



## ACCIONA ENGINEERING

Leader in civil engineering looks to the future

### MARKETS

ACCIONA, the benchmark in Concentrating Solar Power

**ACCIONA'S PROFESSIONALS** 

# The world's their oyster



## A SUSTAINABLE GROWTH MODEL

Creating value, building infrastructures, using alternative energy sources, guaranteeing the availability of and access to water for everyone through a firm commitment to R&D and sustainability in all of the fields where we operate. This is our challenge, our business model, our path, our response.

www.acciona.com



## A horizon of opportunities

e often hear talk of "the challenge of internationalization" as a future project in the lives of companies. For ACCIONA, however, the future is already a reality. Not because everything has already been done, but because much is in progress and there's still lots to come. The world needs infrastructure, energy and water to guarantee sustainable development and this is why ACCIONA's market is global. This is readily assumed by the Company's professionals, too, who have become "citizens of the world" thanks to their work in other countries. They are protagonists, in the first person sense, of the Company's globalization.

One of the keys to international growth is a catalogue of differentiated offerings. ACCIONA Engineering, the company that resulted from the merger of AEPO and Iberinsa, draws together the Company's traditional excellence in this field and reinforces its capacity to compete in markets.

Putting forward and carrying out alternatives, such as solar thermal energy plants or electric vehicle recharge networks, also opens new horizons based upon innovation. And they offer innovative solutions to specific problems, such as the operational challenges at the Tampa Bay (USA) desalination plant, and consolidate ACCIONA's reputation and its capacity to complete critical and complex projects that guarantee sustainability.

All of these factors have been important to ACCIONA producing a satisfactory financial performance in 2010, despite the difficult economic environment.

Each day, ACCIONA demonstrates its vocation as a company without frontiers – in the same way that progress, or social networks, or professional development, have no borders. And with such a vocation, the world is literally a horizon of opportunities.

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## **Citizens of the world**

Vocation, market opportunities, a passion for adventure, professional development... there are many, diverse reasons why ACCIONA professionals want to work outside their native countries. ACCIONA Reports traces some of their experiences.





IGNACIO BENEYTO Spanish. Head of Operations at Tampa Bay desalination plant. In the United States since March 2008.

hen he arrived, the first thing he did was to buy a cell phone. "Until you get used to things, all the streets seem the same and you tell one from another by whether it's a McDonalds or Burger King on the corner." Ignacio is responsible for operation, quality control and optimization of the Tampa desalination plant. "This plant is very capricious and we've had to overcome difficulties we couldn't imagine at the start. We've done so thanks to the teamwork among those of us at the plant and those directing and helping us from Spain. Not for a moment, though, do I feel remote work wise, since we have easy communications." His colleagues helped him a lot when he arrived with "tips and advice on how to cope". Nevertheless, "I miss my family and friends... and the ham, of course."

"Colleagues made our arrival much easier, giving us tips and advice on how to cope"

## "ACCIONA is transforming into a global company and we've to be aware of it and ready to work anywhere in the world"

t was not the first time he'd lived in Mexico, so he landed on familiar terrain. But "since 1995, the country has changed a lot". Then, the economic crisis cut short his stay to ten months and he ended up in Brazil. Now, second time around, he's winning through. "With ACCIONA's internationalization strategy, it came as no surprise when they suggested I return to Mexico and I didn't take long to decide. Today, the international markets offer greater opportunities for growth and development of new projects, and the challenge of this new experience was attractive from the start." He sees the advantage of counting upon the Company's notable local presence. Outside of Spain, Mexico is the country in which ACCIONA has the largest number of projects. Yet, despite this, "you have to take responsibility for processes and tasks which, with a larger structure, as in Spain, arrive on your desk already resolved. But this does allow you to acquire a global knowledge of management."



**GUILLERMO JIMÉNEZ MICHAVILA** Spanish. Director, ACCIONA Infrastructure Mexico, and Country Director. There since June 2009.



ERIC JOHN SCHNEIDER American. Client Services & International Communication, ACCIONA. In Madrid since September 2010.

eing dedicated to communication, the command of language is imperative for him. Also because he fears his daughter of one-and-half years is beating him to it! "When I talk about ACCIONA in Spain, everyone knows the Company and it has an excellent reputation. In the United States and Canada, you need to explain more, but I love telling the story and the vision of the Company. It's something I also now do for new clients and partners in other countries." Culturally, "in Spain, the rhythm of the day runs about two hours behind the US. You eat later, arrive and leave work later and the kids go to bed two hours later... The communication channels are also different. Telephone and face-to-face are preferred to email, and mealtimes are an opportunity to swap impressions with colleagues." The downside on arriving? "Shopping and work times coincide. I haven't had the opportunity yet to buy a car!"

"It's an incredible experience working at ACCIONA HQ and helping drive the Company's globalization" "Without such a close-knit group as we are at Fouka, the project wouldn't have made such progress"

e was on his way to Mexico when ACCIONA needed someone for Algeria. As he already had experience in the North African country, he agreed to swap destinations. Before a year is up in Algeria, though, he'll be on the move again - this time to Mexico, where he is to help build the biggest wastewater treatment plant in the world at Atotonilco. "The truth is that when I first arrived in Algeria it was quite a cultural shock. You come warned about many supposed prohibitions, but after a month you realize that you are relatively free to do much of what you are used to doing. The most important thing is to respect religion. It's the pillar around which life revolves." He's convinced that travelling around the world is good from a professional viewpoint. "It broadens your horizon. You know you will always be busy. And you see the organization from a different perspective, understanding that your experience is very valuable for advancing whichever project, however difficult, and wherever it's at."



JUAN CARLOS VARGAS Colombian. Works Director at the Fouka desal plant. In Algeria since April 2010.



**CAMILO ANTONIO VASQUEZ** Colombian. Works Director at Oaxaca II wind farm. In Mexico since August 2010.

He had been based in Chile and the decision to move to Mexico was a hard one. "Initially, I transferred alone to Mexico, with the aim of making first contacts in the country and making all the arrangements to bring my family over." He's come face-to-face with new construction regulations and processes which now form part of his international experience. "This allows you to be prepared to achieve new goals and have no fear of future professional challenges and projects." Although it takes time to adapt, he recognizes that "without doubt, in Mexico I have been made to feel really welcome and at home." And he points out: "From the little I have learned so far, the rich gastronomic tradition, cultural diversity, landscapes and unexploited beaches stand out."

"I agreed on the move with my family, evaluating the project's importance, the situation in Spain, the possibility of getting to know another culture and, above all, that we could stay together" "I dream of drawing a map with ever more blue on it, as a result of the treatment and distribution of drinking water"

nternational experience turns you into a more versatile and 'chameleon-like' professional. I've always loved travelling and as a result have forged a curious personality. Travelling opens the mind, liberates you, and London is the perfect city for that." She joined ACCIONA specifically for this project; before that she worked for the Royal Bank of Scotland in Edinburgh. "It was a radical change in the professional sense, a challenge and an honour. I enjoy my role in ACCIONA. The world population is exposed to the stress of not having access to enough water. Resolving the scarcity of the resource with our technology is very satisfying." As far as the way of working is concerned, she recognizes that British organization is a big advantage. "As for the English, they find the enthusiasm and strength of the Spanish to bring any project to completion, irresistible!" And with respect to the famous English climate, she assures us that it doesn't rain all the time and there's none of Sherlock Holmes's fog. "Perhaps I'm saying that because I come from Galicia..."



ESTHER LORENZO JAUDENES Spanish. Process Engineer at Beckton desal plant. In London since May 2008.

