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FCC Medio Ambiente launches new website

We present the new FCC Medio Ambiente website. After laborious study and development work, the environmental services area deploys this virtual space to make known through its pages the solutions that FCC Medio Ambiente offers to cities in order to be more sustainable, efficient and socially responsible, in short, to make them more intelligent.

From now on you can access this new virtual space open to dialogue

and designed with users in mind. With a more modern and dynamic design than the previous one, this new website makes browsing more agile and intuitive, by audiences and activities, with an accent on interactivity.

In our Group we are committed to responsible behaviour, based on proximity to our employees, shareholders, customers, suppliers and society in general. This requires a great commitment to communication and this new website is the expression of that commitment.

The new website is available in Spanish and English and is adapted to all devices: PC, mobile and tablet. From here we invite you to browse it in www.fccma.com.



The CEO welcomes the new website

It is a great pleasure for me to welcome you to the new website of FCC Medio Ambiente, the environmental services area of the FCC Group, which is also a world reference in water management and infrastructures. Dialogue and transparency with our stakeholders is vital for us. That is why we are continually undergoing a process of digital transformation, improving and renewing our channels in order to provide visitors with all the latest information on the company.

For more than 100 years we have been making cities cleaner and more sustainable, serving citizens as experts in all aspects that improve their quality of life in the municipal sphere: waste collection, integral management and recycling; street cleaning, integral energy management or facility management, among others. We hope that through these pages you can get to know in detail the solutions we offer to cities to be more sustainable, efficient and socially responsible, in short, to make them more intelligent.

We are a company with a firm commitment to achieving the Sustainable Development Goals (SDS) of the Agenda 2030 of the United Nations and the transfor-

mation of our society to a circular economy model. We are committed to innovation as the lever of change to achieve these objectives, not only in technological aspects, through the implementation of e-mobility in urban service vehicles, energy efficiency and the use of alternative energies, or the improvement in the recycling of resources; but also in the human aspects of smart services (SHES or Smart Human Environmental Services). As an example, we develop intense work for the social and labour inclusion of vulnerable groups with special insertion difficulties, we have values that are reflected in a Code of Ethics and Conduct, and we have established internal policies that actively prevent discrimination for reasons of diversity or gender or situations of harassment. We also foster a healthy work and family environment for the people on our team, who constitute the true wealth and most important asset through which we will continue to be the global leader in city services.

Best regards,
Pablo Colio Abril

Esther Koplowitz,

awarded for her great work in philanthropy

Esther Koplowitz has been awarded by the digital economic newspaper Merca2 for her great philanthropic work over a quarter of a century and has received the 'Patronage of the Decade' award for her work through the Foundation that bears her name. The award was presented last night during the gala of the second edition of the Merca2 Awards, at the Villa Magna Hotel in Madrid, which was attended by political, institutional and executive representatives of major companies. These awards are aimed at recognising companies, entrepreneurs and personalities who have stood out for boosting the Spanish economy and for promoting and disseminating the Spain Brand.

Since 1970

The Esther Koplowitz Foundation, created in 1970 although it was institutionalised on 13 December 1995, focuses its work on the elderly, almost always without resources, on people with different physical and mental capacities and on the advancement of biomedical research, in addition to granting scholarships and study grants.

Residences

Since its creation, it has contributed to the construction and equipping of the Nuestra Casa Residence, in Collado Villalba (Madrid) with a capacity for more than 140 residents, plus 60 day places, which since 2001 offers excellent facilities, both for elderly people who are still in good health, and for those affected by di-



seases such as Alzheimer's.

She has also built the Fort Pienc Residence, in Barcelona, focused on providing accommodations for elderly people who require care of different nature depending on their current situation, with a capacity for more than 140 residents, plus 60 day places. She has also built and equipped a third residence, Nostra Casa del Vall de la Ballestera, in Valencia, for people with different physical and mental abilities who require highly specialised care. The residence features all types of facilities for the care and treatment of the 60 individuals who live there; and a second building of the Nido Foundation, in Madrid, as a rehabilitation centre for children with cerebral palsy.

Research

On the other hand, the Esther Koplowitz Centre in Barcelona, one of the largest biomedical research centres in Europe, was inaugurated on 4 October 2010. The CEK continues to produce a lot of science, with more than 100 scientific articles a year and makes important contributions in different fields, such as oncology, digestive diseases and

arteriosclerosis and diseases related to poverty, including malaria. The centre employs 500 scientists including researchers and experts on various scientific platforms.

In addition, she has also been responsible for the donation of the first surgery robot to the Hospital Clínico in Madrid, where it performed 1095 operations, and for the construction and equipping of a student residence at the Francisco de Vitoria University, where more than 1,600 scholarships will have been awarded by the end of this year. It has also donated to more than 200 charities.

Awards

In recognition of all her work, Esther Koplowitz has received numerous distinctions, including the Grand Cross of Social Solidarity, awarded by HM the Queen Sofia; the Grand Cross of Civil Merit; the Grand Cross of the Guardia Civil for its help to victims; the Blanquerna Prize from the Generalitat of Catalonia; the Gold Medal from the University of Barcelona, and she is an adopted daughter of the cities of Barcelona and Valencia.

In addition to Esther Koplowitz's tireless philanthropic work for more than 25 years, there is also an extraordinary personal dedication aimed at making happy the people who have access to the benefits of her Foundation.



H.M. King Felipe VI presided the event that was held in Casa de América, Madrid

FCC attends the ceremony commemorating the del **20th anniversary of the Euroamérica FoundationEuroamérica**

Casa de América held a round table on the occasion of its 20 years of relations between the European Union and Latin America. The event was presided over by His Majesty King Philip VI and was held at Casa de América in Madrid.

Pablo Colio, CEO of the FCC Group, was present on behalf of the FCC Group and as a member of the Foundation's Board of Trustees.

Following the opening of the meeting by Antonio Pérez-Hernández, Director General of Casa de América, and Ramón Jáuregui, President of the Euroamérica Foundation, a round table was held under the title "1999-2019: Evolution of relations between the EU and Latin America. Challenges for the future", represented by the Ibero-American General Secretariat, Rebeca Grynspan; the former President of the Government, Felipe González; the Honorary President of the Foundation, Carlos Solchaga; the

Vice-President of the Euroamérica Foundation; and Enrique V. Iglesias, former Ibero-American General Secretary and Grynspan's predecessor.

After the viewing of a video showing the different activities held by the Euroamérica Foundation for twenty years, the closing ceremony took place with the interventions of Benita Ferrero-Waldner, Honorary President of the Euroamérica Foundation; the acting Minister of Foreign Affairs, Josep Borrell; and also Ramón Jáuregui.

It was then the turn of King Philip VI who, after congratulating the institution on its anniversary, stressed that Spain has always aspired to make a substantial contribution to the relationship between Europe and America and considered that the momentum of the Latin American community of nations is proof of this.

Also present at the event were, among other authorities, ambas-

sadors, politicians, patrons of the Foundation, businessmen and members of relevant associations and institutions.

The tribute ended with a cocktail, which was joined by all those attending the event.

About the Foundation

The Euroamerica Foundation is a plural, independent and non-profit organisation whose main objective is to stimulate cooperation and understanding between European and Latin American institutions, companies and personalities, in order to foster relations between Europe and America, especially from the private sector.



FCC supports the Once Foundation and the European Commission for the integration of diversity

FCC shows a clear commitment to the integration of people with disabilities in the workplace, as a key element for social integration and personal improvement. With the aim of promoting equal opportunities and eliminating all types of discrimination and harassment, the FCC Group and its business areas have undertaken a number of commitments in this area, which brings it even closer to eradicating any type of segregation.

The attached video, presented by Fundación Once to the European Commission, describes the Inserta Programme aimed at large companies that are committed to developing projects that promote the employment of people with disabilities in their workforces. Ana Benita, Director of Human Resources at the FCC Group, took part in the event. She stressed that Fundación Once is a key element for companies that are committed to diversity, as it does an important job for people with disabilities in companies such as FCC.

The European Union (EU) promotes the active inclusion and full participation of disabled people in society, in line with an approach that integrates disability in the context of human rights. Disability is not discretionary. It is a question of law. This principle is also the basis of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), to which the EU is a signatory. The European Commission's European Strategy on Disability 2010-2020, adopted in 2010, builds on the UNCRPD.

The Group is supporting various projects and promoting social and labour inclusion through workshops, training courses and other actions such as awareness-raising campaigns. In addition, it has participated in programmes that promote the work of integrating functional diversity and improving the quality of life of people with disabilities.

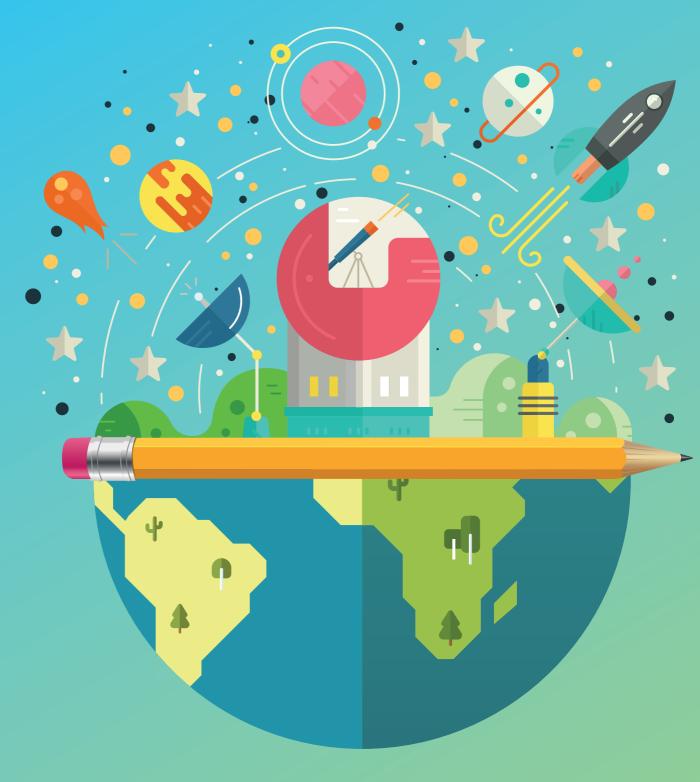




e-mobility

El futuro de los servicios urbanos es hoy.





