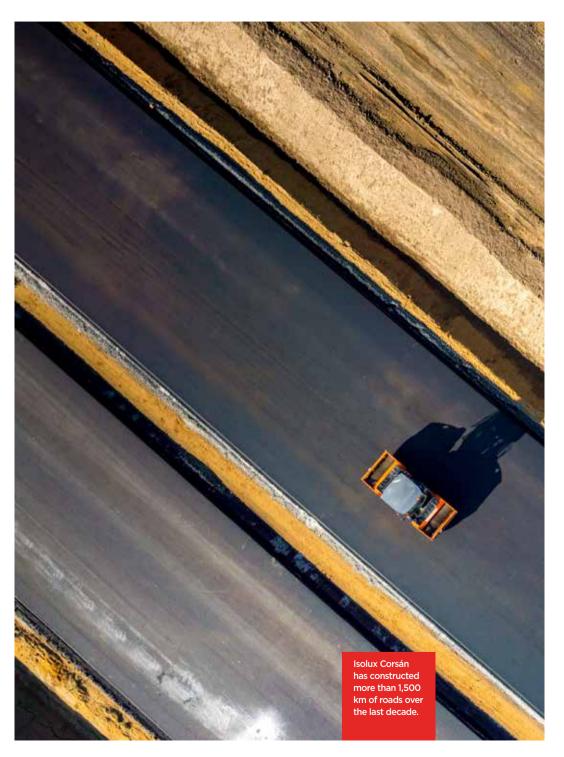






REPORT ON ACTIVITIES







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# **LETTER** FROM THE CEO

# A new Isolux Corsán

When looking back with hindsight, we will realise the real importance that 2015 had in our corporative development. 2015 represents the start of the Group's transformation towards a new Isolux Corsán. Amongst the main changes it is worth highlighting the separation of PSP and the sale of assets which do not represent the Group's core business. Technically speaking, this transformation converted Isolux Corsán into a 100% EPC company however, above all, it ratified us as a company for people.

The path taken over recent years has been a complex one and has not been without difficulties. In spite of this reality, Isolux Corsán has known how to move forward and adapt to the market and this is an achievement that can only be understood by knowing and appreciating the human factor that our organisation prizes. As such, before

moving on to any other aspect, I would like to extend my most heartfelt gratitude to all those who breathe life into this organization day after day.

From a market perspective, the transformation was faced with the challenge of redirecting the Group's business towards projects of a greater magnitude, whilst taking advantage of the experience gathered over the last decade. These experiences, which we, moreover, optimised with a repositioning, returned the essence of our business to us, with a clear vocation via innovation.





Knowledge of the business is vital during this new phase. To this end, I believe that the convergence of the great professionals who work in the company and the influx of young talent will stimulate the company's revitalization. The experience of some and the enthusiasm of others is the best combination, with rigour, to capitalize on the work done.

Work which I would like to summarise with the following statistics: Revenue of 3.056 billion euros, a figure which represents an increase of almost 10% compared to the previous financial year and a gross operating profit (EBITDA) of 653 million euros.

The new Isolux Corsán ratifies the Group's global vision, establishing sources of growth in the Middle East, Europe and North America. It is working on stability in Latin America based on the soundness of our experience - mitigating risk exposure - and consolidating its positions with strategic value in Asia and Africa.

The time has come to feel our area of action as a planetary reality. To learn from each and every one of the cultures with which we relate and to share knowledge with all those who join us on this endeavour where old and new intertwine to make a better, more highly skilled and, above all, a more human Group.

Luis Delso Heras





## ► CEO:

Luis Delso Heras

### ▶ Vice-Chairman:

José Gomis Cañete

### ► Chief Executive:

Antonio Portela Álvarez

## **▶** Board Secretary:

Juan Francisco Falcón Ravelo

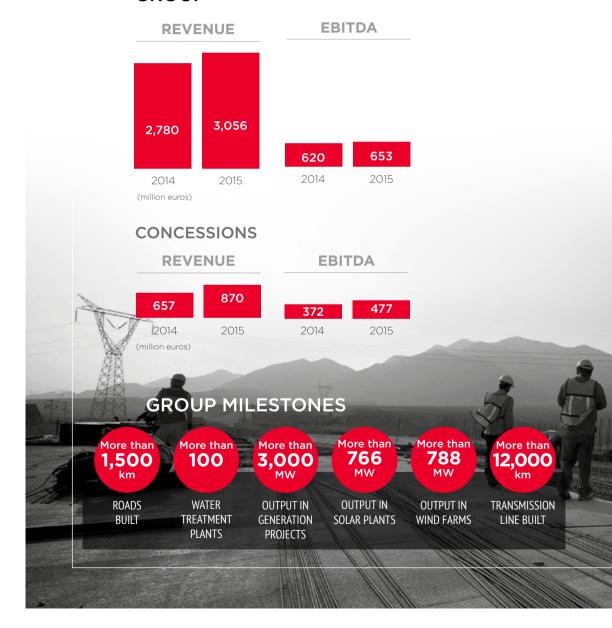
### **▶** Directors:

Serafín González Morcillo
Francisco Moure Bourio
Ángel Serrano Martínez-Estéllez
Lorenzo José Martínez Márquez
José María de Torres Zabala
Javier Gómez-Navarro Navarrete
Antonio Hernández Mancha
José Luis Ros Maorad
Jordi Casas Bedós
Jorge Mercader Miró
Francesc Bellavista Auladell

(Board of Directors as of 31 December 2015)

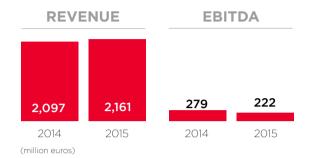
# BASIC STATISTICS 2015

# **GROUP**

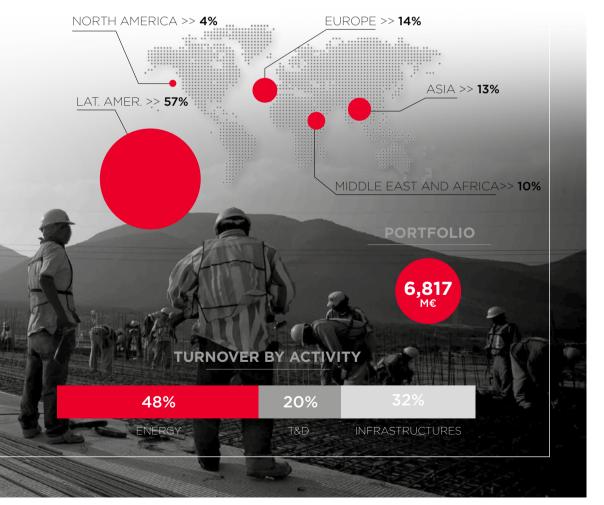




## **EPC**



## **TURNOVER PER GEOGRAPHICAL AREA**



# THE COMPANY







# Isolux Corsán, the success of international vision

The company is positioned on the transport infrastructures market in some of the most highly populated cities in the world.

Over the last year, Isolux Corsán has taken a qualitative leap in its international strategy, thereby achieving penetration in key markets for the future of the business, not only by geographical areas, as is the case of Japan, but also by activity sectors. In this sense, it is worth highlighting the success achieved on the railway electrification market in India, the contract for HVDC converters in Kenya-Ethiopia, or

the company's progress in the sector of metropolitan transport infrastructures in some of the most important cities in the world, such as Delhi, Mexico City and Buenos Aires.

The weight of international business now represents virtually 90% of the Group's total volume with growth of 65% compared to the last five years.



- The Group has penetrated Japan with the construction of a solar plant which is strategic for the country
- Two substations in Saudi Arabia reinforce activities in the Middle East





#### ASIA AND THE MIDDLE EAST

Asia and the Middle East represent 23% of the company's business with increasingly greater and more strategic presence. In 2015 the company managed to penetrate the energy market in Japan with the construction of the "Gunma" solar farm with an output of 31.2 MW, with which it opens its operational capacities to one of the most technologically advanced countries in the world.

#### Leading constructor in India

In India, Isolux Corsán has become the biggest foreign investor in the country. The company, which has undertaken activities in the country for seven years, has consolidated itself as the leading constructor in the sectors of road infrastructures and on the railway electrification market.

Over the last year, the company has started the construction of four new roads with a value of €277 M and has been awarded three electrification contracts for the construction of 563 km of lines and five substations.

#### Middle East, key to the future

In the Middle East, Isolux Corsán concluded its first contract in Saudi Arabia, one of the countries with the greatest energy capacity in the world, for the construction of two substations in the city of Al Hassa. Moreover, the company, as part of a consortium with other two companies, was the preferred bidder for the construction of the underground in Mecca, a project with a budget of €2.3 B.

Furthermore, the contract award for two substations in Kuwait reinforces and consolidates the company's presence in this country, where Isolux Corsán has been operating since 2013 when it concluded the construction contract for 172 km of high voltage lines.

In Oman, the company is executing extension and upgrading works for the BidBid Sur motorway for a total amount of €176 M.

## **AFRICA**

Isolux Corsán, as part of a consortium with Siemens, has been selected to design, construct and install high voltage direct current (HVDC) equipment between Ethiopia and Kenya with a capacity of 2.000 MW.

This project, which is characterised by its innovative and technological development, will provide a reliable connection of electric networks for both countries and will improve the use of power generation resources in the area.

On the continent of Africa, the company is continuing with its activity in Rwanda, Tanzania, Uganda and Senegal and has started works for its first contract in Gambia; the execution of a bridge for €51.7 M.

### **Expansion in Maghreb**

Algeria is, without a doubt, one of the most consolidated countries in Isolux Corsán's business in Africa, where the company is constructing the first tramway line in Mostaganem ( $\[ \in \] 253 \]$  M) and the extension of the Constantine ( $\[ \in \] 314 \]$  M) tramway line, in addition to different building projects such as the Intermodal Station in Bir Mourad Rais ( $\[ \in \] 68.9 \]$  M).

### **NORTH AMERICA**

Without a doubt, one of the country's greatest challenges is the consolidation of the business in the USA where Isolux Corsán has managed to expand to new territories, with operations already established in three States; Texas, Florida and South Dakota. In 2015, the company concluded two new contracts for the construction of a substation in Fort Worth and the first phase of the VT Hanlon substation in South Dakota, and a third maintenance contract for maintenance of the Florida Power lines in the county of Miami-Dade. Mexico has always been a natural expansion market for the Group and, nowadays, represents one of its most consolidated areas. In this country, Isolux Corsán has amassed 5,000 km of high voltage lines and 50 built substations and in 2015. was awarded two new contracts from the Comisión Federal de Electricidad (Federal Electricity Commission) with an overall budget of €156 M.

The company is currently working with various local companies on the construction of the Mexico-Toluca, suburban train, a project with a total budget of €140 in one of the most densely populated metropolitan areas in the world. It is also in Mexico where activity in the area of Renewable Energy is outstanding with the construction of the La Mesa and Ciudad Victoria wind farms as of 2015











→ The company's important role in Spanish High Speed

#### **EUROPE**

In recent years, Isolux Corsán has opened the market to Eastern Europe. Today, the company is present in Romania where it has been awarded its first motorway contract in Armenia. In this last country, Isolux Corsán handed over two of the three road sections it is constructing.

In Spain, where Isolux Corsán has its headquarters, the important role played by the company in the execution of high speed works is outstanding. Over the last year, the company has been awarded two new sections referred to as the Basque "Y".

## **SOUTH AMERICA**

With the penetration of the market in Paraguay over the last year, the company is active in practically all of the countries in South America. The sector journal TOP ENR positions Isolux Corsán amongst the first ten contractor companies in Latin America.

In 2015, Isolux Corsán was awarded the construction of the Madame Lynch viaduct in the city of Asunción in Paraguay. In Argentina, the company inaugurated the first group of the Rio Turbio thermal power plant in Patagonia, the southern-most in the world and a significant milestone in the construction of these types of power plants by virtue of their avant-garde technology and complete respect for the environment.

Last year in Bolivia, Isolux Corsán inaugurated the La Paz-Oruro road and started to construct two sections of roads, the works for which have a total budget of €97 M.

Furthermore, Isolux Corsán continues to have a solid presence in Brazil, the country in which it has managed to grow with two new contracts for transmission lines for €300 M (Lots B and H) and where it has already amassed more than 4,000 km of lines under concession. In the infrastructures area it is worth highlighting the construction of the north section of the Rodoanel (ring road Sao Paulo) with an investment of €259 M.







# **Quality engineering in large-scale infrastructures**

Isolux Corsán consolidates its civil works business with a new efficient study and management concept for projects

The infrastructures area of Isolux Corsán, which is active in 23 countries, concentrates an important part of the company's business with a turnover of €710.159 B, of which 81% corresponds to civil works.

Isolux Corsán is amongst the most important companies in the world in the development of large-scale road, railway, maritime and hydraulic infrastructures. This activity, along with residential and non-residential buildings, constitutes one of its main poles of growth.

In 2015, the company managed to successfully complete a significant number of the large-scale projects being executed in the most strategic countries on the international market. This fact, in conjunction with the development of the new business strategy focused on quality engineering and contractual management, has contributed to Isolux Corsán having efficiently overcome the crisis it suffered in the sector primarily due to the severe drop in oil prices.

#### Change of model

Isolux Corsán has established a new way of managing projects based on four pillars as shown on the diagram below. The reorganisation of its internal structure based on these four basic principles has had the desired effect and laid the foundations for its growth.

Against this new backdrop, the company is setting new objectives on the markets in the USA, Canada, Europe and the Middle East. On the old continent, it is worth mentioning the penetration of the Romanian market as a result of the award for the first project in the country.

