), surpassing all other countries (Brazil, Bolivia, Uruguay and Chile) except for Paraguay. It is thus critical to modify the design parameters and standards to ensure that state of the art energy efficiency technologies are deployed in new housing development in Argentina.

The energy consumption baseline for the residential sector was defined according to methodologies adopted in the SNC (2007). The estimates were based on minimum standards of habitability without taking into account technologies that use EE and RE. Table 1 shows energy consumption and related emissions for social housing as well as all residential sector accounting for historical construction data for the last decade. Social housing is equivalent to 17% of the total residential housing energy consumption in Argentina.

Table 1. Energy Consumption and annual GHG emissions in social housing in Argentina by fuel source (2010)

	Social Housing (1,923,975.8 dwellings)		All Residential Sector (11,317,507 dwellings)	
Energy source	Consumption (ktoe)	Emissions (t CO <sub>2</sub> e)	Consumption (ktoe)	Emissions (t CO <sub>2</sub> e)
Electricity	363.4	2,105,066	2,155.3	12,382,800
Natural Gas	1,645.34	3,465,093	9,678.5	20,382,903

Liquefied Gas	93.71	243,229	551.2	1,430,762
Total	2,102.45	5,813,388	12,385.0	34,196,466

Source: Based on data from the National Statistics and Census Institute (INDEC), the Energy Secretariat, the Urban Development and Housing Under Secretariat and the SNC; Gutierrez (2011).

#### (3) Barriers to reduce Energy Consumption in the Social Housing Sector

At the moment in Argentina, current construction practices in social housing do not incorporate EE and RE technologies. There are several barriers that hinder the adoption of these technologies, which would allow the reduction of energy consumption levels.

One of the main reasons why EE and RE are not included in construction practices is the lack of an appropriate regulatory framework adapted to Argentina's needs. Currently, this regulatory framework has building codes that do not incorporate specific standards on EE and RE. For EE standards, they take as reference regulations produced by the Argentinean Standards and Certification Institute (IRAM in Spanish) which is a private agency that develops voluntary national standards. Current IRAM regulations have different values of thermal conditioning, categorized according to efficiency levels. This process generates inefficiencies and inequalities in adoption levels for each area.

There is also no national regionalized housing initiative that incorporates energy savings measures in the design and construction according to climate zones. There have been specific initiatives by the Provincial Housing Institutes (IPV in Spanish), local governments, universities and research institutes and the private sector. For example, the IPVs have at least six projects for design, construction and evaluation of prototypes at different levels of development. However, these initiatives lack the proper documentation to demonstrate the economic and environmental benefits of the implementation of EE and RE strategies in social housing. They also lack a monitoring system that unifies measurement and evaluation criteria for the development of standards at the national level.

An additional barrier is the lack of development of the required technology for the implementation of EE and RE in housing construction. This is the result of poor product dissemination and demand as well as the poor dissemination of the benefits and savings produced by these technologies. This is in part due to the lack of a well defined national institutional structure to disseminate and train local actors. An appropriate national framework would promote the dissemination of the new technologies consequently increasing their demand and boosting the social acceptance and replication of proved and tested techniques and technologies.

To overcome part of these barriers, the Federal Government under the FHSP has allocated close to \$41 million dollars for the refinement of current low-carbon housing prototypes to test EE and RE technologies in various areas of Argentina. However, this fund allocation is not enough, as it needs to develop a more through and comprehensive approach to scale up and develop a regulatory framework.

This nationwide project will unify construction experiences and criteria on EE and RE in Argentina, attending the climatic characteristics of each region. The new regulatory framework of standards and guidelines for the construction of social housing will have measures of EE and RE based on the prototype evaluation in each pilot site. This will enhance the articulation of all relevant actors in the area and generate quantitative and qualitative leaps in terms of reduction of GHG emissions. The Federal Government co-financing combined with GEF funding will allow catalyzing and accelerating the adoption of new construction practices and efficient technologies for social housing national plans.

