

MARKETS

Mexico built  
sustainably

FOCUS

Securing  
future growth



MARKETS

New wind  
for new energies



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# *Knowhow knows no borders*

**T**he technical expertise behind our projects, and the long track record that guarantees their success, are the passport we carry with us wherever in the world we operate. Knowhow knows no barriers. It isn't subject to boundaries. It makes the difference to projects located in any corner of the planet.

Renewable energy technologies and project management skills form the binomial by which we advance the contribution of these renewable in the global energy mix and convert them into a motor of progress for growing economies. This is the vision without borders we share with our partners, such as KKR, who trust our knowhow in achieving this goal, knowledge that we promote at forums such as the UN's SE4ALL initiative.

Combining a traditional Inuit transport mode with the traction of the wind enabled us to circumnavigate Greenland in 49 days. Such ingenuity is also behind the growth of the family of AW 3000 wind turbine generators, as can be seen from photos of the spectacular journey made by an enormous blade mold from China to Navarre.

The construction solutions that advance sustainability in buildings have found new terrain in Spain and Mexico. And the dream of building ports without concrete came true in Fuerteventura, Canary Islands, with news of the innovative achievement spreading quickly across the world.

We face the challenges of water scarcity with solutions based on R&D, sustainability and management, and which can be applied whether it is in Granada or Mecca.

Process innovation is our response to the demanding requirements of keeping golf courses in prime condition, a challenge as universal as the sport itself. And as universal as the genius of engineers such as Leslie E. Robertson, or the solidarity of NGOs such as Firefighters Without Borders.

ACCIONA volunteers cross borders, too, with their smaller contributions to a more sustainable world. Technology opens new and more attractive horizons both to spread our message and learn from others through friendlier information technology devices and formats.

Knowhow also permits us to design a framework connecting and illuminating the pieces that make up that we call History, whether it is in Spain's National Archaeological Museum or the National Museum of Oman.

You see, knowhow is exportable. It travels and is highly valued wherever it lands. Sharing it results in sustainable solutions to infrastructure and energy needs wherever on the planet they arise.

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July 2014

Published by:  
Department of Communication  
and Corporate Image  
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Design and Production:  
MRM Worldwide.  
Legal Deposit:  
M-35.445-1997

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*Knowhow knows  
no borders*

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# ACCIONA puts faith in action plan to return to growth

Faced with the global crisis and latest regulatory changes in Spain, ACCIONA has taken a series of measures to strengthen the balance sheet and improve its liquidity position. Chairman José Manuel Entrecañales affirms that its action plan is making progress in increasing the Company's opportunities for growth and maintaining leadership in strategic businesses.

**I**n his speech to the General Shareholders' Meeting in June, ACCIONA Chairman José Manuel Entrecañales indicated that, through the action plan, the Company "is making good progress towards our ultimate objective of

mitigating the effect of regulatory changes by optimizing opportunities for growth and maintaining our leadership position in our strategic businesses."

In the face of the global crisis and the latest regulatory changes in



## INTEGRATED REPORT 2013

For the second year running, ACCIONA has prepared an Integrated Report that conforms to the framework of the International Integrated Reporting Council (IIRC, [www.theiirc.org](http://www.theiirc.org)). Following the Council's principles, we have compiled transparent, integrated and relevant information that informs about all the Company's activities with a view on the future. In this way, the report focuses on



## KKR and ACCIONA sign alliance in global renewable energies market

ACCIONA and investment firm Kohlberg Kravis Roberts & Co. LP—together with its affiliates KKR—have sealed an alliance to consolidate and develop one of the largest operating international renewable energy portfolios in the world.

Under the agreement, KKR will invest in ACCIONA Energía Internacional (AEI), which brings together the renewable energy generation assets of the Company outside Spain. KKR is acquiring a one-third stake in AEI for 417 million euros and will help to fund future growth of the renewables portfolio. ACCIONA Energy will retain the remaining two-thirds of AEI.

AEI will hold the operating renewable assets outside Spain, comprising 2.3 GW in 14 countries including US, Mexico, Australia, Italy, Portugal and South Africa, which will generate an estimated cash flow of 120 million euros. Most of the portfolio comprises wind farms, although it includes some solar (photovoltaic and thermal) assets, too.

The terms of the investment gives an implied enterprise value to AEI of 2.6 billion euros, including 1.3

billion in equity and 1.3 billion in net debt, making this one of the world's largest financial transactions in the renewable energy sector to date.

ACCIONA Energy will operate the assets for 20 years under a management agreement and will give AEI a right of first offer on future renewable energy projects it develops within AEI's operational territory. ACCIONA Energy has a strong pipeline that can be accelerated through this partnership.

### The agreement

ACCIONA and KKR intend to promote an IPO through YieldCo, a vehicle that will hold all or part of the assets of AEI. The agreement includes an earn-out consideration of an additional purchase price of up to 50 million euros based on the outcome of this public offering.

the internal and external drivers allowing ACCIONA to create and distribute value in the short, medium and long term.

The Integrated Report sets out the future trends to which the Company plans to respond and the challenges and risks it has to face. It also discusses the Company's new strategy for new growth, which together with the value creation

model, is key to its future. The ACCIONA businesses—responsible for achieving the Company's results—and their contexts and performance are featured in detail, as is the plan to integrate them further.

The most important elements of ACCIONA's corporate governance are also incorporated, since they back up the strategy and generation of value. [www.annualreport2013.acciona.com](http://www.annualreport2013.acciona.com)

*The ACCIONA Chairman underlined that the Company “has reacted flexibly, redefining our short and medium term strategies without losing sight of our long term objectives, which remain intact”*

► Spain, ACCIONA had taken a series of measures aimed at strengthening its balance sheet and improving its liquidity position, he said. “We are reorienting our business model to grow our equity less intensively, using alternative sources of finance and capital markets. We are also reducing our structural expenditure as far as possible and optimizing our global offering through the creation of a large Infrastructure division that covers Construction, Water and Services. Other measures are divestments of 370 million euros in non-strategic assets and the incorporation of new financial partners to enable us to exploit all our potential for value creation.”

“The incorporation of KKR as a new partner in ACCIONA Energy International, announced this

morning, goes in that direction,” added José Manuel Entrecañales. The ACCIONA Chairman pointed out that the alliance with KKR “will allow ACCIONA to speed up its growth in international renewables projects, as well as establish a strategic relationship with a major global investor that manages a portfolio of more than 100 billion dollars.” He announced that “both partners are convinced that this deal could be the first of many joint operations within the energy sector, and also of future alliances in other businesses of the Group.”

#### **Board changes**

The Shareholders’ Meeting approved the annual accounts and their application, supporting the decision not to distribute a dividend. It also



### **Sustainability in figures**

The GSM approved, for the third year in a row, the Annual Sustainability Report, 2013, in which ACCIONA reflects on its economic, environmental and social performance worldwide.

The Company has avoided the emission to the atmosphere of over

**15**

million metric tons of CO<sub>2</sub>, avoiding 24 times the carbon dioxide it generates from productive activity.

Differently-abled people formed

**3.08%**

of the workforce in Spain.

*ACCIONA has optimized its global offer by creating a large Infrastructure division encompassing the Construction, Water and Services businesses*

backed the appointment to the Board of Jerónimo Gerard, as an independent, and Carmen Becerril, who will be an external director. They replace Consuelo Crespo and Miriam González. ■

#### ONLINE INFO

■ [www.acciona.com/news/acciona-focuses-action-plan-get-back-growth-path](http://www.acciona.com/news/acciona-focuses-action-plan-get-back-growth-path)



### New directors

The Shareholders' Meeting approved the annual accounts and their application, supporting the decision not to distribute a dividend, and backed the appointment of two new directors: Jerónimo Gèrard, as an independent, and Carmen Becerril, as an external.

Jerónimo is president and CEO of Grupo Mexico Retail Properties (MRP), a company that works in the development, acquisition and administration of commercial real estate, and his appointment reflects the growing importance of Mexico to ACCIONA's strategy. For her part, Carmen Becerril has worked for nearly 10 years as a senior manager in ACCIONA and she will continue to contribute this knowledge and experience from the highest executive body in the Company.

