# We are FCC N°4

## Aqualia chosen the "best company of the year" in the water sector



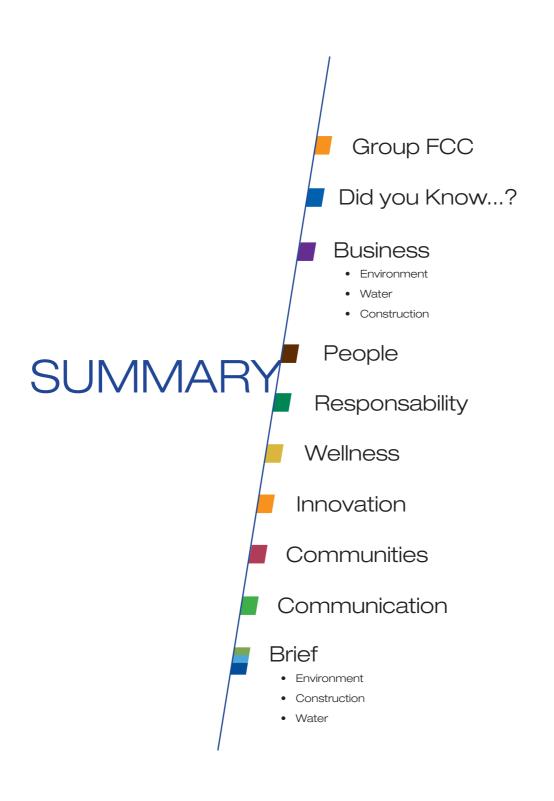
FCC completes the Mersey Gateway Bridge





FCC celebrates more than 40 years committed to electric mobility for municipal services







FCC Group's Board of Directors ratified the company's Corporate Social Responsibility (CSR) Master Plan for the 2020 horizon that was previously approved, on 28 November, by the Executive comittee.

In 2016 the Board approved FCC's CSR policy to comply with the Limited Companies Law and following the recommendation of the CNMV Code of Good Governance for Companies. The fourth CSR Master Plan was approved to comply with the CSR policy and to meet the commitments to stakeholders. As with the policy, the plan, valid for three years, up to 2020, contemplates three lines of action: connection with the public, smart services and exemplary behaviour.

FCC Group's new CSR Master Plan was prepared following an in-depth analysis of social and environmental needs as well as medium and long-term trends. New regulations, global challenges, identified in the United Nations Sustainable Development Goals (SDG) Agenda 2020, the demands of our surroundings and a clear commitment to contribute value to FCC's business, have marked the definition of the 15 action programmes in this the Group's fourth CSR Master Plan.

#### "FCC CONNECTED"

The first pillar of the plan, "FCC Connected," incorporates four action programmes to strengthen the company's ties with its closest surroundings and with society in general to be worth of its confidence and credit through value adding initiatives in matters of social action, dialogue and the transfer of knowledge and experience.

#### "SMART SERVICES"

The second pillar, "Smart Services," seeks to contribute significantly to the fight against climate change and the reduction of the impact on the environment and on the community. The key aspects of the five programmes of this section of the Master Plan are Innovation in sustainability and the company's role in the new circular economy model.

#### "FCC ETHICS"

The visión of the last pillar, "FCC Ethics," is more intra-company focused. Its purpose is to work jointly in the company culture, in giving the organisation exemplariness, competences, confidence and pride as well as mobilising all present and fu-

ture employees around the Group's strategic objectives.

To implement this Master Plan effectively and to comply with FCC's CSR policy, there is a structure that guarantees and ensures the good governance of the plan. Approved by FCC's Board, the plan will be supervised by the Executive Committee, enforced and controlled by the Group's CSR Directorate and implemented by the corporate CSR Committee and the CSR and sustainability committees of FCC's business units.

Through this plan, FCC wishes to underscore its decision to respond firmly to the company's responsibilities and commitments to society. The plan clarifies the Group's sustainability road map for the near future, leveraging credibility and confidence for clients, investors and employees.





#### FCC' CSR MASTER PLAN PLAN

#### **FCC CONNECTED**

FCC +action FCC Educa City 2025 Measurement of positive impact

#### **SMART SEVICES**

Circular economy
Climate change
Water stress
Protection of biodiversity
FCC Innova CSR

#### **FCC ETHICS**

FCC Culture
Responsible purchasing
Human rights
Talent
Equality and diversity
Health and safety



#### **Fidelity Awards**

# FCC pays tribute to employees who have been 40 and 25 years with the Company



The Chairman Esther Alcocer Koplowitz and Pablo Colio, the Company's CEO, both at the centre, accompanied by the award-winning employees.

At an event held in the Las Tablas headquarters in Madrid, the FCC Group gave out the loyalty awards to those who have been working in the Company for 40 and 25 years. Esther Alcocer Koplowitz, Chair of the FCC Group and Pablo Colio, CEO of the FCC Group, presided over the event accompanied by Agustín García Gila, chairman of FCC Medio Ambiente, and Félix Parra, Managing Director of Aqualia.

Pablo Colio welcomed the guests and congratulated the award-winners, thanking them for their dedication, loyalty and commitment and expressed his desire that they continue working together to build the future of FCC. During his speech, Pablo Colio highlighted the fact that the FCC Group is already generating profit and that its good positioning will enable it to face the future marked by growth. Esther Alcocer Koplowitz, in her warm speech, thanked them sincerely for their work and efforts during their professional careers and their commitment and loyalty to FCC.

The awards were given afterwards, recognising the careers of those professionals who have dedicated 40 and 25 years to the company.

The loyalty awards were also given in the Barcelona (capital city) branch

office as well as in the branch Cataluña 1 and Balmes Central Services branch offices in an event headed by Francisco Xavier Martín Garriga, manager of FCC Medio Ambiente's Zone I branch office.

#### FCC wins the Cambio 16

#### "Best Company of the Year" award

Esther Alcocer Koplowitz, CEO of FCC was in charge of collecting the prize.

Esther Alcocer Koplowitz, Chair of FCC Group, received an award from the magazine Cambio 16 recognising FCC in the "Best company of the year" category. During her speech, the Chair thanked the management for winning this award and wished to share this distinction with everyone that forms FCC Group. "It is with pride and enormous satisfaction that I receive this prize from Cambio 16 for FCC as the best company of the year. I would like to share it with everyone who forms part of the company, which has always been distinguished for its commitment, high level of professionalism and its public service vocation. This prize is for them."

Cambio 16 noted that FCC is a leading international public services company, a world leader in the areas of environmental services, full-cycle water management and infrastructure. With more than 115 years of history, the globalising and international expansion experienced by the Group means that it is now present in more

than 35 countries. It also noted that its development is based on responsible growth through the creation of value for the company and its shareholders, with which it has built a sustainable business with a great outlook for the future. The magazine also focused on the company's more than 55,000 employees, who live a corporate culture based on the principles of integrity, professionalism and transparency.

The Cambio 16 awards, granted by this prestigious publication, annually distinguish all personalities and institutions that stand out for demonstrating confidence and leadership in a time of volatility and uncertainty. Their examples contribute to ensuring the planet's future and the well-being of the public.



Esther Alcocer Koplowitz, Chair of FCC, with Jorge Neri. CEO of Cambio 16.

## Esther Koplowitz **recives the solidarity award** granted by the magazine Cambio 16

Esther Koplowitz received the "Solidarity" prize from the magazine Cambio 16 for her continuous efforts to improve the lives of people with limited economic resources.

During the Cambio 16 awards ceremony, she was mentioned and described as an excellent manager, philanthropist and businesswoman, and a reference thanks to her social commitment. Esther was grateful for the prize received and stated that "it is an honour for me to receive this prize which I accept in the name of everyone who has been able to help throughout my life."

Her concern for the needs of the most disadvantaged members of society is channeld through the foundation that she founded that is financed exclusively with her contributions.

The foundation is mainly dedicated to social works in favour of the people most in need of psycho-sanitary assistance for the young, the ill and the disabled as well as encouraging research, education, culture, the arts and sciences, and the protection and sustainability of the environment.





#### FCC started operations on 1 January 2017

# The **Dallas** facility **awarded the best** recycling facility in the United States

The FCC's Material Recycling Facility located in the City of Dallas, built, financed and managed by FCC Environmental Services, the U.S. subsidiary of the FCC Group, specialising in environmental services, was selected by the National Waste & Recycling Association (NWRA) as the Best Recycling Facility of the Year 2017 in North America. This award recognizes the facility that demonstrates leadership in key measurements, such as innovation, quantity of materials collected and/ or processed, types of materials recovered, site improvements, or sustainability measures adopted.

In November 2015, the City of Dallas, Texas awarded the contract for the design, construction and operation of a Single-Stream Materials Recycling Facility (MRF) to process the city's recyclables. With the latest sorting and classification tech-

niques, including optical sorters, as well as gravimetric sorting machines, the plant can handle more than 40 tons per hour of single-stream material.

Construction of the facility started in March 2016 and was completed in December of the same year. It measures 5,400 m2 with the office building occupying a space of 840 m2 and the rkshop about 300 m2. The total area is 5.3 hectares, the equivalent of eight soccer fields.

FCC also built an education centre at the facility to help Dallas City Countil meet its environmental objectives by training and educating children and adults in the best sustainability and recycling practices.

Construction on the facility started in March 2016 and was completed in December of the same year. The facility began operating on January 1, 2017. In its first year of operation, the MRF will process around 80,000 tons in 2017 with a total capacity of 140,000 tons per year.

This MRF is a critical piece of infrastructure because all single stream recyclable material from the City of Dallas, and surrounding areas, will be processed here over the next fifteen years with a possible extension for an additional 10 years. As the contract also gives the provider the exclusive rights to the material from all recyclable waste containers in the City of Dallas for its duration, its successful delivery is vital to achieving the city's ambitious efforts to increase waste diversion to: 40 percent by 2020, 60 percent by 2030, and 80 percent ("zero waste") by 2040.



Indoor view of the Dallas MRF where thousands of tons of glass, plastic, metal, paper, cardboard, and other materials will return to the market over the coming years. The facility was designed to handle 140.000 tonnes per year.

#### **CEO of FCC Environmental Services**

Inigo Sanz, CEO of FCC Environmental Services said, "We are delighted to win this prestigious award for the Dallas MRF. FCC is a company that provides high added value based on more than 115 years of experience. We export our know-how, our consolidated experience and a large portfolio of references worldwide. We have a magnificent team of highly specialized professionals that operate in all branches of engineering, and we

provide knowledge, technology and innovation to every project we carry out. In addition, we have a strongly implemented corporate responsibility policy, which stems from senior management, and which is based on supporting the local communities where we operate."

#### **NWRA**

The National Waste & Recycling Association is the leading organization providing leadership, advocacy, research, education and safety expertise for the waste and recycling industries. NWRA advocates at the Federal, State and Local levels on all issues of importance to our member companies as they provide safe, economically sustainable and environmentally sound services to communities in all 50 states and the District of Columbia

The facility covrs a total area of 5.3 hectares, equivalent to the size of eight soccer fields.





# Aqualia chosen the "best company of the year" in the water sector

The Company was the major winner in the gala award ceremony of the magazine iAgua, a reference publication in the industry, obtaining prizes in six of the seven categories for which it had been nominated.

The #PremiosiAgua include a total of 27 categories in different fields and more than 100 nominees. Besides the main prize, "best company of the year", Aqualia also won I five other categories: Best App ("Smart aqua"), Best Advertising Campaign (#informacionrealdelagua"), Best Presentation (Ma Ángeles Vicente, IT manager), Best video ("La gestión del ciclo integral del agua como jamás te la habían contado") y Best Contract (the Abu Rawash WWTP in Egypt).

Over the course of 2017, Aqualia disseminated 155 communication items, including press releases, interviews, feature articles, other article dealing with various issues, not

just management of the water cycle but also on its policies such as Prevention of Occupational Hazards, Human Resources, and Corporate Social Responsibility. Many of these news items were also linked to research projects and the development of new solutions.

As a result and, according to data on the iAgua ranking based on the publication's algorithm, Aqualia accumulated 15,814 points and ranked in first place, above the powerful Suez Environment which came in second. Aqualia's reporting activity exceeded 56,000 page views with more than 123,000 shares in social media and more than 500 likes. This ranking is

From left to right: María Moltó (Aqualia), Raquel López (Aqualia), Alberto García (Aqualia), David escobar (iAgua), Félix Parra, Alejandro Maceira, Juan Pablo Merino (Aqualia), and Alberto Justel (Aqualia).

totally objective, based on readers' clicks on Aqualia news and the number of times these were shared in the social networks.