It is worth noting that as part of the support to social housing in Argentina, IDB provided in 2011 a credit line of 400 million dollars, as part of its ongoing Neighborhood Improvement Program (PROMEBA) program. The credit line is an integral part of the FSHP, as it seeks to improve the habitability of households located in shantytowns and unregulated settlements to

improve the quality of life and contribute to the urban and social inclusion of Argentine households in the poorest segments of the population.

B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The GEF-funded project envisions the construction and monitoring of pilot social housing units distributed in the six major climate zones of Argentina. The data resulting from the monitoring of these pilots will inform the construction of new standards for social housing that will include EE and/or RE requirements. The standards will be embedded in the framework of the FSHP and the construction of 54,000 houses per year. The impact of the project proposed to the GEF will surpass the duration of the implementation of the project (2013-2015) and result in a transformational change of the current social housing landscape in Argentina. The estimated 10 year-period reduction is presented in Table 2.

#### Project GHG mitigation potential:

Considering that the annual average social housing built in the last decade, this project is estimated to achieve an annual direct reduction of around 231 tCO<sub>2</sub>e and 67,000 tCO<sub>2</sub>e of indirect reductions through the enforcement of the defined standards (see Table 3).

Table 2. Reduction in GHG emissions from the GEF Project

Scenario Company de la company	Annual emissions (t CO <sub>2</sub> e)	Total emissions in a 10 year period (t CO <sub>2</sub> e)	% of GHG emissions
Direct Emissions (pilots)		and fairs (Suppose	
Baseline Scenario	612	33,662	100%
GEF Project Scenario	381	20,983	62%
Indirect Emissions	Heart Hard St. Britis 194	o te estanous sur	
Baseline Scenario	206,296	11,346,376	100%
GEF Project Scenario	139,489	7,671,876	67%
Total Savings due to GEF project	231 + 66,809	12,679 + 3,674,499	32.4%

Note: assuming 54,000 social housing units built each year for 10 years

#### COMPONENT 1: Design and construction of social housing low carbon pilot projects

The project will build pilots based on six preexisting prototypes of social housing and community facilities in each of the six climate zones (see Figure 1). These prototypes have been developed by each IPV with technical support from local universities and present a new construction system altogether for each climate zone, as it incorporates regional materials, local practices and technologies, beyond the EE and RE measures. Based on preliminary data that has EE and RE measures, including improvements in insulation, heat accumulating walls, hot air collectors, solar water heating, solar cooking and clothes' drying facilities, they are expected to reach energy savings of at least 30% compared to the baseline. These EE and RE technology packages are the same that are expected to be deployed in the pilots.

Figure 1. Climate zones in Argentina and location of the six reference prototypes



Source: Based on Standard IRAM 11,603

The prototypes will be evaluated and improved by incorporating necessary adjustments in the design. Subsequently, a total of twenty (20) improved prototypes will be built in each climate zone (120 homes in total) defined by the voluntary norm IRAM 11,603, which is adapted from internal norms (see Figure 1). These will be tested by in situ monitoring to evaluate their performance according to consumption patterns and climatic diversity in Argentina. Twenty (20) members of each IPV will be trained for the construction and monitoring of the pilot projects. This component will cost the most, as it involves de construction of six hundred 60 m² houses, 120 pilots and 480 control houses (the latest covered by co-financing).

The pilot projects will allow the evaluation of the technological packages to be incorporated into homes. These packages will be divided into three levels of energy savings, depending on the location, orientation, geographic characteristics and solar resources: 1) Minimum savings (EE measures in place); 2) Medium savings (full EE and minimum RE strategies); 3) Maximum savings (full EE and RE strategies).

Users of the 120 pilot units will be trained in long-term good use practices as general awareness of EE and RE technologies. An additional specific training program for the efficient use of energy will be developed to target all the households in the neighborhoods in which the project will be executed during the three years (2013-2015). This is estimated to be 44,300 households.

### COMPONENT 2: Monitoring and evaluation of pilot projects

The behavior of the pilot units built in each climate zone will be evaluated and their levels of energy savings will be verified by comparing them with control cases of traditional construction. For this purpose, the National Institute of Industrial Technology (INTI) will unify monitoring standards at the national level to develop a uniform monitoring protocol. INTI will interact with local actors (universities, institutes, private public utilities, etc.)

