



EURO-SOLAR Programme

Renewable energy for development

IEF Presentation
Johannesburg, December 2009



FINANCING AGREEMENT

The Financing Agreement between the European Commission and the beneficiary countries was signed on December 21st 2006 and came into force on January 18th 2007.

GOALS

The EURO-SOLAR Programme is a pioneering initiative from the European Commission's *EuropeAid* Cooperation Office at world level.

The main goal of the Programme is to foster the use of renewable energy as a driver of human development in Bolivia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Peru, the eight poorest countries in Latin America.

SPECIFIC GOALS



The Programme involves the installation of 600 generating kits (91 in Ecuador) using 100% renewable energy sources that consists of photovoltaic panels and the following devices:

- 5 laptop computers
- 1 multifunctional device (printer and scanner)
- 1 projector
- Apparatus necessary for satellite internet access and IP voice telephony
- Water purifier
- Refrigerator
- Battery charger

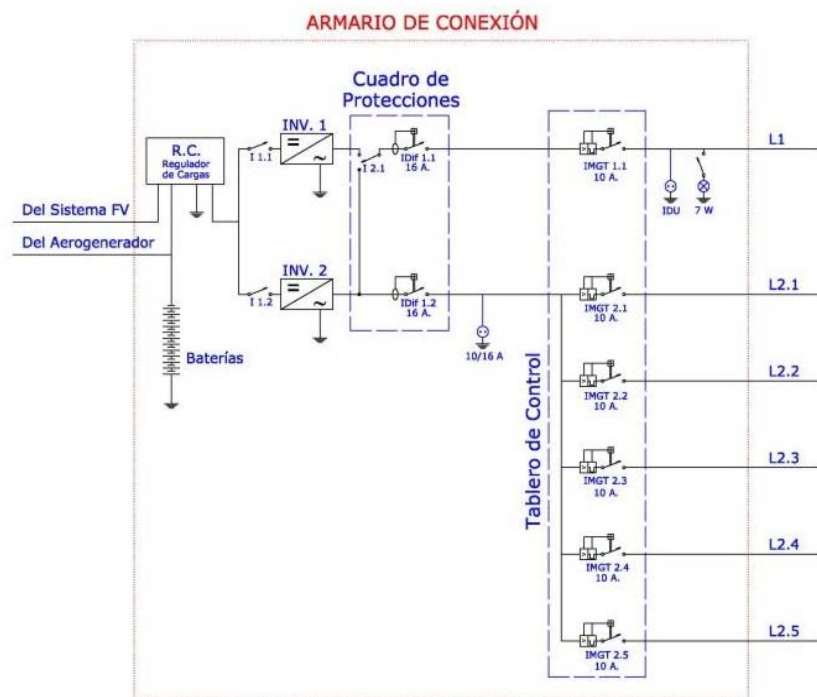
EURO-SOLAR is an integrated programme that includes training villagers in the management and maintenance of the equipment and support for the beneficiaries in the development of basic services in the areas of education, health and information technologies, as well as fostering productive activities.



EURO-SOLAR BENEFICIARY COMMUNITIES



GENERAL INFORMATION



From the Energetic System

Photovoltaic System: 1100 watts

Regulator: 50 A, 24 watts

Invertors: 350 & 1300 watts, 120 volts

Battery Bank: 1000 Ah, 24 Volts

Priority in terms of equipment:

- 1) Telecommunications equipment, 1 light bulb at info centre , 1 light bulb in the control room and a computer,
- 2) 4 computers & 2 light bulbs at Info centre,
- 3) Equipment for Health centre & 2 light bulbs for school,
- 4) A multi functional equipment and a projector
- 5) Rest of light bulbs for school and,
- 6) An external Reflector



STEPS

Identify regions and beneficiary communities (***finalised***).

Installation and infrastructure fully operative, housing both IT and health equipment (***Finalised and in the process of winding up the project***).

Supply and installation of technological kits to implement educational , cultural, productive/social and communication services and applications in the health sector. (***hired. Execution by the European Community underway***)

Implementation of the Programme, training and development and process of evaluation and follow up underway.