# Pillars of the new Project Management model

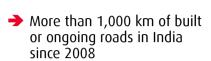
- **01. TECHNICAL** 
  - Quality engineering
  - Technical services
- 02. ECONOMIC
  - Optimization service:
- **03.** CONTRACTUAL

**04.** CLIENT

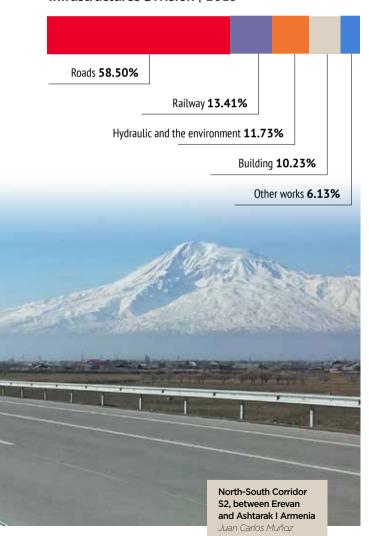


Works for a hydroelectric power plant between Quime and Choquetanga I Bolivia

The company is penetrating Paraguay and Romania and thereby extending its activity to 23 countries



# Distribution of activity in the Infrastructures Division | 2015



#### **ROADS**

#### Leading constructor in India

In India, Isolux Corsán is consolidating itself as one of the leading constructors in the country with more than 1,000 km of built or ongoing roads since 2008. In 2015, the company started to construct four new contracts for €277 M. This relates to the construction of four road sections; the most important one in the region of Odisha, between the cities of Talcher and chandikole with 132 km. Another two sections are located in the state of Assam, a region sharing its border with Butan and Anglades. These two sections, which are located on the NH-37. will connect the cities of Jorhat and Jhanji with a distance of a little more than 35 km and the cities of Jhanji and Demow, totalling almost 90 km of road. Finally, the section located on the NH-15, to the north-west of the country will connect the cities of Phalodi and Jaisalmer.

#### Middle East, strategic region

With one of the most significant economic growths in the world, the Middle East is a strategic region for Isolux Corsán. In this region, and in particular in Oman, the company is executing the extension and upgrading of the BidBid Sur motorway in conjunction with its local partner. The complete project, developed by the Ministry for Transport and Communications, encompasses the upgrading of 56 km of road for the amount of €1.76 M.

#### **Expansion in Eastern Europe**

Isolux Corsán opens new doors in Eastern Europe with the award of its first project, the construction of a motorway with a length of 60 km in Romania for €195 M. With a completion period of two years, the company is working as part of a consortium with

two local companies for the public entity Compania National de Autosrai Si Drumuri Nationala, belonging to the Government of Romania. This new motorway will become one of the main axes of communication between Romania and Hungary. The company has inaugurated two of the three road sections being built by Isolux Corsán in Armenia.



Works on the I-69 | United States

#### **United States**

With regard to the USA, the company is continuing with the construction of the I-69 highway, a key project with which Isolux Corsán has entered American territory. During late 2015, the project had already progressed by 35%.

Amongst Latin America's top ten South America has always constituted a natural growth market for Isolux Corsán, which has marked its international expansion path from the outset. At the moment, the company is amongst the top 10 international contractor companies in Latin America, specifically ninth position, according to ENR.

The company is continuing with its activity in Argentina with an important works portfolio and has strengthened its presence in countries such as Bolivia and Paraguay. In the former, Isolux Corsán inaugurated the La Paz-Oruro road which was endorsed by the presence of the President of Bolivia, Evo Morales, during the inauguration.

This event marked the culmination of the first Isolux Corsán project in this country on which the company has been working for the last two years. At the same time, the construction of two road sections has begun between the towns of San Buenaventura, Tumupasa and Ixiamas for €97 M. In Paraguay, Isolux Corsán was awarded the construction of the Madame Lynch viaduct for €23 M, with a completion period of one year. This is a key location on the road network of the city of

# Ongoing road projects | 2015

In million euros

PROJECT	BUDGET	COUNTRY
Mario Covas Ring Road	259	Brazil
San Buenaventura - Ixiamas Road. Lots 1 and 2	96.9	Bolivia
R2 Zvolen - Pstrusa Motorway	98.8	Slovakia
A-21 Sigües Motorway	46.1	Spain
I-69 Section 5	227.4	United States
Trans-Gambia Bridge	51.7	Gambia
NH-37	113.9	India
NH-200	108.8	India
NH-15	54.2	India
BidBid-Sur Motorway Section 2	175.8	Oman
Grade separations in the intersection of Avda. Madame Lynch and Avda. Aviadores del Chaco	22.9	Paraguay
Brasov-Oradea Motorway, Section 3C	194.8	Romania



Asunción, the geographical location of which determines the constant affluence of incoming and outgoing traffic to and from the city.

In Brazil, Isolux Corsán is executing the construction work for the north section of the Mario Covas Ring Road. The only bypass around the city of Sao Paulo, with a length of 6.42 km and an investment of €259 M.

#### **Expansion in Africa**

The company has started the works for its first contract in Gambia for the execution of a bridge for €51.7 M, which represents the opening of another market in Africa for Isolux Corsán.

Additionally in Senegal in the Ziguinchor-Tanaff project, lot 2 has been handed over and the Kolda bridge, continued with the work corresponding to lot 1.



Virtual recreation of the Aviadores grade separations - Madame Lynch I **Paraguay** 



#### **RAILWAY INFRASTRUCTURES**

## Penetration in the Middle East: Preferred bidder for the Mecca underground

The Middle East is one of the Group's strategic areas. Amongst the most outstanding milestones of 2015 is the selection of Isolux Corsán as part of a consortium with the Turkish company Kolin/Inşaat Turizm Sanayi ve Ticaret A.Ş. and the Arab company Haif Company, for the construction of lines B and C of the Mecca underground. The project has a budget of more than €2.300 B which would be comprised of the construction of almost 25 km between lines B and C and nine stations, including the installation of two large exchangers.

#### Maghreb

Algeria continues to be a key country where the Group is building the first Mostaganem tramway with an investment of €253 M and the extension of the Constantine tramway line for €314 M. Both projects are continuing with the successful development of railway infrastructures that began years ago with the Oran tramway which has been fully completed.

#### Mexico

The company is continuing to grow in Mexico with the award in 2015 of the supply, installation and commissioning of the rolling stock on the suburban Mexico-Toluca line. The project includes railway and communications systems, a control centre, electromechanical systems for the tunnel and viaduct, track, energy systems, traction substations and technical

buildings. The project consists of the execution of all the required superstructure along the 57.74 km route where a double track slab with UIC-6 rail, two traction substations with 65 MVA transformers, provide the required energy to the trains via the 1x25 KV, 16 pantograph and substations for lighting and power. The safety system and telecommunications will be installed, as well as the construction of a control centre and ticket sales office. The contract is rounded off with the supply of 30 compositions of rolling stock for operating the new line.

High speed in Spain

In Spain, Isolux Corsán has been awarded the construction of the Mondragón-Bergara section, Angiozar sector along the "Vitoria-Bilbao-San Sebastián" high speed line. This contract, which has

an allocated budget of €79 M and a completion period of three and a half years, includes the construction of four tunnels with a length of almost two kilometres. Moreover, the company is building the Arantostei viaduct and a false tunnel with a length of 200 m to complete a total platform length of 2.63 km with 4 tracks.

2015 also saw the award of the Elorrio-Bergara section on the Vitoria-Bilbao-San Sebastián high speed line for the amount of €44 M. The section has a length of 2.6 km; the parts worth mentioning are the Kortazar viaduct, 568 m long and with variable width between 14 and 16 m, and the tunnels of North and South Kortazar with lengths of 1749 and 1750 m respectively and a free cross section of 52 m².



Works for the Mostaganem tramway I **Argelia** 



# Ongoing railway projects | 2015

In million euros

PROJECT	BUDGET	COUNTRY
Constantine Tramway, Sections 1 and 2	314	Algeria
Cuatro Ríos de Cuenca Tamway	53.4	Ecuador
Bosque "Y" High Speed Line Section Mondragón- Bergara. Angiozar Sector	78.7	Spain
Bosque "Y" High Speed Lne Elorrio - Bergara -section	44.3	Spain
Suburban Train Mexico - Toluca	140	Mexico



# LARGE-SCALE HYDRAULIC INFRASTRUCTURES

In hydraulic civil works, the company is continuing with the construction of the Miguillas hydroelectric power plant in Bolivia with a value of €302 M. The project includes the construction of two hydroelectric substations, which will have a generation capacity of more than 200 MW. The first of these will be the power station in Umapalca, which will offer an output of 85 MW and an estimated annual production of 416 GWh. The second is the power station in Palilllada, which will offer an output of 120 MW and an estimated annual production of 598 GWh.

The project includes the construction of 24 km of tunnels which will enable carrying the required flows for the operation of the power plant, as well as the construction of dams in lagoons, and reservoirs with hourly regulation or 120 km of access roads to the facilities.

The project, which is being executed as an EPC turnkey project, was awarded by the Empresa Nacional de Electricidad (ENDE National Electricity Company) and has a completion period of four and a half years and will enable supplying the industries and households in the area.

Another relevant infrastructure that the company has started, with the drafting of the construction project, is the Almudévar reservoir in Spain. With a storage capacity of 170 hm3, it constitutes a key part of the lateral regulation of the Cinca and Gállego rivers. The regulated volumes will enable increasing the guaranteed supply for the Alto Aragón irrigation systems.

The construction of the reservoir includes the execution of two large dykes with a crown length of 5925 km, both characterised by loose materials, homogeneous with slightly sloping chimney drain and foot drain.

The West dyke with a length of 2.4 km and 8 m of crown width, has a maximum height above the foundations of 46.53 m and a total soil volume (graded aggregate, filters, drains, breakwater and gravel) of 4.65 million m3.

The East dyke with a length of 3525 km and 8 m of crown width has a maximum height above the foundations of 31.46 m and a total soil volume (graded aggregate, filters, drains, breakwater and gravel) of 2.82 million m3.

In both cases, the protection of the upstream shoulder from the waves is executed using a positioned breakwater under which there is transition material between the breakwater and the graded aggregate.

A pumping station is also executed in the West Dyke which will enable transferring the flows circulating along the Monegros Canal to the reservoir.

# Ongoing large-scale hydraulic infrastructures projects | 2015

In million euros

PROJECT	BUDGET	COUNTRY
Hydroelectric Project Miguillas	301.7	Bolivia
Almudévar Reservoir	109.6	Spain

## ■ INFRASTRUCTURES | **BUILDING**



Dr. Cecilia Grierson Legal Technical Institute - Argentina

# **Experience in building unique buildings**

The company's activity is directed at public, non-residential building work

The projects in the Building division, specialising in the construction of residential and non-residential buildings, represent 11% of total infrastructures operations. The geography of execution of Building projects is concentrated in Algeria, Argentina and Spain, areas where the Group's presence is highly consolidated. This considerable implantation, along with a focus on public, non-residential buildings, enables avoiding the sector risks.

In Algeria, work is continuing on the Bir Mourad Rais Intermodal Station and on the Ministry for Religious Affairs. The Intermodal Station, with a surface area of 66,000 m², will undertake exchanger functions for public transport, taxi, underground, bus and tram systems. The Ministry for Religious Affairs with a built surface area of 36,500 m², has already reached an advanced phase of its structure.

Moreover, two renovation projects have begun for 40 buildings in the historical centre of Al-

giers. These buildings date back to the early 20th century and work will begin on the façade and communal areas

The construction of the Dr. Cecilia Grierson Legal Technical Institute for the Supreme Court of Justice of the Nation and the Federal Prison Complex of Agote for the Ministry of Justice are two building contract awards in Argentina. The Dr. Cecilia Grierson Institute will be a building intended for forensic research with a built surface area of 22,000 m² distributed over eight floors. The contract for Agote Prison, in the province of Buenos Aires, consists of the development of the structural and execution project of a prison with a built surface area of 55.688 m².

Likewise, the work for the Maternity-Children's Hospital in La Matanza and the Bicentenary Hospital, with a total built surface area of 42,400 m², have reached an advanced state of execution. In Spain, work continues on the Campus of Justice in Cordoba, which is considerably advanced

→ Building represents 11% of the operations in the area



Key
 ongoing
 projects
 in Algeria,
 Argentina
 and Spain

with the façade virtually completed with geometric shapes and gaps lending it a plant-like appearance. The building will accommodate all of Cordoba's single-judge entities, as well as the Provincial Court, the Prosecutor's Offices and the Legal Medicine Institute.

Furthermore, the company has almost completed the projects for the University Hospital Complex of La Coruña, the Iberdrola Campus in San Agustín de Guadalix and the renovation for the FormerRoyal Tobacco Factory in La Coruña. This emblematic building, built in 1790 to accommodate the Maritime Postal Service for the Colonies, is declared as a Site of Cultural Interest. After the renovation, it will be used to accommodate the headquarters of the Provincial Court, the Minors' Court, the Court of Prison Supervision and the Prosecutor's Offices.

Some of the main contract awards in the last year in Spain were those for the Industrial Building for Xerophytic Species in San Sebastián de los Reyes, the refurbishment of the Castilian Building 112 for the State Agency for Aviation Safety and the execution of the New Courts of Segovia.

The complex for research on xerophytic species planned for Desert City, aims to be the leading centre in Spain for research on these species. It will consist of a large greenhouse covering 2,000 m2 and two annex buildings. The greenhouse will be covered by inflated ETFE cushion, material providing excellent insulation which, thanks to its optical properties, lets in almost 100% of sunlight. Another unique feature of the project is that the building of the greenhouse will be done on existing plantations, some of which are more than 85 years old and 4,500 kg.

Virtual recreation of the Cordoba City of Justice - Spain



# **Ongoing building projects** | 2015

In million euros

PROJECT	BUDGET	COUNTRY
Travellers' Transport Station in Bir Mourad Rais, Wilaya D Alger	68.9	Algeria
Agote Federal Prison Complex Phase I	109.3	Argentina
Dr. Cecilia Grierson Legal Technical Institute	65.5	Argentina
Cordoba City of Justice	56.8	Spain
University Hospital Complex of La Coruña	29.0	Spain
Iberdrola Complex. San Agustín de Guadalix	19.7	Spain
Renovation of the former Royal Tobacco Factory A Coruña	14.2	Spain
Courts of Segovia	11.9	Spain

# ■ INFRASTRUCTURES | ENVIRONMENT

# More than 100 water treatment plants in nine countries



In Vigo Isolux Corsán is building the largest biofiltration water treatment plant in Spain and one of the largest in Europe

The Environment activity is one of the most consolidated areas in Isolux Corsán. The continued execution of projects as from the 1960s up to today has created a highly qualified Environment Division, with in-house engineering able to boast both national and international prestige. In the area of water treatment, the construction of 116 facilities built in nine countries is proof of this experience and enable looking to the future with optimism.