A Global audit will establish consumption patterns among users through the evaluation of 80 houses per climate zone, for a total of 480 houses across the country. Monitoring and evaluation standards for each of the six climate zones will be determined by the evaluation and validation of the pilot projects. The monitoring will include the tracking of occupancy household levels, energy consumption and the development of energy efficiency studies. The collected data will be used to determine the reduction of energy consumption and GHG

emissions related to the implementation of EE and RE measures. The budget includes investments in equipment, that is, the deployment of six packages of measuring instruments.

To assure the proper data collection and evaluation, at least sixty (60) technicians from local public institutions, with support from local universities, will be trained and technical equipment for the monitoring of the projects within the six climate zones will be provided, to ensure that the data collected is as accurate as possible.

## COMPONENT 3: Adoption of regulatory framework at the national level regarding EE and RE in social housing

This component will develop the new standards for social housing construction based on the results of pilot projects in each of the six climate zones. Enforceable guidelines linked to EE and RE measures will be defined for each zone. The FSHP will apply these standards and the new legal framework developed will be obligatory for all new social housing construction. Training in the implementation the new regulatory framework will be provided for public officials and employees at the national, provincial and municipal level responsible for the promotion and implementation of social housing.

# COMPONENT 4: Building expert capacity for local/regional production of EE and RE technologies

Depending on the new regulatory framework, technical specifications will be modified for each of the six climate zones, and included in the public competitive bidding documents from the FSHP. The documents, containing the legal and technical specifications are part of a public tender process. Thus, companies must meet the same technical specifications, creating a demand for materials and technologies at the local level, influencing the market for the provision of technology and efficient low carbon materials. Additionally, local/regional training programs will be provided outlining lessons learned from the pilot projects, including good practice cases in EE and RE in housing, with the target of reaching at least 120 people from both the private (builders, developers, construction chambers, professional associations, workers construction unions and associations, energy providers, etc) and public sector (local municipalities).

### COMPONENT 5: Outreach and dissemination

In order to disseminate the results and lessons learned from the project and the technologies used to the general public and specific actors, outreach and dissemination tools will be developed. The UDHUS will develop a Web-based Platform containing specific project information including: the new regulatory guidelines, quantitative and qualitative results and benefits of construction of the EE and RE construction, energy consumption of social housing with EE and RE measures, a database of good practice cases, technologies, techniques and materials available on a regional level, databases of relevant stakeholders, among others.

The project will include a national dissemination campaign on construction with EE and RE in the building sector and promotional materials tailored to different audiences (general public and a more specific audience), in partnership with local actors (construction chambers, private electric utilities, etc). It is expected that the dissemination of the results of the project will influence the various sectors related to buildings and construction, promoting the inclusion of EE and RE in their developments.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the

achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

The socio-economic benefits generated at the national and regional level are: 1) Improvement of living conditions of marginalized urban areas and irregular settlement, providing access to sustainable housing. 2) Local socioeconomic development, by strengthening the market for small and medium producers of construction materials, technology and training of skilled labor with emphasis on environmental sustainability and technological innovation. Job creation for men and women, promoting equal opportunities and gender-oriented capacity building; 3) The development of proven EE and RE technologies existing in Argentina, transferable to the rest of the private and public residential housing sector at the national level; 4) The coordination between different actors; and 5) The incorporation of renewable energy and reductions in the consumption of fossil fuel in social housing, adding resilience to the vulnerable population in terms of economic dependence and adaptation to climate change.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