(***European Community and MEER have started to act upon these initiatives to reach the objective***)

Exchange of good practices.

ECONOMIC RESOURCES (Financing by the counterpart)

Previous budget			
Sector/Activity	net	Of another kind	Total
Works	366.420	27.580	394.000
Operational expenses	156.250	359.750	516.000
Total	522.670	387.330	910.000

New Budget

Sector/Activity	net	Of another kind	Total
Works	314.720		314.720
Operational Expenses	376.638	329.213	705.851
Total	691.358	329.213	1'020.571

The EURO-SOLAR programme in Ecuador relies on the funding of Euros 4,360.083 of which Euros 3,450.083 come from the European Community and 910,000 from a local /domestic counterpart. The duration of the programme is 48 months (42 months dedicated to the operative phase and 6 months for closure) this, in accordance with the Financing/Funding Agreement. The Euro-Solar financing programme's Addendum is currently under review for signature. The latter is expected to have an increase in its budget , hand in hand with the 9 months extension added to the project. The estimated value in Euros, on behalf of the European Community is Euros 3,773.512 and Euros 1,020.571 from the local counter part.



EXECUTION PERIOD

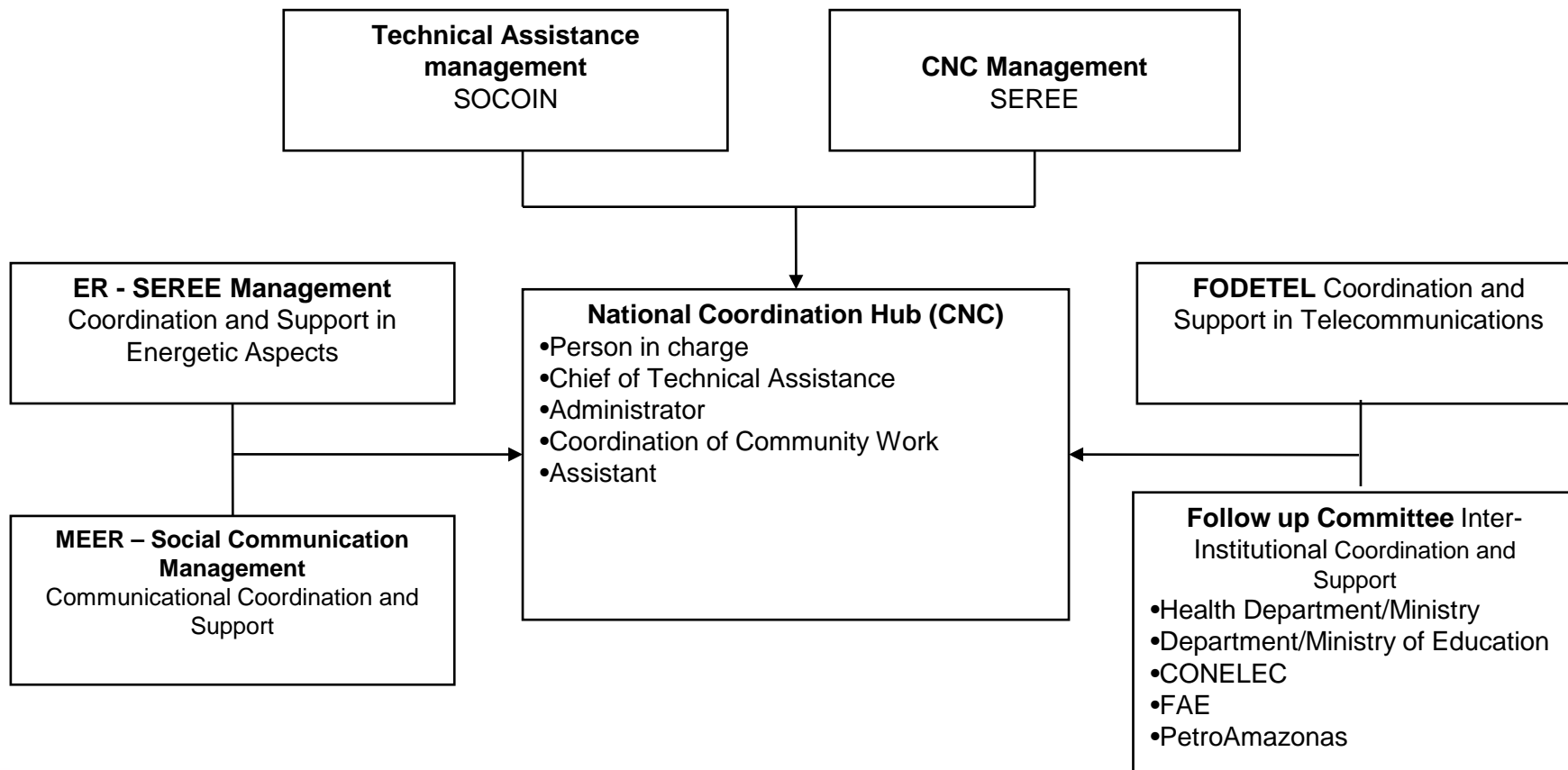
- 57 months (51 months in the operational phase and 6 for the closure phase).
- Starting date: 18-01-2007
- Ending date: 18-09-2011