This important recognition as the best company for its reporting was received by Félix Parra, CEO of Aqualia, in an event attended by nearly 300 people, including representatives of the leading companies, public administrations, universities, research centres, and NGOs who work in water-related activities.

In his speech, Félix Parra expressed his satisfaction for the great team at the Company which he manages, pointing out that "they are the ones who make these achievements possible" adding that "the communications philosophy and strategy if Aqualia has been, and continues to be, focused on maintaining open channels with our pubic, communications media, clients and the administrations. Only in this way are we able to understand the needs of each of them to be able to address these concerns efficiently".



Alejandro Maceira, founding partner of iAgua, gave the Best Company award to Félix Parra, CEO of Aqualia (Photography by Pablo Cebrián).

The objective of this fourth edition of the iAgua awards was to highlight individuals and organizations that are leaders in the water sector in Spain and in LATAM. In 2015, Aqualia won the first prize as the most influential company.

#### Complete list of the winners of the **#PremiosiAgua Awards**

#### Aqualia:

- · Best Company: Aqualia
- Best Vídeo: Aqualia, for "La gestión del ciclo integral del agua como jamás te la habían contado"
- Best Presentation: Mª Ángeles Vicente, for "La transformación digital de los operadores de agua: el caso de Aqualia"
- · Best Advertising Campaign: Aqualia, for #informacionrealdelagua
- · Best APP: Aqualia, for SmartAqua
- · Best contract: Aqualia, for the Abu Rawash WWTP

#### Other winners:

- Best Magazine Interview: Interview of José Carrera, facilitated by CAF
- Best Magazine Article: We Are Water Foundation for "Aguas negras, el rastro de nuestra historia"
- Best Post of the Year: Luis Martín Martínez, for "La genial campaña de ahorro de agua de la ciudad de Denver"
- Influencer of the Year: Antonio García Pastrana and Ignasi Servià
- Best Social Network Strategy: We Are Water Foundation
- · Best Technical Solution: Locken, for Locken Smart Access
- Best Product: Tecnoconverting, for Rascador Manowar
- Best Foundation: Fundación Aquae
- · Best NGO: ONGAWA
- Best Engineering: Grupo INCLAM
- · Best Association: Young Water Professionals
- · Best Research Centre: IIAMA
- Best Water Catchment: Agencia Catalana del Agua
- · Best Spaish Regional Administration: Government of the Murcia Region
- Best Latin American Public Administration: ANA Peru
- Best International Organization: Latin American Development Bank (CAF)
- · Best Training Program Instituto Superior de Medio Ambiente
- Best Publication: OSUR, for "Remunicipalización: ¿ciudades sin futuro?"
- Best Year-on-Year Performance: Almar Water Solutions
- · Best Event: Water Economic Forum
- Best Blog: Antonio García Pastrana



# The Wanda Metropolitano stadium, built by FCC, wins Madrid's "Best Municipal Public Works 2017 prize"

The Wanda Metropolitano stadium, built by FCC Construcción, has been named the "Best Municipal Public Works 2017" by the Civil Engineers' Professional Association at the prestigious Demarcación de Madrid awards.

The prize was handed over in a ceremony at the Casa de América in Madrid by the Sustainable Urban

Development Councillor Jose Manuel Calvo del Olmo to Miguel A. Gil, CEO of Atlético Madrid, to Pablo Colio, CEO of FCC Group, and to Antonio Cruz, architect of Cruz y Ortiz. The ceremony was attended by the General Secretary of Infrastructure, Manuel Niño, the Region of Madrid Environment Councillor Pedro Rollán, the Region of Madrid Town Planning Councillor Rosalía

Gonzalo and various councillors from Madrid City Council.

In awarding the prize to the new headquarters of Atlético Madrid, the jury considered its special nature as a civil engineering project and its general impact on the city of Madrid, in particular its contribution to rejuvenating the surrounding districts. As well as the sports function, the infrastruc-



ture has a social function, giving value to other transport infrastructures such as line 7 of the Madrid Metro. In FCC Construcción, the jury valued the design, its capacity as a construction company for complying with the schedules and the high technical quality. The stadium occupies a total area of 88,150 square metres and has the capacity to house more than 60,000 fans distributed in a general area and a VIP area. It also has more than 1,000 parking spaces for fans in the stadium and 3,000 outdoor parking spaces.

The cutting edge design of the sports complex carries the stamp of the architects Cruz y Ortiz. The concrete

of 83,053 square metres. The membrane consists of 720 PTFE (polyte-trafluoroethylene) panels weighing 92 tonnes. The roof covers the grandstand and ensures that 96% of the seats are protected from rain. It forms a special and differentiating element from the rest of European sports installations designed in recent years.

The numbers dealt with by FCC Group are surprising in their magnitude. More than 2,881 workers took part in the project. To make the stadium possible, it required 455,000 tonnes of concrete and seven tower cranes to carry 4,200 square metres of glass.

The stadium occupies a total area of 88,150 square metres.



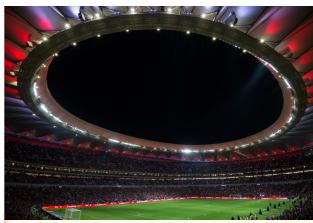




finishes and the wide interior spaces allowing fans to move throughout the complex are particularly noteworthy. The distribution of the new grandstands puts fans and/or spectators near the pitch. The new stadium has three T-shaped grandstands, lower grandstand consisting of 28 levels at the bottom and, in the preference areas, the middle grandstand with 13 levels for VIPs with direct access from the outside and, finally, a high grandstand supported on a perimeter building with 32 levels, containing the public accesses, VIP boxes and complementary services. FCC also built a space with 94 boxes in the lower area of the high grandstand.

The stadium's roof deserves special mention. It is built with a steel structure of some 6,336 tonnes, tensioned with radial tables and connected with a membrane that occupies an area

The new stadium is the first in the world to be lit entirely by LED technology, transforming the skyline of the city of Madrid. More than 16 million colours will be projected in each game. Without doubt, this is a project that represents a modern, functional and first rate venue when compared to other stadiums in Europe and even the world.



#### A leader in sports facilities

FCC has built more than 25 major facilities throughout the world that have housed some of the main sports events in disciplines such as football, tennis, motorcycling and athletics. These are cutting-edge, sustainable and functional venues in which FCC Construcción has added value with its technical and human capability to overcome major challenges. Efficiency, innovative solutions and the use of the most modern technology have been guarantees for success, demonstrating the Company's leadership in this field.

# FCC celebrates more than 40 years committed to electric mobility for municipal services



Madrid 2017, self-recharging electric vehicle with lithium ion batteries

The fleet consists of nearly 12,000 industrial vehicles employed in environmental and urban activities of which 550 are electric, hybrid, or self-rechargeable electric vehicles featuring exclusive FCC technology.

With more than 115 years' history in providing urban services, FCC has been a pioneer in research into and the introduction of new sustainable and efficient technologies, becoming the leading company in the citizen services sector to develop and launch the first electric lorry for the collection of solid urban waste.

FCC Group's Environmental Services business unit currently has a fleet of urban service vehicles featuring the most innovative systems on the market. It consists of nearly 12,000 industrial vehicles employed in environmental and urban activities of which 550 are electric, hybrid, or self-rechargeable electric vehicles featuring exclusive FCC technology. According to the Company, this state-of-the art technology, the most advanced that

exists for waste collection services, is the result of research carried out over more than 40 years through its Machinery Department which has, since its origins, invested in projects designed to achieve more comfortable and sustainable cities.

The electric vehicle fleet provides a service with a lower environmental impact and achieves various fundamental advantages: it does not pollute, its emissions are zero referred to the energy consumed and sound emissions are within the lowest technically possible limit, especially during start-up, braking and in the use of the bodywork. FCC's technology reaches these advantages without losing power or load capacity performance compared to a vehicle with a conventional diesel engine. It also delivers



Electric lorry, 1974.

#### The most advanced technology for collecting waste in cities

Today, FCC Medio Ambiente is one of the world's largest environmental services companies and has been undertaking its activity since 1911 when it was awarded the contract for cleaning

and conserving the sewerage system in Barcelona, which it continues to provide. Since July 2016 in this contract, FCC has been using the first complete fleet of 100% electric vehicles with 13 sets of specialised machinery on heavy trucks, 28 sets of specialised machinery in vans, as well as an additional 15 vans. It is a clear practical case of eco-efficient engines, and an engineering project with electrical technology carrying the FCC stamp.



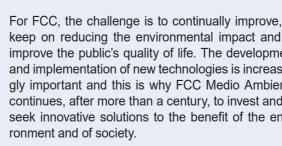


FCC's research into electric vehicles is in keeping with the set of measures that the Group has implemented for fighting climate change. In 2016, the result of these measures was the reduction of nearly 480,000 tonnes of CO2 emissions, an 18% increase in the use of alternative

energies and the generation of 29% more energy from renewa-

For FCC, the challenge is to continually improve, to keep on reducing the environmental impact and to improve the public's quality of life. The development

and implementation of new technologies is increasingly important and this is why FCC Medio Ambiente continues, after more than a century, to invest and to seek innovative solutions to the benefit of the envi-



ble energy sources in its projects.

Flectric collection vehicle. Toledo 1985



bodywork. FCC's technology rea-

ches these advantages without losing

power or load capacity performance

compared to a vehicle with a conventional diesel engine. It also delivers

greater energy efficiency since it pro-

vides a substantial energy saving of between 70 and 80% compared to

internal combustion engines, which in

turn means lower operating costs and



a longer useful life.









Unveiling of the new vehicles and machinery for street cleaning and waste collection in this city. The total new machinery acquired includes 25 street-cleaning vehicles and 17 waste collection vehicles, in addition to cleaning vans. The Company also purchased 672 side-loading containers adapted for the disabled.

### FCC Medio Ambiente renews waste collection and street cleaning service contract in

# Sant Antoni de Portmany

FCC has been providing services to this city in Ibiza since 1990 Sant Antoni de Portmany Council, on the island of Ibiza, has awarded a JV, led by FCC, the contract for collecting solid urban waste and the related services of street cleaning and the cleaning and maintenance of beaches and green spaces for 10 years, plus an extension of two years. The total amount of the new contract is almost €48 million. FCC has been carrying out this municipal service in Ibiza since 1990.

Sant Antoni de Portmany, known for its important bay, the Bay of Portmany, has a population of some 24,000 with

service needs that almost double in the summer due to the seasonal influx of visitors.

To undertake the activity, FCC will have a staff of 42 employees in the winter and 84 in the high season, including the workshop and offices. As for the physical means, there is a total of 25 newly acquired street cleaning vehicles and 17 for collection as well as 15 cleaning carts. The company has also acquired 672 side-loading containers adapted for disabled people.

#### environment



In this new contract, FCC Medio Ambiente is committed to the circular economy and the use of renewable energy sources

In this new contract, FCC Medio Ambiente is committed to the circular economy and the use of renewable energy sources. It is promoting electric mobility with the acquisition of eight Porter type auxiliary electric vehicles, four side-loading vehicles with electric body and three fully electric inspection vans. It is also important to highlight the adaption of a tertiary water point to use recycled water from the treatment plant in watering and washing equipment. It is also planned to install a hybrid solar photovoltaic/wind turbine system to provide power for exterior lighting. Regarding new information and communication technologies

(ICTs), geo-location (GPS) devices will be installed in all equipment and the VISION platform for the computerized management of services will be implemented, designed exclusively by FCC Medio Ambiente. The Línea Verde (Green Line) platform will also be available as well a free telephone line.







# Miguel Arias Cañete inaugurates the new phase of the

inaugurates the new phase of the All-Gas project installed by Aqualia at the Chiclana WWTP in Cadiz.



Before the large crowd of regional and municipal representatives, Arias Cañete refuels the tank of the car with biogas obtained in the All-gas project.

Since 2010, the most important project in the world to obtain biofuel from the cultivation of microalgae in wastewater is being developed by a European consortium headed by Aqualia

The European Union Commissioner for Energy and Climate Action, Miguel Arias inaugurated the new phase in the All-Gas project in the El Torno treatment plant in Chiclana (Cadiz) in a major event attended by the Councilor for the Environment and Land Planning of the Government of Andalusia, José Fiscal, the Deputy Central Government Representative in Cadiz, Agustín Muñoz, and the Mayor of Chiclana, José María Román, together with other representatives of the authorities. Aqualia was represented by Félix Parra, General Director, and Frank Rogalla, R&D Director.