	Risk	Origin	Risk Level	and the second second
		External (Ex)	High (H)	Mitigation
		Internal (In)	Medium (M)	14.40
	*	-	Low (L)	Martine Communication (Communication Communication Communi
	Too many stakeholders	In	М	During the preparation of the project,
	in the decision making			the current mandates and
Ì	process	in the second of the second		competencies of the stakeholders and
	and the district of the Consequence of the Conseque			key actors will be analyzed and roles and responsibilities will be assigned.
	Failure to disburse by	Ex/In		During the preparation of the project a
	the counterparts			chronogram and an implementation
				schedule will be agreed on, identifying
	The second second second second	*	1 1 1	milestones and critical dates, and
	en art, t			formalizing institutional commitments at the highest level.
ľ	Underperformance of	In	$^{\circ}\mathrm{L}$	Previously tested technology by the
İ	the pilots due to the			Provincial Housing Institutes,
	technology or the			universities and researchers will be
	improper use and			used.
	maintenance by users.		. :	A training plan and supporting
				documentation for the proper use of
1	. •			the house with EE and RE will be
				prepared and circulated.
	Insufficient participation	Ex	L	An ongoing monitoring process will
	of the users			be performed and the involvement of
				the users of the housing will be sought
				after as part of the activities of the
_				technical team.
	Lack of sufficient skilled	Ĭn	3	New skilled staff will be hired and
	human resources to			trained.
L	develop the project			

Problems in the coordination and	Ex	М	Institutional commitment at the highest level will be achieved.
difficulties in the national, provincial and municipal policy levels.			Agreements and strictly enforced chronograms with close monitoring tools will be established.
Weak implementation of the new legislative framework	Ex	Н	Training and outreach campaign to ensure the proper implementation and monitoring of the framework

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

	National Sustainable Environment and Development Secretariat. Cabinet of Ministers. Highest authority on environmental policy. Coordinates environmental policies.	Coordination and technical advice on aspects of climate change. Counterpart for training.
	National Institute for Industrial Technology	
	Decentralized public body under the Ministry of Industry. Technical reference regarding	Technical advisory and counterpart for the monitoring component.
insk Versioner	Energy Secretariat	
A REAL PROPERTY.	Responsible for the implementation of national energy policies. Develops policies and programs for rational use of energy and development of renewable energies.	Technical advisory and counterpart for the regulatory framework component.
	Provincial Housing Institutes (IPV)	
en e	level. They centralize the execution of plans,	Executors of component 1 and recipients of institutional strengthening component at regional level.
100000000000000000000000000000000000000	Other stakeholders involved	
	Others.	Coordinate adaptation of the prototype housing units with local IPVs. In most cases this connection already exists. They are also envisaged to develop the monitoring component.
		Will be consulted during different phases of the project. Their cooperation will be requested for dissemination and training activities.

NGOs and social organizations	Will be convened for spreading the project and
Related to sustainable construction, land use planning and environmental aspects. Specialized	training activities. Will be kept informed and consulted at several project stages.
civil associations such as the Argentine Institute	IRAM will be engaged in the development of
of Standardization and Certification (IRAM).	the regulatory framework component.
Private sector companies	Will be kept informed and consulted at several
complementary equipment providers, local electric utilities	stages of the project, especially in the development of the pilot projects and the regulatory framework. Will be invited for training and dissemination.

#### B.6. Outline the coordination with other related initiatives:

The UDHUS manages the (i) Federal Housing and Construction Program (PFCV), for which the project will determine new efficiency standards, and the (ii) Neighborhood Improvement Program (PROMEBA), under which methodology training and control of the pilot users will be provided.

The Energy Secretariat manages the National Program for Rational and Efficient Use of Energy (PRONUREE) (2009), Rational Use of Electric Power (PUREE), Rational Use of Natural Gas (PURE) and the Quality program of energy devices (PROCAE), all oriented towards the replacement of appliances and lighting with more efficient ones in order to reduce residential energy consumption. The project will contribute to the plan of action of these programs complemented by specific measures for the construction industry and users of social housing, tending to maximize its results. The project also contributes to the goals of supplying 8% of national electricity demand with renewable energy by 2016 (Law 26.190/06 and its Regulatory Decree 562/09). The Project will also benefit from the experiences of the PERMER Program, which addresses renewable energy in rural markets.

Regarding the existing IRAM norms on energy efficiency and construction guidelines, it is envisioned that the standards to be developed under the project will incorporate several of the specifications of these norms for the construction of social housing in the whole country.