PERCENTAGE OF PROGRESS

- 46%



INTERNAL STRUCTURE





Proyecto Euro-Solar

Simbología

- Proyectos Eurosolar

Escala: 1:2.000.000

0 50.000 100.000 200.000 300.000 Metros



PROYECTO EURO-SOLAR

REPÚBLICA DEL ECUADOR

MINISTERIO DE ELECTRICIDAD Y ENERGÍA RENOVABLE

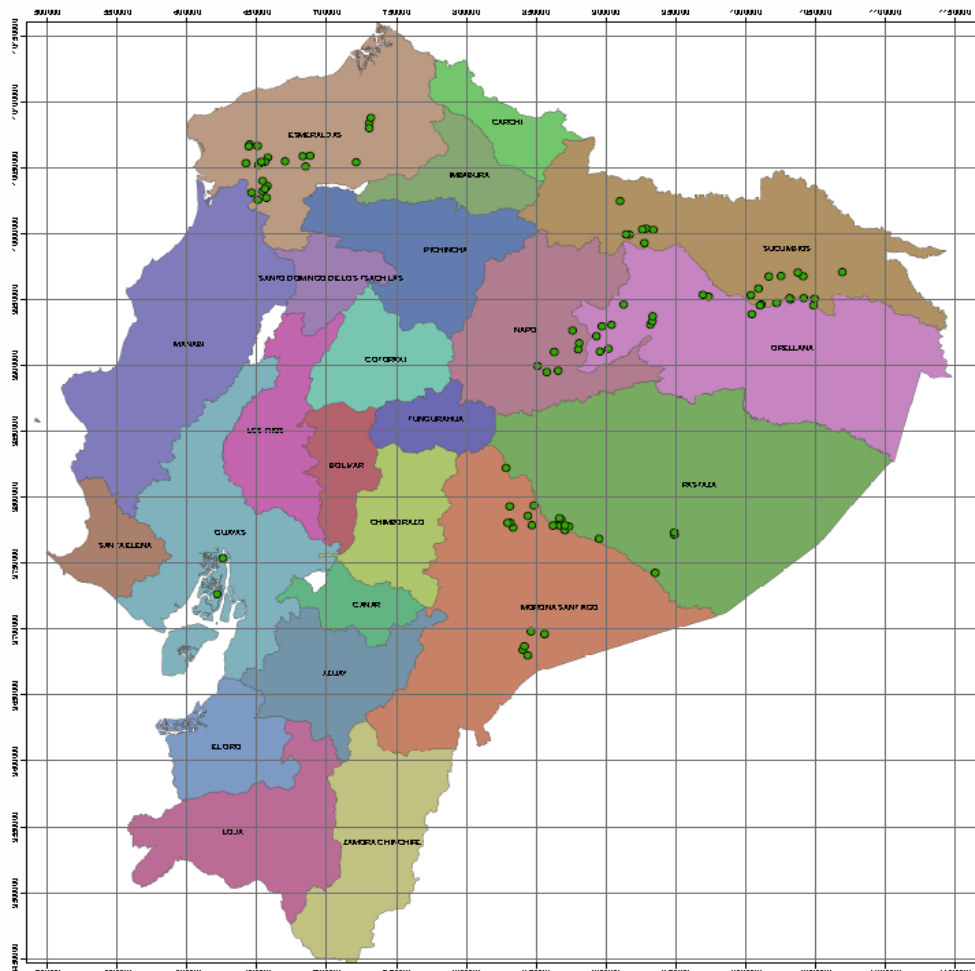
Fuente: IGM
EURO-SOLAR

Subsecretaría de Gestión de Proyectos

Escala Trabajo: 1:250.000

Fecha: Agosto 2008

ES - 006



INFRASTRUCTURE WORKS –CONSTRUCTION CHARACTERISTICS



Current Progress Percentage:

- 100% in 59 communities



Current Progress Percentage :

- 100% in 32 communities