In the water sector the company executes water treatment projects including, drinking water, desalinated water and water treatment, as well as pumping stations. During 2015, in Spain the Tomelloso WWTP in Ciudad Real with tertiary treatment and co-generation and the Torres de la Alameda WWTP in Madrid, based on activated sludge with anaerobic sludge digestion. Its treatment capacities are 24,000 m³/day and 26,000 m³/day, respectively.

In Algeria, the El Bayadh WWTP has started operations with a capacity of 20,000 m<sup>3</sup>/day which will provide service for 123,000 inhabitants. This treatment plant is based on low load activated sludge with prolonged aeration.

The company has started the operation of the El Bayadh treatment plant in Algeria

# Ongoing environment projects | 2015

In million euros

PROJECT	BUDGET	COUNTRY
Mahouane WWTP	26.1	Algeria
Ourkiss WWTP	23.2	Algeria
Mohammadia WWTP	14.4	Algeria
Lagares WWTP	136.7	Spain
Tomelloso WWTP	24.6	Spain
WWTP, intake manifolds, pumping and underwater outfall Nerja	22.7	Spain
Torres de Alameda WWTP	14.9	Spain



In 2015, Isolux Corsán consolidated its outstanding position in the Maghreb area with the contracting of drinking water works with a large treatment capacity such as the DWTP in Ourkiss and the Mahouane DWTP in Algeria, with treatment capacities of 1900 l/sec and 1600 l/sec.

Likewise, the development of the detailed engineering has been carried out, as well as the setting up of the Biofiltration processes and the sludge stabilisation processes in the Nerja WWTP and the Lagares WWTP in Vigo. The latter is the largest biofiltration treatment plant in Spain and one of the largest in Europe and its construction is planned for early 2016. Also based on biofiltration, the Nerja WWTP is in the final construction phase.

Currently, the Environment activity is undergoing a consolidation process of international activity opting for the award of large volume works taking advantage of the company's presence in other activities. Water as a resource is one of the constraints in the development of villages. The consolidation of Isolux Corsán in other activities on limiting factors for development, such as the electricity supply and communication channels, make this Environment activity strategic for our company in the forthcoming years.

The short-term objectives are subject to constant and sustained growth during the forthcoming years on the international market, as well as taking advantage of the investments that will be made on the national market as of 2018 as a result of the implementation of the Plan Crece (Grow Plan) by the Spanish authorities.



The area is reinforcing its international portfolio and consolidating its presence in Maghreb

# **ACTIVITY AREAS**

# **INFRASTRUCTURES**

# **KEY PROJECT**

CIVIL WORKS

#### THE AREA IN FIGURES





#### INDIA

- Signing of 4 contracts
- 1 section of 130 km in the region of Odisha
- 2 sections of 35 km and 55 km in the region of Assam
- 1 section of 160 km, located to the north-east of the country in the region of Rajasthan

#### ISOLUX CORSÁN IN THE WORLD RANKING ENR 2014

119 **Motorway Sector**  Contracting of Transport



#### USA

■ Motorway covering 21 miles from Bloomington to the south of Martinsville

- Roads Railway
- Maritime Infrastuctures
- Airports
- Hydraulic Works

- Residential
- Non-residential

# 140

#### **MEXICO**

- Train Mexico-Touluca
- 58 km double track slab

- WWTP
- DWTP
- Desalination Plants

#### **ALGERIA**

- First tram line in Constantine
- Length of 13 km
- 14 stations
- Sections: 1 section from Zouaghi, Mohamed Boudiaf Airport with a length of 2.8 km and 4 stations
- The second section, Zouaghi-Ali Medjeli, with a length of 10,3 km and 10 stations. It includes a card park





## HYDRAULIC CIVIL WORKS



#### BOLIVIA

- Miguillas hydroelectric power plant
- Location: Inquisivi
- Generation capacity: 200 MW
- Installation: Two associated hydraulic systems: Umapalca and Palillada
- Construction: 6 tunnels, 1 dam, hourly regulation reservoirs and 180 km of access roads
- Client: Empresa Nacional de Electricidad (ENDE)
- Completion period: 4 years



#### **SPAIN**

- Granada University of Medicine
- Developer: Junta de Andalucía (Regional Government of Andalusia)
- Location: University Campus of Health Sciences, Zaidín
- Built surface: 42,680 m²
- The three towers reach a height of 53 metres above ground level

### **ENVIRONMENT**



## ALGERIA

- El Bayadh Treatment Plant
- Developer: National Office for Sanitation - Ministry for Water Resources
- Population served 123,000 people
- Daily volume: 9,697.44 m³/day



#### **ALGERIA**

**BUILDING** 

New headquarters for the Ministry for Religious Affairs

- Facility: 5 blocks with four and five stories joined to each other
- Built surface: 35,500 m²

# New Bir Mourad Rais international station

- Surface area: 54,942 m²
- Includes taxi, underground, bus and tram services
- It will benefit 6 million people



#### SPAIN

- Vigo WWTP; extension and modernisation
- The largest in Spain
- Initial capacity: 147,000 m<sup>3</sup>
- This will benefit 800,000 inhabitants
- This will cover 36% of total consumption
- The planned completion period: almost 3 and a half years



# R2 ZVOLEN-PSTRUSA MOTORWAY | SLOVAKIA

# **Technical information**

Budget:	98.8 million euros
Length:	8 km
Completion:	November 2016
Developer:	Národnádial'ničnáspoločnost', a. s.
	(National Company for Motorways)







# Strategic connection in Slovakia

Isolux Corsán is successfully constructing the motorway section belonging to the R2 road which connects the two main cities in the country, Bratislava and Kosice. The project has a budget of €98.8 M and has the objective of constructing a road covering 7.85 km which is divided into two carriageways with two lanes and each with interior and exterior hard shoulders. Moreover, the project includes two main structures: two viaducts executed in-situ. The longest has a length of 460 m and is found on the Zlatina River, the second is 202 m.

The project design has been devised to have as little environmental impact as possible, as well as visual and noise pollution, for the immediate surroundings. To this end, embankments have been built with reinforced, replanted slopes on those with a height exceeding 2 m. Concrete and methacrylate screens are used to reduce noise pollution, as well as a complex drainage system and oil separators to prevent water pollution.



- Amongst the main structures in the motorway construction are two viaducts
- The motorway will form part of the communication between Bratislava and Kosice, the two main cities in Slovakia

## **■ UNIQUE PROJECTS**

# CORDOBA CITY OF JUSTICIE | SPAIN

### **Technical information**

Budget:	56 million euros
Built surface:	50,893 m <sup>2</sup>
Completion:	April 2017
Developer:	Junta de Andalucía (Regional Government of Andalusia)



- The new court will include over 26 courtrooms and a forensic and public services institute
- → The building consists of a ground floor and four stories in addition to a basement and semi-basement









# An integrative space

The new Cordoba City of Justice will be revealed in two years' time. Isolux Corsán has been building the new city courts since late 2014. During 2015, the company has continued with the construction work for the new building which consists of a ground floor and is four stories above ground level, in addition to a basement and a semi-basement. The total built surface amounts to more than 50.000 m2.

The new building is located in a residential area on the outskirts of Cordoba. The integrative features of the building, located in a residential neighbourhood with public areas, are in addition to an eye-catching design which is reminiscent of Cordoba's history with an Arabic flair. The new court will include over 26 courtrooms and a forensic and public services institute. This is a building with an almost rectangular ground plan, independent and unique, where the ground floor covers just over 75% of the plot. The façade is lined on the exterior with GRC material (micro-concrete reinforced with glass fibre) with geometrical shapes and gaps which give it a plant-like appearance. The interior distribution will be executed using dry, self-supporting partitioning which will help to create independent spaces.



#### UNIQUE PROJECTS

## TREATMENT PLANT IN TOMELLOSO | SPAIN

#### **Technical information**

Budget:	24.6 million euros
Average flow:	24,000 m³/día
Population served:	141,000 inhabitants
Completion:	In service
Developer:	Hidroguadiana

# Service for more than 140,000 people

Isolux Corsán has completed the construction of the wastewater treatment plant which will provide service for the La Mancha towns of Aragamasilla de Alba and Tomelloso in Ciudad Real. The company is also responsible for the extension of the existing intake manifold up to the WWTP.

The work consists of the construction of the treatment plant, with an average flow rate of 24,000 m3/day, and the execution of a network of intake manifolds with a length of almost 2,500 m up to the WWTP. With this new treatment plant 141,000 inhabitants will benefit from improved services.

Furthermore, the WWTP contains a complete utilisation line for the biogas produced during the digestion using co-generation and a complete extraction, and an accumulation and burning system for the excess biogas by torch. The facility also has a complete deodorisation system which enables eliminating the possible impact on the population.







→ The WWTP contains a biogas utilisation line and a deodorisation system



→ The construction of the treatment plant will provide service to Argamasilla de Alba and Tomelloso in Ciudad Real









## Energy from the most southern area of the world

The thermal power plant of Río Turbio in La Patagonia constitutes a milestone of the global construction due to its leading technology and respect for the environment

In spite of the fall of the oil price, which has involved a slowdown of investment in the energy sector throughout the world, Isolux Corsán has managed to meet its objectives in terms of production and final results, thanks to its strong portfolio and to the boost given to the industrial activity. With a turnover of €1bn, the Energy area represents 48% of the Group's incomes, where the activity of Generation has the highest business turnover.

Isolux Corsán exceeds 3,000 MW of power installed in all the projects executed by the company.

#### South America, a strategic area

In 2015, Isolux Corsán synchronized the first group of Río Turbio thermal plant, which is the most southern in the world, located in La Patagonia, event that counted on the participation of Argentina's former president, Cristina Fernández de Kirchner. Río Turbio is a very outstanding milestone in the global construction of this kind of power generation plants for its leading technology and for having succeeded to overcome the area's unfavorable meteorological conditions.

The power plant, which is designed with advanced fluidized bed combustion technology for coal (FBC), guarantees low emission levels of pollutants and the area's natural balance. Moreover, it will have a 240 MV electricity generation capacity. The energy source of the power plant will be exclusively the coal produced in the mine of Río Turbio, the only existing coal deposit in Argentina, which represents a boost of the country's energy development and economic development.







Power plant of Kulhna | Bangladesh

The Brigadier López power plant will provide 6% of Argentina's thermal generation





Isolux Corsán's generation division has a strategic point in Bangladesh for its commercial policy in Asia. The company has three projects in the country that are part of the Energy Development Plan of Bangladesh and has as a main objective the achievement of the country's total electrification by the year 2020.

The open cycle power plant in Khulna is already in operation and supplies five million inhabitants. On the other hand, the combined cycle power plant of Siddhirganj, which is under construction, will generate an output of 340 MW. The awarded combined cycle power station from Bibiyana has been the last company's award, with a budget of €213 M. This work will be funded with GPDB's own funds, belonging to the Ministry of Energy and Mining of Bangladesh, and it will have a completion period of three years. This is a joint venture between Isolux Engineering and Samsung C&T Corporation.

#### **North America**

Isolux Corsán also accumulates a great experience in this kind of projects in other countries of North America, such as Mexico. The Group is executing, as planned, the rehabilitation of the thermoelectric power plant of Altamira in the Aztec country. The rehabilitation and modernization of the central's units 1 and 2 have a budget of \$380 M. This project is creating more than 2,000 direct and indirect employment opportunities and it will increase the service life of the already existing steam units for 30 more years.



## Opening up to the market of non-conventional deposits

The Neuquén's new office and the strong activity in EPC give a boost to TECNA's activity in Argentina

Isolux Corsán operates the Oil & Gas market through its subsidiary TECNA. With more than 40 years of experience in the gas, oil and nuclear energy market, TECNA is a company specialized in EPC projects, with presence in Latin America, Europe, Africa and the Middle East. The company works with the aim of positioning itself in the non-conventional deposits market, for which the Neuquén's office opening in 2015 was key.

The most important TECNA's activity takes place in Argentina, where it works for the country's leading operators: YPF and PAE (Pan American Energy). In 2015, the company completed the Cañadón Alfa Plant, the Cerro Dragón for PAE and the first engineering stage of the Luján de Cuyo refinery in La Plata, a project executed through a partnership with AESA in this case for YPF.

TECNA is present in the main YPF projects, among which outstands Vaca Muerta, the main deposit of shale and nowadays the second deposit in volume production of Argentina, and Mangrullo. The latter project will consist of separating, compressing and dehydrating two million cubic meters of natural gas per day, with the possibility of doubling its capacity in the future.

The effort made by TECNA in Mangrullo was worth achieving a new contract. This contract is the Revamp USP 1 El Orejano project, in which a natural gas separation battery from the deposit El Orejano, on the border of Uruguay, will be adapted and enlarged in EPC regimen. Finally, for the oil company YPF, the new Neuquén office gave support and consultancy assistance to the development of the basic engineering in Loma Campana.







View of the Cañadón Alfa plant I **Argentina** 

→ TECNA works with the leading operators of the southern country: YPF and PAE

Regarding the projects made for PAE, the successful completion of Cerro Dragón has led to a new award: a second contract extension for the installation of a plant for CO<sub>2</sub> removal. Likewise, progress has been made in the gas processing Lindero plant with a capacity of three million cubic meters of natural gas per day.

#### International expansion

The company also undertakes its activity in other countries of Latin America. In Bolivia, TECNA continues with the Campo Icauhasi's execution for TOTAL company. This is the most important project in the Bolivian country, which has already completed the management phase of purchasing materials, assembly and construction service. Likewise, work is on-going at Gran Cacho YPFB power plant and at La Vertiente Villa Montes.

managed to obtain the award of the "turnkey project" of petrol with ethanol for PEMEX.

