



## 2018 Activity Report

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# Letter from the Chairman

**A**s chairman of the Elecnor Foundation, it is my pleasure to present the Activity Report for 2018, the year of our tenth anniversary, whose best celebration has been the reaffirmation of our sincere commitment to progress and to the wholesale development of the communities in which the Elecnor Group is active.

Throughout this year, this aspiration was manifested in the further progress made in the various social infrastructure initiatives rolled out in previous years and in the launch of new ones.

Among the consolidated projects that have seen significant new developments we must highlight *Luces para Aprender* (Lights for Learning),

which when it started between 2014 and 2015, brought solar power and Internet to 100% of rural state schools in Uruguay. A second stage was subsequently rolled out in 2017 and 2018 which sought to re-utilise the panels installed in some of these schools that were no longer in use because the communities were now connected to the grid. These recycled panels are being installed in homes that still have no electricity, and in economic and productive areas and in educational spaces.

A new development for this year is the *Énergie Solaire pour l'éducation* project in Cameroon, the Elecnor Foundation's third undertaking in Africa after the *Solar Back-up Systems* project in Ghana, and *H<sub>2</sub>OME* in Angola. This new programme consists of providing photovoltaic solar equipment to support the work done by the Salesians of Don Bosco since 1983 to achieve social and workplace integration for disadvantaged young people in the city of Ebolowa. This task has been materialised in a technical institute that has become a shining example for training in the country, and a boarding school and a youth centre with approximately 750 beneficiaries in all.

This collaboration also raises the possibility of developing renewable energies in this part of Cameroon, thereby helping resolve its structural problems of security and stability in the power supply.

In addition to all this, we are particularly proud of the consolidation of our corporate volunteering programme, a tool intended to involve the employees of the Elecnor Group themselves in some of the projects run by the Foundation. The fifth edition took place in 2018 and, as in 2017, the setting was the *H<sub>2</sub>OME* project in Angola.



We end this tour of the year's key activities with a visit to the area of training and research. Significant achievements in this field include the signing of an ambitious agreement with Deusto University, an institution with which we have a long history of collaboration. The new agreement is for the creation of a laboratory intended to drive new technological solutions for the sustainable development of cities. Within this framework, the Foundation has joined the Deusto Cities Lab Chair as a patron.

With these and other actions, the Elecnor Foundation arrived at its tenth anniversary in 2018. Looking back over the decade, ten countries have been the setting for a total of 18 social infrastructure, training and research initiatives, with an overall approximate number of 1,020,000 beneficiaries. And we have a renewed determination to continue contributing to the limit of our possibilities to achieving the UN's Sustainable Development Goals (SDGs), a key reference for all

organisations which, like ours, aspire to provide practical solutions for the major challenges facing the world today in terms of sustainability, energy, water, education and health.

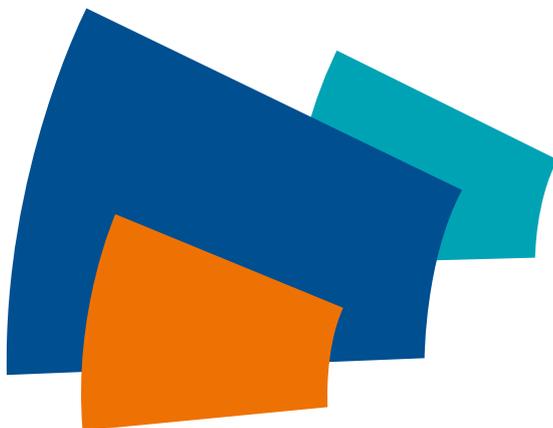
In the following pages I invite you to find out more about our main actions in 2018, and about the general principles of action at the start of a second decade in which our ambition is still the same: to contribute our ideas, commitment and experience to building a better world.

Yours sincerely,

**Fernando Azaola**  
Chairman of the Elecnor Foundation

# Social infrastructure projects

Through its social infrastructure projects, the Elecnor Foundation has become part of the solution for some of the problems facing today's society. Specifically, and as described in the following projects, the Elecnor Foundation contributes to guaranteeing the affordable, secure and sustainable access to energy and water, and to promoting opportunities for inclusive, fair and quality education in disadvantaged environments.