Consuelo Crespo and Miriam González, both independents, formally presented the General Shareholders' Meeting with resignations as members of the Board of Directors. Consuelo Crespo had belonged to the Board since 2008, while Miriam González was incorporated to it in 2010.

Social contribution in 2013 was equivalent to

**1.46%**

of EBITDA.

R&D&I investment rose to

**173.2**

million euros, 4.2% up on the year before.

In the social domain, the Company improved and extended the implementation of its social impact management methodology to Infrastructure and Energy projects in countries such as Brazil, Chile, Morocco, Mexico, South Africa and Costa Rica.





### THIRD JOSÉ ENTRECANALES IBARRA AWARDS FOR CIVIL ENGINEERING AND DEVELOPMENT COOPERATION

# Recognizing the human face of engineering

The José Entrecanales Ibarra Foundation presented its International Civil Engineering and Development Cooperation Awards to the US engineer Leslie E. Robertson and the Water Solidarity project of Firefighters Without Borders.

**T**he Civil Engineering and Development Cooperation Awards, which are made every three years by the José Entrecanales Ibarra Foundation, constitute an international benchmark in the field of engineering and fundamentally aim to position this specialty as a discipline that directly influences the development of society and wellbeing.

Leslie E. Robertson, distinguished in the Civil Engineering category, has stood out throughout his long career for innovations in the design of skyscraper structures and as a pioneer in the use of computer applications in these buildings. For the Development Coopera-

tion award, created to shine light on the more human face of engineering and communicate the role of this area in social progress, the jury decided to present it to the Water Solidarity project of Firefighters Without Borders, which built a system to purify and supply drinking water to a community of former oil workers in an under-developed region of Peruvian Amazonia.

#### **International reference**

In previous editions of the award, two legends of the profession internationally were honored in Guiseppe Lombardi (whose biggest works include hydroelectric power stations and dams in Switzerland,

Austria, Italy, Mexico and Ecuador) and Jörg Schlaich, whose highlights include important works such as the monument remembering the victims of the 3/11 terrorist attack in Madrid, Spain. In the Development Cooperation category, the organization *Practical Action* was recognized for its project connecting 24 isolated villages in Nepal; NGO *International Rescue* for building water infrastructure in Ethiopia, and; the association *Farm Workers for Human Development* for their light vehicle bridge in El Salvador. ■

#### **ONLINE INFO**

■ [www.fundacionjoseentrecanalesibarra.es](http://www.fundacionjoseentrecanalesibarra.es)



## Fundación JOSÉ ENTRECANALES IBARRA

### Leslie E. Robertson



This US engineer has spent over 60 years innovating in the design of structures for skyscrapers across the world, becoming a pioneer in incorporating computer design into the buildings. Robertson has also stood out for his bridge, dome and long-span roof projects, as well as the technical contribution he has made which has transformed engineering

and set the standard for the present generation of professionals. Robertson is the architect behind the structural design of hundreds of constructions throughout the world, from New York's Twin Towers to buildings such as the Shanghai World Financial Center, the Bank of China Tower in Hong Kong and the Pittsburgh headquarters of US Steel, as well as several museums in Berlin and the Miho Museum Bridge in Japan. In Spain, his best known designs are the Picasso Tower and the *Puerta de Europa* Towers.

### Drinking water for the Peruvian Amazonia



The Foundation recognized the Water Solidarity project sponsored by the NGO, Firefighters Without Borders (BUSF), for organizing access to drinking water for 40,000 people in the Peruvian Amazon. The project included the installation of permanent drinking water purification plants and home networks, supply to

difficultly accessed locations and mobile healthcare services, particularly to treat malaria, from which a large number of the population suffers. The project was launched in 2004 with the building of the Delfines plant and has meant: improved living conditions and longer life expectancies, and the growth of the project with new sites and technical proposals that permit cost optimization.

Firefighters Without Borders (BUSF) has worked since 1996 as an NGO focused on Latin America and is made up of firefighters and professionals from different services connected to firefighting and rescue, as well as collaborators and professionals from other sectors.



### The founder

The esteemed José Entrecanales Ibarra (Bilbao 1899-Madrid 1990) dedicated a large part of his life to teaching and academic life. He began his professional career in Bilbao, later returning to the Madrid Civil Engineering School as assistant professor in port engineering. He later joined the Professorship of Foundations and Stonework Bridges, of which he went on to become Chair. For 28 years, he taught many of the great engineers to come out of Spain and is author of an extensive collection of Department Chair Notes on ground engineering that even today place him as the man who introduced Geotechnics to Spain. He was made Honorary Professor and in 1983 received the Member of Honor Medal. In parallel, he developed a successful business activity, which in 1931 saw him form, alongside Manuel Távora Barrera, the construction firm Entrecanales y Távora, which they managed according to the principles of technical excellence. His entrepreneurial project continues to expand to this day under the name of ACCIONA.

A low-angle, upward-looking photograph of a modern architectural interior. The space is characterized by a large, multi-level atrium with a high, vaulted glass and steel ceiling. The walls are composed of light-colored stone blocks. A prominent feature is a large, curved, multi-story staircase with glass railings and dark wood paneling on the landings. The lighting is warm and focused, highlighting the architectural details and the modern renovation elements.

Commitment

NATIONAL ARCHAEOLOGICAL MUSEUM

# Historical restoration of a Spanish institution

Following the most ambitious renovation in its 147-year history, the doors of Spain's National Archaeological Museum are once again open to the public. ACCIONA Infraestructure has left its imprint on this neoclassical jewel, a protected site of special cultural interest in the city of Madrid. Complete restoration has transported this emblematic monument well and truly into the 21<sup>st</sup> century.





*The National Archaeological Museum in Madrid has undergone a profound aesthetic and architectural transformation in the hands of ACCIONA Infrastructure.*

**T**he long queues said it all. Expectation was running high before the reopening of Spain's most important history museum. After more than six years closed to the public, the patient visitors were not to be disappointed. A profound aesthetic and architectural change in the institution awaited them - yet the establishment has still managed to preserve its time-old magic.

ACCIONA Infrastructure, charged with the architectural restoration and museology of the project, performed a central role in the transformation of this illustrious edifice into a more accessible, eco-efficient space adapted to new norms and regulations.

### **Ambitious remodeling**

It is not every day a Company participates in a project involving the restoration of a historic building, housing an institution as prestigious as the National Archaeological Museum (MAN), where

famous exhibits such as the Lady of Elche, and the Osuna Bull, sit at home alongside Egyptian mummies, Greco-Roman ceramics and Visigoth weaponry. Founded in 1867 by Queen Isabel II, by means of a Royal Decree, the MAN is located in the National Library and Museums Palace, designed in 1866 by Francisco Jareño and completed in 1892 under the supervision of Antonio Ruíz de Salces.

ACCIONA Infrastructure threw itself into this challenge of the most ambitious renovation of the museum in its long history, one it more than overcame. That was thanks to the involvement of over 130 professionals from diverse activity areas in ACCIONA, from Engineering to Installations and R&D, directed by Francisco Romero, who has more than two decades of experience in the restoration of museums.

### **Maximizing the space**

Museum director Andrés Carretero enthused that the renovation

had been "total and absolute", a rationalization of space that has led to a 30% increase in the exhibition surface area of the museum to nearly 10,000 m<sup>2</sup>. The restored galleries comprise four floors, two covered patios and 40 rooms connected along a 3 km tour through the ages which takes in over 13,000 archaeological exhibits.

The restoration of the National Archaeological Museum is yet another demonstration of the extraordinary sensitivity and professionalism of ACCIONA Infrastructure in this kind of operation. ACCIONA's long experience in building museums and managing exhibitions, along with the constant innovative efforts of its fine multi-skilled team, have brought ACCIONA Infrastructure international renown for its pioneering work in this field. ■

### **ONLINE INFO**

■ [www.acciona-infrastructure.com](http://www.acciona-infrastructure.com)

*Chiripa wind farm  
in Costa Rica, commissioned by  
ACCIONA in 2014.*



EMERGING MARKETS

# The new frontier for renewable energies

➔ *Growing economies must increase their energy capacity and need clean, competitive generation technology to do so*

➔ *ACCIONA Energy is well positioned to grow in these markets*

**E**merging markets represent a potentially strong growth scenario for renewables in the next few years. The competitiveness of such energy sources, in countries which need to increase productive capacity to keep in step with economic growth rates, makes them an increasingly sought-after energy option.