BACK to the FUTURE

I Edition Children's Drawing Competition

Back to the future, you can change the world.

Every little detail counts. We know you have great ideas. Draw us the world you dream and let us make it happen together.







You can participate in our contest if you are between 3 and 11 years old and one of your family members works for FCC by sending your drawing before 31 October to regresalfuturo@fcc.es Please scan the template with the highest possible quality so that we can appreciate your work well. We know it will be great.

Help us imagine a dream world. Because dreams come true.

You can upload your drawing to Instagram and share it with your all of your friends. The drawing with the most likes will receive a prize.

Follow **@fcc_group** in Instagram, upload a photo with your drawing (only your drawing, without the data column), tag **@fcc_group** to the image and add the following hashtag **#regresalfuturo #fccgroup #ods**.











FCC's strong commitment

The Millerhill Energy Recycling and Recovery Centre starts operations



It will generate enough electricity to meet the energy demands of nearly 32,000 households

Ambiente, waste throughout the

The Millerhill Energy Recycling and Recovery Centre (ERRC) in Midlothian, near Edinburgh, UK, developed by FCC Environment, is now fully operational ahead of schedule.

Construction of the new waste energy recovery plant, featuring state-of-the-art technology, and providing services to Edinburgh and Midlothian, began in October 2016 and since October 2018, has been receiving waste for commissioning purposes. In December of the same year, the turbine was synchronized and energy was exported to the grid



for the first time.

The Millerhill ERRC involved an investment of 142 million sterling pounds and was developed by FCC Environment jointly with the Edinburgh and Midlothian councils through a contract executed in October 2016 for building and managing the plant for a period of 25 years.

The facility has been built on a site of industrial land originally aban-





Construction of the new state-of-the-art recovery facility began in 201

The project involved an investment of 142 million sterling pounds. 99



and has been receiving waste for commissioning purposes since October 2018.

doned and which has now been recovered for economic activity. It will treat about 135,000 tonnes of household waste and another 20,000 tonnes of commercial waste annually, and will generate enough electricity to meet the energy demands of about 32,000 households. District heating proposals are also being developed to maximise the energy efficiency of the facility.

An adjacent facility, designed for handling organic waste, is already in operations. This facility and the Millerhill ERRC will treat food as well as non-recyclable waste, creating renewable energy in this process and will help the Edinburgh and Midlothian councils to meet the national 70% recycling objective before 2025 and the national goal of diverting 95% of waste that ends up in landfill sites.



It will treat 135,000 tonnes of household waste and another 20,000 tonnes of commercial waste each year.



The centre will accept up to 300,000 tonnes of household and commercial waste a year, enough to export some 25.5 MW of electricity.

The 350 million sterling pound project includes a state-of-the-art energy from waste plant capable of producing electricity and heat. 99

Development of an energy from waste facility in **Drumgray**

FCC Environment unveiled a new master plan for the sustainable, long-term future of its Greengairs landfill site, in North Lanarkshire, which is a direct response to the "zero waste" strategy of the Scottish Government. This strategy contemplates the forthcoming ban on the landfilling of food, paper, garden and any other biodegradable household waste before the 1

January 2021, which will cause a significant shortfall of waste treatment facilities capable of dealing with this waste.

The modern waste management compound sponsored by FCC, the construction of which will involve the investment of 350 million pounds (around 400 million euro), is designed to respond to this de-

State-of-the-art technology projects



dfill. FCC will use proven energy-from-waste technology, which will thermally treat the waste to generate electricity and heat. The facility will accept up to 300,000 tonnes of residual household and business waste per year, enough to export around 25.5MW of electricity and the potential to supply heat to local homes and businesses.

In accordance with current legislation, an extensive information and consultation program for the population has been launched, so that the communities in the area can participate and be involved in the development of the plan.

ficit, whilst maintaining the current employment at Greengairs, as well as creating hundreds of new construction jobs and long-term high-quality employment opportunities throughout its lifetime.

300,000 tonnes of waste

Central to this master plan will be the construction of an energy from waste facility, the Drumgray Energy Recovery Centre (DERC) that will receive pre-treated residual, non-recyclable, non-hazardous waste otherwise destined for lan-

Major contracts awarded

In the United Kingdom, FCC Medio Ambiente recently entered into an agreement with the Danish fund Copenhagen Infrastructure Partners (CIP) to develop in Lostock one of the largest energy from waste recovery facility in Europe, with a capacity of 600,000 tonnes per year. The Company was recently awarded a waste collection and street cleaning contract in Northamptonshire representing a portfolio of 20 million euros.

Aqualia strengthens its leadership in water management

It acquires the French company, Services Publics et Industries Environnement (SPIE)



Guillermo Moya, Europe Area Manager, and François Bougaret, Chairman of the Board of Directors of SPIE.

Aqualia, the water management company owned by FCC (51% share) and the Australian ethical fund IFM Investors (49% share), recently acquired 100% of the French company "Services Publics and Industries Environment"

(SPIE) to the French Holding SPI. Aqualia had already shown its interest in the French market for some time now, the largest in Europe where models of public and private management coexist. It is a dynamic market requiring major investments and technological capabilities. In this regard, Guillermo Moya, Aqualia's Europe Regional Director, highlights the experience of the company "in the management of public water services, especially in medium-sized cities, an activity that requires proximity to customers as well as a high level of specialisation and efficiency". SPIE is an independent medium-sized company that brings 120 years of experience in public water service management, serving some 140,000 citizens through 8 supply management contracts and 2 sanitation contracts in the Île de France region.

The incorporation of Aqualia to SPIE shareholders will provide technical expertise and additional financial capacity, complementing the successful public services management project, based on proximity and excellence that the French company has been developing.

As party of its activities in this region, the company produces 10 million cubic metres of water per year for human consumption and manages 5 million cubic metres of wastewater as part of its activity in this region. In addition, SPIE manages 700 kilometres of distribution networks, 32 water tanks and 70 pumping stations, as well as another 200 kilometres of sanitation networks.



Two new contracts in France to provide services in 32 municipalities in Île-de-France

Recently, the French subsidiary Services Publics et Industries Environment (SPIE) won two new contracts in Ile-de-France.

The urban community Grand Paris Seine et Oise (GPS&O) has awarded SEFO, a subsidiary of SPIE, sanitation services in 20 municipalities in the west of the region, with the operation and maintenance of 30 production of close to five million pumping stations.

In addition, SPIE's second sub-contract is of great importance sidiary, CEG, was awarded a as it considerably expands the framework contract to carry out scope of CEG's activities, with the renewal of the water supply twelve municipalities in the cannetwork for the Nord Ecouen ton of Goussainville. Intercommunal Drinking Water Supply Syndicate (SIAEP). The four-year contract stipulates a

euros. From an operational and commercial point of view, this



Acquires the companies Agua y Gestión y Codeur

The transaction contributes 60 million euros to Aqualia's business portfolio

Aqualia has completed the acquisition of the company Agua y Gestión del Ciclo Integral S.A. The transaction includes 100% of the shares of Agua y Gestión del Ciclo Integral, 40% of the shares of the Aguas de Guadix (Granada) joint venture company and the concession contracts awarded to its parent company, Agua y Gestión S.A. by the municipalities of Huéscar (Granada) and San José del Valle (Cádiz). Companies operating in El Ejido (Almería) are excluded from the agreement.

With this transaction Aqualia will manage the municipal water services of 18 new municipalities in Badajoz, Cáceres, Cádiz, Granada, Almería and Ciudad Real. Santiago Lafuente, Aqualia's Director for Spain, highlights the importance of the transaction "to reinforce Aqualia's current leadership in Andalusia and Extremadura as a specialised manager of public water services in these territories".

The new contracts, which are operationally integrated into the extensive network of municipalities managed by Aqualia in these regions, include a joint population of nearly 90,000 inhabitants, have an average duration of 12 years, a workforce of 78 workers and a business portfolio of 60 million euros.

In Vera and Garrucha (Almería), with the support of Codeur

In addition, Aqualia has acquired a significant stake in Codeur, a company which, through a joint venture with the local government, will manage the Municipal Water Service of Vera (Almería) until 2053.

Codeur's shareholders also include the Comunidad de Regantes Climasol, which brings together the majority of irrigators in the area. The company has an annual turnover of 8.6 million euros.

With this stake in Codeur, Aqualia acquires a strategic position in eastern Almería, an area with serious water shortages that requires highly technical and professional water supply management.

Aqualia has recently participated with Codeur in the public tender for the management of the Municipal Water Service of Garrucha. The TJV formed by both entities has been awarded the contract that will be signed soon.

Following the finalisation of these two transactions, Aqualia is present in 91 municipalities in Andalusia, where it serves 2.2 million citizens. In Extremadura it collabo-

rates with 108 local governments and provides services to more than 430,000 inhabitants.

Aqualia is one of the world's leaders in water management

Aqualia is the water management company owned by the citizen services group FCC (51%) and by the Australian ethical fund IFM Investors (49%). The company is Europe's fourth largest private water company in terms of population served and ranks amongst the top ten worldwide (GWI, November 2017).

It currently provides services to 22.5 million people in 1,100 municipalities in 18 countries: Algeria, Saudi Arabia, Colombia, Chile, Ecuador, United Arab Emirates, Spain, France, Italy, Mexico, Oman, Panama, Portugal, Qatar, the Czech Republic, Romania and Tunisia. The company reported EUR 1,115 million of revenue in 2018, with an order back log of nearly EUR 15,000 million.



construction

The design has been adapted to the regional culture, with vaults that represent a bridge between the historic architecture of Qatar and its future as a beam of innovation and prosperity.