During the visit to the facility, Miguel Arias Cañete mentioned the great satisfaction of having supported this project and other similar ones and that it is the responsibility of everyone to seek fuels that emit less greenhouse gas. "We are aware that they are complex projects because they involve various companies but once the process has started, decarbonisation in the European Union is now unstoppable."

"The transport sector is key in this process," he stated, explaining that while emissions in other areas were reduced by some 33% between 1990 and 2016, those from transport increased by some 33% in the same period.

The Mayor of Chiclana, José María Román, focused his speech on the project's pioneering and innovative nature which, as well as being a clear example of good collaboration among the agents involved, is an example of circular economy. "There's nothing that closes the circle like waste water used to provide such a valuable biofuel as biogas."

Félix Parra, CEO of Aqualia, referred to the Company's commitment to supporting R+D+i projects that contribute to generating added value to sustainable development for which, he mentioned, the only thing necessary is "to have a vocation for this to successfully implement such projects". Frank Rogalla, R+D manager mentioned several data underscoring the magnitude of the project and of the capacity of the resource that could be generated: "With the size of a soccer field, we can obtain biofuel for 20 cars".

The Councilor for the Environment and Land Planning of the Government of Andalusia, José Fiscal, declared that "the climate change law will be approved soon in the Parliament of Andalusia," which makes this type of project that contributes to reducing emissions especially relevant.





Miguel Arias Cañete, on the left, listens to Frank Rogalla, Aqualia's innovation manager, during his visit to the All-gas facilities as he explains the project. In the middle, Félix Parra, CEO of Aqualia.

The All-Gas project, supported by the European Union, has started its demonstration phase, successfully exceeding all the objectives and stages set from the start, producing quality biogas that is being tested in various vehicles to check their functioning.

The results of all of the project's phases have shown that All-gas is a clear example of circular economy

since waste (the dirty water) is converted sustainably into raw materials with added value, thus providing an innovative and environment-friendly process.

#### Success story

The All-gas project is co-funded by the European Commission as part of the 7th Framework Program, the "ENER-GY.2010.3.4-1: biofuels from algae" project and was born with the objective of being an industrial-scale demonstration of the sustainable low-cost microalgae culture for biofuel.

water

It is a successsul case of collaboration among the European companies and institutions involved – Euroepan, regional and local – in this circular economy excellence project.

It has also implied, for Aqualia, the company that led the European consortium that is executing the project, the promotion of cutting-edge technoloty and the accumulation of valuable know-how, in addition to developing numerous patents, which has positioned this project in very high innovation standards.





#### **United Kingdom**

# Mersey Gateway Bridge

After more than three and a half years of construction, the Mersey Gateway Bridge has opened to traffic. FCC Construcción is a partner of the Merseylink Civil Contractors Joint Venture (MCCJV) that also includes the British company Kier and the South Korean Samsung, which made it possible for this bridge to become a reality.

The toll bridge is part of a new 9.2 kilometre road network undertaken by Halton Borough Council, connecting the towns of Runcorn and Widnes, near Liverpool, with the six-lane cable-stayed structure as its centrepiece. The purpose of the works, which have been recognised by KPMG as one of the 'Top 100 infrastructure projects around the globe', is to alleviate congestion on the Silver Jubilee Bridge as well as connecting the area to the main motorway network in the north west of England.

The bridge itself has a total length of 2,248m with a central section of approximately 1km and two viaducts. It has four spans supported from three pylons in the Mersey estuary. The iconic structure has a unique design whereby the 80m high central pylon is shorter than the two outer pylons, which are 110m (north pylon) and 125m (south pylon). 810 miles of cables connect these pylons to the bridge deck. The new road network includes a total of 12 new bridges and seven new or upgraded junctions, with 127,415m3 of concrete used across the works. Limiting environmental impact of the project was also a major concern throughout its construction with 1,423,225 tonnes of previously contaminated materials recovered and re-used.

To deliver a project of such importance the Merseylink consortium counted with the support of the FCC Group, specifically, the Technical Services (Structures and Geotechnics) and the specialised Company BBR.

After the success of the Enniskillen Hospital in Northern Ireland, the completion of the Mersey Gateway Bridge leaves FCC well placed to bid for further work in the market. As Pablo Colio. CEO of FCC Group said, "We hope to use the knowledge we have gained of the market and this experience to win new opportunities in the UK and benefit its citizens in the future. The key to our success has been the collaboration with project partners, clients, and the local community. The FCC Group offers more than 117 years' experience and a great team of professionals, plus the technology that sets us apart and which benefits each of the projects in which are involved".

The project will benefit both the Liverpool region, with a population of more than 1.6 million inhabitants, as well as the northwest area of England.







#### Experience in bridge construction

FCC has extensive experience in building bridges. In the last 15 years, the Citizen Services Group has built over one million square metres of bridges of all types using all modern construction methods. It has built the Alamillo Bridge (Seville), a bridge in Saxony (Germany), the Otopeni bridge (Bucharest), the Azud del Oro Bridge (Valencia), the Basarab viaduct (Romania) and the San Marcos viaduct (Mexico), the second tallest in the world. It also built one of the most important connection hubs in the European Union, the bridge connecting Vidin (Bulgaria) and Calafat (Romania). The prime ministers of both countries attended the inauguration.

Important bridges are currently under construction, such as the Gerald Despond Bridge in Long Beach Harbour, Los Angeles.



#### NTERVIEW



Juan Manuel Dochao Merseylink CCIV construction director

Mersey Bridge is a transformation project that improves communications in the region. What are the construction singularities of this project? The national road network has been affected by the construction of the bridge. How were they modified?

Twenty years have passed since the first viability studies were made, deciding that this was necessary due to the future increase of traffic in both banks, from 9,000 to the current 90,000 vehicles/day. This additional traffic put pressure on the congested and antiquated Silver Jubilee Bridge and on the ability for the regional road network to recover.

The construction of the bridge and of the approach viaducts, the seven kilometres of roads and the 12 links to the existing road network, the restriction affecting local and regional development were eliminated and the local transport requirements were effectively addressed. A new strategic transport route was also provided to connect the city with Liverpool Airport, the north of Cheshire and the northeast with the rest of the country.

The regional economic strategy identifies the Mersey Gateway as a transformation project. It will improve access to maximise local development and the regional economic growth opportunities by being a catalyst connecting the communities and leading the regeneration and investment towards northeastern United Kingdom.

#### What has FCC Construcción contributed to the Mersey Bridge project?

Success, key for the design, construction and completion, was the result of taking advantage of all the existing synergies at the FCC Construcción Group. I, personally, thank all our colleagues and their efforts to meet our objectives.

Our different departments, personnel and subsidiaries were involved in all

phases of the construction phase. This included the active direct and indirect presence of the engineers from our technical services – bridges, geotechnics, hydraulics, machinery and civil works – in the coordination meetings with the designers providing our experience, engineering applied to the sequences of the processes, geotechnical design, modelling and geometric control and construction details.

Worth mentioning is the work of the post-stressing and special techniques department of FCC Construcción, an essential aspect in the construction of the project, who installed 146 suspension cables in the three pylons (11,350 kilometres of cable).

Of course, I must thank our entire team involved in the project: engineers, administrative staff, technicians and managers, who were able to work with an international consortium despite the complex relationships, and were a step ahead and able to address the technical and construction difficulties of the project.

## Social and environmental values: what were the social and environmental measures developed during the project?

I would highlight the improvement in public transport, in the infrastructure of the new paths that are safer for cyclists and pedestrians across and around the river, as well as the health benefits derived by reducing air pollution. I would also mention the communication centres, social network activities and the volunteers program during the construction phase of the project.

Our commitment to the environment was also one of the main challenges. The Environment Management Plan implemented during the construction phase (CEMP) defined the way the joint venture would plan and build the project taking duly into account environmental issues.

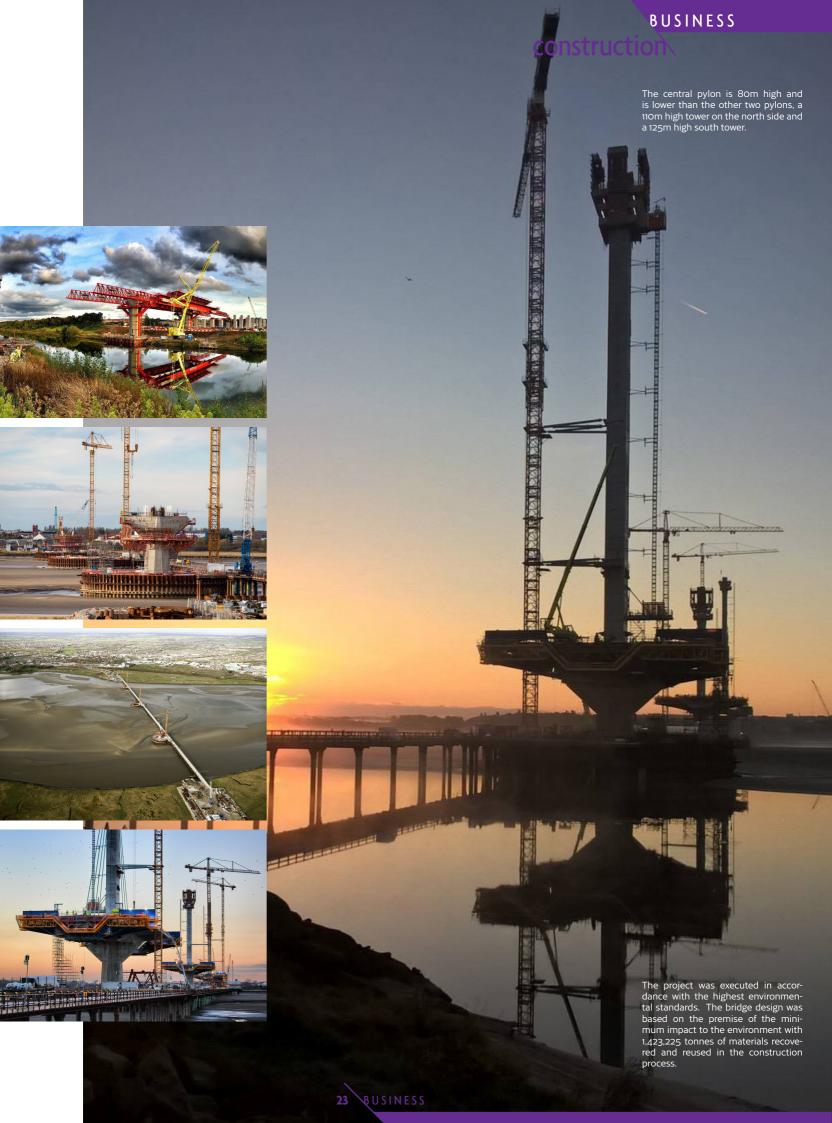
To help ensure the protection and improvement at each opportunity, the Mersey Gateway Environmental Trust was set up. It is a unique charitable organization whose goal is to protect and improve the environment of the Upper Mercy Estuary. This team developed strategies that contributed to preserving the most important ecological spaces such as the marshes and the creation of sustainable wildflower patches.

## As a value-creating Company, what benefits does FCC Construcción contribute to society by building this infrastructure?

The project has enormous social, environmental and economic benefits for people and companies in Halton, Liverpool, and Cheshire County and, in general, the entire northeaster region.

In addition to the social benefits, it is also necessary to mention the benefits for public transport by reducing travel time by at least 10 minutes at peak hours; increasing the reliability of travel time and providing an important new strategic transport route connecting the city-region of Liverpool and the northeast with the rest of the country.

Also worth mentioning are the future economic benefits, the nearly 450 equivalent full-time jobs at the site during the construction phase, the 4640 new permanent jobs as a result of the Mersey Gateway operations, regeneration and internal investment. It will also support sustained growth at Liverpool Harbour and the John Lennon Airport and will improve the commercial productivity in the entire Mersey Corridor (known as the "crowding impacts").



PEOPLES Ayuntamiento de Obras y Parque Ingenio. Las Palmasy

> Herrero Abellán, Araceli Responsable de Calidad del Agua en la



Lobato Corredoira, <mark>María</mark> Administrativa de la Delegación de Canarias. Adeje. Santa Cruz de Tenerife.

López Bonet, Elena 3ª Teniente de Alcalde y Concejala de Territorio y Vías Públicas del Ayuntamiento



en primera persona

Ingenio. Las Palma

Herrero Abellán, Araceli Responsable de Calidad del Agua en la



Lobato Corredon Administrativa de la Delegación de Canarias, Adeje, Santa Cruz de Tenerife.