The cost of renewable energies has fallen dramatically in recent years. Taking an analysis of wind and photovoltaic power, the price of wind turbine generators has fallen by 30% on average in four years (20% for the turbines with bigger diameter rotors) and the price of photovoltaic panels is down by around 60%. The energy cost (investment in the renewable project + operation and maintenance of the plant during its useful life) has fallen by similar percentages.

### Competitive energy

These circumstances mean that both technologies are already competitive with conventional generation in markets that need to increase their productive capacities to cover strong growth in demand.

The situation is very different from that in industrialized countries. The take-off of renewables in the latter was mainly for environmental reasons and to reduce energy

imports. It was helped by support mechanisms that allowed the incorporation of renewable energy into the system and drove technological development.

### A different context

In emerging countries, however, the maturity of renewable technologies and their reduced costs make them direct competitive alternatives to conventional energies, even excluding external environmental and social costs associated with the latter.

A photovoltaic or wind developer in emerging countries is now able to offer a competitive electricity generation price in calls for tender or other contracting procedures, and utilities are interested in obtaining renewably-sourced electricity at costs lower than fossil fuel generation.

Flexibility of renewable technologies also makes them a

more competitive option for direct supply to business or industrial concerns, especially when access to the grid is difficult, which is often the case in emerging markets.

Such a scenario was unimaginable a decade ago and offers great opportunities for renewable energy growth. With installation already high in a good number of developed countries, where the economic crisis has led to cuts in remuneration for renewable operators and there is presently zero or very reduced growth in electricity demand, the spotlight appears to have moved to other countries in which the energy and economic context is currently more attractive.

ACCIONA Energy is very aware of this and has strengthened its strategy towards these markets, obviously without forgetting other countries in the developed world offering business opportunities. ►

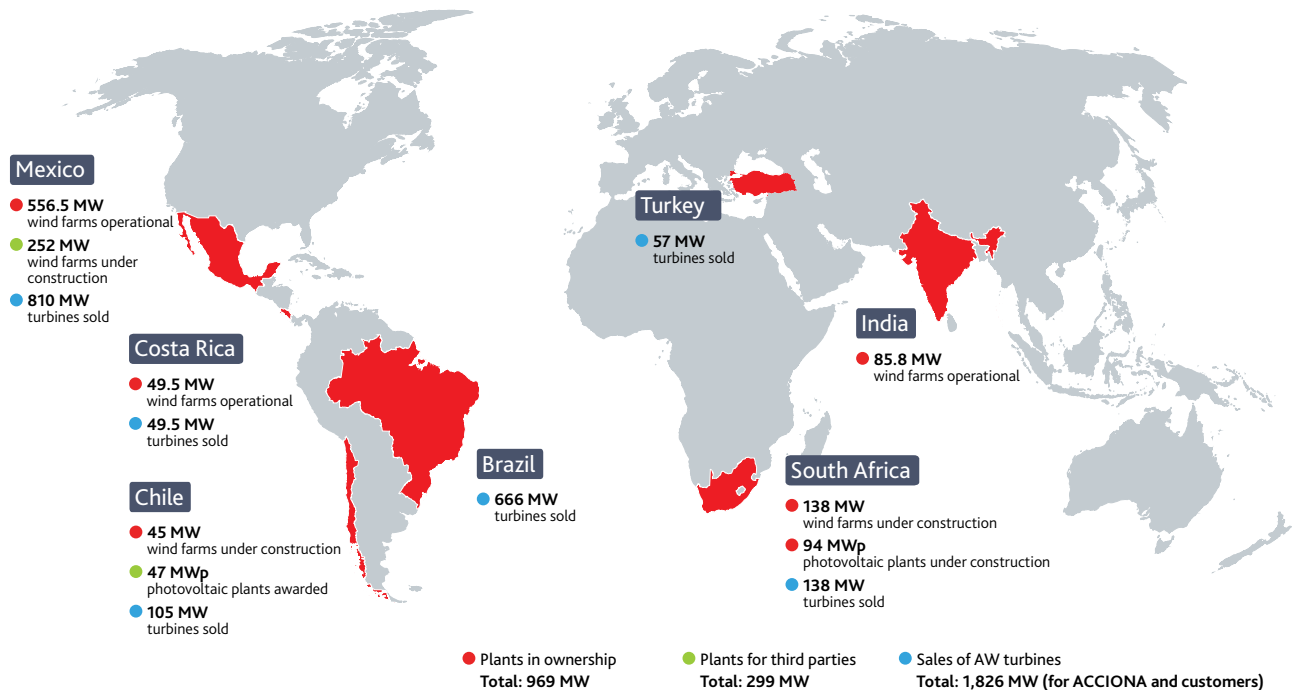
### → COST EVOLUTION FOR RENEWABLE ENERGIES

COST BENEFIT	PERCENTAGE	PERIOD
Average fall in wind turbine price	-30% (*)	2H 2009-2H 2013
Average fall in photovoltaic panel price	-60%	2010-2014

(\*) Average fall in price of large turbines is around 20%.

### → ACCIONA ENERGY PRESENCE IN EMERGING COUNTRIES

Data at 30.06.2014



#### ► Good base for growth

ACCIONA Energy's renewable projects, operational or under construction in emerging markets, amounted to 969 MW at 30 June 2014 and already represent 37% of the Company's own capacity at international level. This is a trend which we plan to increase over the years to come.

In terms of turbine sales, the 1,826 MW of ACCIONA Windpower machines supplied or contracted represent 48% of those contracted by the Company internationally and 31% of its total sales. Of turbines sold in these countries, 57% are to ACCIONA clients (third parties).

#### Mexico: our first market

ACCIONA Energy has four operational wind farms in ownership in Oaxaca, Mexico, totaling 556.5 MW; it has begun building two others under the EPC model (turnkey contract for clients) in the state of Nuevo León, totaling 232 MW; and the Company has installed wind turbine generators for third parties in Cancún. The total is 810 MW, all of them ACCIONA Windpower machines.

The Company has further wind farm projects for clients in Mexico at different advanced stages of development, totaling another several hundred MW. It has also entered the photovoltaic sector. The

recent energy reform in the country should favor the realization of more new projects in the future.

#### Chile: all options possible

The special characteristics of the Chilean energy market, with a mix dependent on coal and demand that outstrips supply —increasing emissions and raising energy prices— has led to non-conventional renewable energies entering the fray. It is expected these will increase over the next few years.

ACCIONA Energy is building a 45 MW wind farm in ownership and has signed EPC contracts for the construction of two photovoltaic plants with a capacity





A 3 MW ACCIONA Windpower turbine generator at a wind farm in Brazil.

## South Africa: two technologies

The country's extremely high dependence on coal, the need to reduce CO<sub>2</sub> emissions and thus diversify its energy mix, has driven the development of renewables in South Africa. ACCIONA Energy took part in the second round of the energy call established by the Government and was awarded, in a consortium with other companies including the South African, Aveng, an 138 MW wind farm and a 94 MWp (75 MW nominal) photovoltaic plant. Both facilities are currently under construction.

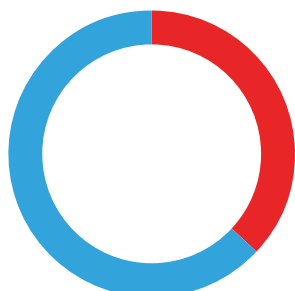
## Other countries

The Company has commissioned a 49.5 MW wind farm in Costa Rica, majority-owned by ACCIONA in partnership with a local company, Ecoenergía.

ACCIONA Energy has three wind farms in ownership in India (85.8 MW), as well as various other initiatives under development.

