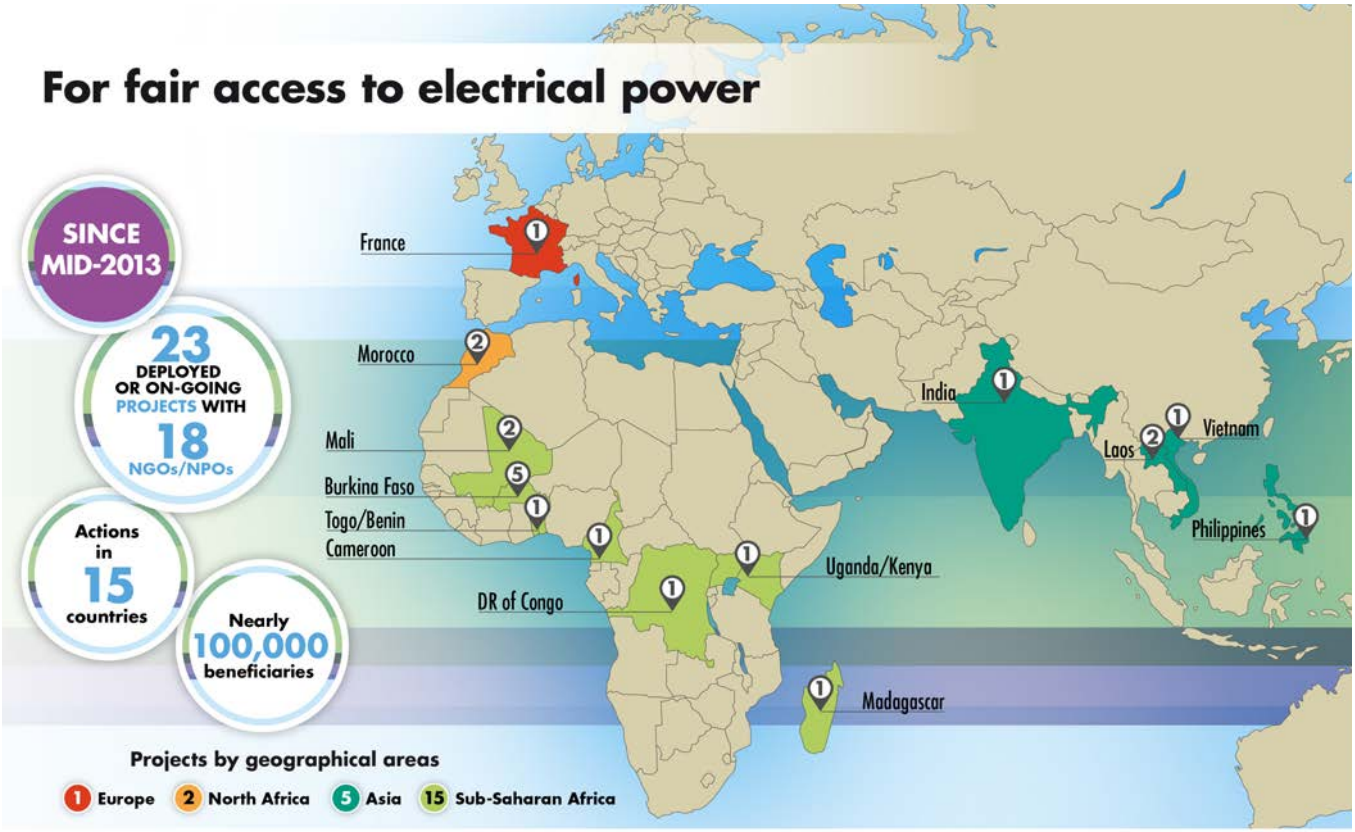
2014 Activity Report

Nexans Foundation

For fair access to electrical power

Summary



For fair access to electrical power

Editorial

Frédéric Vincent,
President of the Nexans Foundation
President of Nexans

Created in early 2013, the Nexans Foundation aims to bring electricity to disadvantaged communities around the world, working preferably with local charities on sustainable solutions. This commitment answers the UN's appeal made in 2012 to raise public awareness on the issue of energy poverty and the need to develop access to energy.
As access to electrical power brings light, it also facilitates education, health care, women's empowerment as well as economic and human development - thus meeting essential needs.
Since its creation, the Nexans Foundation has issued two calls for projects, in 2013 and 2014. Twenty-three projects have been supported and implemented, or are being deployed, in 15 countries. Almost 100,000 people will thus benefit from facilities providing them access to clean energy resources: hydraulic, solar, wind, etc.
The Foundation supports both established NGOs in the field of access to energy - for large-scale projects - and smaller ones, such as student organizations. This Activity Report lists the 18 NGOs supported since 2013, along with corresponding accomplishments.
The Foundation operates in all countries, but mainly in those most affected by energy poverty.
Projects are mostly located in Sub-Saharan Africa (in 9 countries), but also in Morocco, Asia (4 countries) and France.
In 2015 the Foundation continues to develop its activities in new countries, with new associations. To this end, it will leverage its network of ambassadors worldwide, along with Nexans' employees, encouraging them to strengthen their commitment to the Foundation's activities, including becoming volunteers in the supported associations. ■

"Almost 100,000 beneficiaries since mid-2013"

Nexans Foundation
For fair access to electrical power

Uganda

Kenya 

Antenna Foundation: Innovation brings light into homes

In collaboration with Caritas Switzerland and the University of Applied Sciences of Berne, Antenna Technologies has developed a solar lighting system with many advantages. This new product, called OOLUX and supported by the Nexans Foundation, provides a real alternative to kerosene lamps. Its micro-financing approach makes it affordable, meeting the needs of lower-income consumers.

OOLUX aims to provide a high-quality alternative to people with no access to electrical power in Southern countries. Due to its high-quality design, advanced electronics and maximum modularity, it can be adapted to various contexts. To make this technology affordable to the poorest in developing countries, OOLUX is based on micro-financing.