INFRASTRUCTURE WORKS FOR ENERGY AND TELECOMMUNICATIONS SYSTEMS Pañacocha Community



Current Progress Percentage :

- 100% in 33 communities



INFRASTRUCTURE WORKS FOR ENERGY AND TELECOMMUNICATIONS SYSTEMS

Sani Island Community



Estimated conclusion date:

- January 2010



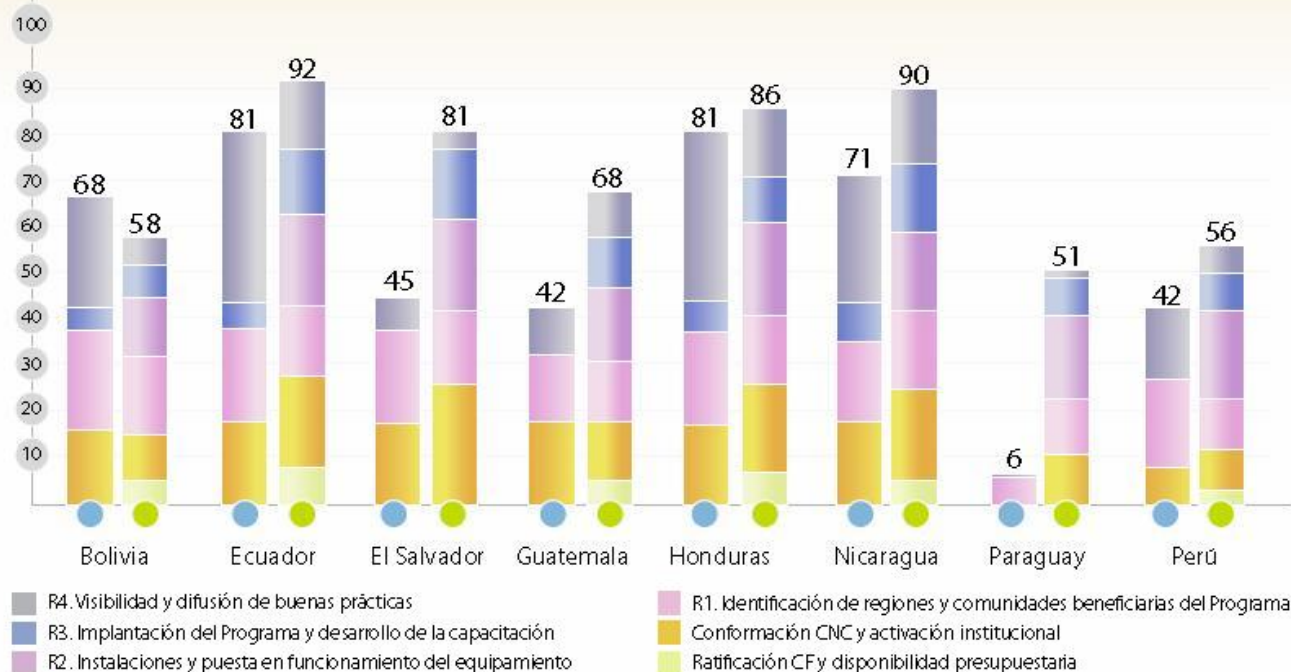
Supply and Putting into effect of the Technological Kits

- Acquisition of Equipment in process
- Civil Works initiated
- Technological Kits expected in November
(it is MEER 's responsibility to free merchandise
and deal with the nationalisation processes)
- it is estimated that by May 2010 , equipment will
be installed and tested.