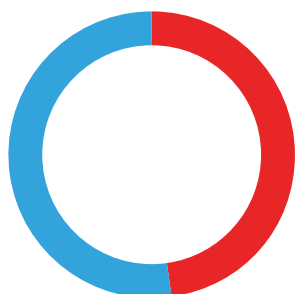
It is also to supply 3 MW turbines to a 57 MW wind farm in Turkey, and is taking part in a competition to award 850 MW of wind power in Morocco. The Company also has initiatives which will see it grow in other countries in the Middle East and North Africa. ■

### → OWN CAPACITY OUTSIDE SPAIN (MW)



● Emerging countries 37%  
● Other countries 63%

### → AW TURBINE SALES OUTSIDE SPAIN (MW)



● Emerging countries 48%  
● Other countries 52%

of up to 47 MWp. In previous years, it supplied, also to third parties, wind turbines for a 60 MW wind farm.

The Company currently has a good number of projects, in ownership and for clients, and which use wind and photovoltaic technologies.

## Brazil: wind turbine generators

Brazil has become the biggest market for 3 MW ACCIONA Windpower turbine generators. The Company had sold a total of 222 turbines (666 MW) by mid-2014, mainly large diameter rotor models, and expects new orders in the coming months.

The reliability of the AW turbine, its adaptability to different wind conditions and its reduced energy cost, has made the machine enormously competitive in the Brazilian wind power market.

### ONLINE INFO

■ [www.acciona-energia.com](http://www.acciona-energia.com)



*The mold arrives at ACCIONA's Blades plant in Lumbier.*

## A mold on 200 wheels

**The ACCIONA Blades plant at Lumbier, Navarre, received on 4 July the new mold it needs to manufacture the longest blades designed to date by the Company. The 61.2 meter blades are to be mounted onto the rotors of its 3-MW AW 125/3000 wind turbine generators.**

Behind it lay a nautical voyage of 18,000 kilometers. Loaded onto a ship in Shanghai, the mold made it by sea to the port of Bilbao in northern Spain. Then it was hauled over a complex three-night journey by road to Lumbier in the region of Navarre, home of the ACCIONA Blades plant. All in all, the operation represented a unique logistical challenge for the Company.

A special road vehicle was used to transport the mold over the final 225 km from Bilbao to Lumbier, a MAN 600-horsepower cab unit

drawing the load on a 200-wheel flat bed trailer.

Given that this type of freight is only authorized to move at night, the trip was allotted strict time slots and had to perform some especially complicated maneuvers. Such as at the junction of the N622 with A1 in Vitoria, where 200 meters of crash barrier and 20 road signs had to be dismantled—and reassembled immediately afterwards—for the truck and trailer to get round a 270-degree horseshoe bend.

All was meticulously planned, though, in a job that took months to



## A very special load

// Truck dimensions: 68.5 m long, 4.6 m wide and 4.8 m high

// Truck weight: 120 metric tons

// Mold weight: 64.3 metric tons

// Mold length: 62 meters

// N° of wheels: 200

// Power cab: 600 CV MAN

// Speed: 10-40 km/h

// Team:

- 1 driver, 4 engineers
- 2 truck company support vehicles
- 1 motorway concession company support vehicle
- 1 vehicle each from Basque/Navarre police

// Departure point: Port of Bilbao

// Destination: ACCIONA Blades (Lumbier, Navarre)

organize, involving the processing of numerous permits from the different local governments en route.

As well as the driver and four engineers accompanying the load, two support vehicles also made the trip, and two others containing Basque and Navarre police, as well as one from the corresponding motorway concession Company. A spectacular convoy, then, that left no one indifferent. A few motorists out and about during the post-midnight hours had the opportunity to contemplate the enormous load on its way.

ACCIONA's Lumbier plant has obtained orders to manufacture 84 sets of blades (252 units) for AW3000 wind turbine generators in 2014, of which 19 sets (57 units) correspond to the giant AW 125/3000 model.

The ACCIONA Blades workforce in Lumbier is set to climb to over 300 by the end of July so the Company can cope with rising demand. ■

### ONLINE INFO

■ <http://www.accion-energy.com>

*The truck needed three nights to make the 225 km trip from Bilbao port to the ACCIONA blades plant at Lumbier (Navarre)*





# We build sustainability

Mexico is currently the only market in the world, outside Spain, where ACCIONA has important projects in all its business lines: Infrastructure, Energy, Water, Real Estate and Services. An example of this is the recently-completed sustainable campus building at the Universidad Autónoma Metropolitana in Mexico City.

ACCIONA has just finished one of the main campus buildings at the Universidad Autónoma Metropolitana in Mexico City.

*Mexico is a key country in ACCIONA's growth strategy, with the Company winning important infrastructure, water, services and energy projects there*

ACCIONA has just finished the construction of a unique, big new campus building at the Universidad Autónoma Metropolitana, replacing the former low-lit provisional accommodation with a 44,000 m<sup>2</sup> edifice fit to house some 7,000 students.

The Universidad Autónoma Metropolitana (UAM) was created in 1974 and, one of the main universities in the country, is located in Mexico City. The Cuajimalpa Unit of the University is known for its commitment to sustainability principles, which makes it the perfect partner for ACCIONA considering our business model. All students in the unit, whatever their main degree, take a complementary subject in sustainability. University Chancellor, Eduardo Abel Peñalosa, explained: "Care for the environment and sustainability are at the heart of studying in our University."

### **Sustainable building**

Taking this factor as the reference point, ACCIONA equipped the

installations with natural lighting and ventilation, installed a small water treatment plant and solar heaters for water in the kitchens. And, of course, the Company has made use of its long experience as a leader in renewable energies to equip the center with clean energies through the installation of solar panels and photovoltaic lighting.

Project architect, Sergio Germán, goes on to explain other measures: "We have planted gardens on the terrace roof of the building; this is one of the main factors that allows us to regulate the climate in a natural way and reduce the use of air conditioning and heating. All the measures were checked by the Ministry of the Environment."

The new building has eight floors, and expansive patios and glass bridges inside to favor natural lighting and ventilation with the energy and environmental benefits they bring. To achieve the design, 3,300 tonnes of metal profiles were used, which are also located strategically to counteract ►

## ACCIONA in Mexico, some projects



### PARQUE REFORMA BUILDING

Located in Mexico City, a 24-story luxury corporate office block built in 1985.



### CAMPECHE CONVENTION CENTER

400 m<sup>2</sup> theater and exhibition hall built between 2008 and 2009.



### SUPPLY OF WIND TURBINES AND COMMISSIONING OF TWO NEW WIND FARMS IN MEXICO

ACCIONA Energy was in 2014 awarded the engineering and construction contracts for the Ventika 1 and 2 wind farms, which total 252 MW, as well as the operation and maintenance of the plants during 20 years.

► possible seismic effects. And there is another important aspect: the university has decided that students of different disciplines should be able to mix as much as possible and to that effect has grouped all study areas into the one building to improve socializing among them.

“The agora (assembly space) is my favorite area. It is a meeting point for friends on other courses, whom we could hardly get to know until now,” enthused one UAM student. This is a project that extends ACCIONA's participation in educational programs. It is one of which the Company's Mexico director, Guillermo Jiménez Michavila, is particularly proud. “The building work was carried out according to very high quality stan-

## Socially responsible

ACCIONA Mexico received recognition as a Socially Responsible Company (ESR) for the fourth time from CEMEFI (the Mexican Philanthropy Center, A.C.). The ESR® 2014 Distinction adds value to our business and accredits us as a publicly committed organization voluntarily adopting socially responsible management as part of its culture and business strategy.







### **SALINA CRUZ PORT (OAXACA)**

Widening of the entrance. Constructed between 2011 and 2012.



### **IRON PALACE**

Situated in Polanco and built between 1996 and 1997.

### **METEPEC REGIONAL GENERAL HOSPITAL**

236-bed sustainable building constructed between 2009 and 2011.

### **VERACRUZ SHIPYARD**

Dry dock and wharf for fleet enlistment. Built in 1982.

### **BAJA CALIFORNIA 5 THERMAL POWER STATION**

Design, supply, construction and commissioning for the Mexican Federal Electricity Commission (CFE). The plant, located in La Paz, will have a net capacity of 46.8 MW.