"The public administration system functions very well and you are received wonderfully well wherever you go"

e'd already lived in the United States, so when it came to taking up a post at ACCIONA's wind turbine-generator manufacturing plant in Iowa there were no surprises. "The only thing unforeseen was choosing a place to rent. We found our first landlord to be dishonest and moved out after two months." But he says: "To spend a spell in a first-rate country like the US is very enriching. Although the dynamics of working are very similar to Spain, less importance is given to interpersonal relations and face-to-face communication. Another difference I've noticed is that the American worker is more organized and punctual." He points out the big advantages of family life: "It's a privilege to be able to support the whole family through my job. Living on one salary alone with three small children would be almost unthinkable in Spain."



**LUCAS JUAN LLADÓ** Spanish. Supply Technician at West Branch wind turbine plant. In United States since September 2007.



**DIEGO ARITIO** Spanish. Head of Production at Adelaide desal plant. In Australia since February 2009.

fter over a year in Chile building and commissioning the Temuco wastewater treatment plant, he spent almost a year on the Torrevieja project, the biggest desal plant in Spain. His third stop with ACCIONA combines two ingredients from the previous ones: internationalization and desalination. "Knowing how to adapt to the situation, and apply improvements based upon other experiences, always means being able to contribute a lot." He is responsible for the design and construction of electromechanical equipment for the Adelaide desal. "We have been able to work in a country with high quality standards, developing new design and construction methods. I'm sure that this will prove an exemplary project from which we will draw a lot of experience to help ACCIONA Agua's international expansion." All's not work, however. "Australia is an ideal country for open-air sports due to its excellent climate, green spaces and beaches. It gives me the possibility of enjoying my hobbies: golf and surfing."

"Changing country is always an adventure and challenge. You feel sad you will not see people at home so often, but also excitement for 'the new""





VANESA AYALA Spanish. Researcher & Developer at Adelaide desal plant. In Australia since 2009.

I recommend, to anyone with the opportunity, that they take advantage of working outside their own country." Vanesa is in charge of refining chemicals used in the desalination process at the Adelaide plant and of water quality controls. "Being abroad, and at the start of a project, you must take important decisions quickly." Her arrival was "chaotic and stressful, with much to do in very little time. I came to Adelaide to work on the pilot plant – which the client already had and it needed modifying to simulate the process of the full-scale facility we were about to build. Thanks to the pilot operation, we were able to draw various conclusions which can improve commissioning and operation of the larger plant. Indeed, I'm going to present a paper on the results of the pilot plant at the next OzWater Congress here in Adelaide."

"I recommend, to anyone with the opportunity, that they take advantage of working outside their own country"

## "In Anglo-Saxon culture, designers and constructors have very different and separate roles"

rgentina, Spain, Hong Kong, Portugal, Chile, back to Spain, and, now, Canada. "When I was a boy I dreamed of travelling out of my native Argentina and venturing around the world." And Ignacio has lived that dream. "My first projects in Hong Kong, from 1994-1998, were epic for all the people involved and that's where my belief in the need for a real internationalization of the Company took root." Arriving in Canada was fantastic. "It was autumn, there were dream-like views of trees of various colours and homes decorated for Halloween. All was happiness. But reality dawned in the winter, when the car was buried in snow and we wore enormous amounts of clothes... now we're used to it." As for professional life, "the Anglo-Saxon contract is very voluminous, with very detailed restrictive clauses in all aspects of the work. The client works with a director responsible for the contract and behind there are legal and economic support teams. It makes for a very rigid environment."



IGNACIO MARTÍN POVIÑA Argentine with Spanish nationality. Operations Vice-President, ACCIONA Infrastructure Canada and Deputy Director of the A-30 Highway. In Canada since 2008.



## Satisfactory performance in difficult times

ACCIONA demonstrated the validity of its business model in 2010, despite a complicated environment. The Company also proved its ability to create value in the development of projects.

ith cautious satisfaction" was how ACCIONA Chairman José Manuel Entrecanales welcomed the Company's 2010 results. "In a difficult environment, we have had the capacity to reduce debt, advance our internationalization, gain access to significant financing, achieve a satisfactory economic performance and confirm that we have a business model of unlimited scalability."

ACCIONA ended 2010 with an increase of 11.9% in net profit on continued activities to 167 million euros and a rise in gross operating profit (EBITDA) of 16.1% to 1.211 billion euros.

### Solid results

EBITDA reached 1,211 million euros, up 16.1% on 2009. This improvement stems mainly from the solid performance of the Energy division, which saw a 39% increase in attributable production thanks to the 2,566 MW of new installed and acquired capacity in 2009, as well as the 173 MW developed in 2010.

Group EBITDA margin improved, settling at 19.3% as a result mainly of the Energy division's greater weight and higher margin.

Net financial debt at the end of the year was 6.587 billion euros, down 9.3% from December 2009, and investment grew to 986 million euros.

> José Manuel Entrecanales, Chairman & CEO of ACCIONA, (centre) during the presentation of the 2010 Results.

acciona

## SENTACIÓN RESULTADOS 2010



## **Results by division**

• **Energy** improved EBITDA by 30.5% to 821 million euros, two-thirds of the Group total. Revenues increased by 20% to 1.497 billion euros. ACCIONA had 7,587 MW of total installed capacity by the end of the year.

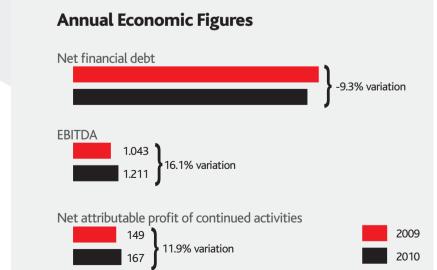
• **Infraestructure** obtained EBITDA of 204 million euros, down 5.1%, while revenues fell 13.7% to 3.121 billion euros as a result of the fall in activity in the Spanish market. The concessions business registered significant growth, with EBITDA up 35.8% and revenues by 30.3%. At 31 December 2010, the work pipeline had increased by 3% to 7.258 billion euros, 38% of which corresponded to the international business.

• The **Water** and **Environmental Services** business improved its revenue by 2.4% to 519 million euros and registered strong EBITDA growth (32.6%) due to good international results. The business pipeline reached 4.812 billion euros in December, up 10.4%.

### **Climate footprint**

In 2010, ACCIONA obtained a significant improvement in its climate footprint, achieving a 35% increase in net emissions balance, to a total 10.27 million metric tons. A 39% increase in attributable electricity production (a total of 16,335 GWh, of which 76% came from wind power) made a decisive contribution to this improvement.





Net financial debt is down 9.3% to 6.587 billion euros

# Leading the solar energy blast-off

In four years ACCIONA has become the world leader in installing Concentrating Solar Power – with three plants operating in Spain and one in the United States.



oncentrating Solar Power (CSP), which produces electricity by heating a fluid to a super-high temperature by virtue of the Sun's irradiation, saw a rapid development in California at the end of the 1980s and start of the 1990s. Falls in petrol prices and other determining factors caused new developments in the technology to come to a standstill for more than a decade. But, in 2006, ACCIONA installed a small plant in Arizona and, the following year, brought on line a 64 MW station in the Nevada desert which marked a 'before and after' in the development of the technology.

After the construction and commissioning of its first plant in Spain in 2009 - at Alvarado in Badajoz (Extremadura region) - the Company last year connected another two CSP stations to the grid at Majadas (Caceres) and Palma del Río (Cordoba), respectively. This brought the total operational CSP capacity to 214 MW and investment in the technology to over one billion euros, turning the Company into a global benchmark. In summer 2011, ACCIONA will start up a further CSP station at Palma del Río and has started construction work on a sixth installation – fifth in Spain - at Orellana in Badajoz, which should be up and running by the end of  $\blacktriangleright$ 

## A technology to grow for decades to come

Power generated by CSP doubled in 2010 to 1,300 MW and could reach 17,000 MW in five years' time, according to estimates by consultancy Emerging Energy Research in its report, *Concentrated Solar Power at a Crossroads* (May 2010).

