

EURO-SOLAR Programme

Final summary



Renewable energy for a sustainable development



This Programme was funded by the European Union

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The contents of this summary are intended solely for information purposes; they are not meant to represent the official position of the institutions of the European Union.

The EURO-SOLAR Programme:

- > Has improved the living conditions of 300 000 people by providing isolated rural communities with access to electricity
- > Fosters the development of basic health care and education services in remote rural communities
- > Promotes the development of new production activities and improves existing ones
- > Facilitates communication with the outside world, reducing exclusion and isolation through the Internet
- > Supports sustainable production and consumption models
- > Fosters the use of renewable energy for electricity production, rather than fossil fuels
- > Strengthens the institutions and communities of beneficiary countries
- > Serves as a reference programme for governments and civil society entities seeking to replicate this form of development

8 beneficiary countries in Latin America

600 communities

300,000 people

36.4 million Euros from the Programme

80% financing from the EU

20% financing from participant countries

76 months' duration

100% renewable energy

3,000 Internet-connected computers

500 satellite antennas

100% of connections via satellites and Wi-Fi

2,500 m² of solar panels

7,200 gel batteries

THE ENERGY CHALLENGE THE ENERGY CHALLENGE THE ENERGY CHALLENGE



Jolita Butkeviciene

Director for Latin America
and the Caribbean

Directorate-General for Development
and Cooperation - EuropeAid

June 2013

One of the greatest challenges of the 21st Century is the energy challenge, since access to electricity is essential for human and economic development.

According to data from the International Energy Agency's World Energy Outlook, there are currently 1,300 million people (almost 20% of the world's population) who lack access to electricity. 80% of these people live in rural areas.

In the light of this situation, it would prove very difficult to reach the Millennium Development Goals without considerably increasing general access to energy and its benefits. Meeting the world's growing energy needs, while limiting their impact on the environment, is one of the most important challenges in the field of sustainable development.

At present the world's energy consumption is based mainly on the use of fossil fuels, which generate the overwhelming majority of the world's CO2 emissions.

So it is crucial that plans intended to develop access to electricity should stimulate the use of renewable energies that permit human and economic development through sustainable production and consumption models and avoid aggravating global warming.

Specifically, Latin America, as one of the planet's lungs and because of its rich biodiversity, is one of the regions most vulnerable to climate change, making it especially important that programmes should be implemented to help mitigate this phenomenon locally.

Access to energy in isolated rural areas of Latin America offers a big challenge, but also a big opportunity, because providing this population with clean, efficient energy, based on renewable resources,

is essential to stimulate sustainable development. This will not only result in the socioeconomic development of the beneficiaries, but will also effectively contribute to the fight against climate change.

In this context, the EURO-SOLA Programme, promoted by the European Commission's Directorate-General for Development and Cooperation - EuropeAid, has proven to be an international trail-blazing initiative. It encourages the use of renewable energy as a development engine in rural communities that lack access to electricity.

From its very origins, EURO-SOLAR was designed to be an integral programme, not solely one based on technology and environmental sustainability, but also with a significant social component - mainly in hygiene and primary education. This was developed through intense training for the beneficiaries, so that they could assume ownership of the facilities and take on responsibility for their maintenance.

Throughout the Programme, numerous challenges were met and valuable experience was gained. After the conclusion of the operational phase, this document was prepared to summarise the main activities and results of the EURO-SOLAR Programme. A Replication Handbook has also been prepared, to support those organisations that seek to develop similar programmes in countries facing similar challenges.



“Energy may serve as a growth engine, transforming it into the driving force for health and education development.”

Renewable energy for a sustainable and inclusive development

Climate change affects the world’s various regions unevenly, with the more disadvantaged countries and the most vulnerable populations being those who suffer the most from the consequences of extreme weather phenomena such as floods or droughts.

Poverty cannot be eradicated without energy. Energy serves as an engine of sustainable growth, transforming it into the driving force for health and education development. That is why the fight against climate change, in the context of development, can be the opportunity to take a huge step toward a sustainable future, by promoting new technologies based on renewable energy.

The EURO-SOLAR Programme is an ambitious regional programme that, through a participatory approach, has generated specific results that have improved the living conditions of many hundreds of disadvantaged communities in the region. Eight Latin American countries participated in the Programme, which has benefitted some 300,000 people. However there are still a great number of people who lack electricity, which is why EURO-SOLAR could well serve as a model for other regions in the world.

Thanks to EURO-SOLAR, communities that had no access to electricity now enjoy, among other benefits, schools with Internet-connected computers; the use of vaccines and medications kept in refrigerators – thus preserving all of the product’s properties until it is administered; and remote training courses in health promotion and disease monitoring, in which local people can participate via the computers provided by the Programme.

The focus of EURO-SOLAR Programme on sustainable inclusive development clearly highlights the European Union philosophy for cooperation and the fight against poverty.

Andris Piebalgs

European Commissioner for Development

THE EURO-SOLAR PROGRAMME



The EURO-SOLAR Programme

The EURO-SOLAR Programme for Latin America was a groundbreaking initiative of the European Commission's Directorate-General for Development and Cooperation – EuropeAid.

THE GENERAL OBJECTIVE

The general objective of the EURO-SOLAR Programme was to promote renewable energies in Latin America's 8 most disadvantaged countries (Bolivia, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Peru) to contribute to the improvement of living conditions in the rural communities, supporting them in their fight against poverty, isolation and marginalisation resulting from their socioeconomic conditions.

THE SPECIFIC OBJECTIVE

The specific objective of the EURO-SOLAR Programme was to provide a source of renewable electric power specifically for community use for rural communities with little or no access to national power-supply grids.

The Programme entailed the installation of 600 power-generation kits totally based on renewable resources.

The Programme's final beneficiaries are estimated to total over 300,000 people in 600 rural communities who were previously without connection to the power supply grid.

EURO-SOLAR is an integral Programme, in that it was not limited merely to the installation and launching of the equip-

ment; it also included training members of the communities in the management and maintenance of the kits and providing support in the development of basic services in the fields of:

- > Education and information technologies
- > Health promotion
- > Social and productive activities

MAIN OPERATIONAL ACTIONS

The main operational actions that the Programme carried out were:

- > The identification of regions and communities that met the criteria to become Programme beneficiaries
- > The installation and start-up of the energy, communications and health care systems to be implemented in each community:
 - Education and Information Technologies component
 - The Health Promotion component
 - The Social and Productive Activities component

- > Implementation of the Programme and development of the training workshops for community members, with a specific focus on gender
- > The exchange and summary of experiences and good practices to replicate the Programme

Duration of the Programme:

76 months

Budget:

36.4 million Euros, co-financed by the European Commission (80%) and the beneficiary countries (20%) through the Ministries related to the Programme.



The history of the Programme EURO-SOLAR

In remote towns of Latin America, communities got together to make a dream come true.