# Luces para Aprender Uruguay



The Elecnor Foundation, the Organization of Ibero-American States (OEI) and the Administración Nacional de Usinas y Trasmisiones Eléctricas (UTE) signed an agreement in 2014 to jointly implement the Luces Para Aprender project in Uruguay, supplying solar-produced electricity and Internet to 100% of the country's rural schools.

In 2017 and 2018 the project rolled out a second stage consisting of the re-utilisation of the panels installed in some of these schools which were not in use as they were now connected to the grid. The recycled panels have been installed in homes that are far from electrical power lines, and are also used in productive activities and education facilities.

**T**he Luces para Aprender Uruguay project involved taking solar power and Internet access to rural state schools around the country. These systems meet the internal and external lighting needs of the schools and also power technological and communications facilities such as TVs, computers and communications equipment, among others.

Luces para Aprender has reduced the digital divide and the isolation of rural communities, which have historically lagged behind in technological developments, by fostering access to communication technology to promote educational, economic, social and cultural development. It also opens a gateway to

processes of community participation, and transforms the school into a meeting place and leisure centre for the community.

This initiative means that since the end of 2014 Uruguay has been the only country in Latin America to have 100% of its schools electrified.

### Second stage: re-utilising unused panels

Following the installation of the solar panels, some of the 85 schools benefiting from the project (specifically 35) were gradually connected to the grid in the rural electrification project undertaken by UTE.

# Luces para Aprender and the SDGs



In 2014, Uruguay became the first country in Latin America to have **all its schools electrified**

**85 rural schools** with no access to the electrical grid were equipped with solar generation and Internet systems



At the end of 2016, the Elecnor Foundation, OEI and UTE undertook to relocate any photovoltaic facilities that were no longer in use.

This commitment was formalised in May 2017 through a contract signed in Montevideo for an addendum to the agreement that launched the second stage of the project, which was in turn structured around three main areas:

- Supply of energy to the homes of schoolchildren attending some of the rural schools that took part in *Luces para Aprender* in the departments of Cerro Largo and Salto. Specifically, solar panels were installed on the homes of 11 students.

The second stage of the project consists of **re-utilising some of the panels** in homes, social enterprises and training facilities

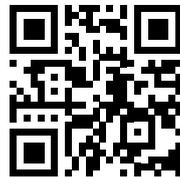
- Support for community enterprise. With the support of the local authorities in Rocha and the National System of Protected Areas (SNAP), solar units were installed in "La Cocina de la Barra", an establishment in the area around the Rocha Lake. This action benefits the traditional fishing community of Apalco.

The installation of this equipment will allow the families in Apalco to reinforce their gastronomic enterprise, which enjoys an increasing influx of visitors, particularly in the summer months. They can also do their work in a more sustainable and professional way in this protected area.



- Support for the creation of teaching spaces.  
The first action of this kind was to assemble solar panels for use in a laboratory for the students at the Uruguay Technological University (UTE), a proposal for public university education with a technological profile, with a focus on research and innovation.

THE SECOND STAGE  
OF THE LUCES PARA  
APRENDER PROJECT  
IN IMAGES



### Awards to Luces para Aprender

Within the framework of the ninth International Seminar on Research into Rural Education held in the department of Canelones (Uruguay) in October 2018, institutions, projects and groups were recognised whose work and example provide tangible values for educational quality and quality of life for children in the rural environment. One of these awards went to Luces para Aprender.

This distinction comes in addition to the one obtained in 2017 within the World Innovation Summit for Education (WISE) awards, which recognise the most innovative initiatives and those with the greatest impact in the field of education.



# Énergie Solaire pour l'éducation in Ebolowa Cameroon

The Elecnor Foundation, in collaboration with Cameroon's Ministry of Water and Energy, has decided to support the work done by the Salesians of Don Bosco since 1983 to achieve the social and workplace integration of disadvantaged young people in Ebolowa, a city located 168 km from the Cameroonian capital, Yaoundé. This collaboration also raises the possibility of developing renewable energies in this part of the country.

**T**his collaboration project with the Salesians of Don Bosco aims to consolidate all the social and educational activities of the congregation in the city of Ebolowa, providing a secure and reliable solution to the power supply problems suffered by this part of the country.