For its part, the International Energy Agency estimated, in its New Policies Scenario (*World Energy Outlook 2010*), that concentrated solar power (CSP) would grow in the period between 2008 and 2035 at an annual rate (CAGR) of 19.3%, higher than any other renewable energy, to reach 91,000 MW operative.

## MAJADAS

## Second station for Extremadura

The Majadas plant has a capacity of 50 MW and produces around 100 million kWh a year, equivalent to electricity consumed by 30,000 homes. Its solar field occupies 121 hectares in this northern district of Caceres. The plant, which represents an investment of 237 million euros, started up in November 2010 and is ACCIONA's second CSP installation in Spain's Extremadura region. A third is already under construction in the region – at Orellana.

## PALMA DEL RÍO II First plant for Andalusia

Palma del Río II is ACCIONA's first CSP plant in Andalusia (its twin, Palma del Río I, built by the Company on neighboring land in this district of Cordoba province, is at an advanced stage of construction). The 50 MW station will produce 116 million kWh a year, equivalent to electricity consumed by 35,000 households. Its solar field occupies 123 hectares. Palma del Río II was connected to the network in December 2010 and has meant an investment of 251 million euros.

## Markets

2012. By then, ACCIONA will have consolidated its position as a benchmark for this technology worldwide, with 314 MW operating. At the end of February this year, Mitsubishi Corporation took a 15% holding in the three Spanish plants ACCIONA already operates, and in Palma del Río II, within the accord signed by both companies to develop projects jointly.

Concentrating Solar Power is a technology with obvious development possibilities, although it is concentrated in the hottest regions on the planet. It differs from solar photovoltaic energy, whose development does not depend upon a high level of irradiation. In the case of CSP, the latter is essential since it consists of heating a fluid to a high enough temperature that, when passed through a heat exchanger, turns water into steam to turn a turbine connected to a generator that produces electricity.

### **Projects worldwide**

Spain and the United States are the countries with the biggest installations in this technology to date. Others such as Australia and India, however, have projects underway. Some initiatives have a wide scope, such as the Desertec project, which will consist of using the potential of the Sahara desert to produce CSP to be consumed in Europe. Development of these and other initiatives will, however, depend upon the existence of regulatory frameworks and infrastructure guaranteeing feasibility of the projects. In 2012, ACCIONA will have consolidated its position in CSP technology with 314 MW operative

## ONLINE INFO

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## Process to capture the Sun's heat and produce electricity



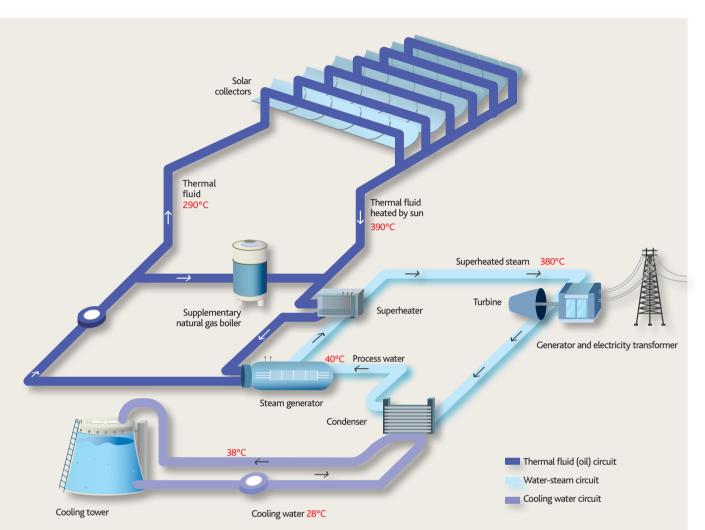
#### 1. CAPTURING THE SUN'S ENERGY

Solar collectors, lined along kilometers of rows of parabolic cylinder mirrors, rotate on an axis to follow the Sun's trajectory and optimize energy capture. The collector surface at the Majadas and Palma del Río II plants totals 372,240m<sup>2</sup>.



CONCENTRATION OF THE SUN'S LIGHT The form of the mirrors

was designed to concentrate the Sun's irradiation on their focal line, where an absorbent stainless steel tube is placed, protected by a glass envelope containing a vacuum.





3.

TRANSFERRING THE ENER-GY TO A THERMAL FLUID Due to the effect of the concentrated solar radiation, the thermal fluid (synthetic oil) circulating inside the absorbent tubes heats to close to 400° C.





## 4.

STEAM PRODUCTION The fluid transfers its calorific energy to water circulating inside a heat exchanger and turns it into steam. Then the fluid returns to the collectors to heat up again and reinitiate the process.



5. ELECTRICITY GENERATION The steam under pressure drives a turbine which, connected to a generator, produces electricity. The electricity is conducted to a substation where the voltage is raised in order to incorporate it into the network.



6. COOLING After transferring its energy to the turbine, the steam is converted back to water in a condenser. This is part of an open-circuit cooling system where the resulting water is used again to produce steam.





Manuel Fariñas, Head of R&D and Innovation, ACCIONA Agua

Long-term effects of emerging pollutants are unknown

ONLINE INFO

www.acciona.com/pressroom/opinion > www.acciona-agua.com

# *Emerging pollutants in water*



hat we call emerging pollutants are natural and synthetic chemical products that are infrequently measured or controlled in the environment, but which can produce damaging effects on our surroundings as well as on human health.

In today's society, we currently use a large amount of chemical products in the home: to relieve pain and discomfort, and treat illnesses and diseases, for personal hygiene and cleaning, or simply to increase the comfort level in our daily lives.

Medicines ingested are not completely assimilated and pass through to the sewage. The problem worsens when we get rid of non-used or expired medicaments by flushing them down the toilet or into the waste bin. Additionally, medicines administered to animals, and chemicals used in rural environments, are swept away by rain towards rivers and lakes.

Are emergent pollutants dangerous? Many, yes. Others are being researched, their long-term effects unknown at the moment. Once they enter the food chain, they can reach humans. In the aquatic environment, the presence of antibiotics produces genetic selection among the most resistant pathogens, the most immediate consequence of which is the progressive diminution of their effectiveness. Traces of hormones, or products having hormonal activity, interfere with the normal functioning of the endocrine systems of living beings when they reach the tissues of organisms. This produces alterations in development, reproduction and metabolisms. Another possible effect is the genetic toxicity that causes malformations.

What do we do? Modern-day wastewater treatment plants (WWTPs), both conventional and advanced (with membrane bioreactors), are not generally designed to eliminate this kind of pollutant. The removal performance of these substances in WWTPs can vary between 15% and 90%, depending upon the pollutant. Evidently, all the pollutants which remain end up in the water system, entering the food chains of various ecosystems.

In the case of drinking water plants, only those which use ozone and/or active carbon treatments yield high destruction rates for these compounds.

Growing relevance of the problem is resulting in a new area of research and action for water treatment systems, raising the protection threshold against this menace.



## Engineering without frontiers

ACCIONA Engineering has been set up to concentrate and unify the Company's services offering. It consolidates the Group's position as a competitive player in the international market – for its size and reputation.

o talk of engineering in ACCIONA is talk of the origins of the Company. Not for nothing did the civil engineer José Entrecanales Ibarra found the construction company carrying his name. It has always been different from competi-

tors, offering bold and novel technical solutions to solve problems and add advantage from the viewpoint of cost and time taken to do the job.

The reason ACCIONA Engineering has been set up is clear: to bring together all our engineering resources and capacities under one roof - and thus gain competitiveness in the market. ACCIONA Engineering has emerged from the merger of AEPO and Iberinsa, two civil engineering heavyweights. From its established position in Spain, the resulting Company is now better able to tackle its principal challenge: international growth.