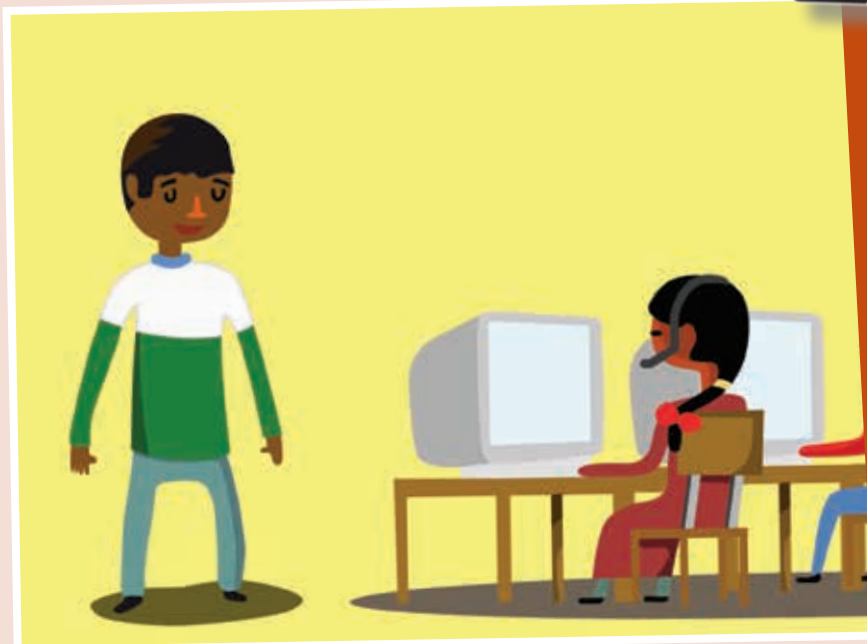
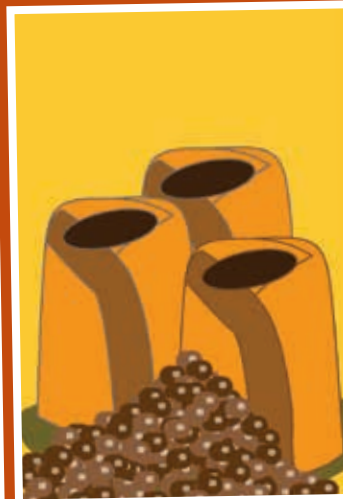
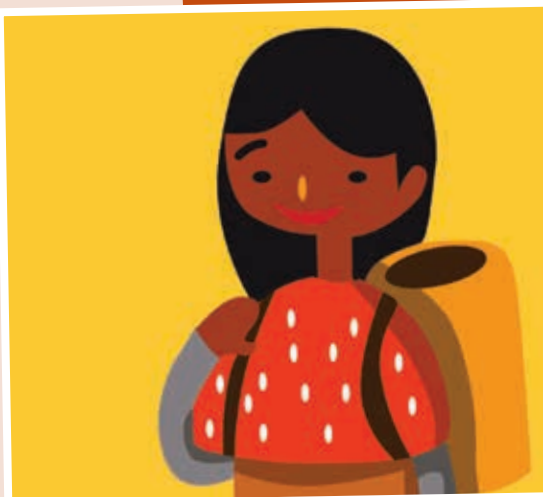


With support from the European Union, through EURO-SOLAR and the national governments, we installed 600 electricity-generation kits.



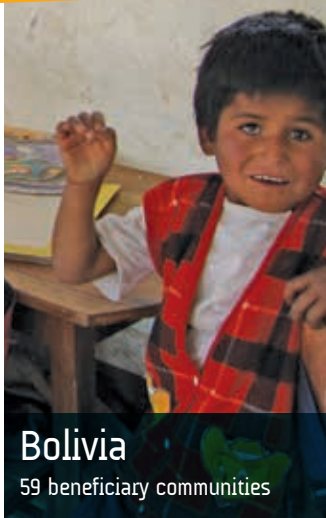
THE EURO-SOLAR PROGRAMME

Now that we have electricity, we can surf the Internet, refrigerate our medicines, market our products, and much more.



Thanks to EURO-SOLAR, we have more energy with which we can build the future of our community and of the planet.

THE BENEFICIARY COUNTRIES



Bolivia

59 beneficiary communities

The EC's contribution:

€2,906,133

Bolivia's contribution:

€765,235

Executive body:

Ministry of Hydrocarbons and Energy through the Vice-Ministry for Electricity



El Salvador

48 beneficiary communities

The EC's contribution:

€2,229,655

El Salvador's contribution:

€532,971

Executive body:

Ministry of Education



Ecuador

91 beneficiary communities

The EC's contribution:

€3,773,512

Ecuador's contribution:

€1,146,550

Executive body:

Ministry of Electricity and Renewable Energy, through the Subsecretariat of Renewable Energy and Energy Efficiency



Guatemala

117 beneficiary communities

The EC's contribution:

€5,309,971

Guatemala's participation:

€1,377,857

Executive body:

Ministry of Energy and Mines through the Directorate-General for Energy



The beneficiary countries

The beneficiary countries



Honduras

68 beneficiary communities

The EC's contribution:

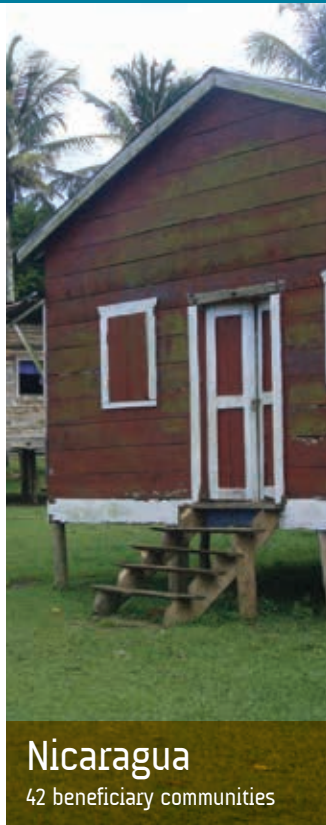
€2,834,223

Honduras's contribution:

€847,054

Executive body:

Technical Secretariat for
Planning and Foreign
Cooperation



Nicaragua

42 beneficiary communities

The EC's contribution:

€1,767,517

Nicaragua's Contribution:

€721,389

Executive body:

Ministry of Energy and Mines



Paraguay

45 beneficiary communities

The EC's contribution:

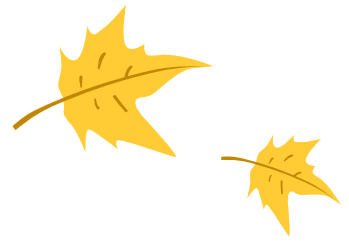
€2,135,281

Paraguay's contribution:

€504,643

Executive body:

Executive body: Ministry
of Public Works and
Communications through the
Vice-Ministry of Mines and
Energy



Peru

130 beneficiary communities

The EC's contribution:

€6,050,408

Peru's contribution:

€1,527,500

Executive body:

Ministry of Energy and
Mines through the
Directorate-General for Rural
Electrification



600

beneficiary communities

With the help of the Programme's technical specialists, a EURO-SOLAR kit was installed and launched in each beneficiary rural community.

“With renewable energy, modernity has arrived.”

(Nancy Arroyo, Teacher in the Community of Capilla Central, Peru)

EURO-SOLAR KIT





EURO-SOLAR kit

The EURO-SOLAR kit consists of three systems:

- > Power-generation
- > Communications
- > Health care

The members of EURO-SOLAR communities use these systems to develop the three Programme components:

- > Education and information technologies
- > Health promotion
- > Social and productive activities

POWER-GENERATION SYSTEM

- > 5 m² of photovoltaic panels (70% of communities) or 5 m² of photovoltaic panels and a wind turbine (30% of communities)
- > Twelve gel batteries
- > A cinder-block shed to protect the batteries
- > A control panel and power supply
- > A safety fence for the enclosure
- > A battery charger

COMMUNICATIONS SYSTEM

- > Five laptops
- > A projector
- > A multifunction station: printer, fax and scanner
- > A satellite antenna and a modem for satellite or Wi-Fi Internet connection
- > An Internet access subscription

HEALTH CARE SYSTEM

- > A water purifier
- > A refrigerator for medical use

The power-generation system



The solar panels and wind turbine are sources of renewable energy that cause no pollution. They are clean and use natural resources.