Power cuts or interruptions in the electrical power supply are increasingly frequent in Ebolowa and the surrounding area, and may even last for several days.

The electrical energy available is of very poor quality. There are often power surges that damage the electrical equipment or their protection, with the resulting economic consequences.

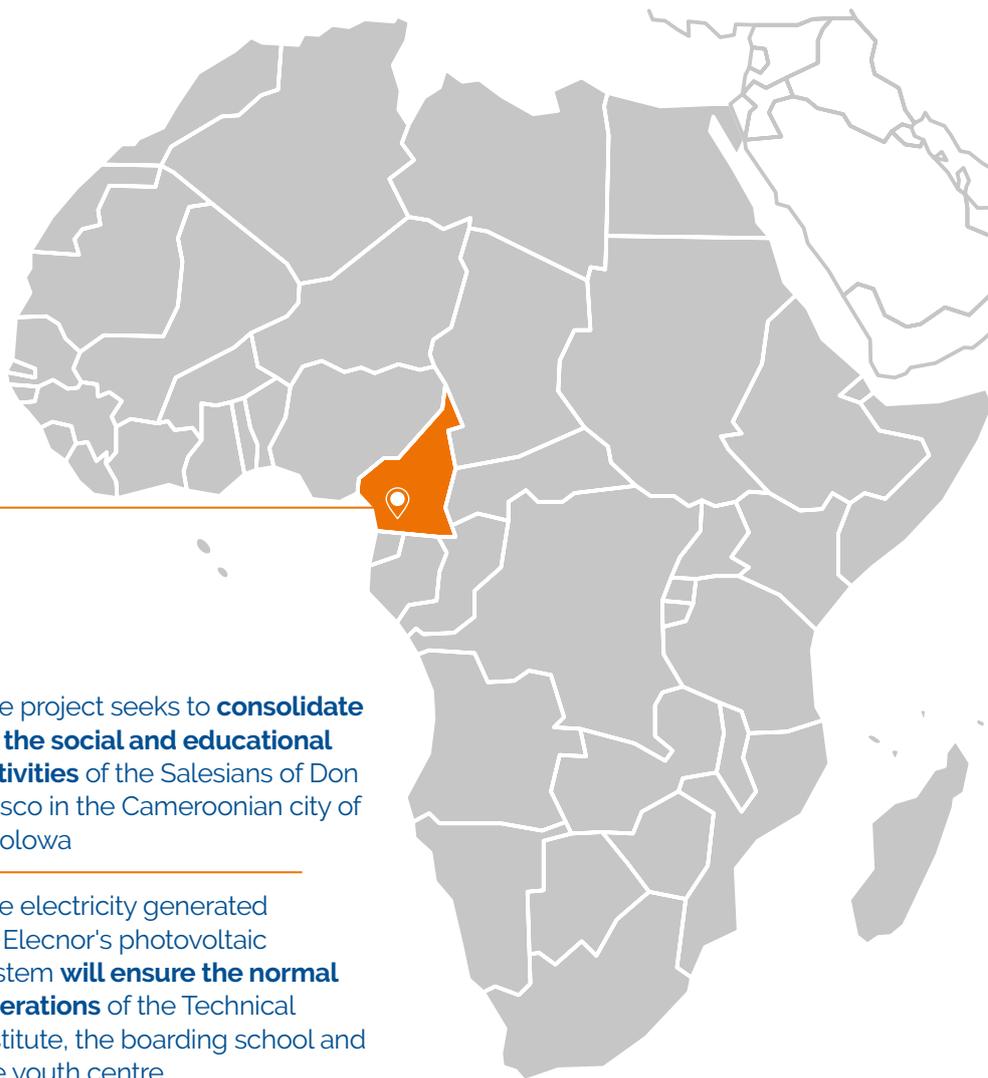
The current solution to power cuts are generators, which require an added investment.

## Over 750 beneficiaries

The electricity generated by the photovoltaic system provided by Elecnor will ensure the normal operation of the activities carried out in the Don Bosco Technical Institute (ITDB), the boarding school and the youth centre, with an approximate total of 750 beneficiaries.