López Bonet, Elena

PEOPLES 24

From left to right: Eduardo del Castillo, director of the Aqualia branch in the Balearic Islands, Montserrat García, councillor of the Environment in Ibiza; Antonia Picó, councillor for the Environment and Sustainability, Citizen Participation and Civil Protection in Santa Eulàlia; and, Elena López, councillor of Territory and Public Thoroughfares in Ibiza.



# Aqualia presents the book "Mujeres en primera Persona" in Ibiza

This action is in keeping with the

This action is in keeping with the equal opportunities for men and women promoted by the Company and as part of the activities carried out by Aqualia as a company awarded the "Equality in the Company" seal by the Ministry of Health, Social Affairs and Equality.

equal opportunities for men and women promoted by the Company and as part of the activities developed by Aqualia as a company awarded the "Equality in the Company" seal by the Ministry of Health, Social Affairs and Equality. One of these actions is the Mentoring Program aimed at promoting female talent or the Program for the Development of Women with High Potential. The book is the result of and further proof of Aqualia's commitment to Equality.

Eduardo del Castillo, director of Aqualia in the Balearic Islands, explained that "this document is a turning and a meeting point for women who work in a common environment to share their daily experience and to enhance the visibility of the role they play in this sector". Throughout the book, all of the women interviewed highlight the great progress that has been made in the corporate world as well as in the Administration in the incorporation of women in managerial positions under the same conditions and the same qualified jobs.

Aqualia officially presented in Ibiza the book "Mujeres e Primera Persona" (Women in first person) which describes the experience of more than 60 women, including Aqualia employees in several municipalities a well as representatives of the Public Administration. These include women such as Montserrat García. councillor of the Environment in Ibiza; Elena López, councillor of Territory and Public Thoroughfares in Ibiza; Antonia Picó, councillor for the Environment and Sustainability, Citizen Participation and Civil Protection in Santa Eulàlia who participated, jointly with Eduardo del Castillo, director of the Aqualia branch in the Balearic Islands.

#### **Commitment to equality**

The Balearic Islands branch, where women manage 45% of the islands' municipal services, is a good example of the Company's commitment to equality. This is one reason for the positive response to Aqualia's initia-

tive by the female councillors from lbiza. According to Montse García, "society now thinks that it's normal for women to occupy managerial positions, although there is still a lot of work to be done. Aqualia is doing it and is working towards equality in the job market".

Elena López encouraged the Company to continue being brave and committed to equality" while Antònia Picó said that, "Aqualia is an example and a reference for other companies and works hand-in-hand with the administrations looking towards the future and not just limited to managing the service".

Aqualia professionals highlight the measures implemented in recent years to promote equality, putting special emphasis on training programs, mentoring, workshops and information campaigns to create awareness in respect of gender violence.



Read the publication

#### Supporting International Day of Disabled Persons

# The FCC Group and its commitment to diversity and inclusion in the job market

Last 3 December was International Day of Disabled Persons. This day was proclaimed by the United Nations General Assembly in 1992 to promote the rights and well-being of the disabled and to increase awareness of their situation in all aspects of political, social, economic and cultural life.

To celebrate this day, FCC remembers that it maintains and strengthens its commitment to this group day by day and progresses in its commitment to be an increasingly diverse and socially responsible company, promoting actions and projects to encourage inclusion and equality through employment. Nearly 900 persons in the company have a recognised disability in a world in which one person in seven has some type of disability (a thousand million in the world, 80% of them in developed countries).

FCC's commitment to diversity and employment inclusion covers various actions and management strategies such as:

- Contracting directly and through specialised organisations such as the Fundación Inserta with the employment programme associated with the Fundación Once with which FCC has been working for years.
- Promoting purchases and the contracting of services with special employment centres, the company being a leader in its own special employment centre (CEE), FCC Equal, under the FCC Medio Ambiente Castile and Leon branch.
- Apoyando programas de educa-Supporting educational and entrepreneurial programmes, collaborating with Fundación Prevent in its classroom for entrepreneurs and recently participating in the

provision of grants to students and entrepreneurs with disabilities, sports persons and prevention of occupational risks researchers.

Valuing diversity and giving visibility to talent, as well as campaigns to fight to eliminate prejudices and barriers that limit the development of persons. This year, with the Fundación Adecco, the FCC Group has joined the campaign "The good vibes consultant against prejudices at work," led by El Langui, Juan Manuel Montilla, the well-known actor and musician, who recognises "having had the luck to demonstrate his talent and live from it," overcoming the barriers of his cerebral injury.

#### The good feeling consultant



#### Aqualia's commitment

Aqualia also joined the "El consultor del buen rollo" campaign in favour of the integration of people with disabilities in the workforce, sending a message according to its corporate social responsibility policy that wagers on normalising disability, joining this campaign to defend that disability does not have a bearing on an individual's talent.

Under the slogan "People with disabilities are aware of our difficulties, don't make it worse with your prejudices", the campaign focuses on a spot in which more than 100 companies committed to solidarity participated, including Aqualia. The video shows, through the character El Langui, the prejudices faced by the disabled on their first day of work.

El "Consultor del buen rollo" invites us to reflect, on a humorous note, about equal opportunities and the job integration of people with disabilities. The message is in keeping with Aqualia' commitment to normalising disability and joins the Adecco campaign to defend the fact that disability does not determine the talent of individuals.

#### United Nations message

FCC wishes to join the United Nation's message "Transformation towards a sustainable and resilient society for all" with the commitment for persons with disabilities to be agents for change that could accelerate progress towards an inclusive

and sustainable development, promoting resilient societies for everyone. A clear commitment to diversity, progress and equality.



#### In support of the International Day of Persons with Disabilities

#### FCC Construcción and Fundación Adecco hold "Positive Disability" seminars

FCC Construcción and the Fundación Adecco held the Positive Disability Seminars on 28 and 30 November. The seminars were held in both headquarters of FCC Group's infrastructure area.

Ignacio León, Human Resources Director of FCC Construcción, inaugurated the event that was attended by Arancha Jimenez, National Operations Director of the Fundación Adecco, Pablo Pineda, Fundación Adecco ambassador and ambassadors from FCC. FCC Construcción and the Fundación Adecco maintain a collaboration agreement based on the development of integration programmes for the disabled in the social and employment ambits. FCC Construcción incorporates disabled persons on its staff through the Fundación Adecco. The Foundation provides training to future employees to adapt them to the functions they will carry out, thus monitoring workers to ensure the success of the process.

# ifiesto #NoHayLír ites. By FCC Construcción y Fun decco AN O A Ton Servicio de Construcción y Fun decco AN O A Ton Servicio de Construcción y Fun decco AN O A Ton Servicio de Construcción y Fun decco AN O A Ton Servicio de Construcción y Fun decco



Ignacio León, HR Manager at FCC Construcción, was in charge of inaugurating the event that counted with the presence of Arancha Jiménez, director of national operations at Fundación Adecco, Pablo Pineda, ambassador from Fundación Adecco, at the centre together with FCC ambassadors.

#### Family plan

Fundación Adecco and FCC have also started the Family Plan, aimed at FCC Construcción employees' family members with disabilities. The objective is to give the beneficiaries a sufficient degree of personal autonomy and the necessary resources to enable them to actively look for a job, providing training to improve their chances of finding a job as well as other adapted leisure and sports activities to encourage the social integration of this group.

The infrastructure area of FCC Group was the first to implement an equality plan in November 2008, the main objective of which was to apply measures that allow the development of and compliance with those positive actions that set up and promote an organisational environment that respects diversity and eradicates discrimination in any employment area.



In the image, from left to right: Marta Rovira Foraste, from Aqualia, and, next to her, Carmen Rodríguez, HR Manager at Aqualia; Ana Escribano Sánchez and María Ángeles Polo Ávalos, also from Aqualia. Followed by Ramona Fernández Kelly, manager of FCC's Legal-Labour Department, next to j Sonia Serrano Batanero, Josefa Moreno Hernández and Virginia Martín Espín, from Corporate Central Services; followed by María de los Milagros Garrote de Marcos, from FCC Construcción, and Mercedes Santos, Head of Recruitment, Training and development at FCC Construcción's Human Resources Department, and Laura Ferrero, head of Recruitment and Training at Corporate Central Services.

#### Seven FCC Group women successfully complete the

#### Management Development Program for High Potential Women

FCC and the Escuela de Organización Industrial (EOI) completed the seventh edition of the Pre-managerial Development Program promoted and partially funded by the Ministry of Health, Social Affairs and Equality through the State Secretariat for Social Affairs and Equality.

The women from FCC Groups different business units who successfully completed the program were Marta Rovira Foraste, Ana Escribano Sánchez and María Ángeles Polo Ávalos, from Aqualia; María de los Milagros Garrote de Marcos, from FCC Construcción; Virginia Martín Espín, Josefa Moreno Hernández and Sonia Serrano Batanero, from Central Corporate Services. The goal of the program is to facilitate the acquisition and development of managerial competencies and skills to be able to assume more managerial responsi-

bilities in the future based on a multidisciplinary approach by focusing on key aspects such as equal opportunities, diversity and corporate ethics. Its ultimate goal is to create awareness among companies on the benefits of having female talent and to make progress in having a balanced participation of men and women in key decision-making jobs.

The course offers multidisciplinary training to promote the managerial capabilities of participants and to enrich their personal and professional development, emphasizing teamwork and the interrelation among the participants, creating a network of contacts among professors and students.

The course was conducted from April to November 2017, combining classroom courses with on-line training periods. The subjects taught included finance, managerial skills for managing efficient and motivated teams, operations management to learn about the Company's functional areas, company management to discover the keys of innovation and identify business opportunities, as well as an individual coaching process.

The program is a decisive factor for career development and, since 2011 to date, 45 company employees have participated in the courses.



#### INTERVIEW

#### Juan Manuel Blanco Angulo FCC Procurement Department

## **Business trips** Where to begin?

#### How much do I spend in business trips?

The first we must do to be able to understand this challenge is to know how much we spend in business trips. A current picture of travel expenses within the organization will help us identify the services and products of which we were not aware or ignored. Accordingly, we will be able to detect the possible improvements that have a direct impact on the organization's Profit and Loss account.

#### How are business trips taken within the organization?

By applying common sense and asking ourselves simple questions, we may be able to find out how travel is done within the organization: Who? How? When? Where? Why? These are the essential questions to be able to identify the needs of travellers. Although this many not be easy, the more information that we have, the more chances for success. In this way, we could define the types of business trips.

#### Identifying the suppliers (service x expense)

Determining the service requisites and the products to be purchased; looking for the appropriate service/product suppliers; selecting the suppliers based on their ability to satisfy the organization's requirements; confirming that the services provided comply with the requested requisites; applying ongoing assessment processes to suppliers by performing qualitative and quantitative valuations; and implementing quality indices to the services offered. These measures, among others, should be implemented in order to maintain a portfolio of suppliers in line with travel requirements.

#### Immediate improvement opportunities: (80/20) and concentration

The application of the Pareto diagram can help us to rapidly and easily identify immediate improvement opportunities and assign an order of priorities to the services or family of products that we want to optimise. As to concentration, it is recommended to negotiate with the largest number of previously assessed suppliers. An example of this could be hotel concentration, essential for organisations that have high expenses in this respect. Agreeing on the foreseen localisations and volumes (city/hotel) will contribute greater improvements to the organisation in relation to the condition agreed. This is the preamble before preparing a catalogue of corporate hotels.

#### Reviewing the current Travel Policy

The collaboration and involvement of the Travel/Travel Manager Department, with a more strategic rather than logistics vision, is fundamental. A periodical review of the travel policy is essential.

Accordingly, it is necessary for senior management to support and demand its compliance. Without this collaboration and support, it would be impossible to implement a new travel policy within the organization.

#### **Constant optimisation**

On many occasions, we are not aware of the advantages of planning the trip ahead of time. Knowing how much the trip will cost before we take it is essential since this has a direct impact on the budget contemplated for this purpose. Implementing a "Travel Portal" within the organization, self-reservation tools and monitoring their adoption and implementation will generate processes that are faster, easier and more efficient. The result of this will be the unification of the approval processes in a single reservation channel for all employees. Furthermore, it will provide a real time vision of the costs per services and the automation of all process in the same comprehensive platform.



## 20 years integrating

energy efficiency solutions in urban environments

For more than 20 years, FCC Industrial has been developing and integrating energy efficiency solutions in urban environments. What solutions does FCC Industrial and, specifically, your business area contribute?