### **FIRST GENERAL HOSPITAL OF THE MEXICAN SOCIAL SECURITY INSTITUTE (IMSS) IN NOGALES, SONORA**

It will have 144 beds in a sustainable building.

dards, both in terms of the constructive systems used, and the materials and concepts associated with sustainability. All this will allow the students to enjoy the new facilities to the full,” he said.

### **Reforestation Lerma**

Parallel to the building of the Cuajimalpa Unit, ACCIONA completed the full reforestation of a neighboring area, not only caring for and respecting the local flora and fauna, but also improving its vegetation in a landscaping project. It planted 40 pines that fit the typology of the land and climate in this area of Mexico State.

ACCIONA always seeks to mitigate the impact of its infrastructure works in the areas where the projects are carried out. This is another example.

### **San Luis Potosí**

“Education is one of the areas that is really going to take off in the next few years in Mexico,” Jiménez Michavila added. “With this new project, ACCIONA is well positioned in this sector.”

While on the subject of building educational centers, ACCIONA has also completed the new campus at San Luis Potosí Polytechnic University, which it now also manages. The campus of 18 buildings has a capacity of 5,000 students and represents the first university center to be managed under concession in Latin America. ■

*Since 1978,  
ACCIONA has  
contributed to  
Mexico’s sustainable  
development  
through  
infrastructure,  
renewable energy  
and water  
treatment projects*

Solutions

# ACCIONA Agua, success stories

The Company dedicates its knowledge, track record and certified working processes to offer effective solutions in the vital sector it leads.





*Section of the Hadda wastewater treatment plant in Saudi Arabia.*

## EDARS HADDA & ARANA (SAUDI ARABIA)

The wastewater treatment plants at Hadda (125,000 m<sup>3</sup>/day) and Arana (250,000 m<sup>3</sup>/day) are responsible for the treatment of all the waste water generated in the holy city of the Muslim world, Mecca.

Saudi Arabia is a country with very scarce water resources from surface water and aquifers, such that the production of drinking water for human consumption has to come from large desalination plants. Indeed, population growth and projects to expand the supply network are based on the construction of huge new desalination plants in the future.

The Mecca installations are an exception in that there is a defined plan for the reuse of treated water, for example from the Arana plant where it is recycled in road cleaning and watering gardens in the holy city. Similarly, a large pumping station is also now being built to transport the treated water from the Hadda plant and reuse it in the heart of Mecca.

It is not only the quality that is essential, therefore, but the continuity and optimal operation of these two plants. They treat water to a very high standard and have acquired a special importance in the city.



People management is another important aspect of these projects. ACCIONA has a team of 116 people from 11 different countries, who have many cultural, religious, linguistic and educational differences, but one thing in common: they have to work in temperatures that rise to over 45°C.

Julio Ratia, project director for the plants, explained: "Within the rituals that make up the tradition of the pilgrimage to Mecca, it is the sacrifice of the lamb that affects us in the operation of the treatment plants. This is due to the spilling of the blood of three million lambs into domestic waste water. It reaches the treatment plants in no time at all."

Client:  
**National Water Company (NWC)**

Location:  
**Border between Jeddah and Makkah (in Mecca province)**

Total capacity (m<sup>3</sup>/day):  
**375,000**

### JAVEA DESAL PLANT: BEFORE & AFTER

Another ACCIONA Agua success story lies in the Javea desalination plant in Alicante. This represents an engineering and construction effort of great significance, hard work and development, one that the inhabitants of the town had been dreaming of for many years.

It was not long after the plant was commissioned in 2002 that the people of Javea were enjoying quality tap water. Neighbors, hoteliers, restaurant and shop owners all gained from the progress, tranquility and comfort the new plant brought to the town. Behind them lay years of disruptions to supply, summer drought periods, having to use saltwater (16,000-23,000 units) or put up with earth-colored water running through the plumbing, swimming pools and watering systems.

The queues to collect water in containers handed out in the town are also now a thing of the past; the image they gave of scarcity was hardly becoming of a 21<sup>st</sup> Century resort.

As for the environment, the initial detractors of the scheme, concerned about the possible damage that the briny water pumped back into the sea could cause to seagrass, had to recognize that the excellent project management by ACCIONA Agua made the best of Javea's privileged coastal location. New life was given

to the Fontana channel, which serves to transport the diluted brine back to the sea. The channel, a natural spillway from the River Gorgos (dry these days), is now a cleaned-up space, a home to wildlife and clear of foul smells.

A small rise in water rates, optimum service and good quality water have turned Javea into a town without restrictions or disruptions to supply in spite of the droughts that continue to hit the Levante region as a whole.

Client:  
**Javea Town Hall**

Location:  
**Javea, Alicante**

Population supplied:  
**134,000**

Total capacity (m<sup>3</sup>/day):  
**26,000**

Final use of water:  
**Drinking water**



*Operator in Javea desalination plant, Alicante (Spain).*



*The WasteWater Treatment Plant (WWTP) in Almuñecar, Granada (Spain).*

## COSTA TROPICAL

As of 1996, ACCIONA Agua, in association with Aqualia and under the name *Aguas y Servicios*, is responsible for the system of end-to-end water cycle management for the Community of Municipalities on Granada's Costa Tropical. During this time, the work carried out has brought notable benefits for the population, including:

- A general improvement in the quality of the water supply, both in terms of water cleanliness and security of supply.
- Environmental improvements such as the reduction in the use of natural resources through better network performance, less energy consumed, and cleaner rivers and beaches due to wastewater treatment.
- Support for economic growth by guaranteeing drinking water supply to a region with scarce water resources.

Close collaboration with the Community of Municipalities has attracted investment (in improved treatment plants, drinking water reservoirs, piping network efficiency, etc.) from the local authorities. Added to this is the research work being carried out through an agreement between the University of Granada and ACCIONA Agua's R&D&I department, and a social action program focused on explaining the Integrated Water Cycle in schools and to neighborhood associations.

The years of work have borne results, such as the extension of the concession till 2045, which entails the investment of over 32 billion euros in renovation works and network improvements in the different municipalities, funded through an Improvement Levy. ■

### ONLINE INFO

■ <http://www.acciona.com/news>

Population

**130,000/  
265,000**  
inhabitants

**15**

municipalities

**92,970**

clients

**170**

employees

**10.3MMm<sup>3</sup>**

of water invoiced

**1,154 km**

length of network

**6**

WWTPs

**92%**

percentage of water treated

*2013 figures.*



# Can you build ports without concrete?

ACCIONA has been recognized with the European Business Award for the Environment, in the Spanish section, after winning the Product and/or Service for Sustainable Development category. The award was made for the Company's solution for extending the cruise ship wharf at the Port of El Rosario in Fuerteventura, Canary Islands.



**A**CCIONA has developed and patented a construction system which minimizes the environmental impact and reduces the resources needed in the building of port infrastructure. Its composite material caissons are made from glass fiber combined with polymeric resins and replace conventionally-made concrete forms. The construction system is being implemented as a pioneering solution in works to

extend mooring points on cruise ship wharfs at El Rosario port in Fuerteventura, Canary Islands, developed by Las Palmas Port Authority.

ACCIONA's solution can, by its nature, be applied to the performance and extension of any such quays, seawalls and mooring points in ports. It has significant environmental and operational advantages with respect to the concrete caissons used up to now.



### Advantages of sustainability

Faithful to ACCIONA's commitment to sustainability, some of the advantages of this new system include a 75% reduction in CO<sub>2</sub> emissions and the generation of less waste during the construction process, as well as minimizing the impact of port infrastructure on the marine ecosystem due to its smaller support surface area.