TECNA's activity reaches the Middle East. The company completed successfully its participation in the construction of a tank farm in Saudi Arabia with its local partner Nesma. In Oman, the company was awarded the consultancy services in a project for a new power plant in Salalah for the national gas company Oman Gas Company (OGC). TECNA's immersion in the North of Africa has been completed through Algeria. It is the first turnkey project of this country in Bergiña's deposit for TOTAL and Repsol operators.

Regarding the nuclear energy, TECNA continued work in the Argentinean nuclear plant for Núcleo Eléctrica Argentina. Furthermore, the company has worked on the engineering of the Service Life Extension Project of the Reservoir Nuclear Plant

On the other hand, 2015 has been the year of TEC-NA's commercial relaunch in Mexico, where it has the Reservoir Nuclear Plant.

The projects in Algeria introduced the company to the North of Africa

The Group has successfully completed a tank farm construction in Saudi Arabia

## Isolux Corsán lands in the country of the Rising Sun

The company obtains its first work in Japan in which it will have to overcome the complicated mountainous terrain

In 2015, the Group has consolidated its Renewable Energy business by its entry in new markets, such as Japan, Honduras, Mexico, USA and Chile, with key projects commissioning and the wind power business strengthening. Its commitment to sustainability, energy efficiency and the environment, leads Isolux Corsán to continue betting for the development of this kind of energy, accumulating already a total of 766 MW of installed power and construction of solar farms.

Isolux Corsán, which is placed among the first global companies in construction of photovoltaic solar power plants, succeeded in making a qualitative leap in this area by energizing the first line of the substation of the solar farm "Gunma" in Japan. The entry in the Japanese country with this project is a challenge for the company due to the opening of new business relationships in the area.

The facility, the construction of which should overcome the complicated mountainous terrain, is located in the city of Takayama and it has a power of 31.2 MW. It will cover an area of 80 ha belonging to an old golf course. The solar farm will be connected to the national network of TEP-CO electric company and its commercial start-up is planned by the end of 2016.



- The company consolidates this area in Latin America, with Chile, Honduras and Mexico as key countries
- Isolux Corsán accumulates a total of 766 MW of installed power and in construction of solar plants







In 2015, Isolux Corsán started the construction of two wind farms in Tamaulipas | Mexico

#### Consolidation in Latin America

Latin America is, without any doubt, a strategic geographic area for the division of Renewable Energy of Isolux Corsán, where the company develops different projects that demonstrate the strength it is acquiring in the area. The commissioning of the "Aura II" solar plant in Honduras has been the company's milestone in the region. The solar power plant of 61.48 MWp will generate 109,000,000 kWh per year, which is equivalent to supplying clean energy to more than 80,000 households. The power plant commissioning will avoid the emission in the atmosphere of 40,000 tonnes of  $\mathrm{CO}_2$  per year.

#### Wind energy with Aztec character

In 2015, Isolux Corsán started the construction of two wind farms that are located in the regions of La Mesa and Ciudad Victoria, in the Tamaulipas State (Mexico), which are planned to be completed before the end of 2016. Each project will have a power of 49.5 MW and is built following the "turnkey" model, including the supply and assembly of 15 wind turbines in each farm, constituting a strengthening of the renewable area in Latin America. The company already accumulates a total of 766 MW of installed power and in construction of wind farms.



- The solar plant "Aura II" will avoid the emission in the atmosphere of 40,000 tonnes of CO<sub>2</sub> per year
- Isolux Corsán is positioning itself among the first global companies in construction of photovoltaic solar power plants

## ACTIVITY AREAS ENERGY

#### THE AREA IN FIGURES



# Main markets United States Asia Latin America Africa

## Energy Activities ■ Generation ■ Oil & Gas ■ Renewable Energy

#### **KEY PROJECTS**

#### GENERATION AND INDUSTRY

## 01 THERMOELECTRIC POWER PLANT'S MODERNISATION IN ALTAMIRA



- Employment positions: 2,000 direct and indirect employments during the works
- Objective: to increase the service life of the current steam units for a period of 30 years
- Budget: \$380 M
- State: Tamaulipas

## 02 BIBIYANA COMBINED CYCLE PLANT Bangladesh



- Completion period: 3 years
- Strategic area: It is the third project in the region
- Budget: €213 M

### PELLETS POWER PLANT IN NORTH CAROLINA



- Annual production: 465,000 tonnes of wood pellets
- Facility: 2 tanks of 40,000 metric tonnes
- Budget: \$126 M

#### A RÍO TURBIO THERMAL POWER PLANT

#### Argentina



- Coal fluidized bed power plant
- Power: 240 MW
- Budget: \$650 M



#### RENEWABLE ENERGY

#### 05

#### GUNMA PHOTOVOLTAIC FARM

#### lapan



- Prefecture: GUNMA
- Power: 31.2 MW
- Capacity: to supply 42,000 households with clean energy
- Budget: €60 M

#### 06

#### BOSHOF PHOTOVOLTAIC FARM

#### South Africa



- District: Lejweleptswa
- Power: 66 MW
- Capacity: to supply 80,000 households with clean energy
- Budget: €30 M

#### 07

#### AURA II PHOTOVOLTAIC FARM

#### Honduras



- Municipality: Choluteca
- Power: 62MW
- Capacity: to supply 80,0000 households with clean energy
- with clean energ
- Budget: €72 M

#### 08

#### ASTRA WIND FARM

#### USA



- County: Randall
- Power: 156.4 MW
- Facility: equipped with a GE turbine of 2.3MW-107 and assembly of 68 wind-power generators
- Budget: \$54 M



#### 2 WIND FARMS

#### Mexico



- Regions: La Mesa and Ciudad Victoria
- Power of each farm: 49.5 MW
- Facilities equipped with turbines
- Joint budget: \$166 M
- State: Tamaulipas

#### OII & GAS

#### 10

#### TREATEMENT OF ACIDIC GAS AND SULPHUR RECOVERY UNIT - FRU

#### Brazil



- Client: Petrobras
- Capacity: gas flux: 635 m³/d
- Completion period: 2 years and 9 months
- Facility: 7 new different treatment unities of sulphur and 2 new substations
- Budget: \$40.6 M
- Location: Río de Janeiro

#### 11

#### GAS TREATMENT PLANT- INCAHUASI

#### Bolivia



- Client: Total
- Capacity: Gas: 6.9 MMSCMD
- Completion period: 2 years
- Budget: \$270 M
- Location: Campo Incahuasi

#### 12

#### MODERNISATION OF CERRO DRAGÓN GAS POWER PLANT

#### Argentina



- Client: Pan American Energy
- Capacity: Gas flux: 635 m³/d
- Completion period: 2 years and 9 months
- Budget: \$58 M
- Location: Chubut



#### **■ UNIQUE PROJECTS**

#### **GUNMA SOLAR FARM | JAPAN**

#### **Technical specifications**

Budget:	60 million euros
Power:	31.2 MW
No. of panels:	100,800
Surface:	80 ha
Operational start-up:	October 2016



- → The solar plant has a 31.2 MW power and a budget of €60 M
- → This project represents a challenge for the company since it will have to face the mountainous terrain







The Gunma solar energy plant, located in the city of Takayama, will have a power of 31.2 MW. The project, which has a €60 M budget, will be undertaken under the "turnkey" method by the Japanese branch of Isolux Engineering: Isolux Engineering G.K.



The photovoltaic farm will cover a surface of 80 ha, belonging to an old golf course. This project represents a challenge for Isolux Corsán since it will have to face the complicated mountainous terrain.



The power plant will be connected to the national network through the electric company TEPCO. The operational start-up date has been set for October 2016.









## Isolux Corsán reinforces its leadership in T&D

The Group conquers the African continent with the contract award of the HVDC converter stations project in Kenya and Ethiopia

Isolux Corsán is a leader in the T&D contracting market worldwide. In 2015, the Group has strengthened its portfolio with the contract award of relevant projects in Africa, Latin America and the Middle East and it has consolidated its business in key countries of the global economy.

The construction of HVDC converter stations between Kenya and Ethiopia is one of the flagship projects this year, both for its technological and innovative character, and for the area where it is executed. Furthermore, it is worth highlighting the quick expansion of the Group in the Middle East and Asia, with the first contract award in Saudi Arabia; as well as the construction of two substations and transmission lines in Kuwait and the first railway project award in India. Another focus of the company's growth has been the USA, with three new contracts.

#### Technology and innovation in Africa

Isolux Corsán-Siemens consortium has been selected to design, develop and install high-voltage direct current (HVDC) equipments between Ethiopia and Kenya. The project will provide a reliable connection for the electrical networks from both countries and will improve the use of generation resources in the area.

The HVDC +/- 500 kV bipolar system will have a capacity of 2,000 MW and will link two converter stations in Suswa (Kenya) and Sodo (Ethiopia) with a 1,000 kilometers-long DC power line.

Isolux Corsán will be in charge of the construction, installation and equipment of the converter station and for the whole EPC at the associated alternating current substations.

Moreover, Isolux Corsán is constructing for the company Ketraco, which reports to the Kenyan Ministry of Energy, the greatest transmission and distribution line of energy in the country, which will be 428 km long and will have a 400 kV voltage. This EPC contract, amounting up to €142 M, will enable the evacuation of the energy produced by the greatest wind farm of the African continent (300 MW), which will be implemented near the Lake Turkana.

The new high-voltage line will link the town of Loyangalani, close to the Lake, to the town of Suswa, on the outskirts of the capital, Nairobi. The company is also consolidating its business in Rwanda, Tanzania and Uganda, for a total of €86 M.

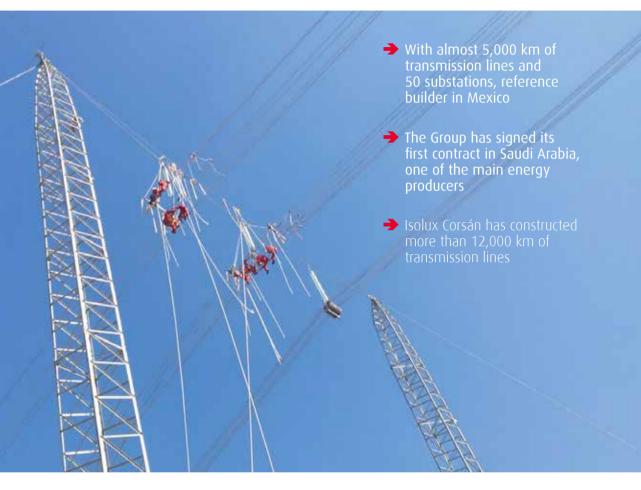
#### Strategic presence in the Persian Gulf and Asia

Isolux Corsán's expansion is gaining ground in the Middle East. The company has been awarded the first contract in Saudi Arabia, one of the countries with the highest energy production capacity in the world. The project, with a total budget of \$40 M, involves the construction of two 115 kV substations in the city of Al Hassa. This work, awarded by National Grid, also involves the modification of the existing substation. With this significant award, the company strengthens its presence in a strategic region such as the Persian Gulf, which has a great potential in the field of energy infrastructures.

Another important milestone of the Group is the award of two substations worth over €19 M in Kuwait. Apart from these facilities, which are expected to be completed in 2018, Isolux Corsán has executed 172 km of 300 kV double circuit structures.

Installation of Jauru - Samuel transmission line I Brazil





#### **Transmission and Distribution Lines** | 2015

PROJECT	VOLTAGE	LENGTH	COUNTRY
Lucala - UIJE TL	220 kV	300 km	Angola
NEA-NOA interconnection Eastern section line	500 kV	572 km	Argentina
Comahue-Cuyo interconnection Northern section line	500 kV	197 km	Argentina
Estreito - Imperatriz TL	500 kV	140 km	Brazil
Jauru-Samuel	230 kV	600 km	Brazil
Sao Simao - Marimbondo, Riberao Preto Marimbondo and Associated Substations TL	500 kV	408 km	Brazil
Linhas Tucurui-Xingu-Jurupari	500 kV	527 km	Brazil
Loyangalani Suswa TL	400 kV	428 km	Kenya
Huasteca-Monterrey TL Project	400 kV	428 km	Mexico
Moyobamba Iquitos	220 kV	588 km	Peru

#### Upturn in North America

Following the successful results from WETT in Texas, the Group is firmly committed to the expansion in the USA, since it represents a strategic value within the global electricity market. Isolux Corsán has been awarded three important contracts: two for the construction of substations and another one for maintenance tasks. In 2015, the company was selected by the Tarrant Regional Water District for the construction, following the turnkey model, of a 115 kV substation in the city of Forth Worth, in Dallas. The second project

comprises the first stage of construction of the 230/115/69 kV VT Hanlon substation for the Department of Energy of the Federal Government of the USA, in South Dakota. Both infrastructures have a joint budget of €14 M.

The third project awarded in 2015 is a contract for the maintenance tasks of Florida Power lines in the county of Miami-Dade. With these projects, the company strengthens its position in North America, where it has an accumulated business portfolio of €50 M and is already operating in three States.



Substations construction in the Al-Uqair project | Saudi Arabia

#### Substations | 2015

PROJECT	VOLTAGE	COUNTRY
UIJE 1 Substation	220 kV	Angola
Pambos de Sonhe Substation	220 kV	Angola
Al-Uqair GIS	115 kV	Saudi Arabia
Gran Formosa Substation	500 kV	Argentina
Reyunos Substation Extension	220 kV	Argentina
Gran Mendoza Substation Extension	500 kV	Argentina
Pimenta Bueno   Ji Parana   Ariquemes   Samuel S/S	230 kV	Brazil
Colinas, Ribeiro Gonçalves & S. Joao de Piauí   Estreito   Imperatriz	500 kV	Brazil
WETT: Cottonwood, Longdraw, Grelton, Faraday, Sand Bluff and Bearkat	345 kV	USA
Kenya-Ethiopia DC/AC converters interconnection	500 kV	Kenya Ethiopia
MWC/C/5001 GIS Substations	132 kV	Kuwait
Majes Solar Farm	138 kV	Peru
Doha Phase VIII GIS Substations	66 kV	Qatar





The new T&D projects in North America are focused on Florida and Texas

Another strategic country for Isolux Corsán is Mexico, where the company has been developing its activity since 1991. The T&D area specifically, is the Group's starting point of the Aztec country. Over the last years, Isolux Corsán has built almost 5,000 km of high-voltage lines and 50 substations, becoming a reference supplier for the Federal Commission of Electricity (FCE). In 2015, the group reinforces its presence with two new contracts: the first one for the construction of 90 km of transmission lines and for the execution of the Regiomontano substation (500 MVA) and for the enlargement of the already existing one in Caderevta. The second contract awarded is for the construction of 400 km of lines with 400kV and the enlargement of two substations. These awarded contracts, given by the Federal Commission of Electricity of Mexico under the contracting model of public work funded at lump-sum price, has an overall budget of \$177 M.