The Project will be complemented by the development of a NAMA for Sustainable Housing to attract necessary investments for the full-scale adoption of EE and RE in social housing. It will also contribute with inputs from its results for the residential sector goals of the TNC to the UNFCCC..

#### C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

The Inter-American Development Bank (IDB) is one of the major credit institutions in Latin America and the Caribbean (LAC). The Bank has a country office and accrues a long history of investment projects with the Government of Argentina on the housing sector. Since 1994, the IDB has provided sustained support to urban development programs in Argentina for a total of USD \$1.5 billion. This includes investment in large urban areas in the Argentine interior (Cordoba, Mendoza, Rosario and Tucuman), investment in municipalities, municipal reform and development, neighborhood improvement and sites and services, neighborhood improvement in Rosario, development of metropolitan areas outside the capital and most recently the Neighborhood Improvement Program (PROMEBA) (AR-L1019 and AR-L1119; \$750 million). Regarding PROMEBA, the local counterpart of this support is the UDHUS, who has received funding and technical assistance from the IDB through this program. This ongoing working relationship between IDB and the UDHUS will ensure the proper coordination among stakeholders. So far PROMEBA has executed 322 projects in 160 locations in 21 provinces, benefiting a total of 118,500 families. The overall target of the long-term support of the IADB is to reach approximately 250,000 households throughout the country.

The specific support that the IDB is currently providing to the FSHP is through the coverage of basic and assistance services in disadvantaged neighborhoods where FSHP builds houses, financing complementary physical works to housing construction to provide: sanitary infrastructure (water and sewer systems), electric power, stormwater drainage infrastructure, natural gas distribution; access roads; pedestrian network; urban community facilities, green spaces; and environmental mitigation works. PROMEBA also supports the strengthening of community organizations to foster social and urban integration and Institutional strengthening at national and local levels.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

Through PROMEBA, the IADB will provide co-financing for the construction and operation of community equipment, as well as for the strengthening of local capacity for the execution of the pilot projects. This support is part of a 400 million loan under the PROMEBA program. In terms of the institutional arrangement between IADB and the UDHUS, this will follow closely the current relationship under the overall umbrella of PROMEBA. That is, the GEF project implementation will follow closely the current arrangement that IADB has with the UDHUS, where UDHUS has an Executing Unit for PROMEBA and the Bank monitors the execution of the projects under PROMEBA.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

This proposed project is well aligned with: (i) the Bank's country strategy with Argentina (2004-2008), updated for the 2012-2015 period, with regard to improving the quality of life of the population with unmet housing needs; and (ii) the objectives of the Ninth General Capital Increase to reduce poverty (measured by urban UBN), to improve the quality of life and equity and to protect the environment and respond to climate change thorough the reduction of GHG emissions in the residential sector. To follow up with project implementation, the IDB has senior staff under current operations with Argentina such as PROMEBA. With this background the IDB is best partner that the GoA can choose to support the development of EE and RE in the FSHP.

# PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

Name	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Ing. Graciela Conesa	Operational Focal Point	ENVIRONMENT AND SUSTAINABLE DEVELOPMENT SECRETARY	03/12/2012

### B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Michael Collins IDB-GEF Executive Coordinator	M LM	04/03/2012	Carlos Ludena	202-623- 1504	carlosl@iadb.org

### **DEM Summary**



### SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the PP (or equivalent) and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

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	IDB Sector	ENVIRONMENT AND NATURAL DISASTERS- CLIMATE CHANGE MITIGATION POLICY
	Type of Operation	Other Lending or Financing Instrument
	Additional Operation Details	
	Country	ARGENTINA
	Project Status	
	Investment Checklist	Generic Checklist
	Team Leader	Ludena, Carlos Eduardo (CARLOSL@iadb.org)
PROJECT DETAILS	Project Title	Adoption of Energy Efficiency and Renewable Energy in Social Housing
DETAILO	Project Number	AR-G1002
	Safeguard Screening Assessor(s)	Campillo Bermudo, Gisela (GISELAC@Contractual.iadb.org)
	Assessment Date	2012-06-28
	Additional Comments	

	Project Category:	Override Rating:	Override Justification:
			Comments:
PROJECT CLASSIFICATION SUMMARY	Conditions/ Recommendations	<ul> <li>Some Cate safeguard or B.3).Where re safeguard, or</li> </ul>	mental assessment studies or are required for Category "C" operations.  gory "C" operations may require specific monitoring requirements (Policy Directive elevant, these operations will establish monitoring requirements to address I and other risks (social, disaster, cultural, fety etc.).