A large part of projects where FCC Industrial has had the opportunity of being able to participate have led to small advances in improving efficiency in urban surroundings. As part of FCC Industrial's strategy, we would mention its involvement in improving and integrating the energy environment, lighting, transport, operations and maintenance (O&M) and energy efficiency systems.

The Technical Commercial Department of the IRMS Division works on a daily basis towards the constant improvement of proposals for our clients in urban environments in relation to public lighting, medium and high voltage distribution networks, electrification and systems for urban infrastructures, metro systems, service galleries, tunnels, and in end-to-end operations and maintenance.

It has its own MMAO (management, maintenance, administration and operations system) developed by the department, and is currently making progress in developing innovative predictive maintenance solutions. The energy service contracts represent a challenge and an opportunity for providing new operation procedures.

The department is working on innovation and R+D proposals, helping our urban clients in their digital transformation, proposing analysis techniques, including bid data, aimed at helping gathering data in advance and improving predictive maintenance.

Following FCC Industrial's recent participation in the Smart City World Congress, FCC Industrial is involved in managing intelligence and citizen services. Can you describe how this activity is conducted and what are the strategic lines being followed in IT?

In line with the above-mentioned, FCC Industrial has developed complete Data Centre projects for public and private clients, with Uptime Tier-IV certifications, without neglecting in any way its environmental performance, obtaining Leed Platinum and Breeam certifications. Our employees are currently operating and maintaining some of these data centres.

We aim to incorporate cybersecurity solutions in IT equipment and our software to ensure the effectiveness of our clients' operations.

#### Which are the major energy efficiency contracts that the Company is currently developing?

We would highlight the contract for comprehensive and energy management of the urban facilities in the city of Madrid totalling more than 250 million euros. Some of the key aspects of this contract are:

- 91,999 points of light, 40% LED.
- 994 remote-controlled control centres.
- · 697 regulated crossings.
- 156 kilometres of galleries.
- 19,626 kW initial scenario of installed power.
- 80,184,550 kWh initial consumption scenario
- 24.3 million euros of required investment.
- More than 40% guaranteed
- · savings.



Nuria Gallego Salvador IRMS Technical Director at FCC Industrial

Other contracts:

- Maintenance service for the public lighting, tunnels, underground crossings, service galleries, renewable energy sources ad installations for Vigo City Council.
- Management of outdoor lighting for the city of Lepe (Huelva)
- End-to-end management of the public lighting system in Totana (Murcia.
- Mixed-purpose contract for supply and services for providing the comprehensive service for outdoor lighting in Palacios and Villafranca (Seville).
- Management of outdoor lighting in Isla Mayor (Seville).

#### Lastly, how does FCC Industrial connect with the community?

Our service activity focuses on improving the services demanded by our clients, closely linked to the community. We connect to the community at the critical centres that we operate and maintain, such as airports, metro systems, communications and installations at large commercial premises that we designed, assembled and maintain, offices buildings, hospitals, leisure centres, schools, universities, and libraries (including the National Library).

We are working on improving our environmental footprint and that every citizen with whom we operate in our processes.

#### The Group celebrates International Day for the Elimination of Violence against Women

It celebrated it under the slogan

## "Me, with you"

and a **large heart** formed at its corporate headquarters in Madrid



FCC celebrated International Day for the Elimination of Violence Against Women, held every year on 25 November.

The Group is appealing within the company as a reminder of its principles and to highlight its commitment and vision – zero tolerance of gender violence and the impetus for the social and professional integration of women victims.

The slogan for the campaign this year was "Me, with you" has been translated into 14 languages and distributed in all the countries where the Group operates. In addition, as a specific support for this activity the Company handed out purple bracelets and posters, sent mailings to all employees, and placed messages in its communication channels.

The Company also organised a seminar at its Las Tablas Headquarters which counted with the participation of Luis Suárez, the manager of FCC Medio Ambiente's Human Resources: Ana Muñoz de Dios, the director of Fundación Integra; and with a speech by someone who had been a victim of gender violence. Esther Alcocer Koplowitz, the CEO of FCC, also attended the seminar and joined the rest of the staff who formed a heart at the entrance of the headquarters building, as a show of solidarity and part of the activities organised to commemorate this day.

FCC renews its commitment to public authorities and social interlocutors and will continue to set up internal actions to increase awareness of the need to eradicate this social scourge and palliate its effects on victims.

The key to success is giving all members of the Group a vision of change, progress and awareness applied to all those actions designed to put an end to violence against women, especially enhancing communication in those countries in the world in which these practices are present.



Esther Alcocer Koplowitz, CEO of FCC, with Ana de Dios Muñoz, director of Fundación Integra, Luis Suárez, manager of FCC Medio Ambiente's Human Resources Department, and the colleague who contributed her testimony in the event.

#### FCC reaffirms its commitment

Through these events, FCC calls attention to equality between men and women and rejects all acts of violence through initiatives in the countries in which our Group is present, enhancing communication to contribute to a freer and more respectful society.

On such a special day, FCC also joins the campaign against gender violence of the Ministry of Health, Social Services and Equality and reasserts its commitment to equality matters, continuously collaborating with the various institutions for a safe society that is free of gender violence.



# Aqualia employees join their voices to say "NO" to gender violence.

Coinciding with World Day Against Gender Violence, for yet another year, Aqualia has promoted various initiatives with hundreds of employees and collaborators from the Administration to say "No" to men's violence against women. As part of the "Me, with you" campaign, the company invited all workers to concentrate at the entrance of the offices to read a declaration condemning any type of violence against women and to express their solidarity with the victims. All the images of the events organised at the offices are available at ONE Aqualia.

The campaign this year was completed with the preparation of a spot where employees and collaborators from the Administration joined their voices to say "No" to gender violence. Hundreds of people joined the initiative at the <a href="https://www.aqualiacontigo.com">www.aqualiacontigo.com</a> website which includes the spot prepared during the campaign and all of the employees' solidarity messages.

The Company also joined the initiatives carried out in the various localities where Aqualia operates. Accordingly, cities such as Alcoy (Alicante), Ávila, El Vendrell (Tarragona), Llucmajor (Mallorca), Oviedo (Asturias) and Sant Joan (Ibiza) have organised different events to create awareness among the population on this social scourge. Aqualia collaborated in activities such as the release of ballons, symbolic dyeing of the water in public fountains, or organising protest marches with signs containing the message, "Me, with you".









Sector B

Sector C

Information stand

# FCC Construcción's social and environmental commitment in the execution of Line 2 of Panama Metro.

Details of the progress achieved





50% of the employees working in the project are from the local communities.

The Infrastructures area of FCC was in charge of executing the first metro line in Central America. It is currently building the second line in the same city that will link up with the recently inaugurated Line 1 of the metro system.

The contract for the construction of Line 2 of Panama Metro contemplates design engineering, the construction of civil works and ancillary facilities as well as the supply and installation of the entire rail system. This line has 16 station and 21 km of above ground rails, connecting the stations from the San Miguelito district with the 24 de Diciembre sector.

#### Committed to the community

FCC Construcción, as part of its commitment with the local Panamanian community and with the environment, is developing several social and sustainability initiatives during its execution of Line 2 of the Panama Metro.

The measures being implemented on a daily basis by the Line 2 Consortium includes local hiring. At least 50% of the employees come from local communities along the route of the infrastructure. This represents a clear commitment to the integration of the local population and the invigoration of the social surroundings as part of the infrastructure's development.

The team responsible for relations with the community have divided the project into three areas based

on their social context: Sector A (the unemployed, middle class housing and a high level of social vulnerability); Sector B (commercial and residential areas); and Sector C (logistics distribution centres, shops and houses with a high level of social vulnerability).

A series of measures have been implemented in each sector as a mechanism aimed at social integration: personalised notices, the presence of Consortium personnel to explain the project in the sector, direct contact with the affected commercial enterprises, companies and industries, and the delivery of information brochures and/or notices.

Sector A marks the beginning of Line 2 of the metro line. It includes four stations connecting San Miguelito, Paraíso, Cincuentenario and Villa Lucre. The station linking with Line 1 of the metro system is situated in one of the busiest squares in the area full of hawkers, taxi stops, metrobuses, etc. The great challenge for the Line 2 Consortium in this sector is reaching out to the community in this area and, to achieve this, all mechanisms for social integration and communication with the local population have been established.

Sector B includes the route stretching from Universidad Tecnológica to Barriada El Crisol. It has seven stations: El Crisol, Brisas del Golf, Cerro Viento, San Antonio, Pedregal, Don Bosco and Aeropuerto. Residents and shopkeepers in the area have received information on



Sector A

the progress achieved in the construction project. The most common notifications for the community are: notices and brochures on the changes in the stops due to the interruption of electric power and water, notices of electricity exchanges, notices on work carried out in executing the viaducts, and traffic detours.

Lastly, Sector C includes the Las Américas community to the Nuevo Tocumen neighborhood. It has five stations: Mañanitas, Hospital del Este, Altos de Tocumen, 24 de Diciembre, Nuevo Tocumen and the future Metro patios and workshops. This is the area where the most progress has been achieved in the execution of the project. Residents and shopkeepers in this area are informed often of the production schedule.

The installation of three information stands in La Doña, San Miguelito, and Los Pueblos underscore the efforts made to integrate the community.

More than half a million people will benefit from the construction of Line 2 of the Panama Metro system. With the execution of this type of infrastructures, FCC demonstrates its clear commitment to urban transport and its sustainability and efficiency to improve the lives of members of the community.



#### 60% progress

FCC Construcción is executing the second line of the metro system of this city in Central America. Currently, 60% of the project has been executed and the Company is working simultaneously in building the 16 stations. Over 8,800 metres of rails have been installed and 60% of the work involving the relocation of affected public services has been completed (electricity, telecommunications and drinking water).

FCC has improved the design of the roofs of the structure which covers the entire station, thereby protecting users during winter season. The roof includes the use of aluminium panels on the top and perforated aluminium on the sides, polycarbonate skylights that provide natural light and to save energy.



#### FCC and its experience in urban rail transport

In its more than 115 years' history, FCC Construcción, the infrastructures division of the FCC Group, has executed numerous urban rail transport projects, demonstrating in these projects its engineering expertise in the design and construction of infrastructures and stations, assembly of the railways, and in installing electricity and signs. It has participated in most of the most important projects in recent years in the major metro systems in the planet, building more than 230 kilometres.

FCC successfully executes and develops projects in Spain, such as the Madrid, Barcelona, Alicante and Malaga metro systems, as well as abroad, such as in Lisbon (Portugal), Medellín (Colombia), Athens (Greece), Toronto (Canada), Bucharest (Romania), Lima (Peru), Doha (Qatar) and Riyadh (Saudi Arabia).



In the photo, representatives from FCC Medio Ambiente, including the representatives from Madrid Capital, the Centre, and Castile and León, Raul Pérez, Antonio Rodríguez and Javier Rivas; the heads of Human Resources Ignacio Fernández Carpintero, Jesús García, Jesús Sancho and José Manuel Salgado; production managers Virginia de Serranos and Enrique Cuesta; and Felipe Urbano, manager of Development, Communications and Institutional Relations; and the promoters of this project, Marino Poyatos, head of recruitment and development at FCC Medio Ambiente; Luis Suárez, director of Human Resources at FCC Medio Ambiente accompanied by the chairwoman of Norte Joven, Concepción Martín de Bustamante, and by Kenia Navarro, on the left, responsible for Job Integration at Norte Joven.

#### Collaboration agreement between FCC Medio Ambiente and Asociación Norte Joven

# **Committed** to employment and young adults



From left to right: Marino Poyatos, head of recruitment, training and development at FCC Medio Ambiente; Kenia Navarro, responsible for Job Integration at Norte Joven; and, Luis Suárez, FCC Medio Ambiente's director of human resources.

FCC entered into a collaboration agreement with Asociación Norte Joven for hiring of young people and adults registered in the entity's Employment Office. This agreement is in keeping with FCC's social commitment to the communities where it operates, promoting the improvement of job placement and the social integration of groups who are vulnerable and encounter difficulties in finding a job.

The signing of the agreement between FCC Medio Ambiente and Norte Joven gives an incentive to both institutions to continue working together on this initiative. It will offer disadvantaged groups new opportunities in the area of street cleansing and other fields such as building maintenance and environmental services. In addition, it opens a path towards job training and placement in jobs required by FCC, implementing new collaborative projects that improve the employability of disadvantaged groups.

#### Fraternization day

The first work session was held recently to make promote the hiring young people and adults who are registered in the entity's Employment office, as a result of the collaboration agreement entered into by both entities.