In Peru, Isolux Corsán has begun the execution of the Moyobamba-Iquitos transmission line, which has a length of 630 km, and the construction of the associated substations. These facilities have the capacity to transport 150 MV of electricity, which will triple the current supply of Iquitos city, located in the Peruvian Amazon heart.

In Chile outstands the construction of 212 km of transmission lines between the Maitencillo and

Pan de Azúcar substations, in the region of Valparaíso, with a total capacity of 1,500 MVA. The contract has a \$39 M budget. Isolux Corsán has also executed in the Andean country 22 km of transmission lines in Alto Maipo and has carried out the enlargement of three substations.

In Argentina, the Group has been awarded the first railway contracts in the country: two distribution lines and one important project for the Metro of Buenos Aires. Moreover, the company will construct the transformer substation of Obera II, which has a total budget of €17.3 M. Another outstanding project in the Argentinean lands is the enlargement of the Ramallo transformer line.

In Brazil, the T&D area is developing two important work for Norte Energía and ANEEL, besides the execution project of the lines 15 and 17 of Sao Paulo Metro.

Moreover, Isolux Corsán has been awarded two batches of transmission lines in Brazil. The Spanish Company will receive a maximum annual turnover of €51.2 M for both projects. The contract comprises the construction work and the operation of 686 km of transmission lines and seven substations, which will be connected to the rede básica of Brazil. The start-up of this new energy project will be between 2018 and 2019.



GIS Facilities in the Boot project I India

## International take-off in railway infrastructures

The Group is consolidating itself in the construction of inter-city transport infrastructures in big cities of the world

Isolux Corsán is positioning itself in the construction sector of railway infrastructures of inter-city transport. Currently it is working on the metro lines of some of the most important cities in the world, such as Mexico DF, Delhi or Buenos Aires.

Isolux Corsán works for the Secretariat of Communication and Transports of Mexico in consortium with different local companies on the construction of the inter-city train Mexico-Toluca, which has a length of 57.7 km. The company is positioning itself as the second group that will provide further assistance in this project with the execution of more than 20% of the total work with an amount which is over €140 M. Specifically, it will carry out the implementation of the traction substations, as well as the construction of the catenary and of the energy system, where it will execute the lighting substations and line equipments.

#### Consolidation of the business in India

In 2015, Isolux Corsán consolidated its railway business in India with the awarding of three electrification contracts. The company

will design and construct a total of 563 km of electrification lines, in addition to five traction substations in the States of Rajasthan and Karnata-Telengana. The execution of these contracts includes the engineering, design, materials supply, construction and the start-up of the substations, switching stations, traction substations, SCADA, signaling, telecommunications, and other additional work.

The electrification work includes traction substations and the catenary system of 25 kV in alternating current. The scope of the telecommunication systems and signaling include automatic signaling, electronic interlocking, train detection systems, and telecommunications systems based on fiber optic cable. Isolux Corsán will also be in charge of the buildings' construction that will accommodate the control room of the substations as well as of the staff offices.

Also in India, the company has completed its first project of Facilities for Mumbai Carril Vikas Corporation (MRVC), which included the design, supply, assembly, tests and start-up of 110 kV and 25 kV in alternating current.



#### Facilities | 2015

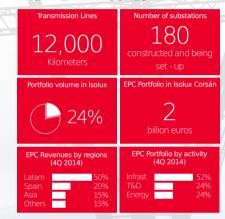
PROJECT	CLIENT	COUNTRY
First line of the Mostaganem tram	Enterprise Metro de Alger	Algeria
Electrical renewal of the line B	Subterráneos de Buenos Aires	Argentina
Electrical Renewal of the line A	Subterráneos de Buenos Aires	Argentina
Facilities for the line 15 (Prata)	Companhia do Metropolitano de Sao Paulo	Brazil
Facilities for the line 17 (Ouro)	Companhia do Metropolitano de Sao Paulo	Brazil
Facilities in Bahadurgarh-Najafgarh underground	Delhi Metro Rail Corporation LTD	India
Facilities and civil work	Rail Vikas Nigam Limited	India
Facilities of ventilation and environmental Delhi underground (Batch 4)	Delhi Metro Rail Corporation LTD	India
Facilities for MRTS Delhi III project	Delhi Metro Rail Corporation LTD	India
Facilities in Mexico-Toluca	Secretaría de Comunicaciones y Transporte	Mexico



#### **ACTIVITY AREAS**

## T&D

#### THE AREA IN FIGURES



#### T&D Activities

- Transmission and Distribution
- Transport Infrastructures
- Maintenance and Services
- Security
- Telecommunications
- Automation and Control

#### Strategic areas of T&D Activity





#### **KEY PROJECTS**

01 uttar pradesh transmission line

India

710 Million €



- Electrical transmission lines and substations
- 893 km of lines with 765 kV
- 703 km of 400 kV

3 AMAZONAS PROJECT





- Pará and Amapá States
- Length: 1,191 km | Power transmitted: 2,400 MW
- Commissioning: 2012

## TAUBATÉ TRANSMISSION LINE Brazil

133



- Length: 247 km with 500 kV
- Employment: 1,900 people
- It will connect Río de Janeiro with Sao Paulo

O4 LOYANGALANI-SUSWA TRANSMISSION LINE Kenya

142



- Length: 428 km
- Installed power: 300 MW
- Voltage: 400 kV

## 5 SOUTHEAST WIND FARMS OF TRANSMISSION LINE United States

500



- Length: 605 km
- Voltage: 345 kV
- Location: Texas

HVDC CONVERTER STATIONS

Kenya - Ethiopia

400 Million €



- Project's partner: SIEMENS
- Completion date: 2019
- Construction of two converter substations



#### **■ UNIQUE PROJECTS**

#### HVDC CONVERTER STATIONS | KENYA AND ETHIOPIA

#### **Technical specifications**

Budget:	450 million dollars	
Length:	1,000 km	
Capacity:	2,000 MW	
Developer:	World Bank and African Bank	







Isolux Corsán builds converter stations on two continents

- → The bipolar HVDC system will have a capacity of 2,000 MW and will connect two converter stations
- The new line will connect Suswa (Kenia) and Sodo (Ethiopia), covering a distance of 1,000 km





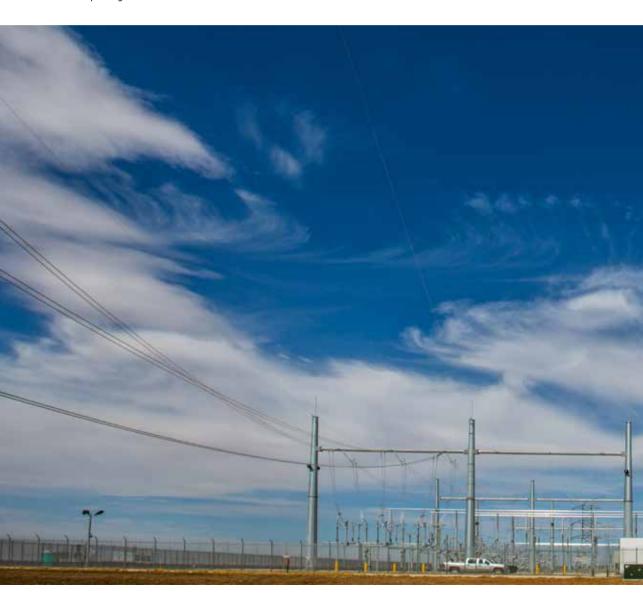




#### CONCESIONES

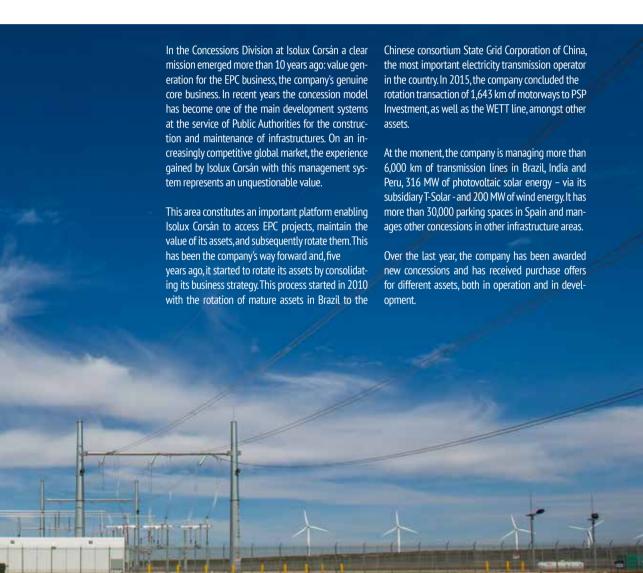
## Platform for the EPC business

The expansion of the concession model used by Public Authorities throughout the world has enabled the company to reinforce EPC





- Isolux Corsán has gained the experience of more than 10 years managing infrastructures
- → It currently manages more than 6,000 km of T&D lines and 316 MW of photovoltaic solar energy



## New contracts in Latin America

Brazil has awarded Isolux Corsán the construction and operation of 420 km of transmission lines

With a total of 6,811 km of transmission lines in operation, construction and development, Isolux Corsán's Concessions Division is consolidating its concession activity in the energy sector.

The company has gained more than 10 years of experience in the construction and management of transmission and has vast knowledge on the rotation of assets

#### New concessions

In 2015, Isolux Corsán was awarded two lots of transmission lines in Brazil with a budget of \$97.3 (€51.2 M) for both projects. The contract, awarded by the National Electric Energy Agency (ANEEL) includes the construction work and operation of 756 km of transmission lines and seven substations which will be connected to the Rede Básica de Brasil and which will come into operation between 2018 and 2019.

These projects have a concession period of 30 years (3 for construction and 27 for operation). The first of these is located in the state of Pará between Tapajos and Xingú with 436 km of transmission lines. The second, in the state of Rodonia, where the company has been awarded the construction and operation of 320 km of transmission lines and four substations between the cities of Samuel and Ji-Paraná.

These T&D lines round off the company's positioning in Brazil where this division manages a total of 4,500 km of transmission lines. Of all the ongoing projects, the construction - already handed over - and concession of 1,191 km of high voltage lines in the Amazon still continues to represent one of Isolux Corsán's main milestones. In South America, the company also manages

assets in Peru, with the concession of the Moyobamba-Iquitos transmission line of 220 kV and an approximate length of 596 km.

In Asia, the company is managing 1,512 km of transmission lines in India which enables the transmission of 4,600 MW of electric energy to the most highly populated state in the country, Uttar Pradesh, with 150 million inhabitants.

During the last year, Isolux Corsán concluded the rotation transaction of its assets in Wind Energy Transmission Texas lines to the Canadian pension fund PSP



Installation works in the Lot G Project | Brazil





#### **T&D lines under concession** | 2015

PROJECT	km	COUNTRY
JTE - Jaurú Transmissora de Energia	940	Brazil
IENNE - Interligação Elétrica Norte e Nordeste	720	Brazil
LMTE - Linhas de Macapá	683	Brazil
LXTE - Linhas de Xingú	508	Brazil
LITE – Linhas Itacaiúnas	563	Brazil
LTTE - Linhas de Taubaté	247	Brazil
LTTE - Linhas de Laranjal	105	Brazil
CPTE - Cachoeira Paulista	181	Brazil
Santaren	436	Brazil
Rodonia	320	Brazil
SEUP - South East Uttar Pradesh	1,512	India
Moyobamba-Iquitos	596	Peru

SASK transmission lines I Canada → The company manages a total of 6,811 km of T&D lines



#### CONCESSIONS | PHOTOVOLTAIC SOLAR ENERGY



#### **Business consolidation**

The Group is working on strengthening its financial structure

The T-Solar Group, which has managed Isolux Corsán's solar business for almost ten years, is present in countries covering three continents. With an installed capacity of 316 MW in operation, construction and development, its activities are undertaken in Spain, Italy, India, Peru, the USA, Puerto Rico and Japan.

In 2015, T-Solar continued with the tasks of consolidating and strengthening its presence on the photovoltaic solar energy market. The business

project undertaken by T-Solar has strategic sites for the development of the business.

In 2015, T-Solar has generated more than 410 GWh of energy of all the photovoltaic power plants in the Group, which equates to the annual average consumption of a population of 712,000 inhabitants.

The Gunma plant in Japan is T-Solar's gateway to the Asian continent. The plant, located in the city





#### **PSE** power plants under concession | 2015

COUNTRY	POWER PLANTS	CAPACITY (MW)
Spain	34	161.2
Italy	8	7.2
Peru	2	44
India	2	17.3
Japan	1	31.2
Puerto Rico	1	30
USA	1	25.2

→ Isolux Corsán is reinforcing its activities in Asia with the Gunma plant in Japan

 Photovoltaic power plants generated more than 410 GWh of energy in 2015

of Takayama will have an output of 31.2 MW and will foreseeably start operation in 2016. During 2015, the refinancing process of assets in Spain and Italy was successfully finalised and the power plants in Peru, India and the USA were managed. Latin America is another key market: the presence of the Japanese company Sojitz, with 49% participation in the plant in Peru has strengthened the company's activity in the area.