FCC completes work at the **Doha Metro** (Qatar)

Qatar is a country with a continuous population growth due to the increase in its wealth through the exploitation of its natural resources of oil and gas. This has required a rapid development of its infrastructure, being the construction of a Metro system a crucial element in such strategic planning.

The implementation of the Doha Metro, capital of the State of Qatar, specifically between the towns of Doha and Al Wakra, has been developed in several phases, the first phase being the one currently under construction.

The project executed by FCC Construcción, called Red Line South Elevated & At Grade, consisted of the construction of a 6.9-kilometre viaduct.

The infrastructure was built using the system of prefabricated segments installed with Launching Gantry type launch shoring, with spans between 28 and 44 metres in length; 58 spans built with a mono-beam of post-stressed concrete, some 28 metres in length, and 22 spans in situ.

The piers of the viaduct are between 6 and 10 metres high and have a variable square section. 80% of the foundations were direct and the rest required the construction of piles with a diameter of 1,000 metres.

Two metallic structures have been constructed as an emergency evacuation system for the viaduct. The cladding was made of metal mesh.

The viaduct works are complemented with the installation of a railing with incorporated lighting along its entire length, channelling trays for installations, low-voltage wiring and an earth connection system.



All stations share a similar architectural design

Three stations and esplanade for the Depot

In addition, three elevated stations have been built along the route, called Economic Zone, Ras Bu Fontas and Al Wakra, of approximately 12,000 square meters each and earthworks have been carried out in an area of 504,000 m2 to house the facilities of the Depot (garages).

Each of the stations has a specific configuration, with different levels, maintaining one concourse level and one or two platform levels.

Access to the stations is achieved by means of access structures called Shelters and elevated metal walkways eight metres wide.

All stations share a similar architectural design, with the same materials and shapes, according

to a Branding Manual prepared by the client. Through a process of design, thermal analysis, acoustic conditions, energy use, waste management and selection of materials it was possible to maintain a regional concept with high standards of quality.

The design has been adapted to the regional culture, with vaults that represent a bridge between the historic architecture of Qatar and its future as a beam of innovation and prosperity.

The materials finally used in the exteriors were: curtain wall façade, GRP roof panels, architectural metal mesh in hexagonal form, lacquered aluminium panels, GRC coatings. The interiors were terrazzo, acoustic ceiling, pearlescent tile, wall-mounted glass, acrylic cladding.

Works include the design, manufacture and installation of equipment for vertical and horizontal transport, such as lifts (19 units), escalators (34 units) and conveyor belts (10 units).

Underpass at Al Wakra

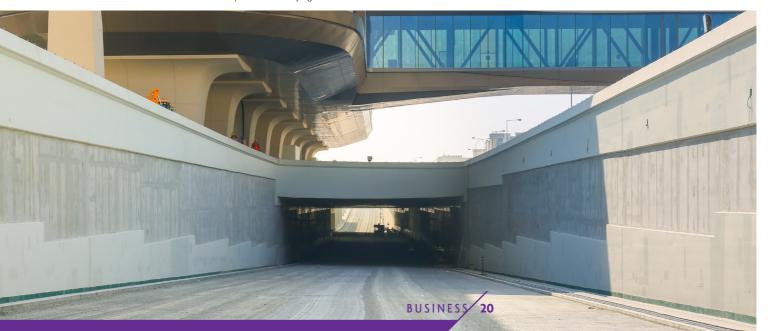
In addition to the metro works, an underpass has been built for the one-kilometre-long Doha-Al Wakra motorway and two 13.5-metre-wide platforms. It is a reinforced concrete structure, with 165,000 m3 of concrete and 18,850 Tn of corrugated steel.

The successful completion of this project joins the long list of transport projects completed by FCC around the world.

The section built by FCC, within the North Elevated Line Network, is the most advanced in relation to all the sections that various international construction companies are carrying out.

FCC's success in this project has meant that it has been pre-qualified for the next phase of expansion of the Doha Metro, the extension of the green line. This project is currently under technical evaluation by the client.

The section built by FCC, within the North Elevated Line Network, is the most advanced in relation to all the sections that various international construction companies are carrying out.



FCC, wins the Agustín de Betancourt Award for the best international project: Doha Metro

FCC Construcción has won the Agustín de Betancourt Prize for the best international project: Doha Metro. The third edition of this award recognises the work carried out by civil engineers and Spanish engineering and construction companies in the international market, which is an emblem for Global Spain and a model of competition and modernity throughout the world.

The project has been promoted by Qatar Railways Company, an organisation dependent on the Ministry of Transport; designed by TYPSA, Sener & Ehaf; and built by FCC Construcción, Archirodon Construction Company, Yuksel Insaat, Petroserv LTD in a Joint Venture.

The work carried out by FCC was the South Elevated & At Grade Line Network, with 6.9 kilometres of elevated section and three stations. Among the reasons for the agreement are the high economic, social and sustainability impact (sustainable mobility) and compliance with the ODS involved in the design, construction and operation of the metropolitan areas, particularly the Doha Metro in Qatar.

The award was collected by Pablo Colio, CEO of FCC, who thanked the Colegio de Ingenieros de Caminos, Canales y Puertos for its invitation and stated that "I collect the award on behalf of all FCC Construcción employees. With work like this, Spanish companies are positioning our engineering at a high level. This has been shown in previous editions and this is how the work of our companies and their professionals can be seen".



The award was collected by Pablo Colio, CEO of FCC

Later, he pointed out that "this project is the backbone of the country, not only for Doha but also for the World Cup, as some of its facilities will be used to access the sports complexes, accompanied by an iconic design that is representative of the country's culture".

The award ceremony, whose Honorary Committee is chaired by S. M. Felipe VI, was held on June 24 within the V Global Forum on Engineering and Public Works, which took place at the Palacio de la Magdalena, Santander. Present at the forum were the Minister of Public Works, the Director General of Internationalisation of the ICEX Company, and the President of the ICCP College, as well as other outstanding personalities from the public and private sectors.

The forum has become a national and international point of referen-

Pablo Colio said: "I collect the award on behalf of all FCC Construcción employees. With work like this, Spanish companies are positioning our engineering at a high level. "

ce and, at the same time, a meeting point for professionals, managers and government officials, in which leading figures from engineering and construction, as well as managers and experts from those strategic sectors in which civil engineers are called upon to play a leading role of great relevance for change and, consequently, for the modernisation of our environment.







Ignacio Poyales
Country Manager in Qatar

What does the Doha Metro project represent?

The Doha Metro is a completely new railway project that aims to modernise transport conditions not only in the city but also in Qatar, connecting it in the future with the country's long-distance railway network.

Together with the construction of eight new stadiums, the metro is the key project for the celebration of the Football World Cup in 2022.

What makes the project so complex?

In my opinion, complexity should be analysed from two different perspectives. Firstly, from the customer's point of view, the metro project involves the construction of a completely new transport system in the country, with a public entity (Qatar Rail) created specifically for this purpose. This entity has been formed by a group of international technicians and new local administrators of the sector, with the mission of carrying out a project of great magnitude from practically zero.

Secondly, from the company's point of view, both this project and the Riyadh metro started at the same time, which involved an exceptional mobilisation of human and material resources. The mobilisation took place in a very complicated and demanding environment, with professional and social customs far removed from our own. Finally, with an impressive effort from all our people, we have managed to carry out this beautiful project, which we hope will help to increase FCC's prestige in the world.

What has FCC contributed to this project?

Before answering this question, I would like to point out that this project was carried out during a difficult international economic period. In spite of this, FCC has been able to respond to the needs of the project by contributing its knowledge in the management and construction of railway projects, where FCC is a world reference.

FCC has demonstrated a high degree of flexibility and capacity for interaction with the customer, thanks to which, our section was the first one to be executed.

Our technical services participated actively in the design phase as well as in the technical assistance during construction. Special mention should be made of the machinery department, whose help was key to the design and operation of our facilities and equipment.

On the other hand, our section has been the leader in execution with respect to the rest of the lines, being used by the client to implement numerous changes that were subsequently implemented in the rest of the lines after verifying their suitability. This is where FCC has demonstrated a high degree of flexibility and capacity for interaction with the customer, thanks to which, our section was the first one to be executed.

What social and economic benefits will the Doha project bring?

The Qatari authorities were not sure if people would actually be using the metro. After the partial opening of the first lines, however, a considerable influx of people has been observed.

If this is extrapolated at the end of the first phase of the metro (by year-end 2019), it can be said that it will be a fundamental part of the mobility of people in Doha, alleviating the major traffic problems that the city suffers.

Thanks to the metro the city will be much better vertebrated, and new urban areas can be developed, allowing distances to be reduced as well as transport time.

What will be the next projects in

Qatar in which FCC intends to participate?

FCC has some projects pending award, such as the extension of the Green Line and the Red Line North.

On the other hand, there is a growing interest in the administration of bidding PPP projects, which could fit perfectly into the philosophy of the company. In this respect, we are currently bidding with Aqualia for the first PPP Water Treatment Plant.

In the short term we will also be paying attention to isolated international projects such as Sharq Crossing or the expansion of the Port of Doha.



Francisco Esteban Lefler, new international president of PIANC



Francisco Esteban Lefler has been elected president of the World Association for Navigation Infrastructure (PIANC). The appointment took place at the Annual General Meeting 2019 held in Kobe (Japan). In the words of Salvador De la Encina, president of Puertos del Estado, "it is always important that Spanish professionals hold positions of responsibility in such prestigious institutions and worldwide organizations".

With this appointment, the Spanish maritime engineering and construction are positioned at the forefront of the world, being an authentic ambassador of the sector's strengths and opportunities. It also constitutes a deserved recognition of the work carried out by Francisco Esteban in the design and construction of this type of infrastructure.