The session was opened by the Chairwoman of Norte Joven, Concepción Martín de Bustamante, who gave a presentation on the Association that was founded in 1985 to promote the social and working integration of the socially disadvantaged. It focuses on the full inclusion in society of young people and adults through academic, industrial and professional training in different trades. She emphasised the importance of helping disadvantaged young people to have a better future and to give them an opportunity to discover real life scenarios in a professional context. Mercedes Negueruela, Norte Joven director, then talked about the Association's experience and its current activities.

On behalf of FCC Medio Ambiente, Luis Suárez, director of Human Resources, addressed all people present, highlighting that the agreement signed with Norte Joven is part of FCC's social commitment to the communities it serves, promoting the improvement of the work placement and the social integration of groups in vulnerable situations who experience difficulties in accessing employment. In addition, he emphasised that recruitment and selection are based on the principles of dedication to service. customer focus, result orientated and social commitment.

The next speaker was Kenia Navarro, North Youth Work Placement Officer, and Marino Poyatos, FCC Medio Ambiente Human Resources, Training and Development Manager, who informed all present of progress being made in recruitment. This collaboration has already allowed the recruitment by FCC Medio Ambiente of 20 people, who have been incorporated as road cleaning workers in weekend and holiday shifts.

Also in attendance at the conference were the FCC Directors from Madrid Capital, Centre and Castile and León branches, Raúl Pérez, Antonio Rodríguez and Javier Rivas; the Human Resources managers. Ignacio Fernández Carpintero, Jesús García, Jesús Sancho and José Manuel Salgado; operations managers Virginia de Serranos and Enrique Cuesta; and Felipe Urbano, Head of Business Development, Communications and External Affairs at FCC Medio Ambiente. All were interested in the Association's project and had the opportunity to exchange views with the Norte Joven Association according to their specific needs.

The day ended with a tour of the facilities of the training centre and the headquarters of Norte Joven, where FCC staff had the opportunity to learn first-hand the activities that are carried out in the different workshops.





### Creating awareness among the community

During the session, the Norte Joven Association shared its project with all attendees and spoke of the activities included in the agreement. At one point of the meeting, the FCC video about the Young North Association was announced with the aim of creating awareness amongst the people being trained by the Association, company employees (for them to publicise the project with FCC staff), and society in general. As explained in the video by FCC Medio Ambiente's HR Director, the agreement includes several lines of activity, such as the hiring of some of the people that are undergoing training in Young North by FCC, either in the placement formats or with a definitive incorporation into the job market. It also includes the possibility of providing specific training and to co-operate on the training content and establish some volunteer activities together with Young North. This will provide guidance for the young people so that they can escape the vulnerable situations they find themselves in.

#### **Since 1985**

Norte Joven was founded in 1985 for the purpose of promoting the social and job integration of the socially disadvantage and works towards the full integration in society of young people ad adults through academic, job, and professional training in different professions.

Kenia Navarro, responsible for Job Integration at Norte Joven and, on the left, Concepción Martín de Bustamante, director of Norte Joven.



Kenia Navarro responsible for job integration at Norte Joven

### "We promote the **personal development and social-labour integration** of people"

### What is the objective of the association?

The mission of Asociación Norte Joven is to promote the personal development and social-labour integration of people, especially young people, who are at a disadvantage by providing training, access to jobs and creating awareness in the society of situations of disadvantage and social inequality.

### Who are the people for whom Asociación Norte Joven works?

Mainly for young people between the ages of 16 and 25 who have lack the basic education degree "Graduado Escolar" and do not have the professional qualifications to enable them to find a job. We also provide services to adults who need support to go back to the job market or to integrate in the community after immigrating. In all cases, these are people who lack economic resources and face various barriers when looking for a job.

At our centre in Vallecas, we also have a program for minors to prevent that they quit school.

### What are the measures implemented by Norte Joven to promote the social and labour integration of the disadvantaged?

We work mainly on training and on mentoring based on a comprehensive approach. We train them and prepare them to get their degree and, at the professional level, for jobs such as kitchen helpers, waiters, electricians, plumbers, carpenters and sales staff.

Other activities are included to make it easier for them to find a job: social-labour skills, training in habits, developing values. We help them to get a job and, if necessary, we help them to keep their jobs.

### Why is the collaboration with external companies, such as FCC, important for the foundation?

We need the collaboration of companies so that we can incorporate in the training that we provide the tasks and competencies that companies require when hiring personnel. And, of course, so that they hire people that we train, offering them the possibility of developing as workers and on a personal level. We understand that training and employment are essential for social integration and to prevent situations of vulnerability and poverty.

In fact, collaboration with FCC makes it possible for the young people who we have trained and who continue with their training to get their first job and to put in the market people who have been unemployed for a long time or at risk of being vulnerable.

#### What role do companies play in the social and labour integration of people who are socially disadvantaged?

Companies are key elements for achieving the Objectives of Sustainable Development and, their Corporate Social Responsibility initiatives that benefit life-long training and access to the job market is a shared responsibility. Companies produce goods and services, they provide innovation and promote changes in the physical and social environment in which they operate. By having an impact on the environment, companies can help through positive discrimination, providing a job opportunity to those who are vulnerable or disadvantaged. Ma-

jor European companies are working along these lines.

### What are the benefits of this agreement for both parties?

For Norte Joven it supports the achievement of labour integration and helps to create awareness among society on the difficulties encountered by the disadvantage of finding a job.

For FCC it is a way of implementing a CSR on the basis of solidarity in situations where someone is at a disadvantage and of increasing the efficacy of their business. In the specific case of hiring people who are socially disadvantage in services such as street cleaning, the efficacy of management makes us focus not just on economic aspects but also on the possibility of promoting changes and improving society.

### What are the actions that you are currently promoting?

We have promoted the collaboration of several FCC departments with the employment office of Norte Joven where we make the first recruitment for open hiring processes for street cleaning and for professional trade fairs. If someone is hired, we monitor jointly the person's adaptation to their job.

We have considered other collaboration possibilities relating to training and building maintenance jobs.

### Dissemination of the Norte Joven project has been an ongoing concern. Of what are you most proud?

We are very happy of having the opportunity of witnessing how a major company such as FCC has become more aware of its social commitment and we also enjoy the complicity of the teams in their staff in the different business units. And, of course, we are proud of every young man and woman who work and make efforts to give the best of themselves.



A group of students at a carpentry class with their professor Kenia Navarro and Concepción Martín de Bustamante.

Kenia during a class with the students from Norte Joven.



## Pilot project in San Sebastián to promote responsible environmental behaviour among the public



Calle Mayor of San Sebastián.

FCC Medio Ambiente has started the SICCAR initiative (service to promote environmentally responsible public behaviour), developed by its Gipuzkoa-Navarre Branch and its Coordination and Development Department in collaboration with the Tecnalia Technology Centre.

This initiative is framed within the search for ideas launched last November within the SmartKalea project, which is led by the municipal local development company Fomento de San Sebastián-Donostiako Sustapena.

The SmartKalea project aims to implement smart solutions in specific geographical areas with an innovative public-private collaboration model that integrates all the agents co-existing in the area of a city from a smart perspective – the public, businesses, technology companies and municipal departments.

#### **Community involvement**

The SICCAR pilot initiative joins the replicable best practices being promoted from FCC Medio Ambient within the value chain in order to better understand and connect with the needs of the public and to drive changes that promote a cleaner, smarter and more inclusive development.

Through SICCAR, the aim is that society participates proactively in improving the street cleansing in the Calle Mayor in San Sebastián, encouraging environmentally responsible behaviour in a playful and innovative way through the ICTs, in this case through the SICCAR application (www.siccar. eu) that incorporates gamification and public perception techniques. The data obtained with the application will allow the effectiveness of awareness campaigns to be measured and

the preparation of a diagnosis of the users' perception of street cleansing service. This will help implement improvements to the service and to the municipal services department itself.

The project counts with the collaboration of the trade establishments (shops and catering) in the Calle Mayor in San Sebastián which, by joining the initiative, will act as its prescribers and promoters of best environmental practices.

### Benefits of this initiative for the public

- · Greater public awareness.
- Use of ICTs as new communication channels.
- Improved cleaning of the Calle Mayor.
- The efficient use of resources (water and power) in urban cleansing

### Main indicators of responsible behaviour:

- · Social participation.
- Satisfaction with the street cleanliness condition.
- · Cleansing service quality indicator.
- Integrated SICCAR indicator (participation + quality).

### **World Quality Day**

coincides with Aqualia being awarded its first quality management certificate twenty years ago

Aqualia joins the #DMCalidad2017, under the slogan "Leadership in times of change" and brings to mind the milestones achieved and pending challenges after obtaining its first ISO 9001 certificate in 1997.

Since 2013, the Company has been working in line with the Sustainable Development Goals (SDG) approved by the United Nations for the 2016-2030 period.

Coinciding with World Quality Day, which the UN in 1990 decided would be celebrated each 7 of November; Aqualia goes over the milestones achieved in this respect. This celebration coincides with the 20th anniversary of its first quality management certificate pursuant to ISO 9001 standard which was awarded in 1997. Two years after that date, the Company obtained its first environmental management certificate as per ISO 14001 standard. Since then, the Company has not ceased to work towards developing a Management System to contribute value and greater efficiency to all of its activities. Since 2013, it has been doing so following the guidelines of the 17 Sustainable Development Goals (SDG) approved by the United Nations for the 2016-2030 period.

Among the milestones achieved during these two decades, Aqualia highlights the fact that it was the first company in the water management industry to record its Carbon Footprint (CF) or all of its activities in Spain.



#### Ten years with the ENAC certification

In addition, the Company's five major laboratories had enjoyed for more than ten years the certification awarded by Entidad Nacional de Acreditación (ENAC); and also, during the last ten years, the Company has had its Corporate Social Responsibility (CSR) report verified under international GRI standards, obtaining the maximum A+ score.

The Company is also a model of a certified company in respect of Innovation and collaborates in the verification of AENOR audits. It recently welcomed representatives of the Chinese certification entity, CNCA when it visited Europe to learn about the strategy and procedures to carry out to certify its Innovation.

Aqualia's commitment to secure and achieve new objectives that satisfy the expectations of its stakeholders, internal and external, continues to grow. The Company has defined as its new objective obtaining the "efr" certificate (family responsible company) awarded by Fundación Más Familia.

It was the first company in the water management industry to record the Carbon Footprint of all of its activities in Spain

### **United Kingdom**

## FCC Environment UK

awarded presigious award for excellence for management of health and safety at work



Paul Stokes, head of Safety, Health, Environment and Quality at FCC Environment UK and Mike Robinson, Chief Executive of the British Safety Council.

FCC Environment has won a prestigious Sword of Honour from the British Safety Council. The company is one of the UK's leading waste and resource management companies was one of 57 organisations worldwide that achieved a Sword of Honour, which is awarded to companies which have demonstrated excellence in the management of health and safety risks at work.

In order to compete for the Sword of Honour, an organisation first had to achieve the maximum five stars in the British Safety Council's health and safety management audit scheme in the period August 2016 – July 2017. They have also demonstrated to an independent panel of experts that they are excellent in their health and safety management throughout the business – from the shop floor to the boardroom.

Mike Robinson, Chief Executive of the British Safety Council, said: "On behalf of the trustees and staff of the British Safety Council, I would like to congratulate FCC Environment – Doncaster and its staff for their huge commitment to keeping their workplaces safe and healthy and minimising risks to the environment from their

organisations' day-to-day activities. FCC Environment's Paul Stokes, Head of SHEQ (Safety, Health, Environment and Quality) said that the entire FCC team is delighted to accept this award and recognition, the result of a lot of time and efforts dedicated by all the people of the organization. He added that he hoped that the award would encourage all the staff to do even better every day as good Health & Safety makes good business sense.







eHealth Challenge is an online intercompany competition open to all FCC employees regardless of where they are based.

Cycling, walking, running...anything goes for moving forward and collecting kilometres.

You don't have to be a superathlete, we can all take part.



The more of us involved, the further we will get.

This initiative is in keeping with the Plan for the Improvement of the Preventive Culture 2015–2018 implemented by the Company to bolster its safety and health policy.

### Aqualia improves its preventive culture in all of its international contracts



Safety and Health technicians from eight different countries attended Aqualia's first training seminar on Prevention of Occupational Hazards.

The Company organized a four-day seminar including training courses and workshops to encourage the use of knowledge in each of the international contracts.