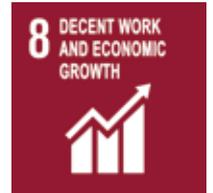
Special mention for the Ebolowa ITDB, a leading professional centre in southern Cameroon. Young people and adolescents learn a trade in a special educational environment. It offers training in automotive mechanics, electricity, carpentry, electronic maintenance and computers.

# Énergie Solaire pour l'éducation and the SDGs



The project seeks to **consolidate all the social and educational activities** of the Salesians of Don Bosco in the Cameroonian city of Ebolowa

The electricity generated by Elecnor's photovoltaic system **will ensure the normal operations** of the Technical Institute, the boarding school and the youth centre



The solar power system will also support the free supply of water to the locals and the broadcasts by Mvila's Community Radio for Development (RCDM), with around 150,000 regular listeners.

Elecnor's collaboration also represents an important transfer of skills for the trainers in the ITDB. This training for the teaching staff means that electrical studies on concepts of photovoltaic energy can be integrated in the programme, which opens the possibility of developing these energies in the region and employing the best qualified students.

### The solar solution

To materialise its collaboration in Cameroon, the Foundation will make use of Elecnor's technical capabilities and experience in the field of solar photovoltaic facilities.

Specifically, Elecnor will install a solar power system with accumulation in batteries that will operate together with the current system on the roof of the ITDB. The proposed design will be formed by a 62 kWp solar array comprising 180 panels, each with a capacity of 345 W, which will be able to provide 63% of the energy consumed. This array will work together with a cluster of 48 kWn inverter chargers capable of supplying the necessary power and with 3,500 Ah to 48 V batteries which will offer up to 12 hours of autonomy, sufficient for the night period.

This solution allows a 33% use of the grid. To avoid voltage problems while connected to the grid, additional corrector chargers will be installed so that all the energy from the grid passes through the batteries like an online UPS, guaranteeing 100% of the quality of the supply.

The number of beneficiaries is around **750**

### In Ebolowa too, safety first and foremost

In collaboration with Elecnor Cameroon and the Group's Occupational Health and Safety area, the first step in the Énergie Solaire pour l'éducation project was to provide safety training for the people who will work in its operation and for a large number of students from the ITDB. The Foundation thus materialises its aspiration to combine a project's technical execution, training for its beneficiaries and the incorporation of young people in the workplace in a single initiative.

The training on prevention comprises two parts, one theoretical (general scope in Elecnor, the specific risk of working at heights, the importance of life lines, etc.), and another practical part focused on life line tests.

Those receiving the training included 24 students and two teachers from the Institute and eight graduates, seven of whom were subsequently employed to join the team of professionals at Elecnor who will install the photovoltaic systems.

### THE EBOLOWA PROJECT, IN IMAGES





# Fifth edition of the Corporate Volunteer programme

## Angola

2018 saw the launch of a new edition of the corporate volunteer programme. For the second consecutive year, the framework of action was the H<sub>2</sub>OME project in Gove (Huambo province, Angola), inaugurated in 2017. The three participating volunteers combined aspects of technical assistance with support for education for local children, using the educational resources associated with the system.

The 2018 edition of the Elecnor Foundation's corporate volunteer programme took place in September with three members from different areas in the Group. As is usual in this initiative, one of this year's participants had a technical profile in order to help improve the process of making water safe for drinking, whereas the other two were responsible for teaching the children in the school in Gove using the facilities in the audiovisual library in the H<sub>2</sub>OME system.

### Technical volunteering

The planned works involve the checking, repair and tuning of the facilities. The work undertaken included the following:



# Corporate volunteering and the SDGs



The 2018 corporate volunteer program combined aspects of **technical assistance** with support for **teaching** the children in Gove, Angola



- Checking the pump and the raw water tank, verifying its general operation and adjusting the starting and stopping parameters.
- Disinfecting and cleaning the raw water tank.
- Checking the levels in the raw water tank.
- DWTP: checking the automatic start-up and remote control.
- Training the four new local operators.