In 2013, a first field test demonstrated strong demand and helped define needs before large-scale distribution, particularly with regards to the development of the micro-financing approach and the demonstration of its economic viability.

In 2014, the project's objective was to validate OOLUX both technically and economically. 450 kits have thus been distributed to about 2,000 beneficiaries. The project, which was initially designed for Uganda only was then extended to Kenya in order to distribute kits faster and make sure that micro-payments can be monitored for a more significant number of beneficiaries. Since August 2014, 450 units have been delivered to Foundation Antenna's local partners - Agrinet in Uganda and Latia in Kenya.

The 50 remaining units will be kept to cover the two-year guarantee period. ■

Democratic Republic of Congo

Electrification of the Ipamu hospital with ESF

Electricians without borders (ESF) was requested by the Development Association of Ipamu farmers (a village in the center of the Democratic Republic of Congo) to electrify the referral hospital in the region, as well as educational institutions, boarding schools and accommodations for health care and education staff. The main objective of the project is to help improve the living conditions of the population and access to education and health care. This project is a continuation of the first work made by ESF in January 2014 as part of a first phase, namely the construction of a first backbone network and the connection of the hospital.The objective of this new project is to continue the network construction, connecting buildings, renovating interior installations of public buildings and places (connection of lighting devices in classrooms and in boarding schools) and staff quarters (doctors, teachers, nurses). It will make it possible to host professionals, but also visiting stakeholders for general education and training courses at the Institute of Medical Education.
Over 220,000 people are expected to benefit from these new facilities.

Burkina Faso

A health care center electrified by Codegaz

The purpose of this project, conducted by the NGO Codegaz, was to equip the Health Care and Social Welfare Center (CSPS, including a maternity ward) of Tiogo Mossi with a photovoltaic power system, as this village located 10 km away from Koudougou is not connected to any power grid.
Until then, care had thus to be provided by candlelight after 6 pm. The Tiogo Mossi Center handles monthly about 1,000 patients, 90 malnourished children, 40 prenatal visits and 15 deliveries (including 70% at night). Before this project was carried out by Codegaz, the only light sources were battery-powered torches and candles. Often staff members and patients had to use their own torches.