Construction of towers and
supports for the photovoltaic
modules

GRADO AVANCE PAÍSES, ABRIL 2008
GRADO AVANCE PAÍSES, MAYO 2009



Visibilidad y difusión de buenas prácticas
Implementación del Programa y desarrollo de la capacitación
Instalación y operabilidad de equipamiento

Identificación de Regiones y beneficiario Communities in the Programme
Creation of CNC and Institutional activation
Ratification of Budget Committee and availability of budget

BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR



GENERAL FACTS

Sufficient financial sustainability in the Rural Communities (RC) in order to guarantee the operation, its maintenance and control of systems.

There should be an organizational structure, more so in the RC in order to guarantee service sustainability.

Existence of an external entity which should offer support and follow up to all RC. Initially it could be made up by The State however, the RC could also participate, due to the fact that the RC know their current state of affairs, concerns, problems and solutions.

Existence of an adequate and efficient mode of Q&A in response to the communities.

Existence of sufficient monitoring and evaluation in order to guide the functioning/operability of the programme in the communities.



BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR



LEGAL AND ORGANISATIONAL ASPECTS

Verify that within the community, they have a judicial conformation so as to enable the transfer of goods.

Should that not be the case, find mechanisms to grant that organisation judicial acknowledgement.

Support the Local Community Organisations (LCO) in the selection of Members for the Community Management Committee (CGC), so that the process is uniform, so that it promotes participation y so that proposals come from within the communities.

Undertake remote monitoring of concerns which may arise once the action phase of the programme is implemented, impacting judicial concerns.

BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR



TECHNICAL ASPECTS

Adequate training on how the equipment works and its corresponding maintenance processes.

A hands-on training methodology has been selected, whereby the equipment supplier will teach the members of the Community Management Committee for as long as the equipment is being installed in the community.

Have mechanisms and action plans at hand to monitor and evaluate training.

Establish an on-line support link to address the concerns raised by members of the Community Management Committee, to address problems that may arise with the execution of the systems.



BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR

SOCIAL ASPECTS

Sufficient training in administrative chores, in legal, tax, accounting and IT matters.

Create incentives for the trainers/teachers so that they may be able to continue with their training at the RC, thereby guaranteeing continuity and their permanence in the community.

Create initiatives to develop productive development initiatives, capable of improving the income of the adult population, having undertaken prior research of their local capacity, which may be channelled by the services provided by the kit which was provided to the community.

Find additional support to the Local Community organisations from within NGOs, universities and foundations, etc.

On-line and on site Monitoring during an adequate period of time, in order to evaluate the Community Management Committee's functioning/ management capacity.



BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR



ECONOMIC ASPECTS

Communities will benefit from the MINTEL-CNT Agreement which grants free of charge access to telecommunications during the first 5 years.

Work with the community so that its population may provide income needed for the feasibility/operability of the technological kits. Request a fee for the services provided by the equipment to the community.

Have a database of productive aspects of interest to the community and those which foster the use of telecommunications, so that the community may benefit from the information provided.



BASIC CONCERNS REGARDING SUSTAINABILITY: ECUADOR

CONCLUSIONS

It is crucial to have institutional support: one cannot foster sustainability only from the Rural Communities.

One has referred to risks, hypothetical scenarios, results, activities, financing/funding sources. There is a need to structure the information.

Areas of sustainability:

- Judicial framework and legal aspects

- Technical

- Social

- Economic

The 4 components are interdependent and necessary.

Critical to define objectives for each area, hypothetical scenarios, risks, activities, responsibilities, budget and financing sources

Final goal: Devise a Sustainability Plan contemplating for each of the four components: results, activities, budget, work programmes and sources for financing.