The know-how behind the merger has opened the path to a new horizon of clients and countries that need to find solutions for infrastructure development. It is also helping closer tieups with the construction company. "At the international level, engineering is often the weapon which allows



the construction company to bid for contracts, since it opens up opportunities upstream through consultancy work in order to offer the best ideas and technical solutions to the needs raised with us," explained Carlos López, Director General of ACCIONA Engineering.

This new business unit, can count upon some 650 professionals to bring their own experiences, technologies and methodologies to design projects from preliminary stages to turnkey delivery - in civil, industrial and environmental engineering. They are there to manage works and infrastructures, optimize and lead maintenance, and contribute studies, laboratory testing, R&D&I projects, operational plans, and solutions, as consultants.

### Two companies, one purpose

Iberinsa was formed in 1960, an engineering and consulting company within the Entrecanales Group, with the name, Ibérica de Estudios e Inversiones, S.A. It changed its name to Ibérica de Estudios e Ingeniería in 1971. The Company was of fundamental support to the differentiation strategy of Entrecanales y Távora as a construction firm, which was indeed its main client, particularly in terms of absorbing technical services. Entrecanales y Távora thus became a company blessed with exceptional technical capacity, fruit of the engineering vocation and talent of José Entrecanales and his dedicated involvement with the Engineering School which permitted him to create a collective of outstanding and restless engineers, many of whom worked or collaborated with his company. As of 1982, Iberinsa's activity gradually extended to other public and private sector clients and in the second half of the 1990s it decidedly committed to expanding internationally.

AEPO stands for Agrupación para Estudios y Proyectos de Obras. It was originally a work team, formed in 1953, by a group of private companies that brought together qualified technical experts and whose function was to support them in the technical preparation of the services they could offer individually or together, ►

Consultancy work opens doors by offering ideas and technical solutions for clients' needs



ACCIONA Engineering's experience multiplies the Company's potential abroad

## A range of specialized services in civil and industrial engineering

AEPO and Iberinsa have a pipeline of top projects that confirm ACCIONA Engineering as the leader in public infrastructure in Spain and which multiplies its potential abroad.

• Airports: Studies and projects for 4 terminal buildings, over 450,000m<sup>2</sup> of platforms and runways, and 20,000m<sup>2</sup> of hangars.

• Roads: Projects and works management for nearly 4,000km of highways, over 70km of tunnels, 1,000 viaducts and 1,000 junctions and crossings.

• Building and urban development: Projects for 2.5 million m<sup>2</sup>.

#### • Railways:

High-speed: Studies and projects, control and monitoring of works, and environmental management of work for 2,500km of route. Projects for 25 stations, 100km of bridges and viaducts, and over 200km of tunnels. Undergorund railway: Over 200km of metro and commuter train route, with 125 stations. **Tramways:** Over 100km of tramway systems with 15 intermodal transport hubs.

• Maritime and port works: Over 100km of quays, docks and coastal interventions.

• Water works: Projects and management of works for over 60 dams, 100km of hydro-environmental interventions in river courses, 800km of water supply, wastewater and irrigation mains with storm ponds, and 200km of canals.

• Industrial works and installations: Fossil fuel, nuclear and hydroelectric power stations, wind farms and biomass, biodiesel, solar thermal and cogeneration plants, liquid gas tanks, industrial and waste treatment plants, etc. • Geotechnics and underground works: Geological and geotechnical studies, hydrogeology, foundations and land improvements, marine geotechnics, excavations, hillside stabilization, tunnels, power station caverns, metro stations and tunnels.

• Environment: Environmental impact studies, corrective measures and environmental integration projects, landscaping studies, Geographic Information Systems (GIS), environmental technical assistance, forest repopulation, R&D studies, environmental monitoring of works, etc.

• Road surface auscultation: Studies and measurements of over 300,000km of roads to determine surface, geometrical and structural characteristics, and 40,000km of video inventories.

**₽**23

## Close-up

above all in the international market. The founding companies were Cubiertas y Tejados, MZOV, Obrascón, Sociedad Constructora Ferroviaria, Inmobiliaria Velázquez and Compañía Internacional de Construcciones. In 1964, by then a limited liability company (Sociedad Anónima, S.A.), AEPO became independent and the property of the professionals of whom it consisted. Its activity, although continuing to be linked to the founding companies, opened up to other companies and particularly public administrations, which by then were beginning to outsource project design and works supervision. Thus AEPO became a benchmark for its clients as they developed their infrastructure plans.

### **In-house role**

ACCIONA Infrastructure keeps its Engineering Services Unit, with a team of 60 professionals led by Rafael Castillo. "Our mission is to improve our product, adding value at different stages, from bidding for contracts to commissioning, while resolving problems which can occur on the way," he pointed out.

Conceived as an internal technical consultancy, ACCIONA Engineering's ability to find the best solution for performance, quality and feasibility, is the key to its competitiveness.

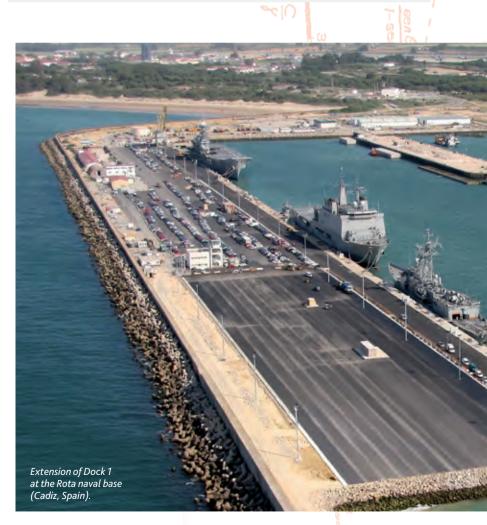
#### ONLINE INFO



## IGNACIO CALVO Head of the ACCIONA Infrastructure Technological Centre **Tradition connecting with the future**



The mutually beneficial relationship between traditional engineering and innovation in ACCIONA has its trail of continuity. One example is the recent Young Civil Engineer Award, by the Madrid Civil Engineering School, to Ignacio Calvo, one of ACCIONA's youngest executives. Ignacio, head of the Innovation Technology activities for several business divisions, among them Infrastructure, Real Estate, ACCIONA Trasmediterranea, Installations and Urban Services, leads a team of 160 professionals working in nine areas.





ACCIONA Engineering has 650 professionals who bring their own experiences, technologies and methodologies to project design



## International influence

ACCIONA Engineering currently has subsidiaries in Brazil, Saudi Arabia and Poland, and offices and branches in Romania, Bulgaria, Croatia, Egypt, Gabon, El Salvador, Nicaragua, Bolivia and Peru.

With over 20 years' international experience, it has carried out projects in more than 30 countries, including the following particularly outstanding achievements:

• Medellín (Colombia) metro project – 28km of route with reordering of adjacent infrastructure.

• Puerto Rico urban train project – 18km of city centre viaduct.

• Petronas Towers, Kuala Lumpur, Malaysia

coordination of installations and interior architecture.

• Ting Kau port access viaducts, Hong Kong – project and technical assistance.

• Bangladesh refugee schools – design and construction works management for 207 refugee schools educating 31,000 children and providing refuge for 400,000 people.

ACCIONA Engineering is presently working on the development of large international projects that include:

• Design and works supervision for the new cross-border bridge across the Danube between Bulgaria and Romania, at Vidin.

• Design of 100,000m<sup>2</sup> of structures for the Mecca-Medina high-speed railway in Saudi Arabia.

• Marine geotechnical studies and design of the Açu port in Brazil.

• Design of drinking water and wastewater treatment project south-east of Managua, Nicaragua.

• Technical and environmental supervision of the 106km Yucono-Rurrenabaque road in Bolivia.