A local, Ouagadougou-based company, Africa Energy Solaire (AES), was selected by Codegaz to implement the photovoltaic system. By the end of 2014 this system was already fully operational, supervised by an EDF electrician - member of Codegaz - and allowing efficient lighting of the Center as well as cold storage of medication. In 2015, the nurse's accommodation will also be equipped. A first audit will also be conducted in parallel with a satisfaction survey of committee members in charge of managing the system. With the technical support of Codegaz, these managers can access basic procedures to maintain the system. Their duties also include collecting and saving the money required to cover operating costs. ■

Burkina Faso

Education and alphabetization at the core of Lumière pour Tous

After the remarkable accomplishment at Boromo in 2013, the Foundation decided to support again the NGO "Lumière pour Tous", a group of French students from Alsace, for their fifth journey. The 2014 operation has resulted in the full electrification of the primary school in Ouroubonon, a village located 5 km away from Boromo, using the electrical power generated by photovoltaic panels combined with a small wind turbine.
The project also included the full electrification of an alphabetization center for village women, using the output of photovoltaic panels, as well as the installation of a solar charging point for all types of batteries (including mobile phones, cars, motorbikes, etc.). This charging point will be managed by women of the village, against a financial contribution. This year, twelve students aged 17-25 years traveled on location during school holidays and were able to apply their skills and practice their study matters.
Thanks to their help, over 350 people, including children and adults, can now benefit from electricity at night. ■

Since 2011, the NGO "Lumière pour Tous", with the help of French students from the high school "Lycée Jean-Jacques Henner" in Altkirch (France), completed the full electrification of four schools in the Balé province, one of the 45 provinces of Burkina Faso. In this province, the town of Boromo has almost 12,000 inhabitants. It is located midway between Ouagadougou and Bobo-Dioulasso inside the Deux-Balé classified forest, a 90-hectare reserve for elephants, warthogs and baboons.


Togo

Benin


Electrification of two orphanages in Togo and Benin by FDTB

The electrification of both orphanages is already complete; the dormitories, refectories and classrooms are now lighted at night, which not only improves the children's quality of life but also secures the premises, especially against animal intrusions. Solar power provides some form of autonomy as well as energy resources available at lower cost. The number of hours of sunlight in the regions concerned by this project was therefore a decisive factor in choosing a photovoltaic solution as the energy source for lighting in both orphanages.

France Togo-Benin Development (FDTB) is a small NGO based in Mayenne (France), aimed at supporting orphans in Togo and Benin through the construction of orphanages, the establishment of educational and technical structures for an education incorporating both the quality of food, schooling, community life, health care, while taking into account the traditional and cultural environment. In the early 2000s, the organization built two orphanages with local partners located in the villages of Naogon in Benin (50 children) and Akodessewa in Togo (30 children) respectively. The project supported by our Foundation consisted in providing the electrification of these two orphanages using photovoltaic panels.

Mali

Strengthening the local economic network of Konséguéla with GERES

In Southeast Mali, Konséguéla is a rural community of 30,000 residents. Its inhabitants are suffering from rising fuel prices, as fuel is the only energy available for economic activities.
Between 2008 and 2013, 95% of millers in the community ceased activity, forcing women to return to the traditional mortar and pestle for crushing grain.
Residents are getting organized to find alternatives and reduce their dependence on fuel with the support of the municipality and GERES ("Groupe Energies Renouvelables, Environnement et Solidarité"). Since 2008, they have been involved in the local production of biofuels and now plan to set up an electrified business park (ZAE) for small businesses to develop their activities, such as mills, metalworking and mechanical workshops (farming equipment), charging points for mobile phones, tailors, etc.
The supported project aims to fight against energy insecurity and improve the living conditions in Konséguéla through the delivery of electricity to support local economic development.
A local business park will be put in place and electrified. With a daily capacity of 70 kWh, it will accommodate 15 local small businesses, service providers and craftsmen. Access to electricity from local renewable energy resources (mixing solar power and biofuels) will help strengthen the local economic network and reduce dependence on imported fossil fuels.
This ZAE will be organized in three separate areas by type of activity, connected by a power grid and respectively dedicated to:

- Power generation, using solar panels and generator sets
- Craftsmen using machines (for welding, extracting plant oil used as a biofuel, crushing grains), who will be provided with sheds and stores for rental
- Service providers (charging points for phones, tailors, refrigeration services, restaurants), who will have shops on rental leases.

The renting businesses in the ZAE will pay for the electricity they use. They will be supported with advice for the dimensioning of their electrical systems and training on how to maintain their equipment and control their power consumption.
They will also be provided with coaching and advice on how to develop their activity. ■

French students electrify a school in Madagascar

The Nur school is located in the city of Mahajanga, West of Madagascar. It hosts 498 children, most of whom are particularly vulnerable, including children with disabilities, orphans, street children, very poor children. Their education is funded with the support provided by French and European NGOs.

A first project was conducted at this school, in May 2013, by French students from the high school "Lycée du Chablais" in Thonon les Bains (France) and consisted of the installation of a photovoltaic system for the electrification of three classrooms and the construction of a children's play ground). However, new requirements are essential to allow these children to continue their scholarship in better conditions, such as new buildings, renovation of existing buildings, and purchase of school supplies, furniture and equipment.

For this second project to be implemented in early 2015, ten students with different specializations (electrical engineering, metalwork, woodwork) will undertake construction work for new buildings and electrification of the Nur school, under the supervision of their teachers. They will be assisted by young Malagasy, in charge of finding the necessary material for this work (such as metal tubes, wood, paint, cement. The project is conducted in partnership with the NGO ADDAM (aid for sustainable development in Madagascar) which has been working for many years in local schools, bringing its country-specific expertise and monitoring the good course of the project with the students. ■

"Lycée du Chablais" carried out three projects in Senegal in 2005, 2007 and 2010, consisting of construction work in remote villages and electrification of schools and health centers. Material was also collected, such as toys, books, medical equipment and teaching aids. This high school has been working with the NGO ADDAM on projects in Madagascar since 2012.

Solar power for children with OTM in Madagascar

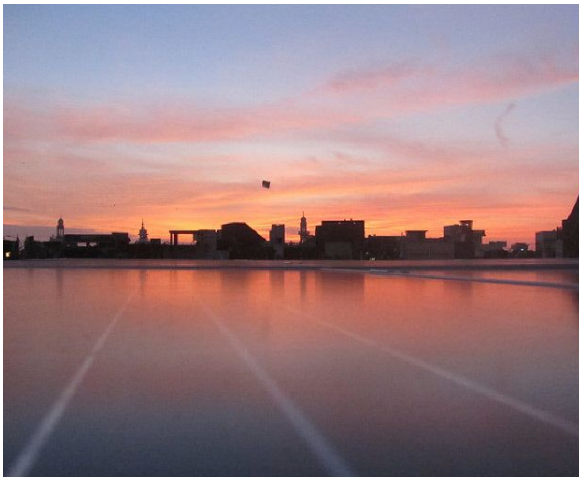
Madagascar is a country where economic development and state aid remain focused on urban centers. The isolated village of Ambatofotsy is about 10 hours' track away from the town of Fianatorosa. There are therefore no basic utilities such as water, electricity and communication means. The population of about 20,000 inhabitants is very poor. Subsistence farming is based on rice growing. The NGO "Ouverture au Tiers Monde (OTM)", based in Isère (France), works mainly in this remote region of Madagascar, where it operates two centers for children, mostly orphans.
The Ambatofotsy center has a school, where 536 children study from kindergarten to final year of high school, and a dispensary.
The project supported by the Nexans Foundation involves two components: the electrification of the school and dispensary through a mini-solar power plant, and the establishment of training courses, in partnership with "Energie Sans Frontières".
This training aims to offer a number of people the opportunity to train for a job with a future in Madagascar, but also to ensure that the equipment installed will be maintained. ■