Francisco Esteban Lefler, is a civil engineer by the Polytechnic University of Madrid and engineer of Construction and Electricity by the Polytechnic School of the Army. He has been with FCC Construcción since 1994, holding positions such as director of maritime works and civil works structures, director of Innovation and technology and currently technical director of the technical services of the construction area of the FCC Group.

Until now, he has been the president of the PIANC Maritime Commission, a position he has held since 2011, as well as president of the Technical Association of Ports and Coasts.

PIANC, a leading association in design and construction of ports

Created in 1885, PIANC is the leading association for public entities and for the private sector in the design, development and maintenance of ports, waterways and coastal areas. It is a non-profit and non-profit organization, PIANC brings together the best international experts in technical, economic and environmental issues related to maritime transport infrastructure. It is known for its excellent high quality technical reports on ports and infrastructures.

PIANC's mission is to provide expert guidance, recommendations and technical advice to keep the international maritime and river transport community connected, and to support young professionals and developing countries.



Aqualia's information booth at the Westland Mall in the western sector of Panama

Aqualia launches information and awareness-raising activities on Panama's Sanitation Programme

More than 3,000 Panamanians have visited Aqualia's information booth at the Westland Mall, the largest mall in the western sector of Panama, during its first week in operation. It is an information point with activities and animations for all audiences where the progress of Panama's Sanitation Program, coordinated by the country's Ministry of Health, is explained. The milestones of the Arraiján Este wastewater treatment plant project, led by Aqualia, which will benefit

more than 85,000 Panamanians in this part of the country, are also announced.

Once the construction of the Wastewater Treatment Plant (WWTP) and the interconnection with the existing networks is completed, Aqualia will be in charge of its operation and maintenance for the next 10 years. The action is part of the Ministry of Health's plan to improve sanitation in the Burunga and Arraijan Cabecera

sectors, areas that now have a low level of sewerage and sewage treatment.

The initiative is in keeping with communication plan that Aqualia has implemented in Panama, with the aim of strengthening the brand image and making the company's values known among Panamanians.



III Open Day at the facilities of the Camino de Hormigueras, attended by workers and families in order to promote wellness at work and a healthy lifestyle

FCC Medio Ambiente organises the **3rd Open Day at its Madrid office**

With the implementation of the Healthy Company Management System, there are numerous actions and programmes carried out by the different branches of the company, which are related to well-being at work and family-work conciliation, and family workdays are one of the most representative samples.

The Madrid branch of FCC Medio Ambiente held its third Open Day at the company's facilities on the Camino de Hormigueras. The meeting was attended by workers and their families from the street cleaning services, maintenance and upkeep of green areas, furniture and networks of the Madrid zone 5 joint venture and the Madrid zone 6 joint venture.

The influx was massive, with almost 1,400 adults and 600 children, which, together with the various activities aimed at children and adults, contributed to the success of the day.

Also present at the conference were authorities from Madrid City Council, such as Beatriz San Gabino, director general of Water and Green Zones; Víctor Sarabia, director general of Street Cleaning and Waste, and Carlos Rubio, deputy director general of street cleaning, as well as several members of the national and Madrid executives of the UGT and CCOO trade unions.

Promote social and family welfare

The various activities organized for this day were focused on caring for the environment, road safety (with the collaboration of Fundación Mapfre and Sinapsis) and promoting physical activity. There was also the presence of Bomberos Unidos Sin Fronteras (United Firefighters Without Borders), who held first aid workshops and helped to combat the high temperatures of the day.

Photographic exhibition

Attendees were also able to enjoy a photographic exhibition showing the evolution of the services provided by FCC from 1900 to the present day and an exhibition of street cleaning

and park and garden conservation vehicles, which delighted everyone and gave both young and old the chance to climb into the cabins of the different vehicles on display and visit the workshop and the paint booth.

To brighten up the day there were different flamenco performances, a pop-rock concert, rumbas and sevillanas, as well as inflatable castles, human table football, swimming pool, dog exhibition (with the collaboration of the association Dame la pata), chess workshop (with the collaboration of Ajedrez Las Dos Torres) and many others.

"FCC Family Day" in Pozuelo de Alarcón, Madrid

The FCC Environment Centre delegation has organised a day for all the contract workers and their families, under the slogan "FCC Family Day", in Pozuelo de Alarcón, Madrid.

Within the framework of the Healthy Company, different activities were organised, mainly aimed at children, such as Scalextric, video games, motorcycle circuit, Goose game, handicrafts, inflatables, music, etc. All the attendees were also able to enjoy an exhibition of solid urban waste collection and street cleaning vehicles and were comforted by a catering service and a hot dog stand provided by the company.

About 40 Opeople, including workers and family members, participated, thereby contributing to the success of this event.



Day held for all contract workers and their families



Abdenbi Khoniouli during the working day in the district of Vergé del Lledó in Castellón de la

An employee of FCC Medio Ambiente receives recognition for his work in the city of Castellón de la Plana

Abdenbi Khonjouli, an employee of FCC Medio Ambiente, has been appointed Honorary Member by the Vergé del Lledó Neighbourhood Association of Castellón de la Plana, in recognition of his dedication and responsibility in carrying out his work.

The association expressed its gratitude to the company in a letter sent to the personnel department for the good cleaning work carried out in the neighbourhood and especially recognising Abdenbi Khonjouli, who

has been given a commemorative plaque.

Khonjouli has been working for FCC Medio Ambiente for several years and regularly provides manual sweeping services in the Vergé del Lledó neighbourhood.

FCC would also like to congratulate him on his dedication and dedication.

FCC Construcción's Technical Services hold their **7th Paddle Tennis Tournament**



FCC Construcción's Technical Services held their VII Paddle Tennis Tournament on 18 June.

The event, organised by the SS.TT. and also joined by employees from different departments of the FCC Group's Construction area, brought together more than 40 participants in the Somontes Sports Club in Madrid.

This is the seventh edition of this tournament, in which couples are selected by drawing of lots at different levels and in which the importance of having a good time between team-mates is emphasised.

FCC Construcción supports this initiative and is committed to sport, as well as to all healthy actions to improve the wellbeing of the company's people.





y bienestar para la sociedad.

FCC es una compañía de referencia internacional, especializada en los sectores de servicios medioambientales, gestión integral del agua e infraestructuras. Opera en más de 35 países y enfoca su gestión hacia el diseño y la prestación de servicios inteligentes para mejorar el entorno vital del ciudadano a través de soluciones innovadoras.

FCC cuenta con un equipo profesional de más de 50.000 personas y es una compañía creadora de valor para la sociedad, con un modelo de negocio sostenible, social, medioambiental y financieramente aceptable.



FCC Construcción in Panama participates in the initiative

"One Million Hectares"



The volunteers planted trees produced in more than fifty nurseries of the Ministry of Environment (MiAmbiente) and members of the Million Hectares Alliance.

On 22 June, a reforestation was held in Ciudad del Niño, Chorrera (Panama), bringing together political representatives, employees and family members of FCC. The big reforestation day was celebrated all over Panama and the volunteers planted trees produced in more than fifty nurseries of the Ministry of the Environment (MiAmbiente) and members of the Million Hectares Alliance.

For months now, the nurseries of "MiAmbiente" have produced more than one and a half million seedlings and have chosen places inside and outside protected areas, schools.

For the past five years, Panama's Ministry of the Environment has been developing the "Alliance for the Million Hectares" project, in which FCC has been participating with temporary access works to the planting area, donation of seedlings for planting and volunteer participation with FCC collaborators and their families for planting.



FCC Construcción and society

The company is part of the communities in which it operates by promoting social projects aimed at reducing aspects such as inequality, poverty or the risk of social exclusion. It is a way of responding to the needs of the communities in which it is present. It develops programmes for the promotion of social development, culture, sport or health care.

In addition, it understands that SDO is a new approach to solidarity and responsibility from which companies can and should contribute to the creation of a more sustainable world. Through its activity, it contributes directly to achieving more sustainable cities and communities (SDO11); it works for innovation in industry and infrastructure (SDO9); and is committed to decent work and economic growth (SDO8) and, from a responsible management, it contributes to the SDO related to clean water and sanitation (SDO6); and to action for the climate (SDO13); or to the reduction of inequalities (SDO10).





Rafael García Meiro, CEO of AENOR, presents the certificate to Pablo Colio, CEO of the FCC Group

FCC Construcción, pioneer in obtaining the **AENOR ISO 44001 certificate for collaborative** relations

FCC Construcción has become the first Spanish company to obtain the AENOR certificate in accordance with the ISO 44001 standard, which highlights the implementation of the Collaborative Labour Relations Management System (CLRMS), which is applied to strategic relationships with customers, suppliers, internal and external collaborators and partners that have a high impact on the organisation's performance, identified and managed within the collaborative relations programme.

For FCC Construcción, the establishment of collaborative working relations through the ISO 44001 management model is a further step in its strategy of innovation, openness and willingness to cooperate and in its commitment to society. It also represents a new manifestation

of leadership and once again positions the company as a pioneer in the sector. This certification enables FCC Construcción to consolidate and maximise the company's relations with its stakeholders in the future, granting and strengthening the value of collaborative work.

Efficient and intelligent management system

ISO 44001 certification verifies the implementation of an effective and intelligent management system for collaborative working relationships that involves, among other benefits, the increase of business opportunities, control in the transfer of knowledge of the parties, the ability to consolidate relationships with suppliers, customers and partners based on a win-win philosophy, cost

optimization and value creation, as well as the ability to strengthen competitiveness to access international markets.

AENOR has recognized the Collaborative Work Relationship Management System (CLRMS) that has been designed from the company's vision, based on a collaborative culture, generating benefits to the parties involved to create collaborative systems and relationships.