## Close-up



SECOND JOSÉ ENTRECANALES IBARRA AWARDS FOR CIVIL ENGINEERING AND DEVELOPMENT COOPERATION

# Honoring the human side of engineering

In a ceremony presided over by His Majesty The King on 17 March, the career of the engineer Giovanni Lombardi and two international social development projects were celebrated.

he José Entrecanales Ibarra Awards recognize the work of professionals who have promoted and developed engineering. They also emphasize the human side of the specialty and how it contributes to social and economic development of communities.

The second such awards thus recognized, in the 2009 Civil Engineering category, the Swiss engineer Giovanni Lombardi for a career lasting over half a century and which has seen him resolve apparently insurmountable problems, such as the support structure for the French side of the Channel Tunnel, and to design 'the projects of dreams', evidenced for example by his preliminary studies for a tunnel under the Strait of Gibraltar.

### **Cooperation awards**

With the Development Cooperation category the Foundation wishes to contribute economically to the carrying out of specific initiatives in the most underprivileged regions of the world, helping to improve their wellbeing and socioeconomic development, and collaborating in spreading the word about the role engineering plays in social progress. This time, and breaking with tradition, two projects shared the prizes: 'Access for opportunities', by Practical Action in Nepal, and; 'Access to water and wash facilities for the rural population of the Boke zone in the east of the region of Oromia (Ethiopia)' by another NGO, Rescate Internacional.

### **International benchmark**

The José Entrecanales Ibarra Awards are international in scope and represent an important reference in the field of engineering. Their main aim is to highlight engineering as one of the disciplines which directly influences society's development and well-being.







## Fundación JOSÉ ENTRECANALES IBARRA

## Giovanni Lombardi



The Swiss engineer - who has spent more than fifty years designing and building bridges, roads, tunnels, dams and hydroelectric plants – was honored in the Civil Engineering category, in recognition of his career and research work.

## Access to water in Boke, Ethiopia

The project 'Access to water and wash facilities for the rural population of the Boke zone in the east of the region of Oromia (Ethiopia)' was successful in supplying drinking water to over 30,000 people (6,000 families) in an area where conflicts mainly occur over the control of natural resources.



## **Cableway transport in Nepal**



The project 'Access for opportunities' includes the building of gravity cable railways which enable the transit of people and goods, and facilitate communication, for some 15,000 inhabitants of 24 villages and isolated communities - improving living conditions, health care and education.



## The founder

Don José Entrecanales Ibarra (Bilbao, Spain 1899 - Madrid, Spain 1990) devoted a large part of his life to teaching and academia. He began his career in Bilbao, returning to the Civil Engineering School in Madrid, where he studied, as assistant lecturer on the Ports course. Later he formed part of the Foundations and Masonry Bridges department, of which he became Professor. Over 28 years, he taught many of the great Spanish engineers and was the author of an extensive collection of published lecture notes on ground engineering, still a highly topical subject today. Indeed, he was the man who introduced Geotechnics to Spain. He was later made Honorary Professor and, in 1983, received the medal of Member of Honor. In parallel, he developed a successful business with Manuel Távora Barrera. Founded in 1931, the construction firm Entrecanales y Távora, known for its commitment to technical excellence, has become ACCIONA and has continued to expand to this day.

## Social networks bring us closer to people

ACCIONA has taken up the challenge and opportunity offered by social networking. The Company is actively present in the main 2.0 communication channels.

or the past two years, ACCIONA has been rolling out its presence on the main online social networks. Its aim has been to open new windows on the world, permitting us to connect with different audiences and their concerns and interests. The Internet makes it possible for any message to be distributed instantaneously and globally through these social networks. They allow direct and bidirectional communication - without intermediaries - between the Company and its public. For Human Resources, for example, the networks help improve selection processes, making them faster and reaching as many candidates as possible. For the Communications department, it lets them know the impact of corporate news on society. And so on. So, if you are an active social networker, we encourage you to help us spread the word on our job offers and news to those - among your contacts who'd be most interested.

New communication challenges Isabel Ramis is in charge of managing ACCIONA's identity on the social networks. She joined the Communication

## How to interact on social networks

With caution. Any information published on the Internet can have unimaginable repercussions. Be responsible. Anonymity doesn't exist on the Internet. Everybody is responsible for the information he or she publishes. Be truthful. The Internet is the best place to discover lies! Take care that the information you share is truthful.

**Show respect.** Good manners on the Internet are fundamental, as is respecting other people's privacy.

department in November 2009. Since then, as social networking has become more important, she has increased our proximity to stakeholders thanks to this instantaneous and bidirectional communication. "The most gratifying aspect of this job is attending to all the people who approach ACCIONA via social networks contributing value or requesting information. Taking care over digital communications is as important as face-to-face contact."

### Award-winning commitment

ACCIONA's commitment to exploring the new possibilities offered by social networks has been recognized by several awards. A report, Ibex-35 companies and the use of Web 2.0, carried out by the Spanish consultancy, Estudio de Comunicación, gives a special mention of ACCIONA's blog, Facebook and Tuenti presence as part of our corporate communications strategy. Meanwhile, we won the 2010 Tea Cegos Best Practices Award in the "Selection and Integration" (recruitment) category.

### ONLINE INFO

» www.acciona.com/social-media » www.acciona.com/pressroom/indepth

## WHERE TO FIND US



Close to 150,000 views on YouTube

> Our followers have grown on average by **15%** over recent months

LinkedIn 300

(42%)

YOUTUBE YOU Interacciona1, Tube a corporate channel containing Company videos.



## LINKEDIN

**ACCIONA** corporate profile to keep up-to-date with the Company's news. ACCIONA Agua, Infrastructure and Renewable Energy. Groups created to share news related to these areas, take part in debates and find out about latest job offers. There's also an exclusive Group for employees and ex-employees.



TWITTER @AccionaEmpleo. To hear about the latest job offers.

@Acciona. For all the Company's info and news.

## Improving personal performance

The Performance Evaluation Programme is improving results of ACCIONA's professionals and supporting Company growth.

CCIONA's performance is the sum of the performances of each employee. The global Performance Evaluation Programme is the process that gives these professionals an individual guide to the targets they are to achieve. This has two aims: to help them focus on the results expected

## **Benefits**

• The Performance Evaluation Programme provides markers and indications as to where efforts should be focused. This will increase motivation and satisfaction in the activity being developed.

• It facilitates knowledge of each person's capabilities, so that the needs of the business and individual expectations can be better integrated.

• Team communications improve, favouring permanent dialogue.

• A common, objective reference is established to define each employee's pay.

• Productivity is improved, aligning individual objectives with the Company's challenges. of them by the Company, and to define the desired evolution of employees so that they can perform their jobs better and grow professionally.

Last year, Performance Evaluation was launched in most business divisions in Spain. This year it is being extended across the whole Company so that everyone, whatever their activity or the country in which they work, can take part in the same process. This will also facilitate equal opportunities.



## A three-phase approach

The Performance Evaluation process is made up of three phases and in each of them dialogue is key.

Phase 1 - Setting Objectives: Each professional sets the objectives with his or her manager. These have to be relevant, measurable, challenging and directly linked to the results ACCIONA demands of each position. This phase is developed during the first quarter of the year.

Phase 2 - Monitoring: This lets us know if we are advancing in the right direction and at the right speed, identifying corrective measures where necessary. This is a voluntary phase scheduled for between June and August.

Phase 3 - Evaluation: Year-end is the moment to analyse results and take stock of achievements.

## Top-level climate activism

Taking part and adopting a stance at international forums which have the capacity to make decisions and act upon them, is ACCIONA's duty in the fight to tackle climate change. The Company is promoting concrete action programmes as a priority objective.

ancun and Davos were must summits for ACCIONA in recent months. At the World Climate Summit, held during COP 16 in Cancun in December, the Company followed the negotiations directly as an accredited observer for the Global Wind Energy Council (GWEC). Although the 25 agreements reached - known as the Cancun Agreements - lacked details in some respects, they saw the recovery of multilateral dialogue under the United Nations framework and repaired the poor outcome from Copenhagen, revitalizing the process and collaborative way of working in the fight against climate change. Europe's summit commitment to making progress stood out. As did the outcome in relation to the carbon market, both for the continuity of the Clean

Development Mechanism after 2012 and agreed reforms to the way it works.