### Training volunteering

For coaching the two volunteers in charge of teaching the children in Gove, the Elecnor Foundation produced a guide with entertaining games and workshops on the subject of education for development in Angola. Its aims were:

- To raise awareness of the importance of an educational and human focus within the practice of cooperation for development.
- To offer the volunteers an extensive catalogue of games, dynamics and workshops to carry out with the young people in the area of education for development.
- To contextualise the game cards and the methodology within the social and political context of impoverished countries.

In addition, school materials were acquired so the children could cut out, draw, paint and create handicrafts.

H<sub>2</sub>OME opens a window onto the world and a path to knowledge, and takes firm strides towards **equal opportunities**



## The H<sub>2</sub>OME project in Angola

The first operational facility in the H<sub>2</sub>OME project was inaugurated in Angola in 2017, and was an innovative response to the scarcity of drinking water in developing countries and the brainchild of Elecnor's R&D&i.

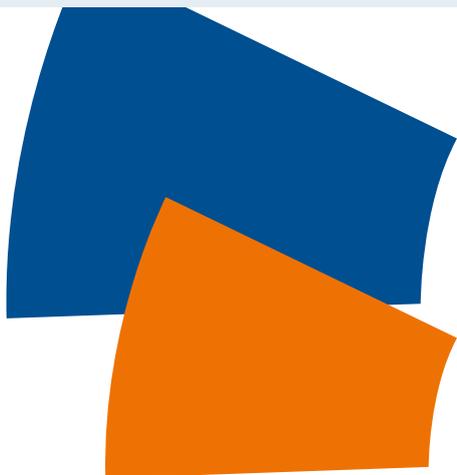
The facility in Angola supplies drinking water to 10,000 people in Gove in Huambo province. It is made from disused shipping containers that were recovered, redesigned and restored to create a two-tier mobile structure that is easy to transport and install.

The installation of the H<sub>2</sub>OME module in Angola means the water is supplied directly to the school and health centre in Gove, and is also distributed via eleven water fountains throughout the municipality so the maximum number of people benefit.

But H<sub>2</sub>OME is much more: children can enjoy a 100 m<sup>2</sup> audiovisual library which was initially stocked with over 3,000 books, computers and DVDs and a television for screening documentaries and films to help provide students with a better education. All this offers them a window onto the world and offers knowledge to enable them to take firm strides towards equal opportunities.

To ensure optimum use of these facilities, the teachers of Gove school themselves will draw up a timetable so the children can enjoy the space and use the opportunity it offers for valuable access to information and education.

H<sub>2</sub>OME is also the first public space in Gove designed to host both educational and recreational activities in a safe location with lighting.



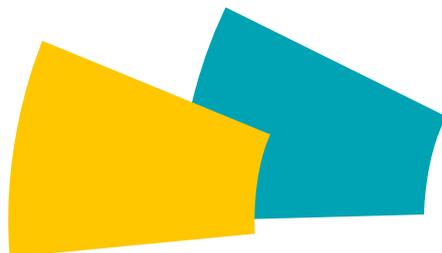
THE VOLUNTEERS,  
IN IMAGES



# Training and research projects

Along with the social infrastructure projects, education is another major area of action for the Elecnor Foundation. Clear inclined towards the various branches and disciplines of engineering, particular efforts are devoted to managing the talent of young people, both Spaniards and foreigners. The aim of all our programmes and agreements in this area is to promote greater knowledge, its practical application and employability.

In close collaboration with the academic world, the Foundation also supports research initiatives in the natural fields of activity of the Elecnor Group and in key aspects of business management such as sustainability, CSR and corporate governance.





# 30 years of the **awards and scholarship** programme for students of the ETSII-UPV

2018 represented 30 years since the collaboration agreement was signed between Elecnor and the Valencia Polytechnic University. Five scholarships were granted this year within this agreement, along with a first prize for the best final project or best master's dissertation.

In November 2018 the Elecnor Foundation presented the diplomas for the scholarship programme for master's dissertations at the Higher Technical Industrial Engineering School (ETSII) at the Valencia Polytechnic University (UPV), in the area of Electrical Engineering, Energy Efficiency and Renewable Energies. In this edition, five students from the ETSII received scholarships, and one of the projects was implemented in Elecnor: an energy efficiency project in municipal buildings in the province of Castellón.