In 70% of the communities, the power-generation system consists of 5 m² of photovoltaic panels; in the other 30% of communities, the solar-generation system is complemented by a wind turbine.

This equipment was placed on the roof of a shed that contains 12 gel batteries, as well as the control panel that monitors and manages the electricity storage and directs the power to the facilities. A safety fence protects the shed and all the equipment.

The electricity system also includes a battery charger that works with mobile phones and rechargeable batteries, thus reducing the pollution from dumping non-rechargeable batteries without recycling them after use.

70% of beneficiary communities opted for a solar-energy system. The reason why the other 30% decided to use the mixed solar-wind system is because of these communities' specific geographical characteristics, particularly the consistent wind. This was the case for all the Bolivian communities and most of the Peruvian ones.

The batteries, which are connected to the solar panels and wind turbine, mean that the electricity is stored in a stable fashion, allowing it to be used around the clock. These batteries are connected to the

peripheral equipment through the control panel, one function of which is to measure the level of available energy at all times.

A community member, who has been trained in the management and maintenance of the generating system, is in charge of managing the equipment according to the needs and priorities determined by the community itself.



“We're working here with two systems operating in tandem: the solar panels use the sun's energy by day and, when there is no sun, the wind turbine harvests the wind.”

(Fernando Chimanca, System manager in the Community of Alto Napati, Peru).

The communications system

The communications system is an essential component of the Programme that allows the beneficiary communities to be connected to the rest of the world.

Each EURO-SOLAR kit came with five laptops, chosen specifically for their durability and the ease of obtaining spare parts in the country's larger cities.

The computers were installed in a schoolroom so the students could easily use them during school hours, in groups of 5 or 10 children – i.e. one or two children per computer; in this manner, they learned how to work with computer programs, create their own files, and surf the Internet to look for information relevant to their studies.

Access to the computers is open to other community members, at different times from the students. This way, men, women and young people can look for information, communicate with their friends and family who live far, and surf the Internet.

The communications system also includes a projector, part of the educational tools for both schoolchildren and adults, making it easier for the latter to participate in group training sessions.

The projector is an important tool of the Programme's social aspect, as it allows the residents to gather together and watch a film or documentary that can then initiate discussions on specific themes.

A multifunction station complements the communications system, offering services such as:

- > Copying documents
- > Scanning documents, so they can be distributed over the Internet
- > Printing documents, such as user-generated texts or files downloaded from the Internet

The communications system includes a satellite antenna and a modem for satellite or Wi-Fi connections and an Internet access subscription.

> 96% OF COMMUNITIES CHOSE A SATELLITE CONNECTION.

> ONLY 4% OF COMMUNITIES USE WI-FI.

The health care system

The health care system consists of two elements offering basic health safety, a crucial element for the proper development of the communities.

The water purifier is connected to a tap that allows users to enjoy totally pure, clean water.

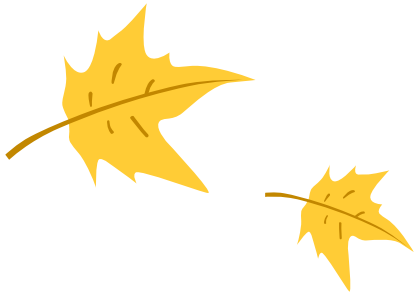
Filters are replaced periodically, so that the water is always completely pure.

The refrigerator/freezer is reserved exclusively for medical use, so that vaccines, serums and medicines can be kept at the correct cool temperature.



"... We were able to communicate with friends who are very far away, in the United States. We're very excited!"

(Edgardo Vásquez. Teacher at Los Izotes-Teotepeque, El Salvador).



THE COMPONENTS OF THE EURO-SOLAR PROGRAMME



The EURO-SOLAR Programme was developed bearing in mind that generating electric power is a cross-cutting axis that supports a series of complementary objectives. This includes improving education; enabling access to information technologies; promoting the health of the beneficiary populations; as well as their social and productive activities. All of these were developed with a constant focus on gender aspects.

The Education and Information Technologies component

The Health Promotion component

The Social and Productive Activities component



The Education and Information Technologies component

The main goal of the Education and Information Technologies component of the EURO-SOLAR Programme is to facilitate access to quality education for the children, young people and adults of the 600 communities in the eight beneficiary countries, thus encouraging their intellectual, economic, social and cultural development.

Through access to information technologies, EURO-SOLAR reduces the digital gap and isolation of the rural communities that, up to now, have been left untouched by technological progress.

Thanks to the Internet, the residents of the beneficiary villages have access to a wide range of information and knowledge, access that was previously denied to them. This has opened new

horizons and widened their possibilities for integrating into a world that is every day more globalised.

From the educational point of view, these new tools improve teaching and reinforce the role schools play in the local development, allowing more in-depth knowledge of computer science and providing benefits from their technological advantages.

In the long term, the objective is to reduce the region's perennial problems, such as early school withdrawal, illiteracy, child labour and poor academic performance, through education and access to the Internet.

The EURO-SOLAR Programme contributes to improve the education and foster the use of information technologies by installing, in each community:

- > Five computers
- > An Internet connection
- > A projector
- > A multifunction station: scanner, photocopier and fax

THE COMPONENTS OF THE PROGRAMME

THE EDUCATIONAL BENEFITS OF THE EURO-SOLAR PROGRAMME

ECUADOR

In the Ecuadorian Amazonia's parish of Pto. Murialdo, in Loreto canton (Province of Orellana), the EURO-SOLAR Programme has changed the lifestyle of both students and teachers at the José María Tandalia school. Since the infocentre first opened its doors, students have had computer-science classes, internet access, and the teachers can use the equipment to send their monthly reports to the Ministry of Education.

The residents are also motivated by the training they received in how to promote their community in the fields of community tourism, agriculture and culture.

EL SALVADOR

In El Salvador, solar powered lighting has helped some 5,000 children of the 50 or so public schools located in less favoured areas.

"We want to promote the use of renewable energy to make it easier to raise the population's standard of living, with the very significant educational impact that the inclusion of technology in teaching-learning offers", says the Vice-Minister of Educational Technologies, Carlos Orozco.

PARAGUAY

Thanks to EURO-SOLAR, all the members of the beneficiary communities in San Carlos, Paraguay, can now increase their knowledge, both in person and on-line, through the virtual connection.

Lucila Rojas, the school's educational director, expressed her thanks to the EURO-SOLAR Programme: "Reasons for happiness abound, because finally a child of the fields, the child of a humble farmer, will have the chance to surf through virtual networks. There can be nothing

better than education without walls, where each person's enthusiasm and motivation can be expressed. We hope to continue receiving the support of the Programme and of the government, to wipe out ignorance and achieve true freedom."

PERU

The Toraní school is located in Puno Bay, Peru: it serves some 60 students who still live as their forefathers did centuries ago, on floating islands.

Thanks to EURO-SOLAR, they now have clean, free energy, as well as permanent access to the Internet, which allows them to be connected to the world.

The EURO-SOLAR Programme has changed their lives, because now all the students have learned how to use computers, with the many benefits for their education that this entails.

EURO-SOLAR AND THE UNIVERSITIES

BOLIVIA

In Bolivia, the "San Pablo" Universidad Católica Boliviana (UCB) has collaborated with the EURO-SOLAR Programme to set up a "virtual community" that incorporates educational content which meets the needs of each village. This was designed following field surveys and interviews.