India

Humanisol: Solar energy to promote school awakening

During the summer of 2014, the NGO Humanisol, supported by our Foundation, conducted the electrification of a school for underprivileged children in Varanasi, India, the SARASVATÎ EDUCATION CENTER, by installing photovoltaic panels on the roof of the school. Currently the school has only one generator — a precarious mode of supply. The new facility allows 80 children from slums to study under conditions that promote school awakening.
The teachers and school staff also participated in the installation work and have been trained on the maintenance of the equipment. Children were supervised by volunteers from the NGO during activities to increase their awareness on the use of clean energy and ecology. The facility required 12 photovoltaic panels as well as 12 batteries to meet the daily needs of the school. ■

The NGO Humanisol was created by student engineers specializing in energy and willing to bring their commitment and knowledge in service of the less fortunate. Leveraging their education in the field of renewable energy within the Montpellier POLYTECH' Engineering School, these students are able to size and install such facilities. For the 2014 operation, they selected India. The team consisted of 8 volunteers from the NGO. To ensure the good course of the project, the students were supervised by their teachers as well as photovoltaic professionals who showed them how to install this kind of system.



Vietnam

Safe access to drinking water thanks to Green ID

The Hai Ly commune in Vietnam is one of the six coastal communes and towns of Hai Hau district where the people are frequently and severely affected by typhoons and other climate related hazards as it has hollow terrain with 100% of its area below sea level. It is also located in the coastal border area with 3.2 km of sea dike. When a typhoon or storm happens, Hai Ly is affected by both the typhoon itself and by flooding since the area lies lower than the national road and the sea dike. The risk of the sea dike breaking under the context of climate change is the biggest concern and threat for local people. At present the commune is lacking systems to alarm its citizens. The livelihoods of the citizens are seriously affected, since they are dependent on aquaculture and salt harvesting. After typhoons they are not able to make money for some weeks, as they have to recover from the disaster while the communication with outsiders is also interrupted due to the power cut. Especially, it is very difficult for the villagers to obtain safe drinking water, since water has to be pumped from deep wells, collected from rainwater or bought in the market at a high price. That is why Green ID, a Vietnamese NPO, decided to develop a clean drinking water solution using reverse osmosis technology (RO) and solar PV power. This green water-energy solution, already installed in another commune, is highly appreciated by local authorities and villagers. The solution was inaugurated in November 2014 and will be proposed by Green ID to further provinces in Vietnam. ■

Morocco

Establishment of an Electrical Apprentice Training Center with IECD in Mkanssa

The European Institute for Cooperation and Development (IECD) supports development through training in 15 Near Eastern and African countries. With 53 local partners, IECD aims to pass the tools and know-how required for beneficiaries to build their future and take an active part in the development of society.
This project in Morocco, which is led by our Foundation in partnership with the Moroccan NPO "L'Heure Joyeuse", has resulted in the establishment of an Apprentice Training Center (CFA). Opened in Mkanssa, near Casablanca, in February 2015, the CFA today provides about fifty apprentices without a diploma or other qualification, coming from disadvantaged backgrounds, with a one-year graduating training program in the field of electricity. Addressing the challenge of access to employment for young people without a qualification, this innovative flagship project was implemented in partnership with the private sector in order to improve the quality of initial and vocational training, and to build true synergy between the demands of industry and the training offer. Beyond financial support, the partnership with Nexans' Foundation enabled collaboration with the Nexans' Moroccan subsidiary. As a cross-operational partner, the latter played a major part, especially by supplying equipment for the technical platform, through the donation of cables and training tools to reinforce workshop equipment. In addition, working clothes (including overalls, electrician vests, tool holders, leggings, etc.) and stationery items (pens, notepads…) were also donated for students. Nexans invited the CFA's trainer to visit its own training center and attend a training session, thus creating a special relationship between both training staffs. On this occasion, Nexans also shared its network of electricians coming from its training center, thereby significantly contributing to the vocational integration of apprentices. ■