Aqualia's 13th CSR Report

highlights that "ethics and business are compatible and should be inseparable"

Under the title
#ImpactoReal, the
Report gathers the 2018
milestones in a clear
and visual way, with
infographics and a wide
interactive and multimedia
content through QR codes,
and includes for the first
time an in-depth interview
with Félix Parra, CEO of
the company, in which he
reviews the challenges and
opportunities faced by the
company.

Aqualia has just presented its 2018 Corporate Social Responsibility Report, which for the company represents "an exercise in maximum transparency", in the words of Juan Pablo Merino, Director of Communication and CSR. Under the title #Impactoreal, the report is the result of a laborious analysis of materiality that Aqualia has carried out in order to know the most relevant impacts of its activity and its repercussions on its stakeholders.

Felix Parra, CEO of Aqualia, opens the Report with an interview in which he provides the keys to the company's last year and the main milestones. It highlights water management as one of the key factors in achieving success on the road to sustainable development: "the efficient management of water resources is a strategic activity, our business model contributes to the generation of wealth and has a positive impact on society as a whole", points out the company's chief executive.

In this sense, Aqualia has developed an analysis to detect the Sustainable Development Objectives (SDO) on which the company has a direct and priority impact. The aim of this work is to align the company's strategy and establish a roadmap aimed at achieving these ODS, thus becoming the first company in the sector in Spain to acquire such a commitment. "Aqualia is prepared and equal to the challenge posed by the ODS", says Felix Parra in an interview in which he reviews in depth the challenges and opportunities faced by the company in terms of business, innovation, ethics and sustainable development.

Ensuring triple sustainability: social, environmental and financial

In line with the ODS as a whole and, in particular, with water management, the company has adopted a position of transforming leadership to establish a basis for measuring and guaranteeing the triple sustainability -social, environmental and financial- required in the management of integral water cycle services. A challenge that requires public-private alliances: "I cannot imagine a future in the water sector if the challenges are not shared between the public and the private; between organisations and employees, companies and citizens", points out Aqualia's CEO.

Global Reporting Initiative (GRI)

Aqualia publishes its Corporate Social Responsibility report, drawn up in accordance with the option of exhaustive compliance with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, in its GRI Standard 2016 version and has been verified by an independent external entity (AENOR).

Video, infographics and interactive content

As a novelty, together with the Corporate Social Responsibility Report, Aqualia has launched a video in which the main achievements and challenges set out in the #RealImpact Report are presented in two minutes.

The document has infographics to help the reader get a glimpse of Aqualia's activity and its main performance figures for 2018.

In addition, it has been provided with interactive content through the inclusion of QR codes throughout the report, which allow mobile access to the extended information in multimedia format.

The Report is published in Portuguese, as well as in Spanish and English. It has a digital version navigable from iPad and other devices and can be accessed and downloaded directly from the web.





FCC Environment

Sustainability Report 2018



FCC Medio Ambiente launches the "Adopt a Friend" campaign

FCC Medio Ambiente has launched the "Adopt a Friend" campaign. A social awareness campaign for the adoption of abandoned animals, the aim of which is to find a home for pets in shelters, thus giving these animals a dignified life that their previous owners did not give them.

Adopting is not only beneficial for the animal, it also contributes to improving people's health, achieving good blood pressure levels and the production of endorphins, which improve the feeling of well-being and contribute to longevity.

FCC Medio Ambiente manages several shelters and it is our commitment to the communities we serve to improve the lives of our neighbours. We therefore invite you all to take part in this campaign.

If you are interested in responsible adoption, please send an

email to the following address comunicacionfccma@fcc.es, to receive information on how and where it can be adopted.

The **17th edition of the Children's Digital Contest** has involved more than 4,200 hours of training in the end-to-end water cycle.

The list of winners of Aqualia's 17th Children's Digital Drawing Competition is now available, in which more than 7,000 schoolchildren have participated.

The company has made available to more than 800 schools a wide variety of educational material, games and comics at the www.investigadoresdelagua.com website.

Opening the tap and having water in quality and quantity is not an easy task. The more than 7,000 schoolchildren who took part in the 17th edition of the Digital Children's Drawing Competition "Water Researchers" are well aware of this. Since the launch of the competition in February this year,

the website www.investigadores-delagua.com has received more than 30,000 visits, which means more than 4,200 hours of training in aspects related to the end-to-end water cycle. During these three months, the company has personally attended to more than 300 queries from relatives and schools in the mailbox set up for "Doubts and Suggestions".

Aqualia successfully closes a new edition of its digital children's drawing competition with the announcement of the winners, already available at investigadoresdelagua.com/ganadores. A platform that houses a multitude of educational tools to convey to the youngest, in a didactic and fun way, the management of the complete water cycle.



Food myths and legends

Recommendations of the Spanish Academy of Nutrition and Dietetics

Eating is the voluntary act by which we choose food. This generates a clear interest in society not only for its relationship with health, but also for what it represents in our social, cultural and family life. As it is something that we do daily, almost automatically, we all have an opinion about food, which means that we are exposed to a large volume of information, which in many cases can question some consolidated food practices, creating doubts about food: these are the food myths.

Bread, pasta, rice, legumes and potatoes are fattening.

There are no foods that make us fat or make us to lose weight because the balance between what we eat and what we spend is one of the basic keys to body weight. Foods rich in carbohydrates, such as bread, legumes, pasta, rice and potatoes, are a sour-

ce of energy and provide vitamins, minerals and fibre (especially whole grains) as well as high quality protein in the case of legumes. The caloric contribution of dishes based on these foods depends on how and with what we cook or consume them, and the amount and frequency with which we eat them.

For example, a baked potato has about 175 kcal, while fried potatoes provides 500 kcal. Are potatoes fattening or does it have to do with the way we cook them. The same goes for bread (and the foods that go with it) and pasta and legumes (and the different types of sauce or ingredients we use). Therefore, we must include them in our daily diet but we should control what we use to accompany them and the number and size of the portions.

Whole-grain breads and whole-grain cereals are low in calories.

The difference between cereals or whole grains and refined, is not in the calories they provide, but in the amount of certain nutrients such as fibre, vitamins and minerals, in addition to other bioactive substances.

Because of this, whole-grain breads and cereals are a healthier and more nutritious option, but, in no way can we consider them light food or low in calories. This is why it is necessary to adapt the number of servings and their size according to our needs. Moreover, there are breakfast cereals which, even though they are whole-grain, have significant amounts of added sugar and/fats.

The fruit should be eaten on an empty stomach or between meals, and not for dessert.

This myth is based on the fact that the fruit after eating would ferment in the stomach and its nutrients would not be taken advantage of, its sugar would become fat, besides making digestion difficult. This rule is present in many miracle diets, but there is no scientific basis to support this practice because foods



have the same calories regardless of when they are consumed. It is also an ideal snack that avoids snacking other foods with higher calorie content.

Although the fruit contains sugar naturally, they are small amounts compared to other foods that we do not perceive as excessively sweet; for example, a 330-ml can of soda has the same amount of sugar as 6 servings of strawberries, 6 slices of melon, or 10 figs. But even if they had the same amount of sugar the fruit also provides vitamins, minerals, fibre and bioactive substances.

Eat only fruits or just a simple salad...

Fruits and vegetables are staple foods in our diet, but do not contain all the nutrients we need, so eating just fruit or just a simple salad can unbalance our diet, as we stop eating other key foods such as fish, eggs or legumes. This practice is very common in "detox" programmes, but there is no scientific basis for this type of miracle diet in which detoxifying properties are attributed to specific foods and culinary practices.

Dairy products are not foods that should be eaten on a regular basis.

Dairy products are important throughout the life cycle, it is not an exclusive food for children, as adults and the elderly can also benefit from this food group as long as there are no properly diagnosed intolerances or allergies.

Although there are other foods such as legumes, nuts and some vegetables, which are sources of calcium, dairy products contain this mineral in an easily absorbable state. The belief that dairy products are not suitable for healthy adults due to poor digestion or that they should be eliminated in childhood because they create mucus has no scientific basis. The general recommendation is to consume dairy products with little or no added sugar and preferably fermented: good quality yoghurt or kephir without added sugar or cheese.

Cooked vegetables lose their properties

It is true that some vitamins such as C and folic acid, are sensitive to heat and light and can oxidize and be lost in water, however these losses are minimal when vegetables are boiled in large pieces, with little water, steamed or cooked in the microwave at moderate temperatures and for just the right time, or when water is used for broths.

Although it is recommended to take raw vegetables once a day, cooked vegetables can boost their nutritional value by making some substances such as vitamin A or tomato lycopene more available, for example in the typical fried onion, garlic and tomato of the Mediterranean diet.

In addition, cooking vegetables increases their microbiological safety, facilitates their digestibility and enhances their flavour.

Drinking water during meals is fattening, that's why you should drink it beforehand.

Water, regardless of when it is consumed, does not provide calories. However, drinking before eating one or two glasses of water would provide a transient feeling of satiety, which can lead to lower food intake

The calories in meals will depend on the food it contains, but not on the amount of water or when you drink it.







Closing ceremony for the

"YOU ARE THE BEST SIGNAL"

campaign in the Aragón – La Rioja branch of FCC Medio Ambiente



Closing ceremony for the "YOU ARE THE BEST SIGNAL" campaign in the Aragón - La Rioja branch of FCC Medio Ambiente

FCC Medio Ambiente held the closing ceremony for the "YOU ARE THE BEST SIGNAL" road safety campaign in FCC Medio Ambiente's Aragon-La Rioja office, together with the Road Safety Unit of the Provincial Traffic Headquarters.

The event was attended by José Antonio Mérida Fernández, Provincial Head of Traffic; Raquel Marquina Madrid, Head of the DGT's Mobility Unit; Delfina García, Head of FCC Medio Ambiente's Health and Workplace Welfare Department; Carme-

lo Jiménez Bozal, Head of Human Resources for the delegation, as well as the works committees for the Zaragoza public cleaning and Zaragoza University building cleaning contracts (UNIZAR).