Thanks to this continuous support for innovation and sustainability, ACCIONA has been recognized with the European Business Award for the Environment (Spanish section) in the Product and/or Service for Sustainable Development category. The European Business Awards for the Environment are organized by the European Commission's Environment Directorate General and coordinated in Spain by the Biodiversity Foundation of the Ministry of Agriculture, Food and Environment. The Spanish award winners will now compete at the EU level. The award was presented by Their Royal Highnesses the King and Queen of Spain to ACCIONA Vice-Chairman Juan Ignacio Entrecañales. ■

#### ONLINE INFO

■ [www.acciona.com/news](http://www.acciona.com/news)

## Innovation engineering

The construction process is rapid, clean and sustainable, and consists of various stages:

**1.**

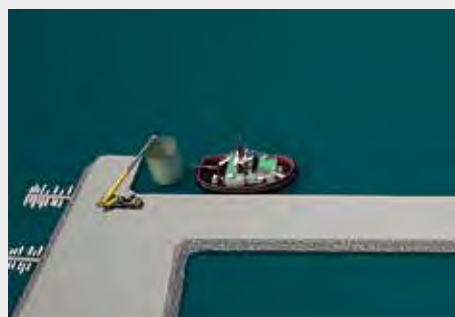
The composite material caissons are built in a factory and carried to the works where they are assembled.



**2.**

Assembly is rapid and clean, using only conventional cranes.

The caisson is formed by its base, a double wall, vertical stiffeners and a series of lower radial reinforcements.



**3.**

Once mounted, the caisson is launched and towed by a lightweight craft to the place it will anchor.



**4.**

When the caisson reaches its definitive location, it is filled with gravel to weigh it down and completed with the superstructure containing the defence and craft mooring bollard.





# Around Greenland in 49 days

**The ACCIONA-sponsored Wind Sled has covered 4,300 km to circumnavigate Greenland, propelled only by a system of kites and no other form of energy. The expedition also fulfilled its task as an 'eco-laboratory' running on zero-emissions in polar climes.**

**T**he first-ever circumnavigation of Greenland's ice terrain by a wind-propelled vehicle came to an end in late June having successfully reached the point it departed from near Kangerlussuaq on the south-west of the island after covering 4,300 km in 49 days.

The five explorers led by Spanish polar legend, Ramón

Larramendi, beat a record for the distance traveled by a wind-powered vehicle in a single stage, reaching 427 km. During the journey, Larramendi's team tested a new prototype for a 'mobile eco-laboratory' which demonstrated that it is possible to travel and research in polar territories on zero emissions.

"The objective of the expedition sponsored by ACCIONA was to test the effectiveness of the Wind Sled as an easy-to-steer, economic, sustainable vehicle for researching polar territories, which are very fragile ecosystems through which today thousands of scientists travel leaving their ecological footprint," explained Ramón as the expedition ended. Spanish engineers Manuel Olivera and Eusebio Beamonte, Dane Karin Moe Bojsen and Greenlander Hugo Svenson joined Ramón on the vehicle. All returned to base without injuries, just tired after such a demanding journey.



## Mission accomplished

Throughout the 49-day-trip, four days longer than planned, the explorers carried out regular data collections from the snow for the Pyrenean Ecological Institute (IPE-CSIC). Their mission was to gather samples every 100 km by introducing a dipstick into the ice and at 400 km they drilled 10 trenches, each a meter deep, to perform further research.

Yet there was also a geographic challenge to tackle, on top of the scientific and environmental ones. No one before had tried to ride around Greenland like this —the

world's biggest island at over 2.5 million km<sup>2</sup>— on its 'inland ice'. The American Lonnie Dupre and Australian John Hoelscher tried it using non-polluting transport (dog-pulled sleds and kayak), but it took them five years (1997-2001). The Wind Sled did it in 49 days.

ACCIONA's Windpowered Antarctic expedition 90°S crossed the continent in 2011-2012, again led by Ramón Larramendi, arriving at the Geographic South Pole on an earlier version of the sled.

Follow the full Greenland 2014 Circumnavigation, as it unfurled, on the project website. ■

## PASSION FOR SCIENCE

We at ACCIONA Reports would like to pay tribute to the great passion for adventure and immense scientific legacy left by the chemist Juan Pablo Albar, who died in July, aged 59. Albar was one of the principal Spanish researchers investigating genome proteins and scientific coordinator for the ACCIONA-sponsored 2011-2012 Wind Sled expedition that reached the South Pole, led by explorer Ramón Larramendi.

### ONLINE INFO

■ [www.greenland.net/windsled](http://www.greenland.net/windsled)



Close-up

# The best course is a well-kept one

The golf industry began to develop in Spain at the end of the 1970s into the 1980s. But it was only in the mid-1990s that clubs started to manage themselves professionally and the sport we know as golf today became a money-spinning business. It really took off when course managers started to take an interest in the natural beauty of their surroundings and sustainability.



*Vallromanes  
Golf Club,  
Barcelona.*





*Cutting the  
fairways at  
Vallromanes Golf  
Club, Barcelona.*



According to Spain's Royal Golf Federation, in 1990 there were only about 45,000 golfers in the country. By 1996 this had more than doubled to 100,000, and in 2006 we were talking about 300,000. The reality is that Spain is the top destination for golfers in Europe and the second favorite worldwide after the United States. Amateurs of the sport choose Spain for the quality of its 450 courses spread out all over the country. The climate, which allows them to play all year around, and the high standard of hotels are other important factors.

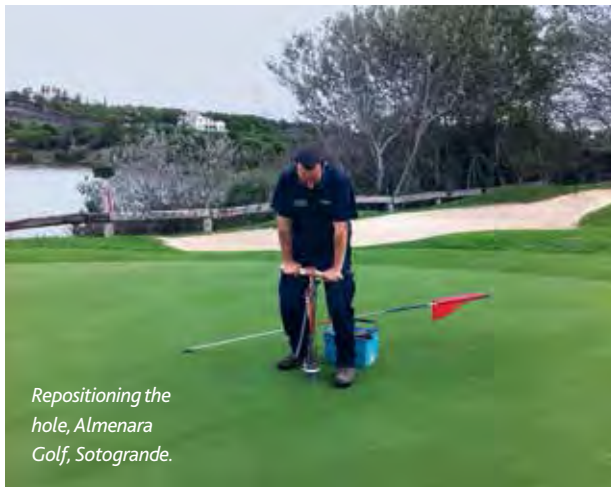
A study by Aguirre Newman points out that Spain welcomes one million foreign tourists a year whose main motive for visiting the country is golf. This holiday activity generates annual revenues of some 1.2 billion euros, an average of 1,200 euros per player per stay.

Meanwhile, the golf courses bring increased economic activity to the

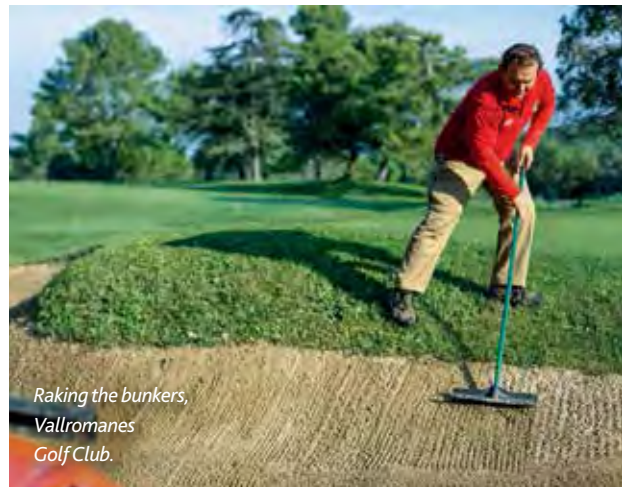
region in which they are located. But the most important element in playing golf is contact with nature, so one of the golf club's biggest assets is its natural surroundings. The players stroll around the course without impacting on the environment, coexisting harmoniously with the flora, fauna and nature around them.

### **Management model**

ACCIONA Service has created its own model here through which it achieves the best in sporting and managerial quality. With 50 years of experience in end-to-end management of services, the company is able to contribute value as a provider of global solutions. Based on the management of its team of excellent professionals, state-of-the-art technology, optimization of the water-energy axis, and sustainability of the surroundings, it introduces criteria of efficiency and economic savings, ►



*Repositioning the hole, Almenara Golf, Sotogrande.*



*Raking the bunkers, Vallromanes Golf Club.*

*Maintenance is considered by many players to be 'the' key factor, even ahead of course design*

- ▶ while improving the environmental quality of the golf course's natural resources.