ACCIONA was at the heart of the World Economic Forum in Davos at the end of January, acting as the leading player in creating a new business platform, Global Compact LEAD, with 53 other companies. All have committed to extending the Blueprint for Corporate Sustainability Leadership, which brings together 50 specific actions towards achieving greater sustainability and determining the UN programmes as the framework for them.



» www.acciona.com/pressroom » www.acciona.com/pressroom/indepth » http://sostenibilidad-acciona.com



ACCIONA has been the leading player in creating a new business platform, Global Compact LEAD

## **European ranking position**

Participation by Spanish companies in the 7<sup>th</sup> Framework Programme, 2007-2009

TELEFÓNICA (53 projects)

ACCIONA (41 projects)

ATOS ORIGIN (40 projects)

ABENGOA (4 projects)

## European innovation champions

ACCIONA took part in 41 research projects under the EU's 7<sup>th</sup> Framework Programme between 2007 and 2009. The programme finances R&D activity from European funds. Thirty per cent of the funds set aside have been used, according to the programme's latest annual report. Four Spanish companies figure among the 50 main participants. ACCIONA is the only one which does not belong to the Information and Communication Technologies (ICT) sector.



Aerial view of Tampa desalination plant.

## The "Lady of Tampa Bay"

Tampa Bay is the biggest desalination plant in the United States. ACCIONA Agua has redesigned and rebuilt the facility and now operates it jointly with partner American Water.

he region of Tampa Bay in Florida (USA) has in the past mainly depended upon underground aquifers for its drinking water needs. Population growth in the area in the 1990s was greater than the rate of development of new drinking water sources. The demand for water, combined with drought and continued exploitation, put existing wells at risk. A plan was drawn up in 1998 to develop

alternative sources of drinking water which included the building of a desalination plant.

ACCIONA Agua was not contracted in the initial design and construction phase of the plant. However, although the original plant produced some water, the design was deficient and filters clogged up too quickly and obstructed the system. Tampa Bay Water issued another call for tender for the redesign and reconstruction of the plant and, this time, ACCIONA Agua and its partner American Water won the contract and started to develop a solution to put right the defects at what is now the biggest desalination plant in the United States.

### The solution

After three years of work correcting the processes and systems, and restarting the plant, ACCIONA Agua



Location Apollo Beach, Florida, USA. Owner

The Tampa Bay Water association.

#### Contractor

ACCIONA Agua & American Water.

#### Main characteristics

With a maximum capacity of 108,831m<sup>3</sup>/day (nearly 109 million litres), it produces drinking water from seawater through reverse osmosis.

#### Type of contract

Design and construction, operation and maintenance (for 18 years).

Reconstruction schedule 2004-2007

Population served Supplies drinking water to over 2.5 million people. **Ouality levels** 

The plant uses cutting-edge technology, with a highly advanced treatment which goes beyond the strict North American standards.

#### Operation

ACCIONA Agua and American Water jointly operate the facility, which employs 23.

## The project in figures

 Maximum treatment capacity 108,831 m<sup>3</sup>/day (nearly 109 million litres), allowing supply of 95 million litres of drinking water.

• 7 process lines, each of 15,540m3/day (15.5 million litres).

 Two-stage reverse osmosis system.

- 10,032 membranes installed.
- 14 MW of power.
- 30-40% energy recovered.

• 18.5-31 g/l salinity (Total Dissolved Solids, TDS) of seawater.



Susan Latvala, Pinellas County Commissioner and Chair of the Board of Directors of Tampa Bay Water

[[

I like to refer to the desal plant as our secret weapon. It's there when nothing else is ... We should all sleep better at night because of it. I know I do.



Iulio Zorrilla. Construction Director, ACCIONA Agua in the USA and UK

Reform of the biggest desalination plant in the US has been an excellent exercise in applied engineering. Other companies failed with the original design. We used all the Company's capabilities, from the R&D department to construction and commissioning engineers, to contribute alternatives and put them in practice, ensuring stable and reliable operation for years to come.

and American Water finalized the project. The plant was designed to supply up to 108,831m<sup>3</sup> a day of drinking water and have an estimated useful life of 30 to 50 years.

Tampa Bay Water has now fulfilled its mandate to reduce the consumption of underground water and secure the supply of quality drinking water to its customers with full guarantees.

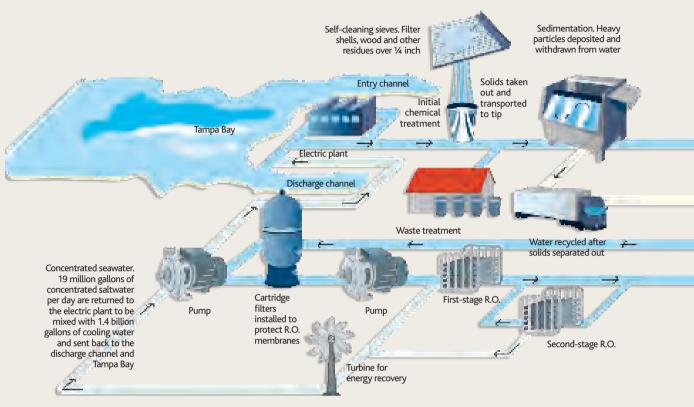




Tampa Bay desal plant redesign and reconstruction project has been a challenge at the technical and human level. Few installations present such complex working conditions with respect to process, water quality, temperatures, salinity, etc.



## TAMPA DESAL PLANT FROM THE INSIDE



## Main changes carried out

### Sand filter protection

To avoid the entry of molluscs and fish, which prevent good functioning of the filters, continuous dosage of a biocide product was installed, as well as 3mm gratings.

### **Pre-treatment improvements** Water delivery was modified to

the more than 250 sand filters and a second stage of filtration added, this time much finer, using a natural medium: finely-ground unicellular algae fossil shells. Dosage of chemical products was also modified and the whole system automated.

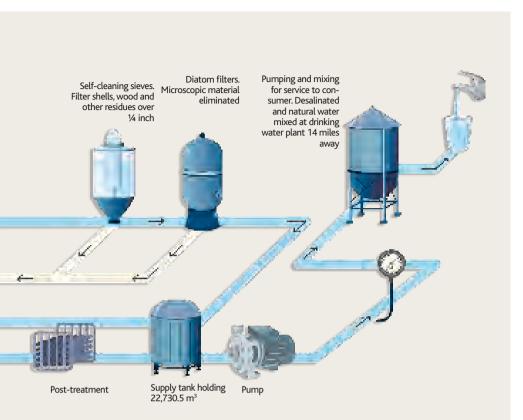
### Osmosis frame improvements All 10,000+ membranes were replaced and a new membrane washing system, with tempera-

ture regulation, was designed and installed, and instrumentation added.

### Post-treatment improvements

Water leaving the osmosis process contains no minerals. To add them, while fulfilling quality requirements for supply, new equipment for chlorine dioxide and calcium hydroxide dosage was installed.





#### Waste treatment

Solids eliminated from the water during treatment are very dilute.