The campaign, aimed at promoting compliance with road regulations and reducing traffic accidents, was aimed at around 2,200 FCC workers in Zaragoza and provided them with information on road safety and sustainable mobility.

At FCC Medio Ambiente there are many vehicles used to carry out the different services and many workers spend their entire working day behind the wheel, not forgetting the thousands of journeys made daily by all workers to get to work and return home, which is why road safety is so important to the company.







FCC Construcción obtains the new ISO 45001:2018 standard certificate

FCC Construcción has obtained certification in the international standard ISO 45001: 2018 "Occupational Health and Safety Management Systems-Requirements with guidance for use" after successfully passing the audits carried out by the certifying company SGS. FCC Construcción is thus among the first companies in Spain to obtain the new international accreditation in the field of occupational health and safety.

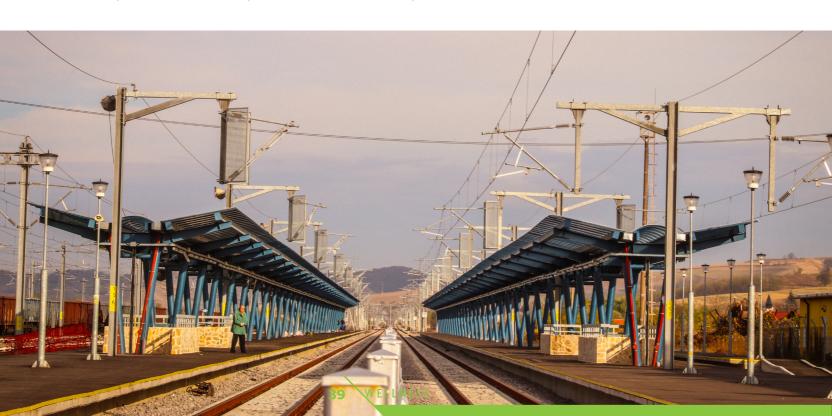
ISO 45001:2018 specifies the criteria and requirements for an Occupatio-

nal Health and Safety Management System, enabling companies and organisations to offer their workers and stakeholders safe and healthy working conditions, including proper management of well-being at work.

Obtaining ISO 45001 guarantees that FCC Construcción has implemented the best practices in occupational health and safety, minimising occupational risks with effective prevention measures, developing a preventive culture and protecting the health and safety of workers, all under the leadership and commit-

ment of the company's management together with the consultation and participation of workers.

FCC Construcción integrates prevention throughout the company's structure. With the leadership of the management, the joint prevention service and the collaboration of all those involved, the culture of prevention has been made part of the company's management.





Event at the El Torno wastewater treatment plant in Chiclana (Cádiz).

All-gas, Aqualia's commitment to move towards a green and decarbonised economy

Aqualia has organised an event at the El Torno treatment plant in Chiclana (Cádiz) to present the advances of the famous All-gas project. The meeting brought together researchers from all over the world, political representatives and the business world to learn first hand the results of the project and its possible application in current and future clients.

The Mayor of Chiclana, José María Román; the Director General of Water of the Ministry for Ecological Transition, Manuel Menéndez; the representative of the project Officer of the European Commission, Szilvia Boszoki; the Director of Aqualia in southern Spain, Lucas Díaz; the coordinator of the All-gas project and Aqualia's Director of Innovation and Technology, Frank Rogalla; and the President of the Guadalquivir Hydrographic Confederation, Joaquín Páez, presided over the event.

The new development based on algae consumes three times less electricity than a conventional wastewater treatment plant and generates up to four times more energy than that used in the process. After learning about the operation of the project along the facilities located in the El Torno WWTP and next to the lake of the peri-urban park of Las Albinas del Torno, the mayor said that "at the beginning we were not clear how it was going to be or how it was going to end, but fortunately, this has become over time a new paradigm in wastewater treatment throughout the Mediterranean basin, breaking all the molds. José María Román also stressed that "we need to adapt so that circular economy projects such as these can continue to progress because we are changing".

Therefore, the mayor thanked the representative of the Ministry, Manuel Menéndez, "because he has known first hand the importance of this project", thanking the entire Aqualia team, for trusting and believing in Chiclana, "because this project is a real revolution, we are fixing CO2, we are controlling the discharges and everything forms a new model, so we have to adapt to what is being achieved technically.

For his part, Manuel Menéndez pointed out that "the Ministry for the Ecological Transition was created a year ago and a project like All-gas represents what this ministry is, because it fuses energy and the environment. Trying to bring the worlds together in this project makes the administrative part go behind and that sometimes is a more complicated challenge than the technical or scientific aspects.

In addition, Lucas Diaz noted that it is a special day, "because the team that has worked in Chiclana has made this project one of the ones of which Aqualia is most proud because it has given us visibility nationally and internationally. He also thanked the support of the City Council and the personal interest of the mayor in this project, as well as all the team and all the entities involved. The Aqualia director stres-

sed that "All-gas is the best example of public-private collaboration, with entities such as Chiclana Natural, Aqualia, City Council, Junta de Andalucía, European Commission, Central Government, among others. We have all helped and collaborated in a project, each in the way that they could, with the aim of achieving technological development.



All-gas is the best example of public-private collaboration, with entities such as Chiclana Natural, Aqualia, City Council, Junta de Andalucía, European Commission, Central Government, among others.

Capacity for 40 vehicles

The All-gas project demonstrates the sustainable large-scale production of biofuel based on the cultivation of microalgae at low cost.

The research, which began in 2011, opened its demonstration phase in 2017. Currently, the project facilities produce enough high quality biogas to drive 20 cars per hectare of microalgae cultivation, which will mean 40 cars, thanks to the two hectares available for cultivation. In November 2010 the All-gas project consortium began its research activity. Since then, it has successfully achieved different milestones to become the world's largest facility

for the cultivation of microalgae with wastewater for obtaining vehicle biogas.

The results obtained by the All-gas project at different scales suggest a new paradigm of wastewater treatment, so that this operation should no longer be seen as a waste of resources, but as an activity with a positive energy balance, and source of "green" resources of high added value (bioplastics, biofertilizers, cosmetics, ...) and respectful of the environment.

The balance of these years of research is successful. It has been demonstrated that the technology developed by the consortium has enormous potential in territories such as Andalusia, which has nearly 3,000 hours of sun per year and surface available for the cultivation of microalgae. We can think of the 400 wastewater treatment plants that exist in Andalusia as bioenergy factories and as a fundamental element for the development of a new economy, committed to compliance with the SDOs and with enormous potential for this territory.



The Mersey Bridge, built by FCC Construcción, has been awarded as the best bridge in the world by the International Association of Bridges and Structural Engineering (IABSE).

The IABSE awarded the first prize, recognizing the outstanding characteristics of the project worldwide, highlighting its uniqueness, innovation and respect for the environment.

The project built by FCC Construcción has won several awards, such as in the "Infrastructure" and "Overall Project of the Year" categories of the prestigious RICS North-West awards. In addition, the Mersey Bridge has been the protagonist of the prestigious New Civil Engineer magazine. In the main article of the magazine a description was made about the new bridge as well as the main objective of this great civil work, recognized by KPMG among the 100 most important infrastructure projects in the world.

About the bridge

The bridge has a total length of 2,248 meters, with a cable-stayed central section of approximately 1 kilometre and two access viaducts connected without joints to the central part. The central section has 4 openings supported by three pylons in the Mersey estuary. This unique work has a unique design due to the different heights of the pylons. The work has been carried out with the highest environmental standards. The bridge design was based on the premise of minimal environmental impact and 1,423,225 tons of materials have been recovered and reused in construction.





FCC Medio Ambiente has been providing waste collection and street and beach cleaning services in the city of Almuñécar since 2008, and once again the City Council has awarded the service for a period of 10 years.

Thanks to its privileged climate, mild temperatures throughout the year and its location at the foot of a fertile Tropical Valley sheltered by the mountains of Granada and overlooking the Mediterranean, Almuñécar has been an enclave coveted by numerous people since the dawn of history, as expressed by the local tourism website of the town of Granada.

Almuñécar occupies a privileged place on the map of the most attractive cities in Andalusia. Its narrow and steep streets, its whitewashed houses, its spectacular beaches and its Andalusian essence present in its corners, definitely raise it to the rank of the leading cities.

Almuñécar City Council has once again placed its trust in FCC Medio Ambiente and awarded it the contract for the collection and transport of solid urban waste, street cleaning, cleaning of beaches and coastline, and management of containers and clean points for a period of ten years. The total amount of the portfolio is more than 50 million euro.

In order to serve the city's more than 26,000 inhabitants, FCC will employ up to 89 workers to carry out the different collection and cleaning tasks, with plans to collect around 22,000 tons of various fractions of waste. Nearly nine kilometres of beaches and 22.17 linear kilometres of coast-line will be served with beach conservation and cleaning services and cleaning of floating debris.

Last generation vehicles

The solid urban waste collection service will be upgraded with the latest generation of vehicles, which are much more functional and efficient, thus counting on a fleet of nine waste collection vehicles with lateral and real loading, ten lorries with open boxes of different volumes and two vehicles for washing containers.



With regard to road and beach cleaning services, five sweepers, two washing machines, four hydrocleaning equipment, nine auxiliary vehicles, two boats for cleaning water sheets and three tractors will be used. Part of the street cleaning machinery will be electric.

As a novelty, selective collection will be improved and a container removal and placing system will be installed in the old quarters of Almuñécar and La Herradura, and a future municipal clean point will be incorporated. The cleaning service includes the mechanical washing and scrubbing service and selective collection.