The company has also consolidated its activities in the USA with the El Centro (The Centre) project

in California which has been in operation for two years, producing an average of 52 GWh per year. The project has received financing from Banco Santander and the North American Development Bank

The supervision of all its power plants is a priority for the Group. As such, in its headquarters in Madrid, it has an Energy Management Centre (CGE) which performs the continuous real time monitoring (24/7/365) of the operation of each and every power plant located all over the world.

## Financed projects, experience and knowledge

The company is consolidating its business in projects financed in the energy sector

Isolux Corsán's Concessions Division manages various financed projects which round off the company's assets map under concession with high strategic value.

2015 saw the start of the development of the Molloco Hydroelectric Power Plant in the region of Arequipa (Peru) that the company has under concession and which will have a capacity of 300 MW. This infrastructure, located in the provinces of Caylloma and Castilla, will be comprised of two hydroelectric power plants and will produce energy based on the water resources from the Molloco river basin and some of the water from the Palca river.

→ The Cordoba City of Justice is one of the projects in the area of large concessions

Another of the most important concessions managed by Isolux Corsán is the Cordoba City of Justice (Spain) which is currently being built. The 25-year concession for the new city court has 26 courtrooms and a forensic and public services institute. Over the last year, Isolux Corsán has been developing the wind farm in the Spanish region of Castilla y León which will be built in 2017 and will have installed power of 200 MW. Production is estimated at 680,000 MWh/year with a capacity factor of 38.8%.

In the wind energy area it is also worth highlighting Loma Blanca in Argentina and finally, the photovoltaic plant of Mexico, another renewable energy project under concession with 5 MW.

The sale of various environmental projects as part of the asset rotation policy





	Main projects   2015  PROJECT	TYPE	COUNTRY
	IN OPERATION		
	Loma Blanca	Wind	Argentina
	WWTP Aragón	Wastewater Treatment Plant	Spain
	Comisarías Mossos d' Esquadra	Surface right	Spain
	Burgos Hospital	Capital participation 5.2%	Spain
	ADIF-ALBALI	Capital participation 7.5%	Spain
	UNDER CONSTRUCTION		
	Cordoba City of Justice	Surface right	Spain
	UNDER DEVELOPMENT		
	Lote H Leilao	T&D	Brazil
	Moyobamba-Iquitos	T&D	Peru
	Molloco	Hydroelectric Power Plant	Peru
57.52			

## Third car park operator in Spain

Strong boost for this concession business with more than 30,000 managed spaces.

Isolux Corsán has become the third operator in the car park concession business in Spain with more than 30,000 spaces and 57 parking sites in the country. It has gained experience for over ten years in the development and operation of public and private parking sites.

Since Isolux Corsán entered into partnership with the British company Oak Hill Advisors to strengthen its car park business in 2014, the company has acquired 7,747 spaces, of which 4,187 were added during 2015.

This evolution in the business shows an average growth rate of 17.36% since 2006, when the Car Park Division was set up, up to last year.

In 2015 the purchase concluded for a new parking site in Tenerife, adjacent to the University Hospital of the Canaries. The new car park is the third that the company manages on this island and has 708 spaces. 2015 was also the year when Isolux Corsán was awarded the construction of a total of 130 parking spaces in Segovia, which are included in the building project for the new city courts.

Furthermore, the Virgen de las Nieves Hospital Car Park in Granada, built and managed by Isolux Corsán, was recently awarded the Parking Award in 2015, which is given twice-yearly by the Spanish Association for Car Parks and Garages (ASES-GA). With a built surface area of almost 20,000 m2 distributed over four underground levels, the car park has 723 spaces and 38 for two-wheeled vehicles.

The company's main activity is focused on three areas: the development and operation of car parks under rotation, the management of surface car parks (regulated ORA zone) and the management of car park spaces for residents.

In the parking network it manages, Isolux Corsán is implementing the most pioneering technological management systems for the facilities to provide users with the highest security levels, both for people and vehicles.

Technological applications enable monitoring the management of the car park both from the facilities in theactual car park and from the company's operations centre using a sophisticated remote control system. It is in this way that the comprehensive management of all the car parks in the network is achieved automatically, thereby reducing incidents and optimising human intervention.

Thanks to permanent investment in technological innovation Isolux Corsán car parks have an access control system, automatic car number plate reading, CCTV, space guidance system, remote control and electric vehicle charging stations.

#### Hospital sector

Part of the success in the Isolux Corsán Car Park Division is thanks to the expansion of the business to the hospital sector. The development and operation of car parks under rotation has become a fundamental feature in this division, managing more than 7,000 spaces located in various hospitals in Spain with a total of five car parks in hospitals.



Virgen de las Nieves Hospital car park in Granada I Spain



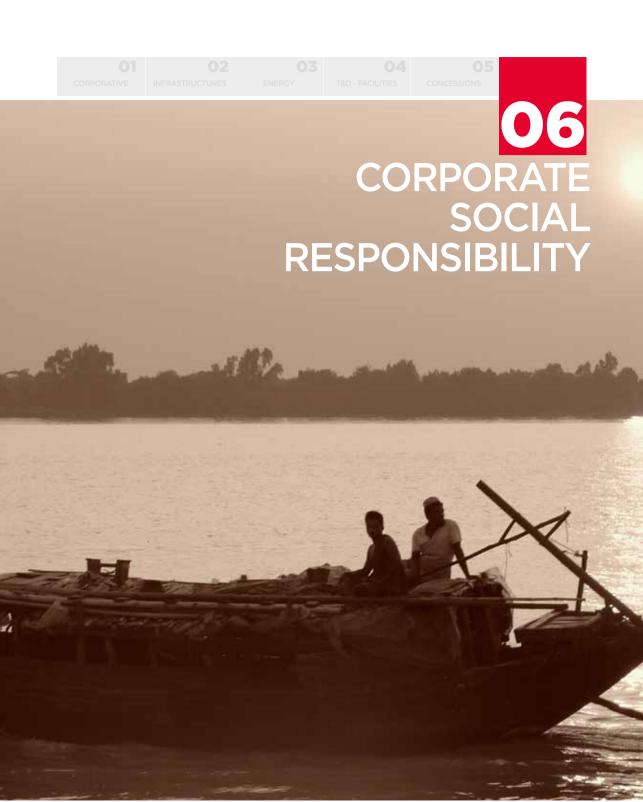


#### **Hospital car parks in Spain** | 2015

HOSPITAL	SPACES	PROVINCE
New Burgos Hospital	1,378	Burgos
Virgen de las Nieves Hospital	728	Granada
De la Arrixaca Hospital	2,535	Murcia
Cartagena Hospital	1,780	Murcia
Mar Menor Hospital	633	Murcia
Miguel Servet Hospital	199	Zaragoza



Access to the public car park Valle Menéndez in Tenerife I **Spain** 







## Committed and sustainable

Isolux Corsán monitors and controls its Code of Ethics, implemented in all countries where it operates

- The Company signed its adherence to the United Nations Global Compact five years ago now
- The path undertaken in 2015 cannot be understood without the particular importance provided by the Group's CSR. Over the last years, we have worked on the precise mechanisms so that our best endeavors in the field of corporate responsibility meet the international certification organizations' highest standards. Based on this background, Isolux Corsán was already in a reference position in CSR management. However, in 2015 we have made progress beyond what is strictly required. The Code of Ethics has provided all of us with a unique roadmap in terms of excellence and good practices. This framework, which defines our internal and environmental relationships, is crucial to deal with new challenges for the Company: a new concept of Group

The Group promotes CSR in its commitments to employees, the surroundings and the environment

in which we take on that our excellence in a triple performance (economic, social and environmental) is aligned with the excellence we build in our teams and in the environments where we operate.

In 2015, coinciding with its 5<sup>th</sup> anniversary since its adherence to the United Nations Global Compact, Isolux Corsán has given a boost to its Code of Ethics, also activating an Anti-corruption Policy and a Claims Channel.

The Code of Ethics, which regulates the actions from each person and society that integrate the Group, including those affiliated companies under the effective control of Isolux Corsán, estab-



#### Interest groups

GROUP	KEY POINTS	COMMUNICATION CHANNEL
Employees	Talent Retention Professional Development Reconciliation Equality Social benefits	Intranet CEO blog HR Portal Corporate documents Meetings with the EPC CEO Information and training sessions Works council Health and safety committee Claims Channel
Clients and regulatory bodies	Satisfaction Quality Innovation	Corporate website E-mail Satisfaction surveys Monitoring
Shareholders	Transparency Value creation Confidence	Specific space on the website Statements
	Innovation Transparency Professionalism Safety	Purchasing system that enables to have all information and inquiries Obraris Portal
	Respect for human rights Ethical attitude Sustainable development Transparency	Direct dialogue with NGOs, associations and foundations Participation E-mail Mass media Open Doors Day, visit the work sites Social networks

lishes 16 principles and values. Integrity, respect, loyalty, leadership, commitment, excellence and transparency are the values that make up the basis of the Code of Ethics and the foundations of the Company's CSR.

Through this Code of Ethics, available on the Intranet of the Group and applicable to suppliers and third parties, the Company ensures legal compliance, eradication of child labor, data protection, transparency, freedom of association, prevention of money laundering and zero tolerance for corruption. Moreover, it is committed to employees (ensuring their professional development), safety and health, quality, the environment and the community. The Company

promotes the efficient use of systems and computer resources placed at the employees disposal.

Isolux Corsán has created a monitoring body for the compliance of this Code, of the Anti-corruption Policy and the Claims Channel.

#### HUMAN RESOURCES

## The employees, the Group's key

The growth and international expansion make the mobility one of Human Resources' biggest challenges



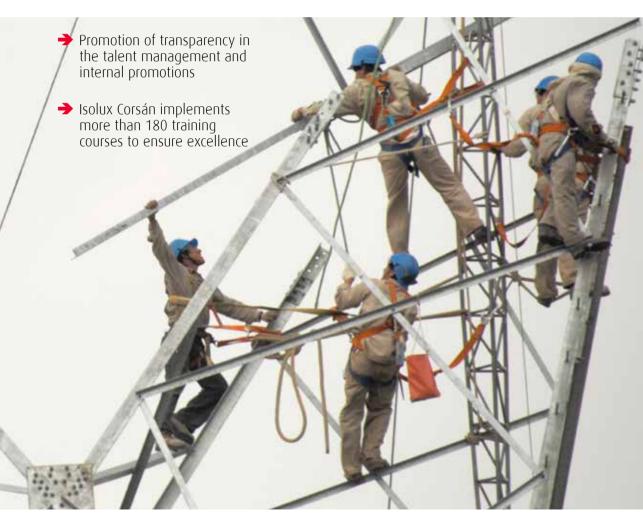


2015 has been the people's year in Isolux Corsán. During the last year, we gave a boost to Human Resources policies in all of its areas in order to strengthen the commitments to our team.

We are aware that in order to achieve the involvement of the employees, it is necessary that Isolux Corsán gives an efficient and rigorous response to their professional needs and that it is sensitive to their personal needs. This service vocation of the Company towards its members is the true essence of the commitment we work with for the future.

Isolux Corsán's Human Resources policy is based on two main pillars: the professional development and talent promotion and the commitment to all the employees.

This is how the Company's Code of Ethics shows it, through which the Company commits to establish necessary measures and tools that will allow all of its workers to achieve the maximum professional and vital goals and to guarantee the equality, diversity and family reconciliation. Also, the Code includes the right to freedom of association, data protection and its commitment to safety and health.



#### A global team

The Group ended the 2015 year with an average workforce of 5,500 people. The Company's international nature turns geographical mobility into one of the main challenges of Human Resources area. Currently, the Company is present in more than 40 countries of the four continents. For this reason, we foster integration programmes of diversity, we promote geographic mobility policies and we develop corporate tools that make easier the Company's global management.

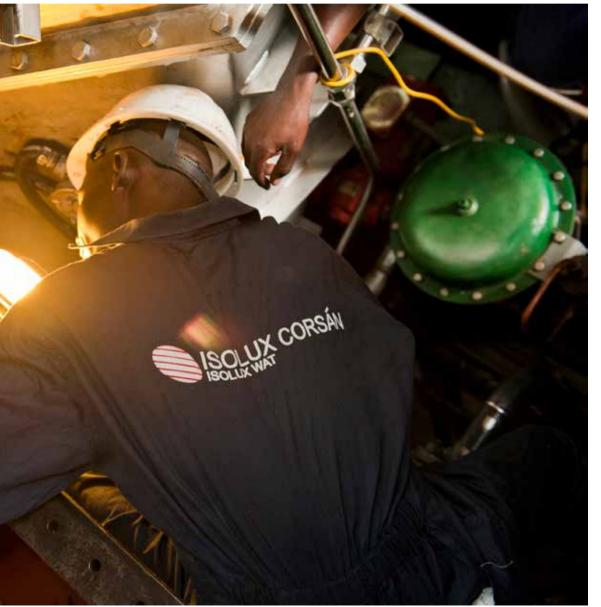
In Isolux Corsán we always understood that the expatriate personnel is a key value for the Company. Therefore, knowing how to meet their needs is one of the imperative goals of our Human Resources department. Isolux Corsán has, according to the data as of December 2015, 330 people displaced in the countries where it operates.

By geographical areas, Spain – the Company's headquarters- continues to be the country with the largest number of employees of the Group.





- Isolux Corsán counts with an average workforce of 5,500 people distributed in all of its activity areas
- Geographical mobility is one of the main challenges of Human Resources area



Angola in operation | Jesús Honrubia

#### Talent management and internal promotion

In Isolux Corsán we believe in the combination of talent and experience. For this reason, we don't just look for the best professionals in the market, but also offer them a solid career plan. With this double perspective, we believe that we benefit the symbiosis we are looking for between the Company and each of the professionals it is composed of, and the day by day management.

Throughout the last year, different programmes aimed at strengthening the talent of the people who are part of the Group and at the recruitment

of new professionals were developed. Moreover, in 2015 the Talent Train project was continued, which is intended for recently graduated students in Business Management and Economics. The goal of this project is to offer young people an opportunity for training in our company with a global perspective.