The Foundation also presented the first prize, endowed with 1,500 euros, for the best project submitted. The award went to the student Pascual Martínez la Osa for his work in the design and implementation of a test bench for industrial lighting techniques and his energy efficiency in laboratory practices.



*The Foundation's training programs in Spain and the SDGs*

# Sixth edition of the **specialist post-cycle course** in medium/low-voltage electrical installations

The Elecnor Foundation in conjunction with the Salesian Deusto College (Bilbao) sponsors this pioneering course in the field of vocational training. The Foundation is actively involved in designing this project and in financing the equipment required in the school laboratory.

**T**he fifth edition of this specialist course concluded in March 2018, with 12 students obtaining their diploma. Another 12 students were included in the sixth edition, which took place between February 2018 and March 2019. As in previous courses, the structure was modular, with a duration of 82 hours distributed in theoretical classes, workshop classes, and a visit to Elecnor's facilities.

This course is a great opportunity for young vocational training students of electricity distribution at the intermediate level to complement their theoretical and practical training in this subject. It also seeks to reinforce the training and information on various occupational risks and the factors that can lead to work-related accidents and diseases.



## Deusto Cities Lab chair at Deusto University

In 2018 the Elecnor Foundation and Deusto University signed a collaboration agreement for the development of actions and initiatives linked to ethics and values in companies, public institutions and other types of organisations. These include the creation of a laboratory focused on the role of technological solutions in the sustainable development of cities.

The agreement includes the incorporation of the Elecnor Foundation, as a patron, in the Deusto Cities Lab chair at Deusto University, whose aim is to generate a proposal for Smart city ecosystems that promote synergies between the different spheres of development and innovation (ecological, economic, social and cultural) and the different sectors and agents (institutions, companies, social institutions and citizenship).

The Elecnor Foundation thus joins other key names in the economic and institutional life that were previously associated with these chairs: the Basque government, the BBK Foundation, the Guipúzcoa regional government, BBVA, Bilbao City Council, Iberdrola, Vitoria City Council, Ferrovial, Eudel, Ikusi-Velatia and the Ner Group.



*The Foundation's training programs in Spain and the SDGs*

# Participation in the course 'SDGs: an inevitable transformation'

The Centre for Innovation in Technology for Human Development at the Madrid Polytechnic University (itdUPM) is an interdisciplinary centre that carries out training and research applied to the achievement of the SDGs. In partnership with this centre, the Elecnor Foundation has prepared two classes for the SDG course: an inevitable transformation.

The course is in the MOOC format (the acronym for Massive Online Open Courses), and is part of the micromasters course offered by itdUPM: an online and open training itinerary that can be accredited through a degree granted by the Madrid Polytechnic University.

This is a distance training programme accessible by Internet and open to participation by anyone with practically no limit to student numbers. In addition to the materials in a traditional course such as videos, reading and questionnaires, MOOCs offer interactive forums for users that help to build a community for students, teachers and teaching assistants.

## Course content

The course presents the 2030 Agenda, the world action plan for the achievement of the SDGs as a lever for innovation and organisational transformation towards sustainability. The MOOC comprises 22 classes grouped in four modules, of which nine are practical cases narrated by their protagonists.

The teaching staff is made up of 27 professionals specialising in their respective spheres from the university (UPM and UCM), private companies (Elecnor Foundation, Iberdrola, Suez Spain and

Acciona.ORG) and the third sector (Oxfam Intermon, Ashoka and SDSN).

The initiative is geared to people integrating and managing change, professionals who wished to stimulate sustainable transformation in their organisations and areas of work through creativity, design culture and by encouraging a new organisational context that drives the achievement of the 2030 Agenda.

## A practical case: the Elecnor Foundation and its role in the Sinergia Project (Chile)

The course contents include a description by Pedro Duque, advisory councillor at the Elecnor Foundation between 2012 and 2018, of a public-private alliance for development (PPAD). This is a Sinergia Project, which involves bringing water and energy from solar photovoltaic sources to Totoral, a remote community in the Atacama desert in Chile.

The partnership created for this project was signed by the Elecnor Foundation, Elecnor Chile, the National Institute of Agricultural Development (Chilean Ministry of Agriculture) and the community of Totoral.

For his part, Jorge Ballester, Director of the Elecnor Foundation and a participant in the project, analyses the motivations and characteristics of the partnership.