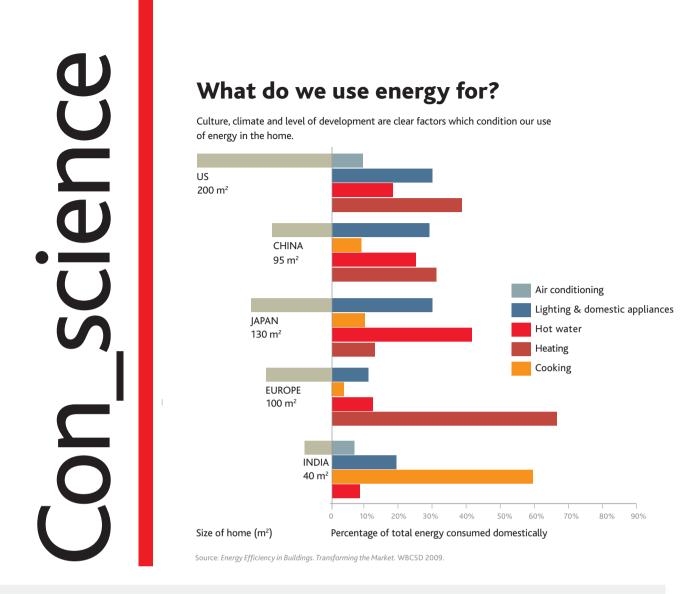
To reduce transport costs, a densification and dehydration line was built to produce a solid with 25% concentration for road transport. The water is recovered by the desalination plant.

ONLINE INFO

www.acciona.com/pressroom/indepth > www.acciona-agua.com

## Environmental impact

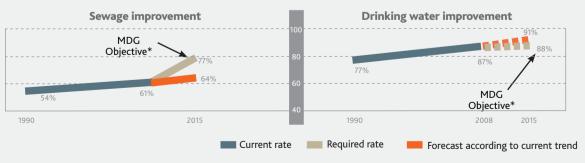
At full capacity, the reverse osmosis process generates around 72 million litres of brine and this is diluted with 5.3 billion litres of water used by the electricity generating station as a cooling agent. The diluting ratio obtained is up to 70:1. Then, the diluted water passes through the power station's discharge channel, mixes with more seawater and is returned, complying with all safety requirements, to Tampa Bay with a salinity almost equal to the water in the bay. Large volumes of water flowing near the Big Bend area help dilute it even more, thus preventing build-up of salinity over the long term.



## Both sides of the Millennium Goals for water

The Millennium Goals, subscribed to by 192 UN countries in year 2000, aim at reaching eight development targets by 2015. These include reducing by half the number of people without sustainable access to drinking water and basic sewage services. Advances to date in access to drinking water give cause for optimism: at the current rate, the objective will be fully met. Sewage services, however, appear to be lagging behind.





Source: Water, Sanitation and Hygiene. Annual Report 2009. UNICEF. Millennium Development Goals.



# **((** The financial crisis is temporary; climate change isn't **)**

CHARLES, Prince of Wales



## WALLACE BROECKER The man who 'discovered' global warming

On 8 August 1975, a reputable geologist from Columbia University published in *Science* the paper *Climate Change: Are We on the Brink of a Pronounced Global Warming?* It was the first time the term 'global warming' had been used. Its author, Wallace Broecker, has now written more than 460 scientific papers, yet will pass into history for having coined this one phrase and given rise to myriad scientific theses on the subject. On the verge of his 80th birthday, he laments the time wasted in not heeding the warning. "The climate system is an angry beast and we are poking at it with sticks," he says.



### GRO HARLEM BRUNDTLAND Norwegian politician, ex-Director-General of the WHO and UN Special Envoy on Climate Change

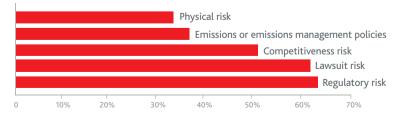
If seven billion people were to consume as much energy and resources as we do in the West today we would need 10 worlds, not one, to satisfy all our needs.

World wind power production capacity grew by **22.5%** (a total of 35.8 GW) in 2010, driven by development in China, where nearly half of new turbines were installed

## Investors worried about climate change

Corporate risks related to climate change are increasingly taken into account by investors. Almost two thirds of asset managers consider the regulatory risks (63%) and possible lawsuits (62%) when investing in a company. Half (50%) weigh up the competitiveness of products and services related to climate change. Emissions policy (36%) and physical climate change risks (33%) are aspects which they give less importance to in their assessment.

WHICH RISKS DO YOU WEIGH UP WHEN MAKING AN INVESTMENT DECISION?



Source: Investors analyze climate risks and opportunities. A survey of asset managers' practices. Investor Network on Climate Risk. January 2010.

Source: Global Wind Energy Council.

# Electric vehicles ready to take charge

Electric vehicles (EVs) are increasingly seen as the transport of the future. ACCIONA is ready to help roll them out. The Company has installed charging points which are already operating in Madrid, Valencia and Pamplona.

 $\prod_{i=1}^{n} n a matter of months, top car manufacturers will begin rolling out the first EVs in Spain. They represent the first steps of a 21<sup>st</sup> Century transport revolution towards sustainable mobility. This will be a green and silent revolution – the new motors emit no CO<sub>2</sub> and make little noise.$ 

ACCIONA is readying itself to support the roll-out by installing the necessary infrastructure services for recharging the vehicles. This includes operating informa-

## Five kinds of client

ACCIONA is targeting five kinds of client in the electric vehicle (EV) sector:

Manufacturers who want to offer charging infrastructure at EV sale points. This is the type of agreement that's being developed with Renault-Nissan. ACCIONA is ready to extend it to other manufacturers.

Car park managers who want points installed at their facilities. Examples of agreements are with Comfersa (at 66 railway stations) and Unibail (14 shopping centres). Local authorities fitting points on roads and in public car parks. An example is the five-station pilot network installed in collaboration with Pamplona City Council and the Navarre Regional Government.

Neighbourhood communities and individuals who would like a point in their collective parking or own garages.



• Car-hire fleets planning to incorporate EVs.







Inaugurating one of the charging points already operating in Pamplona, Spain.

A green and silent revolution is underway: the new motors emit no CO<sub>2</sub> and make little noise

tion and energy supply. With this in mind, it has signed collaboration agreements with a number of industry players, especially car park managers and local authorities leaning towards providing a charging service for future users. The Company is also finalizing accords with technological suppliers to offer the most advanced solutions.

### Posts already operational

The first products of this collaboration are already visible in the streets of Pamplona, high-speed railway stations in Valencia and Madrid, and the capital's Parquesur shopping centre, in the form of operating charging points. ACCIONA has also placed several such posts on a number of its premises. At the time of writing, a total of 14 had been installed, but several hundred more are scheduled to come on line during this year and many more in the years to come.



## How to recharge



A **green light** means the post is operating and available. Users connect an electric cable to their

vehicle and swipe a card to free the lid covering the charge socket.



As the card passes, the post light turns **yellow**, meaning it is being used. The lid can now

be lifted and the cable plugged into the charging point.



After plugging in the cable and closing the lid, the light turns **blue**. Charging has begun. A

display shows the progress of the charge and the energy consumed.



To finish charging, the card is swiped again, the light returns to **yellow** and the electricity

supply stops. The lid is lifted, the cable unplugged, the lid locks shut again and the light returns to green.



A **red light** indicates a fault. The user can use the telephone provided to solve the problem.

## A cultural and architectural icon for Galicia

Galicia's 'City of Culture' rises from the top of mount Gaiás, a gigantic icon reflecting the age-old tradition of St James the Apostle and a futuristic vision of an increasingly interdisciplinary world.

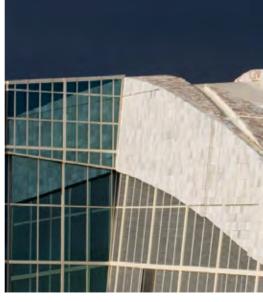
B ack in 1999, the Galician Regional Government, or Xunta, launched an international competition to design and build a city of culture for the 21<sup>st</sup> Century. The objective was to revitalize the region's vocation as an important travel destination, popular for its hospitality. In a tough contest, the design proffered by architect Peter Eisenman's firm triumphed for "both its conceptual singularity and exceptional harmony with the chosen site".