In Isolux Corsán we manage with transparency and responsibility the staff recruitment. All the vacancies are published internally on the Intranet with the purpose of contributing to the internal promotion and mobility.

#### Other programmes | 2015

- ITACA Project (Isolux Talent Calibration). The Company has relaunched this tool that allows to measure and develop talent. The system's goal is to make easier and strengthen the Company's professional development of human capital through the performance assessment process. In 2015, over 1,000 professionals were evaluated.
- > Employee's Portal. Apart from providing corporate information from the Company and boosting good practices, the Employee's Portal allows managing the CVs of all the Company's staff.
- Collaboration agreements with different Spanish universities with a grant programme, through which Isolux Corsán counted in 2015 with more than 50 students of the last degree courses, who were doing an internship with the Company.
- **>** Participation in the most relevant employment forums in Spain.



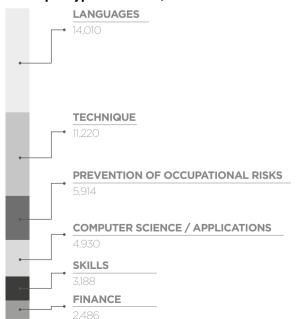


#### Type of training | 2015

- > Prevention of occupational risks, quality and environment training
- > Languages training
- > Finance training
- > Technique and skills training
- > Computer science and applications training

#### 

#### Hours per type of course | 2015

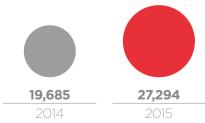


## Training for excellence and professional development

In Isolux Corsán we develop our Training Plan with the clear aim of ensuring excellence in all our activities and keeping a high professional requirement level. In total, more than 27,000 training hours were achieved. 2015 was the year of changes in the training and development approach. A more modern and integrating approach regarding technology, people management tools, and knowledge and skills development were pursued.

With regard to the modalities, Isolux Corsán has been able to adapt to the new technologies and there is an increasing role of online training courses, making easier the participation and flexibility. This type of courses enables to standardise the content in such a way that it conveys exactly the same information.

#### **Total training hours**





"Businesses should support the elimination of discrimination practices in respect of employment and occupation"



## We promote equality, diversity and family reconciliation

Isolux Corsán is committed not only to the professional development of its employees, but also to ensuring its maximum vital goals, as it is stated in the Code of Ethics. In order to do so, the Company takes on the commitment of maintaining a free work environment, where all the employees are treated with respect and dignity and where all of them have the same professional development opportunities.

The Company ensures the absence of any kind of discrimination based on sex, age, disability, religion, ethnic group or ideology, and also works for the equality between men and women. Actually, the presence of women managers in the Company has increased every year.

The percentage of women amongst the employees of Isolux Corsán has increased during the last years, accounting at 15%.

#### In Spain

The Company has the Family Plan running, developed in partnership with the Foundation

Adecco with the aim of promoting social and labour integration of disabled people. In 2015, a total of 7 disabled people joined Isolux Corsán' workforce.

The Company has also activated programmes to improve the compensation conditions for its employees. Here is where FlexICPlan is included.

With regards to family reconciliation, Isolux Corsán provided various licenses that help and promote reconciliation of personal and professional life.

In the annual programme of flexible compensation system, Isolux Corsán has provided its employees with kindergarten checks and health insurance. A total of 44 people used the kindergarten checks and over 240 people subscribed to health insurance policies. Isolux Corsán is analyzing the inclusion of more aids for the next years.



#### Freedom of Association

In compliance with the applicable regulation of each country where we operate, Isolux Corsán respects the trade union freedom of association of the employees and the right to collective bargaining.

Isolux Corsán counts with a Contingency Plan and audits in order to ensure data protection



"Businesses should support the freedom of association and the effective recognition of the right to collective bargaining"

## Respect for privacy and data protection

Respect for privacy is another basic right we are permanently ensuring. In Isolux Corsán we maintain updated our data files in the General Data Protection Register, pursuant to the Organic Law of 15/1999 and the Royal Decree 994/1999 and we count with a Contingency Plan and internal audits that ensure the correct access and confidentiality of all the information we manage in the Group.





"Businesses should support the abolition of any kind of forced labour or carried out under compulsion"

## Looking after health and safety at work

The prevention of occupational risks and healthcare are the priorities for Isolux Corsán. Thanks to the policy implemented for years now by the Group's Human Resources Corporate Management, nowadays we have a Management System with protocols in all of the countries where we operate in, in order to guarantee the protection of safety and health of all of our employees.

This system, based on the OHSAS 18001:2007 regulation, aspires to build a preventative culture with the highest safety standards – applicable also to contractors and suppliers- with monitoring and control mechanisms at an international level.

The data speak for themselves. Training actions related to occupational risks prevention, controls and

tracking, the communication between the Company and the subcontractors, the number of awareness-raising actions and the ergonomic studies have been increased. In short, the reduction of the number of occupational accidents was achieved.

In the Occupational Medicine area, we continued working on the different prevention campaigns of health, vaccination, blood donation, medical examination and on campaigns of collaboration with local clinics in different countries where we operate, so that all the employees hold a medical insurance.

In Madrid, Isolux Corsán carried out campaigns of blood donation with the aim of raising awareness among its employees that this action saves lives.





#### **Accident rate | 2012 - 2015**

	2012	2013	2014	2015
Total accidents	317	328	142	55
Incidence rate (no. of accidents/no. of workers)*103	35.07	41.24	23.11	13.83
Frequency rate (no. of accidents/hours worked)*106	16.24	19.09	11.67	6.4
Severity rate (days of leave/ hours worked)*10 <sup>3</sup>	0.23	0.32	0.24	0.09

#### **Indicators** | 2012 - 2015

	2012	2013	2014	2015
Training activities	4,317	3,153	8,283	9,275
Hours of training activities	14,847	38,373	23,823	25,325
Trained workers	43,606	35,621	63,368	49,028
Drafted or reviewed safety plans	1,246	1,049	1,442	1,473
Business activities coordination meetings	689	476	1,369	1,109
Internal audits	624	604	434	462
Health and safety follow-up inspections	3,217	1,960	2,030	2,291
Ergonomic studies/hygienic assessments	23	20	40	555
Emergency plans	34	41	65	320
Awareness actions	19,478	19,534	33,893	52,201





#### ■ CREATION OF VALUE

## Our aim is excellence

For some years now, we insist in achieving the greatest levels of possible excellence in all of our areas and projects we work on. This vocation of improvement has led us to take care of our value chain even in the most delicate moments of the economic crisis

We are aware that the traceability between the supplier and the client can't be solved just with a good performance on our side. It is necessary that the suppliers feel like an integral part of our philosophy when we undertake joint projects and also that

the clients understand that Isolux Corsán responds for its own talent and also for the one selected in the market as a support of its activity. Only a correct application of this value chain –which stands up for the suppliers' good practices and clients' satisfaction- will protect our global consolidation, will allow to build stable partnership networks in each country we operate in, and it will also enable to present ourselves quite rightly as real members of those communities, with the required respect towards their cultures and the needed involvement in the social action programmes.





"Businesses should work against corruption in all its forms, including extortion and bribery"

#### The priority is the client

98% of the clients would repeat working with Isolux Corsán

Isolux Corsán works with the aim of reinforcing the clients' satisfaction. The daily treatment with the client, together with the follow-up of the tasks to be carried out, are essential processes in the Company so as to ensure that the customers' needs are a priority in the Group's work. Our commitment to our clients is valued to the extent that 98% of them would hire again the Company's services.

Achieving a work that is aligned with the needs of our clients requires to consider internalising their feedback and opinions, collected through surveys, complaints and congratulations. By analyzing them, we get keys for the improvement of our processes.

During the last five years, the satisfaction level has maintained a more than satisfactory mark, achieving over 80 out of 100. The aspects evaluated in the surveys are as follows:

- > Compliance of the requested requirements
- > Compliance of deadlines
- Quality of work's execution/provision of the service
- Suitability and adequacy of environmental management means
- Suitability and adequacy of occupational risks prevention means
- > Quality of the provided technical documents
- Accessibility and communication with the people in charge of the work/ service
- → During the last five years, Isolux Corsán has maintained its mark over 80 out of 100



### We anticipate risks

The efficiency in the management of suppliers is a key point for the improvement of operations within the perspective of global competition. The main objective of Isolux Corsan's Purchasing Department is to generate value in terms of cost and funding, and also to make possible that the Company counts on it in its strategic planning.

As in the previous year, 2015 continued to be a key year in our relationship with the suppliers, especially in funding and risks anticipation aspects.

The best efficiency in the management of suppliers was essential for the improvement of projects and operations during 2015. One of the main tools for the improvement of this efficiency has been

the promotion of Framework Agreements, which enabled to find costs reduction strategies from the supplier. The relationships with global big suppliers are focused on cooperating and strengthening long-term relationships that will generate joint growth opportunities.

In the years to come, anticipating the needs of the projects and operations will be an essential aspect for the purchasing management. This anticipation will allow us to increase the competitiveness and accuracy in all the operations the Company will undertake. Likewise, in the next years, the creation of global strategies for value generation from the suppliers will be our paramount goal.



"Businesses should make sure that their suppliers and clients are not complicit in human rights abuses"



### Management Systems in all the projects

Guidelines for a successful management of quality, environment and risks prevention

Our organization has a framework for action in terms of Quality, Environment and Occupational Risks Prevention defined by its Policies, which gather the Company's strategic principles and commitments and that is developed in the corresponding Management Systems.

These systems enable that the Company's guidelines, which are increasingly geared to management by processes, are introduced in each of our business areas at an international level in an efficient and systemised way by meeting the standards established by the ISO 9001, ISO 14001 and OHSAS 18001 Regulations and promoting the continuous improvement.

The scope of application of Management Systems covers all the Company's activities: engineering, supplies, execution, commissioning, use, tracking and control, etc. which perform the Directorates-General.

Management Systems are applicable to each of the countries where our Group operates, for responding not only to the contractual commitments established with our clients and the legal obligations, but also to the requirements of the international market which is increasingly globalised and demanding.

Over the years, through initiatives undertaken from all the areas of our organization, the Management Systems have developed and consolidated as a tool used for the international expansion and for the continuous improvement. This is evidenced by the initiatives of the Suppliers Assessment System review, which started being developed in 2015.

These initiatives include the risks management in the supply chain and reinforce the suppliers' support through the participation of different areas of the organization (purchasing, quality, environment, safety, health and financial specialists), appreciating the suppliers who have Certificated Management Systems and verifying through audits their reach, implementation and validity for large supplies.

The tracking of our systems' implementation, which allows us to indentify continuously the strengths and opportunities for improvement of our processes, is carried out with a comprehensive plan of audits done, depending on the case, by our own staff, by the clients or by accredited certification bodies.

The good results obtained from the audits carried out in 2015 are a proof of the systems' maturity and of the increasing management culture by processes of our organization.

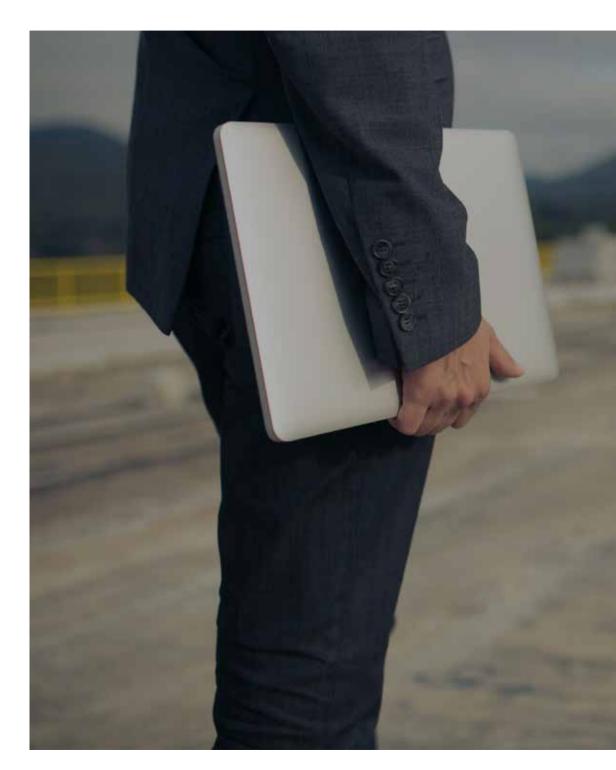
The consolidation of the teams in charge of the systems' development, implementation and follow-up guarantee, with their wide experience and ongoing training provided by the organization, the achievement of the goals set by the Company's management.

- Management Systems have consolidated as a tool for the international expansion
- → The good results obtained from the audits carried out in 2015 show the maturity of our processes











### Certificates that guarantee the international standards

#### Certificates of the Quality Management System and Environmental Management

COMPANY	CERTIFICATIONS STANDARS
Corsán- Corviam Construction	ISO 9001 + ISO 14001
Isolux Engineering	ISO 9001 + ISO 14001
Isolux Corsán Services	ISO 9001 + ISO 14001
Watsegur	ISO 9001 + ISO 14001
Corvisa Productos Asfálticos y Aplicaciones	ISO 9001
Isolux Corsán Group	ISO 9001 + ISO 14001
Isolux Corsán Argentina	ISO 9001 + ISO 14001
Isolux Mexico	ISO 9001 + ISO 14001
GIC Fábricas	ISO 9001 + ISO 14001
Isolux Corsán India	ISO 9001 + ISO 14001

#### Certificate of the Management System of Occupational Risks Prevention

COMPANY	CERTIFICATIONS STANDARS
Corsán-Corviam Construction	OHSAS 18001
Isolux Engineering	OHSAS 18001
Isolux Corsán Services	OHSAS 18001
Isolux Corsán Group	OHSAS 18001
Isolux Corsán Argentina	OHSAS 18001
Isolux Mexico	OHSAS 18001
Watsegur	OHSAS 18001
Isolux Corsán India	OHSAS 18001

#### COMMUNITY AND ITS ENVIRONMENT









#### **ARGENTINA**

The Group's subsidiary of this country has developed different activities in the field of CSR, among which we highlight:

- > Recycling charity campaign with the Hospital de Niños Garrahan: The subsidiary continues with the controlled collection of disused paper campaign in the facility of Isolux Corsán's headquarters in order to give it to the Hospital de Niños Garrahan. This programme, which has been 16 years in operation, is striving to economic resources to support the Hospital's comprehensive development and it contributes to the environment protection, as well as the structuring of a charity project where the civil society participates as the leading figure.
- > Material donation: The Company has donated construction material for the restoration of the Nuestra Señora del Rosario chapel and collaborated in the recovering and restoration

- of the Argentinean National Gendarmerie, in the Río Turbio locality. Likewise, Isolux Corsán Argentina has managed the funds collection, along with the subcontracted companies, for the creation of two new classrooms in the San José school. The amount achieved accounted for \$220,000.
- In the field of safety: A prevention culture has been developed, not only for the employees of the Thermoelectric Central of Rio Turbio, but also for all the inhabitants of the coal deposit community, Santa Cruz Province. More than 3,200 safety and health training actions guarantee the work performed by the company in Argentina.
- > Flu vaccination campaign: Considering the closeness of the winter, when the flu chaos starts to rise annually, the Company planned the vaccination for its employees in May 2015.