Touring the city

Some of the remains that can be visited today are the Phoenician-Punic necropolis such as Laurita and the Noy Bridge. From the Roman period there is Roman aqueduct spanning more than seven kilometres; the Columns of La Torre del Monje and La Albina; the Factory of Salazones (salt-preserved foods), and the Cave of Seven Palaces, current headquarters of the Archaeological Museum. From its Arabic origin remains the layout of its streets, the watchtowers situated in some of its beaches and the Castle of San Miguel that crowns the town. From the Christian era, the church of La Encarnación and the Church of El Pilar in Calle Real stand out, as well as the Palacete de La Najarra, built in the 19th century.

Beaches

It has 19 kilometres of coastline, where 26 beaches are located, from small coves with transparent waters to beaches such as La Herradura, where you can scuba dive, La de Velilla, San Cristobal and Puerta del Mar, all of them with the Q seal for tourist quality.

Gastronomy

Both the sea and the products of the land meet at the tables of Almuñécar its fish and some vegetables and tropical fruits such as cherimoyas, avocado, mangoes, papayas, and guava are the basis of its gastronomy. Fennel soup, cazuela mohína, fried pumpkin or San Juan pastries, are not lacking at the table of the natives of this region.



Modern boats for water cleaning



FCC Medio Ambiente has put into service two modern boats for cleaning the water on the beaches of Almuñécar and La Herradura, which operate during the summer period until 30 September, always adapting to the beach season.

The 6.5-metre-long and 2.5-metre-wide boats have articulated arms on the port side and starboard side with textile nets to collect foams of dirt that could reach the coasts, as well as inboard motors, which provide greater safety for bathers since the propellers go inside the vessels.

These two boats are part of the improvements included in the cleaning specifications with respect to previous years, thus improving considerably in efficiency and effectiveness.

In addition, FCC Medio Ambiente has integrated three new machines for cleaning the beaches of Almuñécar and La Herradura to provide the service in all aspects of sand treatment, cleaning and installation of new walkways, among others.

With these new vehicles, operability is improved in order to be able to act better and faster, and these services are also extended to Sundays.



FCC Construcción to carry out the **refurbishment that will turn the Club de Mar Mallorca** into the most modern port in the Mediterranean

FCC Construcción and the Mallorcan company Vías de Obras Públicas (VOPSA) will be responsible for carrying out the refurbishment of the Club de Mar Mallorca, which will transform Palma's seafront at its western end and open up the port to the city.

Once the agreement between the club and the construction companies has been signed, the work is expected to begin in the autumn of this year and will be completed in 2012, after the Balearic Islands Port Authority (APB) and Puertos del Estado, a body dependent on the Ministry of Development, have given the green light to the project.

Borja de la Rosa, president of the Club de Mar Mallorca, has assured that the election of FCC Construcción and VOPSA, two "solvent and prestigious" companies, guarantees the development of a reform "aimed at turning our club into the most modern and sustainable recreational port in the Mediterranean".

The work on the Club de Mar Mallorca, added De la Rosa, "will begin the overall reform process of Palma's Paseo Marítimo and will give a strong boost to the concept of integrating the harbour-city promoted by the City Council in collaboration with the APB, by extending the areas for



The Club de Mar Mallorca project is the most important recreational nautical project in Spain.

public use of the concession and creating a connection axis between the Paseo Marítimo and the Cruise Station, in addition to the improvements in the services that the new facility will enable us to provide to our members and users".

The director of the Club de Mar, José Luis Arrom, has highlighted that its socio-economic impact will be very important for the city. "We expect to generate around 500 new direct and indirect jobs and that the investment in infrastructure will translate into a value of the facilities of 170 million euros at the end of the

concession period. This implies an unquestionable benefit for the public sector through private initiative".

The project places sustainability and respect for the environment among its priorities. "We wanted a 21st century port, adapted to the demands and social sensitivities of our time. The new facility will allow us to expand the policies of environmental efficiency, quality, safety and service that we have already been implementing," adds Arrom.

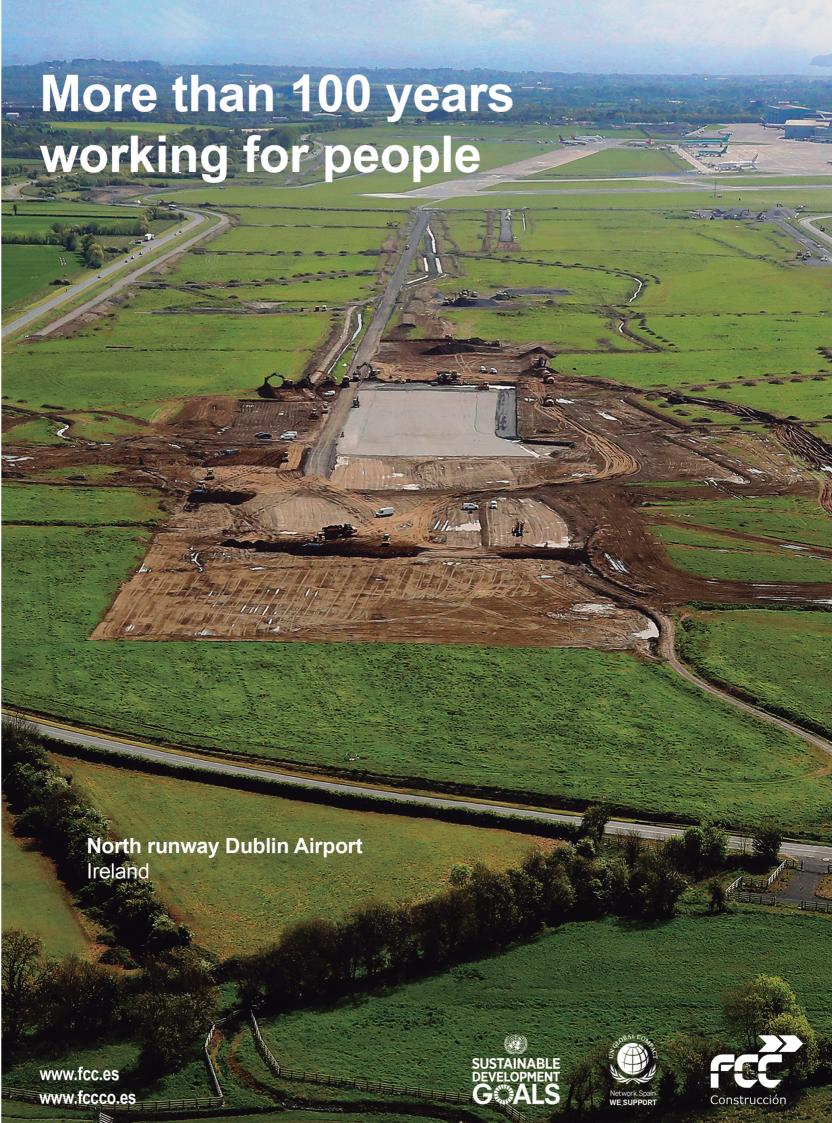


The largest nautical work in Spain

The APB Board of Directors approved the Club de Mar Mallorca renovation project on October 18, 2017, which meant the extension of the concession period until 2044 in exchange for investments in public space worth more than 50 million euros.

Also, as part of the agreement, the nautical sports entity, founded in 1969, under-

took to pay the figure of 250 million euros in fees over 25 years. These figures turn the Club de Mar Mallorca project into the most important recreational nautical project in Spain.

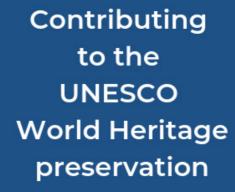




























FCC Environment CEE contributes to

World Heritage preservation

"Heritage is our legacy from the past, what we live today and what we pass on to future generations." (UNESCO)

The UNESCO World Heritage List includes 1,121 properties, including 869 cultural, 213 natural and 39 mixed (UNESCO). With 10 of them, the FCC Environment CEE mark is closely connected, and in them we can find FCC people working, as well as containers, trucks and other vehicles that keep the places clean and well cared for. We are proud to contribute to the preservation of our unique cultural heritage.

We care about the future

Responsibility for the future is also one of the guiding principles of FCC Environment CEE. Following its mission "Service for the Future" seeks to minimize waste and transform it into a valuable resource. By reducing the environmental burden, the company ensures a good quality of life for present and future generations.

With its management, it contributes to its mission of providing the best service in eight countries in Central and South-Eastern Europe; in Austria, Bulgaria, Czech Republic, Hungary, Poland, Romania, Serbia and Slovakia, serving more than 1,379 municipalities and 4.9 million inhabitants.

Thanks to the services of FCC Environment CEE, the cities are cleaner and better preserved, which improves the quality of life of citizens and makes the cities more pleasant and attractive to tourists. Collaboration with local authorities makes cities more sustainable.

UNESCO World Heritage sites supported by FCC Environment CEE services

Among the places where FCC Environment CEE provides its services are also UNESCO World Heritage locations:

- Historic districts of Graz and Schloss Eggenberg (Austria).
- Historic centre of Vienna (Austria).
- · Semmering Railway (Austria).
- Historic centre of Salzburg (Austria).
- · Boyana Church, Sofia (Bulgaria).

- Villa Tugendhat, Brno (Czech Republic).
- · Historic centre of Prague (Czech Republic).
- · Budapest, including the banks of the River Danube, the Buda Castle district, and Andrássy Avenue (Hungary)
- · Cracow Historic Centre (Poland).
- Bochnia Royal Salt Mine (Poland).





Today, security must be immersed and visible in the supply chain, i.e. in the development cycle, in the workforce, in the workforce and in the proliferation of points of contact with customers.

As the company evolves, there are numerous changes that must be taken into account, including its security position since it is one of the most fragile structures and is in constant threat.