The programme consists of on-line training with an initial face-to-face section, the contents and courses of which are hosted in a virtual library accessible through the Internet. These courses are prepared by UCB teachers in accordance with the communities' different areas of interest: health, education, territoriality, productivity, communications, development, etc.

In practice, the on-line training began with a course titled "Introduction to Municipal Environmental Management", which



offered concepts related to sustainable development to the staff of Bolivian municipalities. On the one hand, this experience was the first one dedicated to the training of human capital in municipal governments; on the other hand it was also a groundbreaker in alternative education directed to key community players in Bolivia's rural areas: mothers, boys and girls, teenagers, teachers, health personnel, telecentre (community technology centre) administrators and producers associations.



<http://www.eurosolar.uch.edu.bo/>

All in all, 12 courses were designed to deal with topics related to:

- > Environmental management
- > Communications
- > Rural development
- > Civil rights
- > Literacy
- > Mathematical reasoning
- > Cultural diversity
- > Food
- > Nutrition
- > Hygiene

The virtual library has its own YouTube page, where videos can be uploaded.

To complement this, a group of social facilitators was formed, consisting of experts in handling the virtual platform and in the use of e-mail, forums and social networks; their objective is to facilitate access to the educational content and establish links between students both inside and outside the community.

A group of international agencies and governmental and non-governmental institutions have joined the on-line training project, providing freely accessible material for the virtual library.



<http://www.youtube.com/user/eurosolarbolivia>

The EURO-SOLAR Programme's on-line training fosters the social inclusion of Bolivia's isolated rural communities, the fight against poverty, health promotion and universal access to basic services.

EL SALVADOR

In El Salvador, it is the UCA – the Universidad Centroamericana José Simeón Cañas – that has collaborated with the EURO-SOLAR Programme, by providing on-site training to community members and the “on-line” monitoring of the knowledge acquired by the beneficiaries.

The objective of this university's work is to bolster the skills, abilities, dexterity and knowledge of the community members in operating the EURO-SOLAR kit and the information and communications technologies; it consists of three training modules:

- > Awareness of rights and obligations
- > Basic introduction to computer sciences and the Internet
- > Productive uses and sustainability

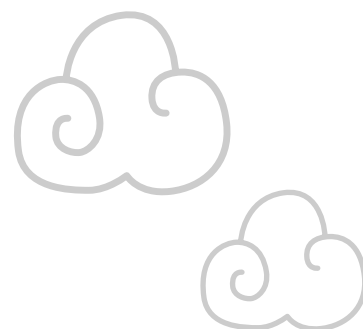
NICARAGUA

In Nicaragua, the university which collaborated with the EURO-SOLAR Programme is the Universidad de las Regiones Autónomas de la Costa Caribe Nicaragüense (URACCAN).

The objective was to reinforce the efficient use of information and communications technologies and create a virtual platform where all the courses given could be hosted; these courses focus on three areas:

- > Basic computer sciences and the Internet
- > General administration of Community Service Centres
- > Preparation of Community Development Plans

A very important factor is that, for the first time, community residents have been trained in their native languages by local teachers. This motivates them even more to continue acquiring knowledge which furthers their personal development and, in turn, that of the communities they live in.



THE COMPONENTS OF THE PROGRAMME

SYNERGIES BETWEEN EDUCATIONAL PROGRAMMES

THE UNIVERSITY IN THE FIELD

On the 30th of March, 2012, in Nicaragua, the EURO-SOLAR Programme participated in the international meeting of the project “La Universidad en el Campo” (The University in the Field), a programme of higher agricultural education for young rural residents, developed in four Latin American countries (Nicaragua, Bolivia, Colombia, and Mexico).

Thanks to EURO-SOLAR, the technical and technological programmes of the “La Universidad en el Campo” project were available to young people from the rural sector whose access to higher education would otherwise have been limited.

During the event, there was an exchange of information between the members of both projects to detect and apply good practices and/or synergies which fostered the improvement and full development of both initiatives.

TRAINING IN INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT)

EL SALVADOR

In November 2010, a training day in computer sciences was offered to 76 directors and teachers of EURO-SOLAR's beneficiary schools. The objective was to improve the teachers' computer-science skills and to cover basic topics on the proper use of the equipment provided by EURO-SOLAR and its operational tools (use of productivity software and other programs).

GUATEMALA

Since March 2011, EURO-SOLAR's Technological Centre in the community of Uaxactún, Guatemala, has operated as a

computer-science academy, recognised by the Ministry of Education, facilitating the professional development of young people who, thanks to this new facility, can now be taught computer sciences without the need to move to the municipal seat of Flores, 90 km away, thus saving the cost that this commute entailed.

PARAGUAY

In Paraguay, in 2011, rural school teachers and teachers were trained in computer programs. They in turn taught both students and the general population the use of computer tools.

In the educational area, teachers had great expectations for the new equipment. Since it was set up, many of them no longer have to prepare schedules by hand, nor follow long procedures to keep school records. Electronic forms and word processors have made the tasks of schoolteachers and directors much easier.

PERU

In October 2012, over 300 teachers from 130 EURO-SOLAR communities' primary and secondary schools were trained in information and communications technologies. They also learned how to operate the programs provided by the Ministry of Education to improve the quality and bolster the children's education.

THE GENDER PERSPECTIVE

Thanks to the gender perspective built into the EURO-SOLAR Programme, the communities' women are also learning to use computers and the Internet, allowing them to improve their general knowledge and obtain information about specific topics such as micro-managerial development, parental education and reproductive health.

In Guatemala, Micaela and her sister Candelaria Pop Rax are two indigenous mothers who are part of the women's committee of the community of Caserío San Juan Sepalaú.

It is in kekchí, their native tongue, that they expressed their happiness: “We are happy and grateful for the EURO-SOLAR Programme, since we women will also learn and participate!”.





EQUIPMENT MAINTENANCE

Since 2010, residents of the various EURO-SOLAR communities have received on-site and virtual training in computer equipment maintenance and the operation of the satellite or Wi-Fi connection.

Thanks to the acquisition of these new skills, community members can make the most of the resources provided to them by EURO-SOLAR, thus contributing to the Programme's long-term sustainability.

As part of this project, instruction is given in preventative and corrective maintenance of the computer hardware and software. This both extends the life of the equipment installed by the EURO-SOLAR Programme in the 600 Latin American communities and allows potential operational problems to be solved. This includes:

- › External and internal cleaning
- › Virus diagnosis and elimination
- › Software installation/configuration

- › Configuration of connections
- › Change of certain equipment parts

An example of this strategy took place in November 2010, in Guatemala, when a training course was run on "The sustainability of technological centres and community projects with the application of renewable energy".

The course was designed for the team responsible for coaching the Programme's beneficiary communities, to enable them to undertake long-term maintenance of ICT equipment.

“

"I set the children a task, and they immediately tell me they want to do it on the computer!"

(Deisy Aparcana, Teacher of the Community of Camacho, Peru)

"Here, the children have no access to the library, because it is over three hours away. Now, with the Internet, it's easier for us to improve our class work."