The role of the greenkeeper is an essential element in ACCIONA's model. The greenkeeper is responsible for the condition, maintenance, care and management of the resources of a golf course. The greenkeeper's main aim is to keep the course in the best condition for playing the sport all year round, managing the budget established and caring for the environment. He must make use of technological

advances (satellite-controlled watering systems, all kinds of automatic devices and new machinery) and combine various disciplines, from the scientific area to environmental management, horticulture to human resources, teaching, meteorology and public relations, to name a few.

#### **Key factor**

Course maintenance is considered by many players to be *the* key factor, ahead of even the design of the golf course.



*Cutting the ring of the green, Almenara Golf.*



*Manual mowing of the green, Almenara Golf.*

## Greens fit for inspection. Basic maintenance tasks

Greens are the crown jewels of golf courses and need meticulous maintenance. A golfer demands that the greens are in a perfect state to get his or her best putting game going. The hardness of the green surface and the speed of the rolling ball are the basic parameters ACCIONA Service considers when it draws up its maintenance plan.

### CUTTING

Optimum frequency and height of the cut maintain the grass dense and healthy, helping the trajectory and speed of the ball.

### ROLLING

Frequent rolling keeps the surface of the greens uniform and firm. Combining cutting with rolling is a good method to increase the speed of greens.

### AERATING AND PRICKING

For correct drainage and high grass quality.

### GRAVELLING

The incorporation of sand after the pricking, or on a regular basis, will provide firmness in the putting surface.

### APPLICATION OF GROWTH REGULATORS

Helps prevent the proliferation of *Poa annua*, an undesired variety of grass that slows down the green.

### WATERING

Occasional, but profound, watering, together with localized watering in dry areas, will make for less succulent grass, keeping it healthy and favoring the trajectory of the ball.

### FERTILIZERS

Fertilizer should be applied depending on the results of both soil and foliation analyses.

### CHANGE OF FLAG POSITION

Regular repositioning of the hole achieves the distribution of traffic across the green.

### APPLICATION OF PHYTOSANITARY MEASURES

Our philosophy is focused on performing preventive maintenance, since, if the grass is kept healthy, the risk of disease diminishes. We resort to fungicides in one-off cases where corrective actions are required.

**ACCIONA**  
*Service provides  
an end-to-end  
management  
solution for  
golf courses  
and associated  
activities by  
contributing  
added value*

Keeping of golf courses has thus become a career in its own right, one which has to coexist with the practice of the sport, without interfering with it. For this, the greenkeeper plans work on the greens, their fringes, the tees, fairways and roughs thoroughly - for the short, medium and long terms.

ACCIONA Service takes care of the maintenance of several golf courses, among which the best known are Almenara Golf in Cadiz and Vallromanes Golf Club in Barcelona.

One of the pillars of the ACCIONA Service model is its commitment to sustainability and the technologi-

cal innovation optimizing water and energy consumption, protecting biodiversity at the golf courses, performing sustainable waste management, working towards the environmental integration of the courses and applying computerized watering, preventive and corrective maintenance, and incident management procedures. These are just some of the tasks that see golfers returning time and again to the well-kept course. ■

ONLINE INFO

■ [www.acciona-service.com](http://www.acciona-service.com)



## // The Decade of Sustainable Energy for All begins

ACCIONA Chairman José Manuel Entrecanales took part in the 1<sup>st</sup> Sustainable Energy for All (SE4ALL) Forum, an initiative of the UN and World Bank to launch the transition to a more sustainable energy model. As a member of the Advisory Board and co-chair of the Renewables Committee, Mr Entrecanales presented the progress achieved and some work recommendations, the most important of which were:

- **Knowledge management**, for sharing information on available technologies, policy and regulatory options, success stories and lessons learned in installing renewables.
- **Policy and regulation**, since the commitment of governments is key to achieving the objective of 30% renewable energies by 2030.
- **Social support**, for which the development of information, communication and awareness-raising campaigns, and a social debate based on the future energy model, are essential.
- And two horizontal objectives complete the work areas: **the development of innovative lines and products of financing, and training to promote employment.**

SE4ALL also saw the presentation of the *REMap 2030* report which emphasizes the technological, economic and financial viability of going from 18% renewable generation in 2010 to 36% in 2030. This increase would mean an investment of 265 billion dollars, easily offset by savings of 740 billion dollars

associated with the costs of the pollution from fossil fuels that would not occur with double the share of renewables in the energy mix. UN Secretary-General Ban Ki-moon and World Bank President Jim Yong Kim used the forum officially to launch the Decade of Sustainable Energy for All 2014-2024.

### SE4ALL

Sustainable Energy for All is an initiative first raised by Ban Ki-moon at the UN's Private Sector Forum in 2011. It aims to unite the efforts of governments, the private sector and civil society to achieve by 2030:

- Universal access to modern energy services
- 40% improvement in energy efficiency
- 30% of world energy produced from renewable resources.

ACCIONA also used the forum to present its commitment to providing basic electricity access to rural communities isolated from the grid in emerging economies/countries, with all supply coming from renewable sources. This commitment is based on an innovative public-private association model and includes the collaboration of local and national governments in promoting a favorable framework for renewable energy supply. It also helps develop local renewable energy providers in isolated rural communities.

In September 2013, ACCIONA extended its commitment to this initiative in Africa, where the Company is studying replicating the *Light at Home* program it has already installed in Peru and Mexico. ACCIONA is looking at introducing the program in South Africa and Gabon by 2015. ■

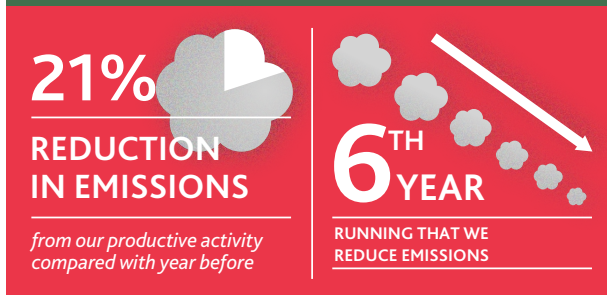
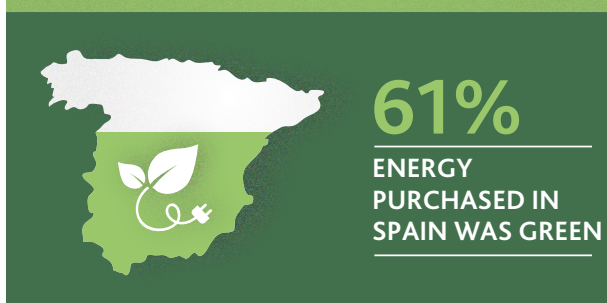
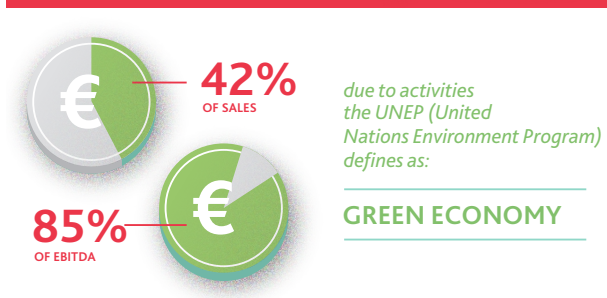
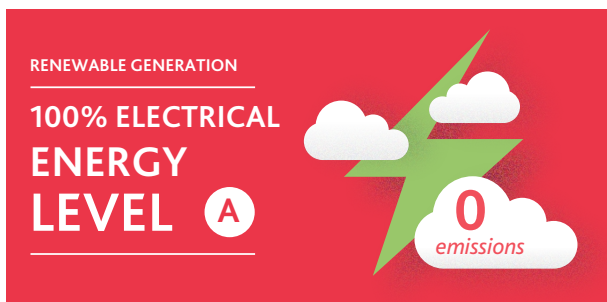
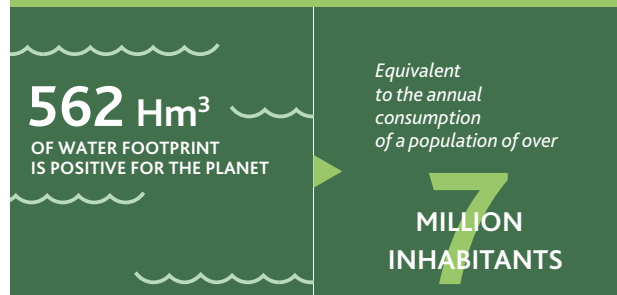
#### ONLINE INFO

■ [www.se4all.org](http://www.se4all.org)



## ACCIONA IMPROVES ITS ENVIRONMENTAL BALANCE SHEET

Most significant achievements in 2013.