It is necessary to know the degree of maturity and effectiveness of organizations in managing cyberthreats and identify areas for improvement, as well as test systems and know the response of the human team in a realistic scenario and assess how a cyberattack would impact on ICT infrastructures. Recently, the National Security Council approved the National Cybersecurity Strategy 2019, which reflects Spain's position on a

Chapter two examines the main threats and challenges facing Spain in cyberspace. Section three sets out the objectives and principles governing the Strategy (unity of action, anticipation, efficiency and resilience). Chapter four sets out the lines of action aimed at achieving the objectives in order to strengthen capacities in the face of threats, guarantee security and resilience, ensure the full implementation of the National Security Scheme, the Critical Infrastructure Protection System, and compliance with and harmonisation of regulations on the protection of critical infrastructures and essential services; and develop the State General Administration's Cybersecurity Operations Centre to improve prevention, detection and response capabilities, and promote the development of cybersecurity operations centres at regional and local level, among

in the spotlight of companies



new conception of cybersecurity within the framework of the National Security Policy and meets the general objectives in order to guarantee the safe and reliable use of cyberspace, protecting the rights and freedoms of citizens and promoting socio-economic progress, the objective of cybersecurity and the lines of action established to achieve it.

Strategy is structured in five chapters

According to information contained in the Official State Gazette, the Strategy is structured in five chapters. In the first chapter, the opportunities and challenges of cyberspace and digital infrastructure are presented, the inherently international nature of the approach to cybersecurity is exposed and the main features of the new conception of cybersecurity in Spain are described.

Finally, chapter five integrates cybersecurity into the current National Security System along with the National Security Council; the Situation Committee, the only one for the entire National Security System in crisis situations; the National Cybersecurity Council; the Permanent Cybersecurity Commission; the National Cybersecurity Forum; the competent public authorities and the national CSIRTs.



FCC awarded contract in Omaha, Nebraska (U.S.)

FCC Environmental Services was awarded the contract for solid waste collection services of the city for the next



ten years, with a possible extension of another ten years. FCC will also provide the seasonal selective collection of yard waste for 12 weeks per year. The total volume awarded is of \$255 million, which, together with the possible extension, could reach \$560 million.

Waste management and street cleansing contract in Jerez (Cádiz)



Jerez City Council awarded a joint venture led by FCC Medio Ambiente, which is part of the FCC Equal Special Employment Centre (CEE), the new solid urban waste collection and street cleaning contract for a term of nine years with a possible one-year exten-

sion. The total portfolio of the contract amounts to more than 186 million euro.

FCC Medio Ambiente wins contract in Volusia County, Florida (U.S.)



The Volusia County Council Members approved unanimously the award for solid waste collection services to FCC Environmental Services, the American affiliate of FCC's environmental division. The total term of the contract is 7.5 years with a possible additional 7-year extension. The total backlog awarded is \$87 million, which would potentially reach \$170 million with the extension. With a fleet of 42 CNG vehicles, FCC will start the solid waste collection services in Volusia County in April 2020.

Protagonists in the first edition of the Smart HSE Linkup for Occupational Health and Safety professionals



FCC Medio Ambiente attended the first edition of the SmartHSE LinkUp organised by the Nalanda Community to talk about how innovation, leadership and future legislation will help to bring occupational health and safety professionals even closer to success in their work. FCC was represented by Delfina García, head of the Environmental Health and Welfare Department, who took part in a round table discussion with the main companies in the sector to discuss the concept of a Healthy Company that has been successfully implemented in the company.

FCC Medio Ambiente awarded at the ONCEAragón 2019 Solidarity Awards

FCC Medio Ambiente's Aragon-La Rioja branch of FCC Medio Ambiente has been awarded the ONCE Aragón 2019 Solidarity Awards in the company category for its concern about the real inclusion of



disabled workers in its workforce and in the work environment that surrounds them.

Implementation of an application for the cleaning service of the city of Jaén

Jaén City Council has launched a citizen collaboration application, developed by FCC Medio Ambiente, to report incidents in the city's cleaning service. The new app is supported by VISION, an intelligent digital platform designed by FCC for comprehensive management of municipal services, enabling it to respond to the needs of all the agents involved in providing these services: city council, company and residents.

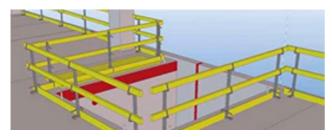


Convensa wins the maintenance contract for the Madrid-Seville High Speed Line



Convensa, an FCC Group railway company, has been awarded, together with other companies in the sector, the infrastructure, track and track maintenance contract for the Madrid - Seville High Speed line (lot 2). The contract has an amount of 41.5 million euros and a term of 48 months.

The SAFETY4D R+D+i project, led by FCC Construcción, is underway



The main objective of the SAFETY4D project is the development of a novel advanced high-performance process for the prevention of occupational risks in construction, which will allow the improvement of risk prevention and, with it, the reduction of the risk of accidents in the field of construction, without this entailing a greater investment of resources on the part of companies. For the development of the prevention process, a methodology will be designed together with a tool that allows the management of the preventive measures and protection equipment of the companies by means of the BIM methodology.

Informative breakfast on hydrocarbon logistics in the face of energy transition



The FCC Group's construction area took part in the informative breakfast on hydrocarbon logistics in the face of the energy transition. The event was attended by the CEO of CLH, Jorge Lanza, as well as Pablo Colio, FCC's CEO, who offered FCC's collaboration to continue supporting each other in national and international projects, including Dublin Airport (Ireland).

Contract for the renovation of the Prosperidad, Esperanza and Arturo Soria metro stations (Madrid).

FCC Construcción has won the contract to revamp the Prosperidad, Esperanza and Arturo Soria stations of line 4 of Metro de Madrid. The awarding budget for the three stations amounts to more than 8 million euro and has a completion period of 12 months.



FCC Construcción completes the construction of the "El Alamein" desalination plant (Egypt)

FCC Construcción has completed the construction of the "El Alamein" desalination plant in Egypt. The EPC contract (Engineering, Procurement, Construction, Commissioning), which includes a year of operation and maintenance, was awarded by the Egyptian Ministry of Defence, in 2016, to Aqualia, the FCC Group water management company.



FCC Construcción shortlisted for the prestigious NCE TechFest Awards for the DOVICAIM innovation project.

The project was presented by Francisco Esteban Lefler, Technical Director of the Technical Services of the FCC Group's Construction area. On 24 September FCC will defend its candidacy in London before an international and technical jury.



The government of the Czech Republic recognises Aqualia's role,

through its subsidiary SmVaK, in the development of the Central European country

Aqualia has been recognised by the Czech government as one of the key players in Spanish investment in this Central European country at an event held at the Czech



embassy in Madrid. At the Top Spanish Investor event, the Czech ambassador in Spain, Ivan Jančárek, presented awards to the eleven leading Spanish companies with investments in the Czech Republic. Aqualia was the only company in the municipal services sector among the award-winning companies.

New SmVaK contracts in the Czech Republic



Aqualia, through its subsidiary SmVaK, was awarded a 5-year contract for managing the end-to-end water cycle of the industrial zone of Mošnov, in the northern part of the Czech region of Moravia-Silesia. SmVaK also won the

concession for the sewage network in the Czech town of Písečná, in the Beskydy mountainous region, close to the border with Poland thereby strengthening its presence in the area.

One year of operation at the Djerba desalination plant (Tunisia)



Aqualia has just successfully completed the first year of operation and maintenance of the Tunisian desalination plant in Djerba. The installation, which provides 50,000 m³ of drinking water to the largest island in North Africa, gua-

rantees water supply in this touristic region and represents key element in the economic, social and environmental development of this territory.

Large deployment in Navarre to collaborate in the recovery of public services after the floods



Aqualia has done its best to minimise the damage caused by flash floods and has dedicated all kinds of resources, both human and technical, reviewing the installations and focusing

efforts on recovering normality beyond its contractual obligations with the Mairaga Community, where we provide services to nearly 20,000 users and a total population of almost 32,000 inhabitants.

The Incover project, led by Aqualia, transforms Almeria's urban effluent into water suitable for irrigation



Almeria has hosted the third and last international working meeting (Innovation Workshop III) of the Incover project, which has

been developed over the last three years at the El Toyo treatment plant in Almeria's capital. The objective of the project, which has also been monitored in Barcelona, Chiclana (Cádiz) and Leipzig (Germany), was based on transforming wastewater from urban agglomerations into an energy source (biomethane) and valuable products such as bioplastics and biofertilizers.

Aqualia in favour of responsible water consumption

Under the hashtag #contralaescasezhídrica, Aqualia has launched an awareness campaign for the rational and sustainable use of water. La Guardia (Jaén), Ibiza or Formentera (Balearic Islands), Ávila, Candeleda (Ávila), Lleida, Torderà (Barcelona) and La Bisbal del Penedès (Tarragona) are



some of the municipalities that have joined the campaign that aims to promote responsible consumption of tap water among citizens. The campaign has had special repercussions on Twitter and Youtube, where the video "13 ways to take care of water like you've never been told" stands out.

Extinguishing tasks of the first big summer fire in Catalonia

One of the first fires of the summer originated in the province of Tarragona, devastating more than 6,500 hectares. In this area, Aqualia actively collaborated with the Garrigues Sud Irrigation Community in putting out the fires, thus making it possible for most of the irrigation installations located in this area to be safe from the flames. One of the main actions was the installation of 50 hydrants to complement the existing ones in the area that were not enough to cope

with the situation. In addition, a coordination and communication system was set up with firefighters and agents to put out the flames by which, via WhatsApp, the exact location of each of the new hydrants was sent to them in real time.





En 2015 la ONU aprobó la Agenda 2030 y fijó los Objetivos de Desarrollo Sostenible (ODS).

La gestión del ciclo integral del agua se ha postulado, a través del ODS 6, como uno de los factores clave para alcanzar el éxito en el camino hacia el desarrollo sostenible.

Aqualia está preparada y a la altura del desafío que plantean los ODS y desarrolla todas sus actividades teniendo en cuenta la triple sostenibilidad: ambiental, social y económica.

Descubre más en conexionesaqualia.com





I Edition Children's Drawing Competition

September 20th · October 31st