(José López, Teacher in Tular-Usulután, El Salvador)

The Health Promotion component

The EURO-SOLAR Programme developed the Health Promotion component with three goals in mind:

- > Community-level health promotion through access to the appropriate information via the Internet
- > Maintenance of the cold chain for the preservation of vaccines, serums and medicines using a refrigerator for medical use
- > Better hygiene using a water purifier

HEALTH PROMOTION

Health promotion is the process that encourages people's knowledge, aptitudes and attitudes for:

- > Participating responsibly in the care of their own health
- > Opting for healthy lifestyles
- > Achieving and preserving better health for the individual, the family and the community, through such activities as:
 - Social participation
 - Educational communication
 - Health education

Using the Internet, community members can now take distance-learning courses on health promotion to improve their standard of living.

Remote diagnoses can be made and emergency warning can be sent, thus avoiding the isolation of the communities in matters of healthcare.



These online consultations enable medical decisions to be made quickly. This can ultimately save lives, particularly when the communities are isolated and there are no doctors or medical services nearby.

THE COLD CHAIN

The cold chain is the process that allows the immunising capability of a vaccine to be preserved from the moment it is prepared until the time it is administered. It should be kept at a suitable temperature (between +2° and +8° Celsius) throughout its entire lifecycle.

The refrigerators supplied by EURO-SOLAR enables the vaccines to be preserved properly at the correct temperature until they are used.

EXAMPLES OF HEALTH PROMOTION THROUGH THE EURO-SOLAR PROGRAMME

EL SALVADOR

Since 2009, a Health Training Programme has been offered in El Salvador, consisting of visits from Health Promoters who are responsible for educating rural communities about four issues:

- > Community participation
- > Health promotion and development
- > Basic care
- > Monitoring community epidemics

The Health Promoters use several educational methods to achieve greater participation from the various groups in each community, particularly teenagers and women.

These include showing a series of videos focused on the main health topics, using the projector and computer provided as part of the EURO-SOLAR kit.

Meanwhile, in May 2012, the Ministries of Education and Health signed a cooperation agreement by which the 48 Salvadoran EURO-SOLAR communities will receive courses on health-related issues.

Activities include, among others, promoting the monitoring of the main existing diseases in the light of each beneficiary community's epidemic profile.



GUATEMALA

In the six communities of La Libertad, the health equipment offered by EURO-SOLAR encourages improvement of the medical care network. It also enables medicines to be properly stored, thus supporting vaccination campaigns.

Some 400 families - approximately 5,000 people - benefit from this.

The EURO-SOLAR Programme improves the communities' health by supplying water purifiers with filters and refrigerators for medical use to preserve vaccines, serums and medicines.



THE COMPONENTS OF THE PROGRAMME



The Social and Productive Activities component

Social and productive activities are two key elements in the communities' development. The social aspect generates cohesion among residents, while the productive one allows them to generate revenues for their well-being.

EURO-SOLAR interacts with these activities when installing the kits, opening a two-way gateway – from the communities to the world and from the world to the communities – through their social and productive activities.

Each one of the kit's three systems – power-generation, communications and health care – interacts in a different way to develop the Social and Productive Activities component, while simultaneously combining with each other.

Electric light plays an essential role in the social and productive aspects, as it enables people to carry on their activities into the evening without having to resort to candlelight.

This way, at the end of the working day, the town's residents can meet and talk, gather together and develop projects, or finish some urgent task.

Using the computers, the residents of the communities can communicate with their friends and relatives who live in another village or city with access to Internet. They can also prospect the market price of mango or coffee; look for information on production processes; how to employ or sale their surpluses and explore new business opportunities.



In several communities, the Internet connection is used to market local products like mango and coffee.



"We no longer have to travel to the state capital, Siuna, just to make a photocopy that will cost us 90 córdobas just for the price of the trip!"

(Salvador Ruíz. Member of the Rosa Grande Community in the North Atlantic Autonomous Region, Nicaragua)

The projector also fills the same double role, both social and productive. On the one hand, as a community cinema it allows residents to watch movies, while on the other hand, it is used as a teaching tool, whether in the children's education or for professional workshops about agriculture, carpentry and other occupations.

The photocopier also saves time and money by avoiding the need to travel many kilometres by bus to do administrative paperwork that can be done over the Internet.

These examples, which are part of the Social and Productive Activities component, have been studied by the organisations that collaborate in the EURO-SOLAR Programme, generating great interest in terms of the project's sustainability within the communities.

It is crucial for the communities to generate revenues to cover the costs of operation and maintenance of the equipment if they want to continue enjoying their benefits as it is patent that the initial financial resources facilitated by international or national assistance programmes cannot be provided on the long term.

It is with this in mind that the organisations involved in the EURO-SOLAR Programme have started a series of training courses for the beneficiary communities.

Usually, national agencies assume responsibility for designing courses and workshops and implementing them either directly in the classroom of the communities, sending trainers fluent in the local language, or over the Internet, through modules designed on a case-by-case basis, so they can be understood and delivered by local teachers.

TRAINING IN SOCIAL AND PRODUCTIVE ACTIVITIES

EL SALVADOR

During the first semester of 2012, El Salvador's "José Simeón Canes" University gave a series of training courses to the 48 EURO-SOLAR communities, covering three complementary topics.

The "Productive Uses and Sustainability" workshop raised the awareness of the communities' residents to the development of productive activities to cover the equipment's operating expenses and maintenance and to invest in new activities. It emphasised the need for transparent management by the community itself.

The "Awareness of Rights and Obligations" course was focused on how to make the greatest possible use of the equipment for the community's benefit, using it outside school hours.

The "Introduction to Computer Sciences and the Internet" session helped residents discover what use they could make of the computers, how to handle virtual documents, and how to find information on the Internet.

GUATEMALA

In March 2011, Guatemala's Local Community Organisations defined a "Business Plan" to ensure the sustainability of the EURO-SOLAR Programme in their communities. This plan covered, on the one hand, carrying out activities related to the use of elements of the EURO-SOLAR kit's communications system and to the Internet connection. It also covered how to manage the revenues generated, thus guaranteeing the proper use of the equipment.

The forum-workshop on "Strategies to contribute to Human Development through the use of renewable energies", took place in January 2011. It covered sharing good practices related to renewable energy



THE COMPONENTS OF THE PROGRAMME

between the national and cooperative institutions within the country. It also referred to identifying synergies with international organisations, private agents, donors in the target areas and the sectors of intervention and, particularly, those financed by the EU and its Member States.

HONDURAS

The Las Selvas community in Honduras represents a good example of the kit's use and the promotion of activities that ensure the generation of funds, which is vital to guarantee the sustainability of the EURO-SOLAR Programme. Proof of this is that this community has a bank savings account and a revolving fund dedicated to the monthly EURO-SOLAR operating expenses.

NICARAGUA

In Nicaragua, in September 2010, a training course was offered to community system managers on the operation and maintenance of the EURO-SOLAR kit's electric and electronic equipment, with topics including:

- > Power sources, use and management
- > Description of the photovoltaic system
- > Basic elements of electricity
- > Battery charging
- > After-sales service commitments

This training of system managers, who are the bridge between users and technology, was an essential starting point to ensure that the communities can acquire the kits and use the equipment properly.

February 2011 saw the first workshop on "Exchange of experiences with the EURO-SOLAR Programme" between the communities of Puerto Cabezas and Prinzapolka, during which – among other topics – participants discussed the advantage of creating a savings fund to guarantee the sustainability of the kits for both their operation and maintenance.

One year later, in March 2012, the first workshop on "Sustainable rural development" was held, featuring the following themes:

- > Implementation of technical, managerial and environmental guidelines for sustainable development of the communities
- > Strengthening local capacities and organisations as part of communal integration

PARAGUAY

In September 2010, in the community of Guajaybí, Paraguay, training courses were offered for the farmers and partners of the agricultural co-operative in the EURO-SOLAR classroom, equipped with computers and a projector. Thanks to this system, many partners were able to participate in the training, because they did not have to travel long distances and take too much time off from their work.