# Oman and its history

**The National Museum of Oman is one of the most ambitious projects by ACCIONA Productions and Design in Middle East. With a collection of 7,000 pieces, and an interactive system that will recreate the history of Oman, the museum will become —by the end of 2014— the first to be adapted for blind people in the Middle East.**

**S**ome 7,000 artifacts, city maps and life-size replicas of ships, complemented by a host of audiovisual and interactive material, will go to make up Oman's National Museum, to open at the end of 2014. The aim is to recreate the history of the country through its most significant events and the best combination of conventional resources and latest technology.

The project has been placed in the hands of ACCIONA Productions and Design, chosen by the Omani government to carry out the technical development and museological execution of the museum, a contract worth 18 million euros.

Occupying 4,000 m<sup>2</sup> and 12 rooms holding over 250 display cases, this is one of the most challenging projects the Company

has been involved, given the large size of the collection. There will also be a gallery for temporary exhibitions, a storage area that can be visited, a conversation space and a children's classroom.

Interactive and audiovisual resources designed to present the exhibition's context will contribute both games and learning material to the visit, which will culminate in the showing of the film, *Oman*



A contract worth

**18 M€**

the project is ACCIONA Production & Design's biggest in Middle East.

More than

**250 DISPLAY CASES**

holding some

**7,000 PIECES**

constitute a significant challenge in museological arrangement.

This will be the

**FIRST MUSEUM ADAPTED**

for blind people in the Middle East.

*in History* in the museum's theater.

This spectacular production, which uses an 8.3 megapixel screen, was shot in 4K ultra high definition (UHDTV) and will include some extraordinary beautiful aerial film.

Within APD's 'social innovation' concept, used in all the Company's projects, the Oman National Museum will be adapted so that people with special needs can also enjoy the heritage on display, converting it into the first museum for blind people in the whole of the Middle East and the first in Oman that will be accessible to people with reduced mobility.

### Contract signing

The signing of the contract, which took place at the beginning of April in the current Oman National Museum in Muscat, could count upon the presence of His Highness Sayyid Haitham bin Tariq al-Said, Minister for Heritage and Culture, the President of the National Museum Board and, for ACCIONA, the ACCIONA Production & Design Business Director, Juan Jesús Caballero Trigo. ■

### ONLINE INFO

■ [www.acciona.com/news/acciona-producciones-diseno-national-museum-oman](http://www.acciona.com/news/acciona-producciones-diseno-national-museum-oman)



# Volunteers without borders

**The third annual ACCIONA Volunteering Day testified to the Company's international outlook. Schoolchildren took part in sustainability workshops given by our professionals in 11 countries.**

**S**ome 330 volunteers took part in the initiative in 2014, hosting workshops involving over 6,500 schoolchildren aged 7 to 11 in Spain, Portugal, Croatia, the United States, Mexico, Chile, Canada, Brazil, Australia, Poland and Gabon. ACCIONA employees traveled to around 100 schools and, during two hours, led the pupils through activities and games aimed to teach them, in practical and fun ways, how to save energy and water, obtain more from natural resources, and basic notions about renewable energies, etc.

Volunteers were provided with a teaching guide and materials to carry out exercises and help the pupils improve the 'climate

footprints' resulting from their daily routines.

The initiative, held for the third year running, aimed to involve the children in improving the environment through activities in their school environments. This included the pupils converting used bottles, tetra paks and







ACCIONA employees gave workshops for schoolchildren aged 7 to 11 on Environment Day.



*The initiative aims to get the children involved in sustainability through activities in their schools*

yoghurt cartons into musical instruments, piggybanks and robots, and discovering which of their routine practices were polluting. They also each received a 'sustainability detective ID card', making them responsible for environmental protection in their respective schools.

ACCIONA aims, through the Volunteering Day, to raise awareness among schoolchildren of the active role they can play in

achieving sustainable development and to encourage employees to assume the Company's philosophy based on the commitment to low-carbon business models. This means carrying out activities which avoid CO<sub>2</sub> emissions, reduce greenhouse gases and optimize energy and water use. ■

#### ONLINE INFO

■ [www.acciona.com/sustainability/sustainability-master-plan/society/volunteering](http://www.acciona.com/sustainability/sustainability-master-plan/society/volunteering)



# News round-up



- ACCIONA Energy won the engineering, construction and supply contract for the wind turbine generators for two wind farms in Mexico, totaling 252 MW, which it will also commission, operate and maintain for 20 years. The farms —Ventika 1 and 2— are planned to come on line in the second quarter of 2016.

- ACCIONA will supply electricity sourced from renewable energy to all Spain's mainland airports in 2014-2015 —except Madrid, Barcelona and the Canary Islands— for around 23.5 million euros.
- ACCIONA won the contract to build Panama's new 280-bed cancer hospital, which will have floor space of 33,350 m<sup>2</sup>. The project budget is 172.7 million dollars.
- ACCIONA Windpower created 400 jobs at its concrete tower manufacturing plant for wind turbines installed in Areia Branca municipality, Brazil. The factory will supply 101 towers for 3-MW ACCIONA Windpower turbine generators heading for wind farms of the Voltalia company in 2014 and 2015.

## APRIL



- ACCIONA became the first construction firm worldwide to obtain the *Environmental Product Declaration (EPD)*, certifying the environmental footprint of the Company's infrastructures during their full useful life cycle.

- ACCIONA and Ferrovial won the contract to design and expand 19.5 km of Australia's Pacific Highway between Warrell Creek and Nambucca Heads.
- ACCIONA won the contract to design, supply, build and commission Baja California V thermal power station in La Paz, Mexico, for 107 million dollars. The plant will have a 46.8 MW net capacity and is expected to be completed by June 2016.

## MAY



- ACCIONA Windpower expanded its range of AW 125/3000 turbines of 3-MW nominal capacity and 125 m rotors. This is the biggest diameter rotor the Company has designed so far, with the new version specially adapted to medium-strength winds.



- ACCIONA installed **camera traps by its sewage plants, wind farms, motorways, vineyards and other installations** to research indigenous wildlife behavior. Over 19,000 photos and videos show that the facilities analysed are not having a vacuum effect on animals living near them.

- ACCIONA Agua is leading the European R&D project, RENEWAT, which aims to synchronize the activity of sewage plants with the availability of renewable energies integrated in the plant. The move will reduce plant energy dependency **by up to 30% and save 25% in sewage treatment costs.**

## JUNE

- ACCIONA Windpower signed a contract **to supply and assemble 30 3-MW turbines totaling 90 MW** of capacity headed for the Itarema wind farm complex owned by Rio Energy in Ceará state, Brazil.

- ACCIONA Windpower signed a contract to **supply and assemble 51 3-MW turbines totaling 153 MW of capacity** headed for the Santa Vitória do Palmar wind farm complex owned by the Atlantic company in Rio Grande do Sul state, Brazil.



- Globalvia successfully completed the operation to acquire ACCIONA's 11.78% and 12.88% stakes in the companies operating two Barcelona tramways: Tramvia Metropolità, S.A. and Metropolità del Besòs, S.A., respectively. The operation means Globalvia, which was already the majority stakeholder, increases its participation to hold 42.44% and 43.05% of these companies.

## JULY

- Rio de Janeiro State Environment Ministry in Brazil awarded ACCIONA Agua—in a consortium with Brazilian companies Serveng and GEL—the **works for the São Gonçalo waste treatment network for 117 million euros.** The project will involve the environmental recovery of the Alcântara (which gives its name to the project) and Mutondo river basins, and will serve an estimated population of 250,000 inhabitants.



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