Aqualia held the first training seminar on the Prevention of Occupational Hazards for its Safety and Health Technicians (HS Manager) at its international division. Company professionals from Italy, Mexico, Chile, Algeria, Saudi Arabia, Egypt, the United Arab Emirates and Kosovo met in Spain to participate in the fourday event which included training to implement safety and health policy in the company in all international contracts, certified in accordance with OHSAS 18001 standards.

The first event of the training course was a session organized at the Las Tablas corporate headquarters in Madrid where Luis de Lope, manager of Aqualia's International division, welcomed all of those who attended and who were able to learn about the general policies and objectives in relation to the Prevention of Occupational Hazards policy implemented by the Company, the procedures worldwide, and were also able to analyse the reports and data on the rate of accidents and participate in a workshop focusing on the investigation of incidences.

The two subsequent days of the seminar were organised at Aqualia's facilities in Ávila. The aim was to gain further knowledge and put into practice the procedures for workat-heights and in confined spaces. The course was led by Ignacio Romero, a support technician who is an expert in both specialties. International technicians were also able

to analyse the management system applied by the Company in the activities it conducts in Ávila. Pascual Capmany, the manager of Aqualia's Safety and Health at Work Department, closed the training cycle with a monographic session on the preventive culture.

This initiative, promoted by Aqualia's Prevention of Occupational Hazards (POH) department and organised by Jesús Ventura, POH coordinator in the international area, is part of the Preventive Culture Improvement Plan 2015-2018 implemented by the Company to bolster its safety and health policy. The plan focuses on three strategic lines: improve leadership in safety and health; enhance the visibility of the Company's commitment through communication and awareness-building; and improving the learning process at the organization.

The main objective of accident investigation is the deduction of the causes that generated them through prior knowledge of the events that occurred.

### FCC bolsters its in-house training for investigating accidents at the workplace.

Investigating accidents at the workplace is an essential process in managing the prevention of occupational hazards, the aim of which is to gather information on the events and determining its causes by means of the corresponding analysis.

This analysis serves to define the necessary corrective and preventive measures to prevent these incidences from taking place again.

Therefore, investigation is an essential learning tool for improving the Company's preventive management, involving various agents, starting with the prevention technicians, the managers and departments involved and, finally, with the participation of workers and their representatives.

For the purpose of reinforcing knowledge and techniques in relation the investigation of accidents, FCC's Corporate Department of Coordination and Development of Human Resources organised a transversal workshop on 7 November aimed at the prevention technicians in which several of them from different business areas participated. The morning-long workshop at the Las Tablas head-quarters was led by Pedro Ledesma, head of FCC's Corporate Safety and Health Area, and Carlos Arévalo, an expert and external consultant in this field.

### Seminar at Cementos Portland Valderrivas

On 8 November Grupo Cementos Portland Valderrivas organised a 3.5-hour seminar for its management staff. The event was coordinated by Carlos Alonso, the manager of Safety and Health and Corporate Social Responsibility. Other participants included Ana Benita, manager of Coordination and Development of Human Resources at FCC, and Ángel Luis Sánchez Iglesias, an inspector from the Labour and Social Security Department.







### **United Kingdom**

# The leading water Company in the **UK tests the ELAN®** technology at the Oxford WWTP.

The patented technology, developed by Aqualia in collaboration with the University of Santiago de Compostela, makes it possible to reduce the cost of eliminating nitrogen and the production of sludge by means of specialised bacteria and a specific process.

Aqualia has installed a prototype of the ELAN system at the Thames Water facilities which will be tested along with the technologies developed by Veolia and Sweco Grontmij.

Providing services to fifteen million users, Thames Water is looking for a technological partner to implement efficient solutions at the 25 anaerobic digestion centres that it manages. Thames water, the leading water company in the United Kingdom, has decided to test the ELAN® technology, developed and

patented by Aqualia in collaboration with the University of Santiago de Compostela. The objective is to reduce energy consumption and optimise the elimination of nitrogen. The British company, which operates in London and in the Thames valley where it provides services to fifteen million users, has installed a pilot ELAN® unit in its Oxford waste water treatment plant which will start operations in early 2018.

Thames Water has a thermal hydrolysis system applied prior to the

From left to right: Nicolás Morales and José Ramón Vázquez, from Aqualia's Innovation and Technology Department, and Pascal Ochs and Ben Martin from Thames Water, in front of the pilot ELAN® installation at the Oxford WWTP.





Exterior appearance of the building that houses the buried homogenization tank and the two ELAN® reactors of which the project consists.

anaerobic digestion of sludge at the Oxford WWTM which increases the production of biogas in addition to the production of biosolid materials that can be used for agricultural purposes. The hydrolysis process also increases the treatment capacity making the Oxford WWTP a strategic centre for handling sludge from the small treatment plants in the region.

This technology has already been installed in Spain at the Guillarei (Pontevedra) WWTP and at the Friscos canning facility in Catoria (Pontevedra). Two other units are being built at Chiclana de la Frontera (Cadiz) and at the Ecopark in the Barcelona metropolitan area.

After the prototype is installed at the Oxford WWTP, Thames Water will compare Aqualia's ELAN® system with two other processes: Veolia's ANITAMMOX and Grontmij's (now SWECO) ANITAMMOX before selecting the one that will finally be installed in most of the anaerobic digestion centres that it manages.

#### **ELAN®**

The initial phase of the ELAN® pilot project at Thames Water, coordinated by the Europe Zone branch office and Aqualia's R+D+i Department, will last six months, competing with the leading companies in the industry which offer a similar process. The objective of this initia-

tive is to implement this technology I a large number of WWTPs managed by the British company and have Aqualia become a reference technological partner.

The granular ELAN®-ANAMMOX biomass at the pilot facility





FCC will renew more than 80% of the current waste collection fleet (201 new vehicles and 47 reconditioned). It is also committed to environment-friendly technologies since it will incorporate 62 electric, non-polluting vehicles in the service, forming 25% of the fleet.

# FCC Medio Ambiente to provide waste collection and street cleansing services in Bilbao and serve Mercabilbao for the next four years

Bilbao City Council awarded a joint venture in which FCC has a majority stake, a four-year contract, that could be extended for an additional two years, for cleaning and waste collection services in the city and for waste management at Mercabilbao (the central market). The contract is worth more than 43 million per annum and represents a backlog, excluding the extensions, of 173.4 million euros.

This is the sixth contract connecting FCC Medio Ambiente (the Spanish brand for FCC Environment) with Bilbao City Council without interruption since 1972.

The contract awarded this time differs from others in that it is divided into two lots. Lot 1 corresponds to street cleaning services and waste collection in the city of Bilbao while the Lot 2 con-

templates waste management for the company Mercabilbao.

FCC Medio Ambiente received the highest score in the public tender process called by the City Council in which the leading companies in the industry submitted their offers.

In order to perform the work entailed, FCC will have an average staff of 664 operators for Lot 1 and 14 operators for Lot 2.

Bilbao has almost 350,000 inhabitants and with this contract, more than 144,000 tonnes of municipal solid waste will be handled per year. It will be removed and transferred to various handlers for treatment, the main destination being the Arraiz-Artigas environmental management complex.

#### 80% of the fleet to be replaced

FCC will renew more than 80% of the current waste collection fleet (201 new vehicles and 47 reconditioned). It is also committed to environment-friendly technologies since it will incorporate 62 electric, non-polluting vehicles in the service, forming 25% of the fleet.

The company will put new technical means into operation, adapted to the properties of the waste to be collected and the specific needs of the city. This includes side-loading collection vehicles of various sizes and small hybrid-electrical vehicles with no pollutants, or sound emissions, for refuse collection in city's historic district.

In addition, to improve the service for citizens, the efficiency of the sys-



tem and the recycling percentages in Bilbao for the next six years, the selective organic matter collection will be extended to all of Bilbao (1,400 additional containers). For this, a side-loading collection system will be implemented, the same currently used for the collection of other materials: black bag waste, packaging and commercial cardboard, using containers opened with an electronic card, allowing better management and attention for operators. The paper-cardboard (+20%) and used oils (+70%) containers will also be reinforced.

#### Selective collection

As an innovation, selective collection will also be implemented in the municipal markets, differentiating between waste fractions, organic matter, paper-cardboard and polystyrene.

The new contract also includes the full renovation of two of the four recycling points or 'Bilbogarbis' and the partial renovation of the other two. This will make them more accessible and comfortable for the public with easier functioning adapted to the new regulations for handling the new types of

This is the sixth contract connecting FCC Medio Ambiente with Bilbao City Council without interruption since 1972.

wastes that can be deposited. There will also be a selection space ('Berrerabilgunea') that will allow a second life to some materials deposited by the public that are susceptible for reuse. The 'Bilbogarbis' mobile service is reinforced with two new vehicles in addition to the existing one.

FCC is committed to arriving at 2020 with recovery rates through selective collection of 50% of waste generated, complying with the European Directive and the enabling Royal Decree.

The highest quality cleaning service will also be extended (daily cleaning as well as maintenance checks throughout the day, provided until now only in the city centre) to almost all the districts in Bilbao, to the districts considered as 'district hubs' in which there is commercial or lodging activities.

To provide all these services, the conventional equipment will be reinforced with more efficient and state-of-theart machinery.

#### **Special services**

In addition to the usual sweeping and washing services, other special services will be carried out including façade cleaning, scrubbing and stripping pavements, removing chewing gum and the disinfection and cleaning up of dog excrement, for which the number of multi-use equipment will be increased. Another important innovation is the incorporation of self-propelled light vacuum cleaners to maintain cleanliness in busy areas.

The centre of Bilbao will continue to be swept and washed at night, using pressure equipment that minimises water consumption for this work with the same effectiveness as now. Electric sweepers of various sizes will minimise the fumes, heat and noise generated by conventional engines. The rest of the city will be swept with conventional sweepers, some of which will be "dual" sweepers/washers.

Both litter bins and containers will be subject to a detailed control and maintenance for which they will be identified with a tag that gives details of their location and filling.

All the data relating to the service from the work teams (time schedules, performance, status, incidents, quality, etc.), the containers and litter bins will be processed on a computer management platform designed and defined exclusively by FCC Medio Ambiente for the city of Bilbao. This platform will allow the implementation of the "Friendly" service, that is, it is carried out effectively but with the minimum of nuisance for the public.

#### **Bucharest** (Romania)

### **Aqualia** participates in the largest public sector water contract awarded in Europe this year:

### the Glina WWTP

The Company, participating in a consortium with FCC Construcción and Suez, will revamp and enlarge the Glina WWTP in Bucharest. This is the fourth facility of its kind in Romania in which the Company participates.

The city of Bucharest has chosen a consortium of Aqualia, FCC Construcción and Suez to revamp and enlarge the Glina (Bucharest, Rumania) wastewater treatment plant (WWTP) for a total value of €113 million. The plant, which will serve 2.4 million inhabitants, represents the largest public sector water contract awarded in Europe this year. Financed by European cohesion funds, the project is scheduled for commissioning at the end of 2019.

The works, which include the construction of a re-use facility for the sludge generated in the treatment process, is worth a total of 113 million Euros.

The enlargement and improvement of the WWTP represents a significant technical challenge because it will be carried out while the current installa-

tions continue to operate. The work includes reforming the biological reaction lines, adapting 48 secondary clarifiers, building 24 new ones and the reconversion of the sludge line

This contract further reinforces Aqualia's positioning in Romania where it previously built the Agnita, Dumbraveni and Zimnicea WWTPs. These projects are helping the country to reach the environmental objectives set by the Framework Water Directive and to approach the Sustainable Development Goals set by the United Nations for 2030.

Infographics of the new secondary rectangular decanters that will modernise the existing treatment lines.



# FCC Environment implements efficient maintenance measures in the roads of Bratislava (Slovakia)



Snow-removal vehicles featuring GPS monitoring devices.

Winter road traffic in Bratislava is very heavy due to the snow. This is the season where the demand for road maintenance and preservation reaches its peak. The citizens of Bratislava are affected even more during this season since the city lacks an underground transport network.

For FCC Environment Slovakia and for the community, this is a very challenging season. Each year the city makes efforts to implement measures to increase the road efficiency. For the first time, in 2015, FCC introduced an on line monitoring system for the winter street maintenance service.

Snow removal vehicles feature GPS monitoring devices provided by "Commander Systems" that make it possible to pinpoint the actual location of each vehicle during the winter months, including those that are not operating.

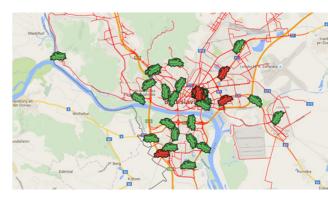
The city's website provides a map with the location of the service vehicles in real time. By clinking on a banner, users will be able to see an icon of the vehicle and its speed.