Ever since then, the co-operative's partners have been giving remote training courses via Internet conferences that allow them to transfer the knowledge and applied technology to other EURO-SOLAR beneficiary communities in other departments.

On the same theme the EURO-SOLAR Follow-Up Committee has, since August 2009, offered assistance to the communities, taking advantage of the remote training tools.

These training sessions are intended for farmers and small producers, among others, through courses offered through the telecentre.

This is an excellent opportunity for them to learn how to add value to their products and increase their revenues, using small investments and additional processes.



THE STRATEGY FOR SUSTAINABILITY

The goal of EURO-SOLAR is to encourage the sustainable development of isolated rural communities through the use of renewable energy sources. The strategy for sustainability relies on four complementary pillars - technical, social, economic and institutional - that build a long-term perspective offering opportunities to replicate the concept in other regions of the developing world.

Technical sustainability

The technology made available to the communities is user-friendly. The equipment was carefully selected on the basis of how they were built (simple and robust), how easy they are to repair, and how easy it is to find spare parts at affordable prices, whether regionally or nationally. The chosen devices offer functions that are easy to understand for community residents, and their maintenance is simple and not very expensive. The goal is to be able to use and maintain the equipment in a simple, inexpensive fashion throughout its life cycle.



Social sustainability



Management of the equipment, as well as the definition of its uses, is based on a community-wide decision-making process that puts particular emphasis on the gender aspect, offering women a leading role.

Thanks to this shared management, the beneficiaries view the EURO-SOLAR kit as an important, fully-integrated element of the community, thus ensuring its long-term maintenance and optimal use during its lifespan.



Economic sustainability

The operation and maintenance of the equipment included in the EURO-SOLAR kit are an expense which the community must bear.

The answer lies in the concept behind the EURO-SOLAR Programme, since the equipment provided to the communities represents a double benefit.

The equipment provides residents with direct benefits that can be extended to neighbouring towns.

Therefore, it is suggested that the communities charge for private use of the kits, thereby guaranteeing the Programme's sustainability.

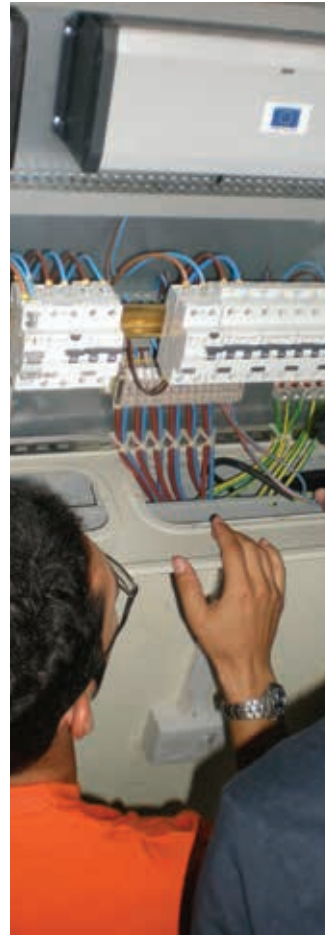
Examples might include fees for photocopying or scanning documents, recharging batteries and cell phones, Internet connections, sending e-mails, refrigerating pharmaceutical products, or renting the projector, among others.

The beneficiary communities can use the income generated through this kind of services to reinvest in the maintenance, repair and improvement of the existing equipment, as well as in the acquisition of new, more efficient and/or complementary devices.

The creation of such a virtuous circle is the basis for the project's sustainability, benefitting both the EURO-SOLAR communities and the neighbouring towns which participate in its development.

The Programme's economic sustainability is not limited to fund-raising through fees collected for certain services; these activities may encourage the generation of jobs and wealth, besides creating co-operatives and production groups which, using the system's capacities, develop new products and services.

Institutional sustainability



The involvement of the administrative and technical managers of the EURO-SOLAR Programme and their commitment to the proper development of the Programme, ensures the long-term operation of the activities generated by the kit's three components:

- > Education and Information Technologies
- > Health Promotion
- > Social and Productive Activities

One example of the commitment made by the various governments to increase the sustainability of the Programme is the fact that courses given in the communities have been validated by the Ministries of Education of the beneficiary countries.

The training of experts in Information and Communications Technologies - ICT - who in turn will provide maintenance and oversee the training of new experts, is another example of the momentum generated by EURO-SOLAR.



The funds raised permitted the purchase of complementary equipment, such as A3-sized photocopiers.



MANAGEMENT OF THE EURO-SOLAR PROGRAMME

EURO-SOLAR is a regional programme in which, from its very beginning, the European Union and the eight selected Latin American countries have participated actively. Therefore, it was essential to establish a fluent communication to facilitate an efficient development of all project activities.

The Programme's players

EUROPEAN COMMISSION – EUROPEAID IN BRUSSELS

The European Commission was responsible for coordinating the EURO-SOLAR Programme, contributing most of the financing, contracting the supply of equipment, and providing technical assistance.

EUROPEAN UNION DELEGATIONS (EUD)

European Union Delegations represent the European Commission in the Programme's eight beneficiary countries. They supervised the Programme in each country, in collaboration with the National Coordination Cells of the executive ministries and the Technical Assistance.

NATIONAL COORDINATION CELL (NCC)

The National Coordination Cell managed the Programme in each country, coordinating and supervising the activities at national level and contributing the funds and resources committed to it. Each country's NCC consisted of personnel from the Programme's executive ministry and from the Technical Assistance including technical and social specialists.

LOCAL COMMUNITY ORGANISATION (LCO)

The members of the rural community, the beneficiaries and end users, created a Local Community Organisation that manages the kit, ensuring its community use and maintenance. This process was developed with the support of the NCC's and the Technical Assistance.

TECHNICAL ASSISTANCE (TA)

TA acted at the regional and local level to coordinate, supervise, manage and support all Programme activities. Their team consisted of experts in the energy sector, employees of the private company subcontracted by the Programme (in this case, Gas Natural Fenosa Engineering), selected through an international tender for services. TA worked with all the players and was part of the NCC.

THE TECHNOLOGICAL INSTITUTE FOR RENEWABLE ENERGIES (ITER)

The ITER supplied the Programme's technological expertise in the area of renewable energies. It was also responsible for providing consulting services, design and technical expertise to EURO-SOLAR.

SUPPLIERS

Supply companies were responsible for the provision, installation and connection of the power-generation, communications and health care systems. They also trained the users in the use and management of the equipment.



The Programme's regional character has provided a great opportunity for the communities, as it has allowed and encouraged the exchange of experiences, knowledge and good practices among them.

In this fashion, a network of contacts with shared interests has been created in the Latin American region.

Selecting the beneficiary communities

The selection of the 600 beneficiary communities was carried out in several stages.

The principle that was adopted was to shortlist a greater number of candidates than the final tally, and to determine, through intense fieldwork, which communities were interested in being involved in the project.

The technical and social specialists who carried out this canvassing followed a general methodology which was then adapted to each country, taking into consideration technical and socioeconomic criteria, as well as each community's level of commitment.

In each country, a major information and awareness-raising campaign was carried out, with visits to the communities. Information workshops were held and the benefits and commitments of the Programme were explained.

This way those communities which were genuinely interested in being part of the EURO-SOLAR Programme were helped to complete and submit declarations of interest, signed by their representatives.