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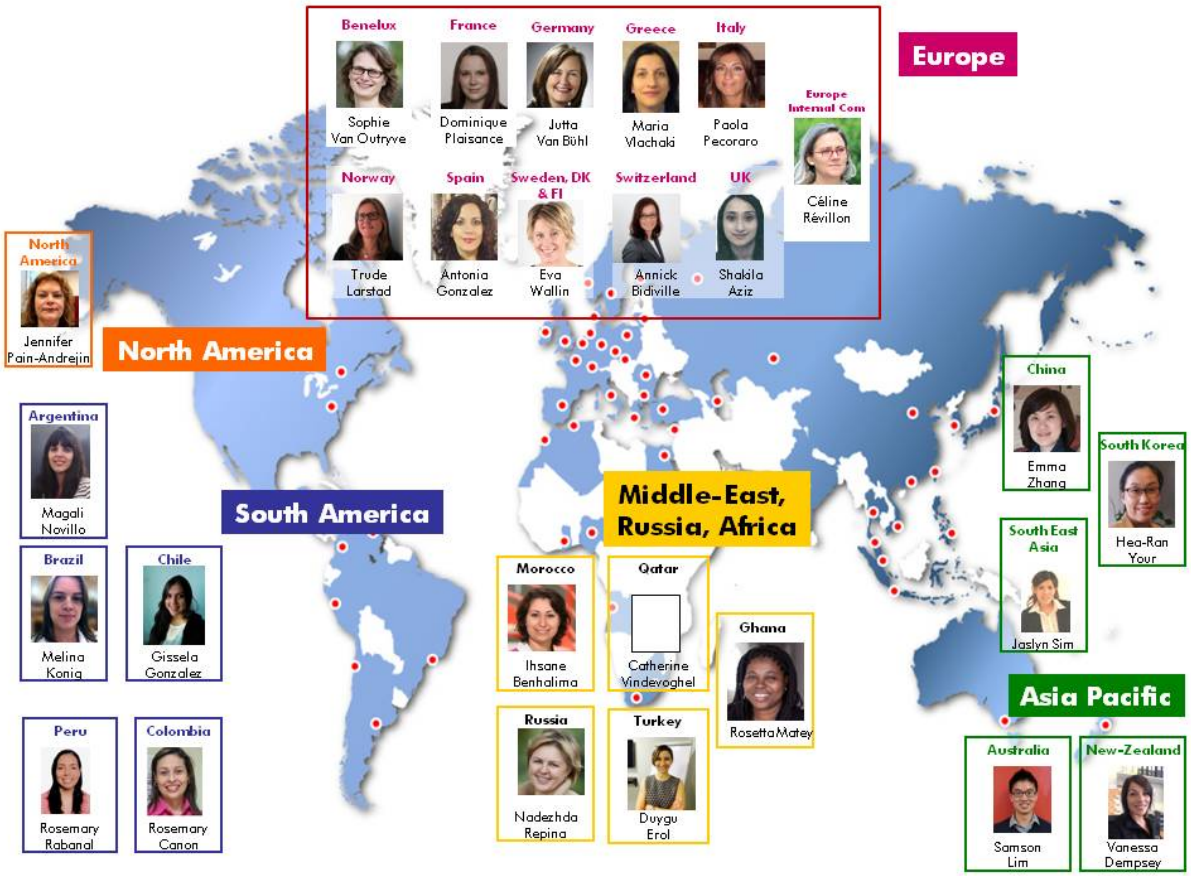
The international network of the Foundation Ambassadors



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