**2** | P a g e Annex II: AR-G1002

	containing requirement Environme	ect Team must send the PP (or equivalent) the Environmental and Social Strategy (the nts for an ESS are described in the nt Policy Guideline: Directive B.3) as well as lard Policy Filter and Safeguard Screening orts.
SUMMARY OF	Identified Impacts/Risks	Potential Solutions

SUMMARY OF	Identified Impacts/Risks	Potential Solutions
IMPACTS/RISKS		
AND		
POTENTIAL	·	
SOLUTIONS		·
I		A. A. I.

ASSESSOR	Name of person who completed screening:	Campillo Bermudo, Gisela (GISELAC@Contractual.iadb.org)
DETAILS	Title:	
	Date:	2012-06-28

### SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the PP (or equivalent) together with the Safeguard Screening Form, and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

le i	IDB Sector	ENVIRONMENT AND NATURAL DISASTERS- CLIMATE CHANGE MITIGATION POLICY
	Type of Operation	Other Lending or Financing Instrument
	Additional Operation Details	The stant of
	Investment Checklist	Generic Checklist
PROJECT DETAILS	Team Leader	Ludena, Carlos Eduardo (CARLOSL@iadb.org)
	Project Title	Adoption of Energy Efficiency and Renewable Energy in Social Housing
	Project Number	AR-G1002
	Safeguard Screening Assessor(s)	Campillo Bermudo, Gisela (GISELAC@Contractual.iadb.org)
	Assessment Date	2012-06-28
	Additional Comments	(V) REGION

जिल्लाम् स	Type of Operation	Investment Grants	
obsy Filter Republication	Safeguard Policy Items Identified (Yes)	The Bank will make available to the public the relevant Project documents.	(B.01) Access to Information Policy- OP- 102
SAFEGUARD POLICY FILTER RESULTS	(Grodina substitution	The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
3		The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
d		Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation of women and men, (b) socio-culturally	(B.06)

,	appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.	
	The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
	Any part of the investment or component(s) is being co-financed.	(B.15)
	Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	(B.17)
 Potential Safeguard Policy Items(?)	No potential issues identified	
Recommended Action:	Operation has triggered 1 or more Policy Direct refer to appropriate Directive(s). Complete Proj Classification Tool. Submit Safeguard Policy Fi PP (or equivalent) and Safeguard Screening Fo	ect ter Report,
Additional Comments:		

ASSESSOR DETAILS		Campillo Bermudo, Gisela (GISELAC@Contractual.iadb.org)	
	Title:		ada (1944), in the control
	Date:	2012-06-28	

Annex III: Index of completed and proposed sector work

Торіс*	DESCRIPTION	STATUS	REFERENCE
Construir Ciudades, mejoramiento de Barrios y Calidad de Vida Urbana. (2009)	Practice-based publication on the design, implementation and evaluation of interventions for improving integrated urban neighborhoods in Latin America and the Caribbean.	Completed	http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=2252509
Auguste S., R. Bebczuk y R. Moya (2011). "Housing Finance in LAC: What is Holding it Back? A proposal for Argentina".	Analysis from the Research Department of the IDB regarding barriers of housing finance in Argentina.	Completed	http://www.iadb.org/en/research-and-data/publication-details,3169.html?pub_id=IDB-TN-284
Nota Técnica Sectorial Desarrollo Urbano y Servicios de Vivienda	The Note provides input for the preparation of the Updated strategy of the Bank in Argentina (2012-2015)	Under internal review	http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=36890451
Nota Técnica Sectorial Adaptación y Mitigación al Cambio Climático	The Note provides input for the preparation of the Updated strategy of the Bank in Argentina (2012-2015)	Under internal review	http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37048763

Resources and Timetable for project preparation