The last stage of the selection consisted of fieldwork and data analysis, during which the various candidate communities were evaluated in a completely transparent manner and the 600 beneficiary communities were defined.



Asking for the participation of the communities from the very start of the project has yielded good results, as they took over the Programme's administration and committed themselves to getting the best results possible throughout its development.



Over 1,700 declarations of interest in the Programme were evaluated.

Over 1,000 potential beneficiary communities were visited.

Finally, a total of 600 communities were selected.



"Our community is very small, but with a great desire for development. When we were told we had been selected from so many other communities, we were overjoyed."

(Juan Lapo. Beneficiary of the "El Progreso" Community in Río Canandé, Ecuador)

Installation of kits and verification of their operation

The efficient and sustainable installation of the kits required two simultaneous steps:

- > Definition of the size and location of the enclosure intended to host and protect the power-generation system
- > Adapting community facilities to receive the peripheral equipment

During this preparatory phase, the activation of the National Coordination Cells and the involvement of the communities' members were crucial for success.

Once the equipment was up and running, a thorough inspection was carried out in the field to check that all kits were working correctly.



Internet connection

The Internet connection, a key element of the EURO-SOLAR project, was carried out in two stages.

First, the European Union Delegations acquired the connection equipment, consisting of a satellite antenna, a regulator and a modem.

Next, the national Ministries contracted Internet connection services, either by satellite or through a Wi-Fi system.

The coordination of both bidding processes was crucial for the success of this activity, guaranteeing complete compatibility between the equipment and the Internet connection services.



The design of the kit is ideally adapted to the operating conditions in the various communities of the eight beneficiary countries. The kit functions properly with but a minimum of maintenance and the number of problems is relatively low.



Having five Internet-connected computers has been one of the most highly-awaited events and the one which generated the greatest interest among the EURO-SOLAR communities. It is a key milestone because it contributes to the community's ownership of the Programme and it ensures its sustainability.



"The reason for the verification in each community is to ensure that all the equipment is installed and operating correctly. Once all the communities have been checked, the process of transferring legal ownership can begin."

(Lorena Lanza. Vice-Minister of Energy and Mines of Nicaragua)

Training and support to the beneficiaries



One of the greatest successes of EURO-SOLAR lies in its sustainability.

To achieve such sustainability, the Programme was designed and built with a holistic and participatory vision.

Holistic because not only did it cover the installation and start-up of the equipment, it also included the training of members of the communities.

Participatory because it is the members of the communities themselves who decide which activities will be carried out.

An ambitious series of training courses were provided to support the transfer of the Programme's ownership to the members of the communities, focusing on two key topics:

- > Community development, in its three components:
 - Education and Information Technologies
 - Health Promotion
 - Social and Productive Activities
- > Equipment management and maintenance

This was supported by teachers, health and education experts, with a specific gender focus, seeking equality.



In Guatemala, EURO-SOLAR facilities were recognised as Academies for Professional Training in Administration and Computer Sciences, making job hunting easier and improving the residents' access to the job market.



"I can guarantee we will protect our EURO-SOLAR and continue to treasure it, so that it is still here tomorrow."

(Petronina Robertti. Beneficiary in the community of Santa Ana, Paraguay)

"We keep records of everything we do. During 2011, we've already generated 17,000 quetzals! Our goal is to make sure this doesn't stop, that it goes on... Even if one computer breaks down, we must be able to repair it, and even to buy more of them!"

(Joël Medina. President of the community organisation in Rocjá Poptila, Guatemala)

Local Community Organisation

In each community, a Local Community Organisation (LCO) was formed, which took on the responsibility for the proper use and maintenance of the equipment.

The LCO was formed when the project began, as soon as the community was chosen to participate in the EURO-SOLAR Programme. It started work when the equipment reception certificate was signed and the equipment's operation was verified, thus taking a huge step forward in the ownership of the Programme.

To support the LCO's activities, regulations for the use of the kit were drafted in each community, with the support of social facilitators.

These regulations cover the following topics:

- › Community use of the kit, including the establishment of priorities if the batteries are low
- › Documents and standards for the transfer of responsibilities among members of the community, to reduce the loss of knowledge in if members leave the area
- › Administration of the community resources generated through the kit's exploitation when it is not used for educational or health purposes

To complete the full ownership of the EURO-SOLAR Programme by the communities' residents, Technical Assistance experts took the opportunity during their visits to install the kit, to train members of the local community. They did so in the local language, covering the management, maintenance and repair of the technical facilities, and to make them responsible as the kit's "System Managers".



An intense training campaign was also carried out covering the three Programme components (Education and Information Technologies, Health Promotion, Social and Productive Activities), with a particular focus on gender issues.



Ten members of each community were trained in Information and Communications Technologies - ICT.

In 85% of communities, there is a teacher on the LCO to support the educational strategies; in 37% of communities, there is a member of the health sector who helps manage the project's health component.



"I am the person in charge of supervising the financial aspects of the kit. I also oversee the system manager, who updates me on the equipment's operation. All of this is in the regulations."

(Germán Sigüenas. President of the Local Community Organisation of the Community of Capilla Central, Peru)

"The community has collaborated on everything from the beginning. The Local Community Organisation coalesced and consolidated itself little by little, through many community assemblies over the years... Although the arrival of the equipment was the key moment, since that was when everyone truly felt themselves to be beneficiaries."

(José Arica. Social facilitator of the EURO-SOLAR Programme in Peru)



Promotion of the institutional commitment

The national institutions of the eight beneficiary countries, and particularly the ministries that gave their support to the National Coordination Cells, played a key role in the execution of the EURO-SOLAR Programme.

Their success owes a great deal to the public authorities' ownership and effective commitment at national and local level in each beneficiary country.

All those concerned took on the management of this project as a shared responsibility, supporting its sustainability with human, technical and financial resources.



Replication of the concept

The goal of the "Replication Handbook of the EURO-SOLAR Programme" is to share its best practices; the knowledge acquired during its implementation, and, most of all, the desire to build a sustainable development among the peoples of the world.

Following the tangible success of the Programme in the 8 beneficiary countries, several agencies and institutions of these and other countries, as well as international organisations, have shown interest in replicating and strengthening the EURO-SOLAR Programme.

One of the international agencies which has expressed great interest is the Organization of Ibero-American States for Education, Science and Culture (OEI, from the Spanish), through their "Luces para Aprender" project (www.lucesparaaprender.org).

This project is an ambitious initiative with the aim of bringing electricity through solar panels and giving a computer with Internet connection to 60,000 Ibero-American schools that still lack these services, while simultaneously ensuring teachers' training, project's sustainability and commitment of the communities.

INTERNATIONAL

In May 2009, the EURO-SOLAR Programme participated in the "European Solar Days".

At the Madrid symposium, speakers offered a clear endorsement of the use of renewable energies as a fundamental element for a fairer and more sustainable development, focused on four basic elements:

- > Access to energy is indispensable for the economic and social development of the entire world's population; therefore, it should be considered a universal right.

- > Power-generation based on renewable energies is the ideal solution for the electrification of isolated rural areas. Renewable energies play a fundamental role in the progress of less favoured regions of the world.

- > Projects based on Clean Development Mechanisms (CDM) are crucial in promoting renewable energies and overcoming technological barriers in developing countries.

- > The establishment of a governmental regulatory framework for the energy sector is essential for the expansion of the power supply to isolated rural areas, taking into consideration the technical, social and economic characteristics of the rural environment.