"Businesses should support the abolition of child labour"



#### **ARMENIA**

The Company keeps on collaborating in the SunChild Campaign, created by the Foundation for the Biodiversity and Cultural Values Conservation. This programme is aimed at educating new generations in the awareness-raising of environmental values. In Armenia, there are currently nine SunChild Eco-Clubs, one in each region of Armenia and around 600 children are enrolled in the environmental education courses the company conducts.

On the other hand, Isolux Corsán continues providing healthcare to the community and the employees. With the goal of stimulating the community's economy, the Company has promoted the local recruitment. Also, it carried out several information campaigns in the country about the occupational risks prevention and HIV training courses.



#### **INDIA**

teaching materials among the children or places nearby the construction area of the Mainpuri electrical substation. In this area the water and essentials distribution for the households has been carried out.



#### **SLOVAKIA**

Isolux Corsán is carrying out, simultaneously to the motorway construction project in Zvolen city, an action for the staff integration of the gipsy ethnic group. It has hired and undertaken specific trainings for workers without qualification from the settlements close to Zvolenská Slatina, Vígľaš and Pstruša.



#### **BRAZIL**

Within the *Rodoanel Norte* project, Batch 1, Isolux Corsán has implemented different social and training actions for the local community:

- The company has worked for the employment creation since the very first moment, prioritizing the local workforce recruitment
- It has also cooperated with the reintegration into society and programmes of the penitentiary system focused on the labour market
- ➤ It has donated, throughout local bodies, warm clothing and new blankets for vulnerable people during winter.
- ➤ Isolux Corsán has offered a rabies vaccination service for dogs and cats and the inclusion of an identification microchip.
- ➤ The Company has carried out the implementation of the Human Resources area with workshops for the local population focused on labour market orientation, curriculum development, selection process...
- At Christmas, Isolux Corsán made a donation of toys and sweets for the party of the children of the area.



#### **SPAIN**

Isolux Corsán has participated in the "Vives Emplea" initiative, an employability and entrepreneurship strategy that Action against Hunger accomplishes in Spain since 2013. In the context of this project, Isolux Corsán organized a session in the Group's facilities with people who are in a long-term unemployment situation. The session was focused on activities for the development of our Company, on which of them have more job vacancies and on the most demanded profiles.

On other hand, the staff recruitment department gave a talk about how to look for a job and the existing tools on social networks.

The Family Plan, a project in which Isolux Corsán has cooperated since 2011 with the aim of integrating disabilities as a corporate part,

has benefited this year nine families, this figure accounting for 17 families in the last four years.

As it is usual at Christmas, the Company throws itself into the "charity basket". In 2015, Isolux Corsán achieved more than seven tones of food for the Food Bank. This food was distributed amongst over 500 associations, such as social canteens, residences and families without resources, among others.

Isolux Corsán Spain has carried out several dissemination campaigns for the employees on the Intranet. Amongst the most important campaigns, it should be highlighted the campaign against smoking, the vaccination campaign against flu and the campaign in favour of safe driving.



ACTIVITIES

"Businesses should support and respect the protection of internationally proclaimed fundamental human rights within their area of influence"



## **Environmental safeguard**

Isolux Corsán has implemented the last changes in the Environmental Management Policies this year





The last summit on climate change held in Paris on December 2015 showed again that it doesn't matter how long and difficult the sustainability path may be, because it is the only way to give an efficient response to the needs of our society and our planet. In Isolux Corsán we are aware that this reality runs parallel to the big work we are developing. We change the environment in order to improve the quality of life of the societies we work for. Also, for the work to be comprehensive, it always has to be done with the most accurate compliance of the fixed environmental policies.

We believe in the planet's environmental safeguard and, actually, we translate this commitment in specific lines of action in the field of renewable energy.

→ The Company is committed to innovative projects in environmental issues

Our commitment to a cleaner energy alternative demonstrates the importance we give to this area. A commitment that is very close to our R+D+l policy. We are fully aware that the companies able to gain the future will be those that are able of combining the talent recruitment and retention with active policies on research, development and innovation. The engagement with the quality and the adequate environmental management are the lines of work Isolux Corsán has set for itself for years.

The Group maintains the same environmental strategy in all the organization's stratums, as well as in all of its activities and the countries where it operates with the determined goal of working for the environment protection.

Committed to the environment and the legal compliance and improvement of the environmental management



"Businesses should support a precautionary approach that favours the environment"

## Regular review of the environmental policy

Isolux Corsán demonstrates its commitment to sustainability and pollution prevention through its Environmental Policies, whose review for setting reliable goals is vital when it comes to their development. In May 2015 the Group did the last modifications in the Quality and Environmental Management Policies where new commitments were included, some of them directed at the new versions of the ISO 9001:2015 and ISO 14001:2015 standards.

#### **Isolux Corsan's Commitments**

- Development and implementation of Environmental Management Systems suited to the Company and its context.
- Adoption of measures that enable to improve continuously the efficacy of the implemented systems.
- > Full integration of the environmental dimension and respect for the natural environment in the Group's strategy.
- > Identification of risks that may affect the activities, incorporating them in the planning and development of the management system.
- Implementation of practices focused on the prevention and reduction of the pollution in order to reduce the most significant
  environmental impacts
- > Compliance with the applicable environmental regulations and other environmental requirements that the Company endorses, related to environmental issues, as well as to the maintenance of the corresponding information available and updated.
- > Promotion of an efficient and sustainable use of the resources in the activities the Group carries out.
- > Control and implementation of the environmental targets and aims compliance, aligned with this policy and in accordance with the Company's capacities. Taking into account that these targets and goals contribute to increase progressively the good environmental performance and the efficacy of the environmental management system of Isolux Corsán.
- > Regular review of the environmental policies to always ensure coherence with the Management's view and strategic goals and with the needs detected at any time in the social and natural market scope in which Isolux Corsán develops its activities.



### Responsible work in waste management

Isolux Corsán works in a responsible way with all the waste generated by the development of its activities. All the surpluses from the excavation and the ground movement of the work, as well as the waste generated mainly by the activities typical of the construction of demolition sector, such as the concrete, ceramic materials, metal, wood, etc.,

are separated at the beginning and are managed independently according the law.

All the new projects include specific data for the management of used and generated waste in the work site. This way, a greater control of them is achieved, which improves the Group's performance in this field.

"Businesses should undertake initiatives to promote greater environmental responsibility"



#### Information that is provided in the new projects

- Quantity estimation, expressed in tones and in cubic meters, of the construction and demolition waste the work generates.
- Measures for the prevention of occupational risks applicable to the management of the generated waste.
- > Reuse, valuation or removal operations.
- > Measures for waste sorting in the work site
- Drawings of the planned facilities for the storage, management, storing and, where appropriate, other waste management operations within the work site.
- > Special requirements to be included in the project's bid specifications.
- Valuation of the expected cost of this management, of which the project's budget will be part of forming an independent chapter.
- **>** Good practices in the use and the adequate management of waste.



"Businesses should encourage the development and diffusion of environmentally friendly technologies"

### **Boosting new environmentally-respectful projects**

Isolux Corsán is committed to innovation in its projects and considers renewable energy as a real and efficient alternative to fight against climate change. These projects are mainly aimed at the energy optimization of water

treatment and regeneration processes, as well as sewage plants waste recovery, which are some examples of the engineering work implemented in 2015 by the Company in the field of environment.

#### Optimizing energy as an objective

Isolux Corsán works to optimize energy consumption. To that end, it complies with the following key principles:

- > Improve the energy efficiency ratio.
- Improve the water consumption efficiency ratio.
- Minimize waste generation and improve its management.
- Integrate the environmental issues in every activity

#### **Carbon Footprint**

Since 2013, the Company gathers and consolidates data for the extraction of carbon footprint in their permanent facilities, factories and work in Spain following the guidelines indicated in the UNE-ISO 14064-1: 2006 regulation on greenhouse gases, where in Part 1 can be read: "Specification with guidance, concerning the organizations, for the quantification and the report on the greenhouse gases emission and removal."

The Method used is the one mentioned in the Procedure "IT-9696-03- Data Acquisition and Information Processing; Carbon Footprint calculation and measurement."



#### 2015 emissions broken down by scopes

Company's total emissions calculated for 2015: **11,840.52** tones of CO, Eq.

#### Scope 1

2015 TOTAL direct emissions: 3,915.23 tones of  $\mathrm{CO_2}$  Eq. For the estimation of these emissions, the emitting sources pertaining to the organization or are under its control have been considered (machines, vehicles, manufacturing processes...) associated to permanent facilities, factories and work.

Broken down values:

Headquarters: **73.08** Tn CO<sub>2</sub> Eq. Factories: **441.49** Tn CO<sub>3</sub> Eq

Permanent facilities, Work/Services: 3,400.56 Tn CO, Eq

During 2015 and as a result of the reduction of fuel consumption measures, there has been a decreased emission of 1,235.18 Tn  $\rm CO_2$  Eq in comparison with the previous year.

#### Scope 2

Indirect emissions derived from energy: 3,427.14 Tones of CO, Eq.

2015 emission factor is used to calculate the emissions associated with electricity consumption produced externally in the different facilities of the Group. It originates from the buildings sector in Spain, and primary energy permeability coefficients from different sources of final energy, National conventional electricity (Ministry of Industry, Energy and Tourism and Ministry of Public Works).

Broken down values:

Headquarters: **1,060.82** Tn CO<sub>2</sub> Eq Factories: **151.43** Tn CO<sub>3</sub> Eq

Permanent facilities, Work/Services: 2,214.89 Tn CO, Eq

#### Scope 3

Other indirect greenhouse gas emissions that are not included as acquisition and consumption of energy: 4,498.15 Tones of CO<sub>2</sub> Eq. In 2013 and 2014, the national trips by plane and train were considered for the calculation of these emissions. In 2015, likewise, the international trips in this and other means of transportation were included.



# Technological development as a standard

The Group reinforces its R&D&I activities by adapting to the new standards established

Isolux Corsán is aware that the standard of excellence of the projects implemented depends closely on the technological innovation and R&D that each society of the Company develops and implements in all its activities. The R&D&I Policy established by the Group's Management team shows its commitment, ensuring a sustainable development of our organization, and enabling to face with confidence the challenges identified in the sector in the short, medium and long term.

Isolux Corsán fosters its growth through the implementation of cutting-edge work methods and the participation in research, development and technological innovation projects. This way, it provides added value to the products and services offered to the clients and differs significantly from its competitors.

Corsán Corviam is part of the Spanish Construction Technology Platform (PTEC in Spanish) as





a patron member of the PTEC Foundation. This platform is composed of the most important institutions, research public bodies, universities and companies of the building sector in Spain. It is aimed at contributing to improve the building sector through public-private partnerships in research, development and innovation, developed between companies, business associations, universities, research centres, technological centres and clients.

During 2015, Isolux Engineering and Corsán Corviam have worked on the adaptation of the R&D&I Management System to the new requirements established in the last version of the ISO 166.002:2014 standard.

Moreover, they have successfully overcome the External Audit of the Management System Certification and have renewed the certificates under new standards.

#### The R&D&I Management System Certification allows our organization:

- To systematize our R&D&I processes and activities, by integrating them in the Company's general management.
- To plan, organize and control the R&D&I units, as well as the portfolio of generated projects.
- To determine the interaction between R&D&I and other departments or divisions.
- To provide added value in terms of trustworthiness in the R&D&I activities of the Company, improving its corporate image and competitiveness.
- **>** To make all management systems of our organization compatible.

#### R&D&I

## Outstanding projects

Isolux Engineering has made a major effort in the development of renewable energy projects, reaching the leadership position in several aspects related to this energy. Isolux Engineering's Environment Area develops numerous R&D&I activities in the field of water. Some of the projects under development in 2015 were as follows:

- > ABECAR: Application of the Bio-Electrolysis Catalytic technology to urban sewage treatment.
- TREFO: Treatment and Regeneration of Wastewater Backflow using new Forward Osmosis and Microbial Fuel Cell Technologies.
- **ANAGUA**: Strategic Nanotechnology applications in Wastewater

- → The Company develops innovative techniques such as Biofiltration and Sludge Thermal Hydrolysis
- → The use of satellite images, an effective tool for the study of soil





Corsán Corviam has developed in 2015 several projects that include new important features. Some of them were as follows:

- **> SEIRCO:** Smart expert system for risk assessment in different building sector environments.
- > Terrain Stability Study through remote sensing over multi-annual periods. The use of satellite images has proved to be an effective tool for the detection of signs of historic landslides in an area where the abundant vegetation can mask the characteristics of the terrain, which make difficult the interpretation by using photogeology conventional techniques.
- > Topographical rise by using an airborne laser scanner system in areas with abrupt topography and performance assessment and slope stability method based on the results obtained with the topographical rise. It enables to carry out research on the terrain's stability and performance by making photographic images for the slope stability study through a classic photo-interpretation study.





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