Since 2008,  
contributing to  
building a  
better world





The Elecnor Foundation celebrated its first ten years of existence in 2018. Looking back over this intense decade, its members (trustees, partners and collaborators) can see with pride how their projects and initiatives have succeeded in improving the lives of thousands of people with energy, water and education. Creating opportunities for development. Creating new horizons of progress and hope.

These are ten years of enthusiasm, dedication and hard work in which the Elecnor Foundation has materialised ten social infrastructure projects in ten countries for an approximate total of 1,020,000 beneficiaries.

Projects like **Sinergia**, to take water and light to a community in the Atacama desert in Chile.

Or **Luces para Aprender**, which has lit up many rural schools in Uruguay.

Projects that today continue active and progressing towards new goals.

Other more recent projects such as **H<sub>2</sub>OME** in Angola, which since the end of 2016 has been bringing drinking water to a community of nearly 10,000 people.

Or **Starting Out and Learning in Digital**, in Nicaragua, in collaboration with Plan International, which improves the process of education and cultural training for the local population, in particular children and young people from the Miskita ethnic group, through the sustainable use of ICTs.

Not to mention **Ilumina**, in Honduras, and **Loma Atravesada**, in the Dominican Republic, which brings light to inaccessible places.

And also **Solar Back-up Systems**, to guarantee uninterrupted electrical supply in hospitals in Ghana.

And we are also proud of the **Ronald McDonald House in Madrid** and of the multiple **training and research** programmes supported from Spain.

# SUSTAINABLE DEVELOPMENT GOALS

*Committed to the  
United Nations  
Sustainable  
Development Goals and  
the Global Compact*



WE SUPPORT THE  
GLOBAL COMPACT

This is our **communication on the progress** in the application of the principles of the **United Nations global compact**.

We appreciate any comments on its content.

**E**lecnor's commitment to social progress and sustainable development has been materialised over the years through the positive impact of its infrastructure, energy, water, environmental and space industry projects, which have been effective in tackling global challenges such as climate change, reducing the energy gap or providing access to basic necessities.

This global contribution was reinforced in 2008 with the constitution of the Elecnor Foundation and its specific actions.

The vision of Elecnor and the Elecnor Foundation is closely aligned with the challenges represented by the Sustainable Development Goals, approved by world leaders within the UN in 2015. In this same line, in October 2018 the group became a Signatory Member of the United Nations Global Compact, the world's largest initiative in sustainable development and transparency.

In the case of Elecnor and its different business units and subsidiaries, its association with the SDGs is highlighted in the Group's 2018 Integrated Report.

[ELECNOR GROUP'S 2018  
INTEGRATED REPORT](#)



Specifically regarding the Elecno Foundation, the association with the SDGs can be summarised as follows.

# The projects of the Elecno Foundation and the SDGs

Honduras	Ilumina			
Dominican Republic	Loma Atravesada			
Ghana	Back-up Systems			
Peru	Pachacutec Scholarships			 
Chile	Sinergia			  
Nicaragua	Starting Out and Learning in Digital			 
Uruguay	Luces para Aprender			  
Angola	H <sub>2</sub> OME			 
Cameroon	Énergie Solaire pour l'éducation			 
Spain	Ronald McDonald House			



The Elecnor Foundation, as Elecnor's main Corporate Responsibility tool, assumes and is fully committed to its principles and values, which are enshrined in the Code of Ethics of the Elecnor Group.

The Elecnor Group constantly endeavours to ensure that it conducts all its activities in accordance with the highest ethical standards and adopts a zero tolerance stance towards ethical malpractice and lack of professional integrity, and expects its employees and related parties to behave in keeping with the principles

# A pledge to act ethically

# 10

YEARS | 2008-2018



of this Code, the rules on which it is based, and its implementing policies and procedures.

Through this Compliance System, the Elecnor Group of which the Foundation is part, and all its employees, are committed to carrying out their activities in accordance with the current

legislation in the countries and regions where it operates, and to complying with and upholding human and employment rights, acting with diligence, professionalism, integrity, quality, respect for the environment, occupational health and safety requirements and social responsibility.

*ally and responsibly*





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