BOLIVIA

In Bolivia, the Ministry of Hydrocarbons and Energy, together with the OEI, has been looking into ways to develop new projects similar to the EURO-SOLAR in 10 isolated communities, with the support of the European Commission's Latin America Investment Facility (LAIF) financing mechanism and of regional institutions in Latin America.

ECUADOR

Ecuador's Ministry of Electricity and Renewable Energy and the OEI have agreed to include several Ecuadorian communities in the "Luces para Aprender" project, incorporating EURO-SOLAR's technological, training and community-strengthening components.

EL SALVADOR

El Salvador has established contact with foreign governments, particularly Taiwan's, to obtain economic assistance to facilitate the development of the initiative, based on the characteristics of EURO-SOLAR's success.

GUATEMALA

Photovoltaic electrification of two telecentres similar to EURO-SOLAR's, with five computers and Internet connection, was implemented in Guatemala through the Organisation of American States (OAS) and with support of the Ministry of Education.

HONDURAS

In some of their Honduran projects, the Italian ONG "ReTe" incorporated the health care system of the EURO-SOLAR Programme, including as a model a refrigerator for medical uses and a water purifier.

NICARAGUA

In the case of Nicaragua, 22 EURO-SOLAR communities have been included in the preparation of the National Programme for Sustainable Electrification and Renewable Energies as part of their third component, "Expansion of renewable energy in isolated areas", to install an autonomous photovoltaic power-generation system at the private-home level.

PARAGUAY

On the basis of the components and benefits of the EURO-SOLAR Programme in the fields of social and educational development, health, access to ICT and potable water, various academic centres of the Southern Cone region have shown an interest in facilitating the development of similar initiatives in local communities.

PERU

The Peruvian programme, "Núcleos Ejecutores" ("Focal Points") has replicated the EURO-SOLAR concept in 28 rural communities of the Amazon region with the installation of photovoltaic power-generation systems, computers, vaccine preservers, digital TV signal and battery chargers.

Communication and visibility

Communication and visibility of the EURO-SOLAR Programme are essential for the success of this international project, in which both European and Latin Americans players have collaborated.

COMMUNICATION FOR COORDINATION

In the EURO-SOLAR context, multilateral agencies, governments, universities, private-sector companies, municipalities and individual participants have formed a complex web. This required efficient coordination if they were to carry out the 600 projects in diverse and remote geographical areas, projects which influenced the life of some 300,000 people.

Only the closest coordination of these groups enabled the successful execution of the various phases of the EURO-SOLAR Programme.

Communication played a key role, with a focus on communication for coordination.

Communication for coordination promoted the exchange of information between the Programme's various players, linking communities, local and national public entities. It also involved representatives of the European Commission at the international level and in each one of the countries.

PROMOTIONAL COMMUNICATION

The EURO-SOLAR Programme is a project with huge scope throughout the Latin American continent, with a considerable financial investment of over 36 million Euros. As part of the promotion of the European Union's image and visibility, a series of communication activities targeting the Latin American and European public have been carried out. These have promoted the results, in close collaboration with both local and international reporters, from printed media, radio and television.

In this case, what is needed is another kind of communication: promotional communication.

Promotional communication publicises the project as a whole and advertises its impact. It is a key element for donor agencies that provide the human, technical and financial resources from Europe and Latin America, since they can thus justify the investments they make to their citizens.



COMMUNICATION FOR IMPLEMENTATION

During the project's first stage, when technical and social specialists visited the communities' and encouraged them to participate in the EURO-SOLAR Programme, it was crucial that the project should be fully explained. This included describing what each person's role consisted of and what participating would represent for the communities. Once the project was launched – and during each of its subsequent phases – participants received a constant flow of information, so that they were fully integrated in the process.

This type of communication differs from the previous ones; it is communication for implementation.

The purpose of communication for implementation is to inform the members of the various groups of beneficiaries of the project's activities and implementation.

COMMUNICATION FOR EMPOWERMENT

During the project's implementation, beneficiaries became players in their own development, taking over the working of the Programme until they could fully manage it.

The development of this ownership process required a fourth kind of communication: the communication for empowerment.

Communication for empowerment consists in awareness-raising campaigns carried out directly in each community, fostering an exchange of views between the beneficiaries and facilitating the establishment of structures for project management at the micro level.

COMMUNICATION ACTIONS

Throughout more than six years of the EURO-SOLAR Programme, these four kinds of communication were combined to provide a maximum efficiency to the complex processes of implementation; and fluidity to the relationship between all different players.

COORDINATION

As part of the communication for coordination among the various players, a series of activities were carried out, some of the more outstanding of which were:

- > The Intranet section of the EURO-SOLAR website directly facilitated the exchange of technical information and the decision-making process between the Programme's players.
- > The Annual Regional Days, which fostered encounters between all of the Programme's players, fostering the exchange of ideas and experiences.
- > The presence of the EURO-SOLAR Programme in events, both national and international, related to issues such as energy, fighting poverty, rural economy or sustainable development.

PROMOTION

To promote the EURO-SOLAR Programme, promotional communication focused on the following themes:

- > Publication of articles in the national and international press, using publications of both specialised and general readership.
- > Organisation of on-site visits with reporters from the specialised press, to encourage them to write articles and reports about the Programme.
- > Production of promotional videos distributed to the television channels and published on the Programme's website.
- > Remodelling of the existing website to offer more promotional content with a focus on the EURO-SOLAR model's replication.



IMPLEMENTATION

The communication strategy during the project's implementation was carried out through:

- > The design and distribution of brochures in the local languages.
- > The hosting of events in collaboration with the residents of the various towns.
- > The publication of a bimonthly bulletin showcasing the progress of the Programme's implementation, with a readership of over 1,000.
- > The creation of promotional material in the local languages.



EMPOWERMENT

As the EURO-SOLAR Programme was evolving toward the communities' total ownership of the kits, empowerment communication was given centre stage.

This communication was carried out by sociological and technical experts who enabled participatory decision-making communication channels. They also defined, together with the beneficiaries, the communal and economic use of the kits.

As part of this campaign, two types of actions were carried out:

- > Community workshops with the participation of trainers specialised in creating and developing internal capacity building among community members.
- > Virtual Internet courses in the local languages, to raise the awareness of EURO-SOLAR Programme beneficiaries about the transition of their activities towards autonomy and sustainability.





2

The location of the house that would later host the kit was determined in collaboration with the residents



1

It all began with the presentation of the project in those communities that wanted to participate, followed by the signing of the agreement.



3

The communities made available to the Programme a classroom or a clean and locked building to install the equipment.



Construction of the kit EURO-SOLAR

Step-by-step, the work was carried out by the communities



4

The shed was built out of cinder blocks, following the plans and norms provided by Technical Assistance.



5

The antenna and solar panels were installed.



6

Security measures were taken to guarantee the proper operation of the equipment and prevent theft.



7

Construction of the kit concluded when the power-generation, communications and health care systems were installed.



8

The EURO-SOLAR kit is now ready to work!



THE EURO-SOLAR PROGRAMME:

Has improved the living conditions of 300,000 people by providing isolated rural communities with access to electricity

Fosters the development of basic health care and education services in remote rural communities

Promotes the development of new production activities and improves existing ones

Facilitates communication with the outside world, reducing exclusion and isolation through the Internet

Supports sustainable production and consumption models

Fosters the use of renewable energy for electricity production, rather than fossil fuels

Strengthens the institutions and communities of beneficiary countries

Serves as a reference programme for governments and civil society organisations seeking to replicate this form of development

For more information:
European Commission
Directorate-General for Development and Cooperation – EuropeAid
Latin America and the Caribbean
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