The 700,000m<sup>2</sup> site chosen was Mount Gaiás. More than 100,000m<sup>2</sup> of this plot is taken up by buildings designed to provide a symbolic representation of the Galician city of Santiago de Compostela, subtly blended with its immediate surroundings.

ACCIONA is immersed in realizing this ambitious project and has had the honour of inaugurating the first two buildings: the Galician Library and Archives. The first, with a surface area of over 15,000m<sup>2</sup>, takes up six floors and has the function of centralizing all Galicia's bibliographic collections. But the large library, with a capacity for











## ACCIONA is immersed in making this ambitious project a reality

more than one million books, will only be the most visible part of a management centre whose huge digitalization programme will allow greatly expanded access to all the region's libraries.

The Galician Archives, an adjacent building of nearly 12,000m<sup>2</sup>, complements the library. It contains all the public and private documents that must be preserved for their institutional, historic and cultural value.

#### ONLINE INFO

» www.acciona.com/pressroom/indepth » www.acciona-infraestructuras.com



## A project growing bigger and bigger

The role of ACCIONA has extended to other flagship buildings at the complex. The Company is also a partner in constructing the International Art Centre and the Centre for Music and Performing Arts. From the landscaping perspective, it is additionally in charge of realizing the botanic Hedjuk Towers, which were originally designed by the architect John Hedjuk for the Belvís Gardens in Santiago de Compostela, a project which never materialized. After his death in 2000, Eisenman, Hedjuk's colleague and friend, decided to include them in the City of Culture project. ACCIONA is also responsible for more than 145,000m<sup>2</sup> of further urbanization, and a services level in the form of a tunnel connecting the whole complex, permitting underground access to installations and for supplies.



## A universal lament

*Flamenco, flamenco* is a cinematographic vision by Carlos Saura which dissects, and simultaneously leaves intact, the magic of an art recognized as an Intangible Heritage of Humanity.

onsidered the best example of the cinematic music genre by Carlos Saura, Flamenco, flamenco follows the evolution of the song, dance and music of the form, which, according to the director himself, should not only be considered as a "heritage of humanity, but of the universe".

#### Lavish cast

The film was shot in Seville over seven weeks in October 2009, and brought together a distinguished team, including the Oscar-winning film-maker Vittorio Storaro (of 'The Last Emperor' and 'Apocalypse Now' fame) and Isidro Muñoz, the musical director with whom Saura selected the different styles and artists the film is about.

### Kaleidoscope of colour

"Flamenco is born of a fusion," said Saura. "It exists in the present and will go further in the future. In flamenco, the most orthodox there are share with others who are trying to take the



'Flamenco, flamenco' offers a complete vision of all the art form's styles

form further." 'Flamenco, flamenco' is a kaleidoscope in which the masters Paco de Lucía, Manolo Sanlúcar and José Mercé accompany a new generation of talent including Estrella Morente, Sara Baras, Miguel Poveda, Israel Galván, Eva Yerbabuena, Farruquito, Niña Pastori and Rocío Molina.

The artists point out the freedom Saura gave them in which to work. He rejected the idea of imposing any straitjackets on them as he set about implementing his own artistic vision. "We are lucky to be shown to the world through the eyes of someone such as Saura. It was a blessing to have a film-maker such as him presenting our image to the world," said a grateful Manolo Sanlúcar at the Spanish premiere of the film in the 2010 Seville Festival.

The movie was produced by General de Producciones y Diseño (GPD), part of the ACCIONA Group.

### ONLINE INFO

f 🛅 🗊 🚠 🗶 匡 » twitter.com/flamencosaura

» http://www.flamencodecarlossaura.com » http://www.facebook.com: Flamenco de Carlos Saura



'Flamenco, flamenco' makes a passionate journey through the past, present and future of the form, designated a Heritage of Humanity.



## Touring the world

The film has been taken on a tour of presentations at film festivals in 14 countries. It premiered in the United States on 29 January at the 'Dance On Camera' Festival in the Lincoln Center in New York. It will be part of other film festivals in Portland, Miami, San Diego and Washington DC.

## **News round-up...**

The Azimut Project aims to generate the knowledge needed to develop a large-scale marine wind turbine generator out of 100% Spanish technology. ACCIONA, Alstrom Wind and Iberdrola Renovables are to lead the project, which has a budget of 25 million euros and is coordinated by Gamesa.



ACCIONA signs an accord for the workplace insertion of women victims of domestic violence.



ACCIONA and Comfersa sign an agreement to introduce an intelligent recharge network. The first points are to be installed in 2011 in car parks at Madrid-Valencia high-speed rail network stations. ACCIONA is also going to extend the network to the rest of the railway station car parks managed by Comfersa across Spain.



ACCIONA Energy starts up its 50 MW Concentrating Solar Power (CSP) plant, Palma Río II (Cordoba, Spain), making ACCIONA the Company with the biggest such installation operational worldwide. It has a total 214 MW of CSP capacity at three plants in Spain and one in the United States.



ACCIONA Energy is awarded the 2010 Miguel Pardo Prize by CME, the Spanish Maritime Cluster, in the environmental category, for its R&D activities in the field of marine wind energy.



ACCIONA wins a contract to supply over 70% of rail administrator Adif's electricity in 2012. Eleven of 17 lots on offer are awarded to the Company, representing estimated energy consumption of 2,114.8 million kWh and revenues worth over 162 million euros. All the electricity will come from ACCIONA Green Energy Developments, with renewable origin certification accredited by CNE, the Spanish Energy Commission.

## **NOVEMBER**





Viña Mayor 2004 is named the world's reserve by The Wine Spectator magazine. It ranks among the best 100 red wines

## DECEMBER

ACCIONA Infrastructure wins the 2010 Potencia Prize for applying sustainable solutions in its works.



CERMI, the Spanish Committee of Representatives of People with Disabilities. recognizes **ACCIONA** for its commitment to incorporating disabled people in its workforce and demanding the same of its suppliers.





ACCIONA Energy seals the **financing for Tuppadahalli wind farm (56 MW) in record time.** This is its third wind farm in India and construction on it has now begun. The transaction, completed in three months, was signed with the credit entity, India IDFC Ltd., for 33 million euros.



Experts meet at ACCIONA's installations in Navarre (Spain) to monitor the **On-Cultivos Project**, designed to encourage **sustainable energy production from biomass** obtained from energy crops in Spain. The initiative unites and coordinates efforts, and develops synergies, between companies, universities and research centers.



ACCIONA takes part in the **UN's Global Compact LEAD** in corporate sustainability. Fifty-four companies from across the world commit to adopt solutions to tackle big global challenges through a new platform created by the UN's Global Compact. Its objective is to reach a new level of environmental, social and government action to establish a **new benchmark for corporate sustainability.** 

> ACCIONA is the second preferred company – the top Spanish – of engineering students in Spain for the second successive year, according to the Graduate Barometer 2010 Engineering Edition.



The Company consolidates its **support for gender equality** by signing the Equality Plan drawn up by ACCIONA Energy and Spain's majority trade unions, UGT and CC.OO.

> ACCIONA sells **15%** of its solar thermal plants to Mitsubishi Corporation.



**FEBRUARY** 

## **JANUARY**

The **first electric vehicle recharge network** is inaugurated in **Pamplona** (Navarre, Spain), with five points across the city.



The Company is to build and operate **the Mundaring drinking water plant in Australia.** The plant will have a capacity of 165-240 million liters per day.



ACCIONA Energy starts building **the Golice wind farm**, the Company's first in Poland.

> ACCIONA improves EBITDA by 16.1% to 1.211 billion euros in 2010.



Today's society demands new media and communications channels on the 'Net. ACCIONA has stepped up its active presence in blogs and social networks. Because our global commitment to society requires instantaneous, direct and mutual communication.

## Would you like to know us better?

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