This service is available during the winter, usually three months. The 73 vehicles, of which seven are for passengers, can be monitored online.

The monitoring online map shows the vehicles that are actually removing snow from the roads and also includes vehicles that are stuck at traffic jams or at the parking of the company providing technological services. Each vehicle in the map is marked with a different colour:

- Red stationary vehicle
- Orange Lacking GPS
- Green in operations

This measure has improved the way that work is performed and provides more detailed information. The map is updated every 30 seconds and shows, in real time, where the snow removal vehicles are located. This contributes to helping drivers from being affected while travelling on the roads.



The map shows the vehicles that are cleaning the roads in real time.





During the high-risk season, priority is given to extinguishing work carried out by two helicoptertransported brigades, twelve standby teams, four patrols and one CODIF (forest fire defence operational centre).

### Matinsa obtains the fire prevention and extinguishing service contract for the eastern area of the Region of Madrid

cialising in the conservation of infras- for grubbing and removing remains as tructures, won a fire prevention and well as multiple personnel transport extinguishing service contract for the vehicles. eastern part of the Madrid Autonomous Community. The budget for the Matinsa has undertaken similar work contract is 46 million euros.

The contract covers the eastern area of the Region of Madrid and involves fire prevention and extinguishing work across all months of the year. In the season of low forest fire risk, priority is given to prevention work. This is carried out by 13 teams, two mechanised forestry units, four support teams and one CODIF (forest fire defence operational centre). During the high risk season, priority is given to extinguishing work carried out by two helicopter-transported teams, 12 teams, four patrols, four support teams and one CODIF.

The operation has two Bell 412 helicopters, 10 heavy forestry pumps of 3,500 litres, 13 light forestry pumps

Matinsa, an FCC Group Company spe- of 450 litres and four forestry tractors

since 1998 for the Region of Madrid General Emergencies Directorate and has managed the fire extinguishing and rescue service for the Council of Pontevedra since 2013.

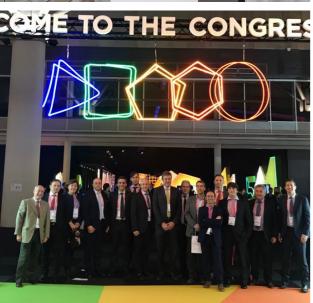
#### **Since 1992**

Founded in 1992, Matinsa is an FCC Group Company that is the leader in the Spanish infrastructure conservation industry. Its activities include all areas of the conservation of major infrastructure works (roads, railways, water works and forestry work) as well as services for improving energy efficiency









Jordy Payet, the CEO of FCC Medio Ambiente, and Santiago Farré, the director of the East Branch of FCC Construcción, participated in the event on behalf of FCC.

As one of the founding partners of the Smart City Expo World Congress (SCEWC), the most important international events on smart cities, the first of which was held in 2011 in Barcelona, FCC participated for the sixth consecutive year in this event that has become a global reference.

### Present at the Smart City Expo World Congress

The FCC Group participated in the industry's most important smart cities event: the Smart City Expo World Congress 2017, which was held in Barcelona on 14-16 November at the fairgrounds in Gran Vía, L'Hospitalet de Llobregat.

On this occasion, the FCC Group was represented by the Environment and Infrastructure business area under the slogan "A better world in which to live".

The 120 square meter space organized by the Company featured relevant information on the two business areas and their positioning within the framework of Smart Cities. Several of their innovative projects were displayed in screens panels and in interactive media.

The Smart City Expo World Congress has become a global reference in the smart city concept. It brings together municipal and institutional representatives, academic leaders, research centres, companies and entrepreneurs who enjoy a significant decision-making power.

As a driver in the development of Smart Cities, FCC is aware of the challenges posed by the new social-economic context and of the essential necessary collaboration among companies, public administrations and citizens. These messages, jointly with the presentation of various smart solutions, were displayed at a stand where the Company presented its best practices and projects.



Joan Ribó, the mayor of Valencia, visited FCC's stand at the Smart City Expo World Congress in Barcelona (in the centre). On his right, Jordi Payet, CEO of FCC Medio Ambiente; and Santiago Farré, the director of FCC Construcción's East Branch office. On the left, Xavier Martín Garriga, director of the Barcelona capital city and Balearic Islands branch office.



Xavier Grau Alafont, Environment Delegation Director Barcelona Capital and the Balearic Islands, together with the mayor of Valencia and the general director of FCC Medio Ambiente.

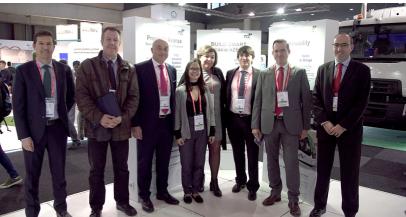


The minister of Energy and Tourism, Álvaro Nadal; Ada Colau, the mayor of Barcelona, and Nuria Martín, the mayor of L'Hospitalet and chairman of RECI (Red Española de Ciudades Inteligentes, the Spanish Smart City Network) visited FCC's stand accompanied by Jordi Payet, the CEO of FCC Medio Ambiente.





# Smart City in images





### COMMUNICATION

### Smart City in images















AVANZA: Technology & Intellig

committed to action

**Smart City** 



















#### ONCE Foundation congratulates FCC Environment on the responsible initiatives presented at the international Smart City conference

The Catalonia and Balearic Islands Regional Office of FSC Inserta (ONCE Foundation) has congratulated FCC Medio Ambiente (the Spanish brand for FCC Environment) on the responsible initiatives for the inclusion of underprivileged groups presented at the international Smart City Expo World Congress (SCEWC), held on 14–16 November in Barcelona.

Aware of the need for a position of responsibility and integration, FCC made a set of material resources and initiatives available to the ONCE Foundation in order to provide a service adapted to each person's needs. Besides providing simultaneous translation for people with hearing difficulties and guided visits with a route specially designed for visually impaired people, FCC made several electric scooters available for people with limited mobility at the information point, in order to facilitate the route and present the SCEWC to them.

FCC's partnership with the ONCE Foundation has been a very intense and fruitful one for more than 15 years now. Over this period, the company and the foundation have served as an instrument and bridge to enable hundreds of workers to gain access to the labour market.

Many people have passed through the company on their way to other firms or professional activities, some to acquire initial training and experience so they can go on to integrate more effectively into the labour market, while others have stayed put within the company. As a result, and as a sign of greater partnership ambitions, the "Inserta Agreement" was signed, first at the Barcelona City Office and then throughout FCC.

#### FCC's social commitment

These actions and developments are part of FCC's global social commitment towards the communities where we provide services, striving to improve labour-market insertion and social integration for vulnerable groups who encounter difficulties when it comes to securing jobs.

As part of this spirit of social commitment, FCC has entered into partnership agreements throughout Spain with the Red Cross, the Madrid Down Syndrome Foundation and most recently with the Norte Joven Association, the Full Inclusion Foundation at Aragón and the A La Par (formerly Carmen Pardo-Valcárcel) Foundation.



### Jaén City Council awards FCC Environment the contract for waste collection, street cleaning and upkeep of green areas

Jaén City Council has awarded FCC Medio Ambiente the contract to provide waste collection, street cleaning and upkeep of green spaces services for 12 years, plus two possible four-year extensions.

It involves annual sales of almost €12 million for a contract total of about €143 million. FCC has been providing municipal services in the city since 1985.

### FCC Environment wins the contract for street cleaning and waste collection in El Puerto de Santa María (Cadiz)

FCC Medio Ambiente has won the contract for street cleaning and waste collection in El Puerto de Santa María up to 31 December 2020, with a possible extension of one year. The value of the contract is €37.3 million.

The contract was signed on 29 November by the Mayor of El Puerto de Santa María, David de la Encina, the Deputy Mayor for the Economy, Antonio Fernández, the Director of the Andalusia II Branch of FCC, Francisco José Cifuentes, and the Provincial Manager, Luis Luque.

FCC has provided the service in El Puerto directly or through various subsidiaries since 1980. For this new contract, FCC Medio Ambiente is committed to innovation and the use of clean fuels and clean and renewable energies to ensure a more sustainable service.





# FCC Medio Ambiente recognised by the Fundación Integra for its commitment to the inclusion of vulnerable groups into the workforce

The awards were presented during the annual celebration held by the Fundación Integra to companies committed to socially responsible employment, the inclusion of the disabled and those at risk of social exclusion from the labour market. Jordi Payet, Chief Executive Officer of FCC Medio Ambiente, accepted the award on behalf of FCC Medio Ambiente.

### FCC Medio Ambiente publishes its sixth Sustainability Report

FCC Medio Ambiente has published the sixth Sustainability Report for its division in accordance with the Global Reporting Initiative (GRI) guide for preparing sustainability reports and checked by an independent external organisation that vouches for the compliance of its contents with version G4 of the guide and its correlation with the Sustainable Development Goals (SDGs) prioritised by the organisation. FCC Medio Ambiente, together with its stakeholders, is adding its contribution to compliance with the Agenda 2030 objectives.





#### FCC wins contract for Los Chinamos— El Ayote road improvement in Nicaragua

FCC Group's infrastructure division has won the contract to improve the Los Chinamos–El Ayote road in Nicaragua. The project has a budget of €32 million and a completion time of 23 months.

The client, the Nicaraguan Ministry of Transport and Infrastructure (MTI), has subdivided the project into two sections, with a total length of 39 kilometres.

### FCC participates in two new contracts with ADIF to maintain the conventional railway system

FCC Construcción, through its company specialising in railway work, Convensa (Contratas y Ventas), has won two new contracts to maintain the infrastructure and track on the conventional railway system in Spain. The timeline for the works is 24 months and the total budget of the contracts, in which Convensa participates, is more than €95 million for Lot 1 (central area) and Lot 6 (southern area).



#### FCC Construcción America participates in the cancer prevention campaign, "For the sake of your health, get a medical check-up on time"

FCC Construcción America participated in the campaign for the prevention of breast and prostate "For the sake of your health, get a medical check-up on time." The objective of this initiative is to create awareness among all FCC Construcción stakeholders on the importance and the need to get regular medical check-ups taking into account the risk factors and symptoms of both of these



### FCC Construcción receives New Civil Engineer Tunnelling award for the Bolaños tunnel



FCC Construcción receives award in the "Geotechnical Specialist Innovation of the Year" category at the New Civil Engineer Tunnelling Awards 2017 for its work on the Bolaños tunnel on the Madrid-Galicia high-speed line. The project was also shortlisted in the "Technology Innovation of the year" and "Outstanding Contribution to a Project" categories.

### FCC wins the bid to widen section I of the Inter-American Highway (Panama)

The consortium FCC Corredor de las Playas I, formed by FCC Construcción and the operator CICSA (infrastructures and construction division of the Grupo Carso), has won the bid to widen the first section of the Inter-American Highway (Panama). The consortium had the best technical score and the best economic proposal for widening the Inter-American Highway to six lanes between La Chorrera and Santa Cruz in the province of Panama Oeste. The project to widen section I has an

undertaking schedule of more than 20 months and a budget of \$543 million.





### Aqualia, the first national water operator have its work-life balance policy certified with the EFR Seal.



In its commitment to create a work environment that contributes to the development of the Company's professionals, Aqualia successfully completed the EFR certification process of Fundación Másfamilia, certified by AENOR, an external and independent agency, to consolidate work-life balance and its management. Félix Parra, CEO of Aqualia, received the EFR certificate from Roberto Martínez, the director of Fundación Másfamilia, in an event organised at the Company's headquarters in Las Tablas (Madrid).

### Aqualia, chosen for managing the new WWTP in Burgos



Aqualia chosen for providing maintenance, upkeep and operation services at the new wastewater treatment plant (WWTP) in Villalonquéjar (Burgos). The facility provides services to a population equivalent to one million. The four-year contract, which can be extended for an additional two years, is worth nearly 13 million euros.

### Aquaelvas and Aquamaior awarded the quality seal by the Portuguese regulator.

Entidad Reguladora de Servicios de Aguas y Residuos (the Water and Waste Services Regulatory Entity, ERSAR) in Portugal awarded Aquaelvas and Aquamaior the seal that





### FCC Aqualia buys back Mitsui's 49% stake in FCC's water business in Czech Republic

FCC Aqualia, FCC Group's subsidiary for the water market, has agreed to buy back from Mitsui its 49% stake in FCC Aqualia's water business in the Czech Republic. In 2013, FCC Aqualia sold the abovementioned stake to Mitsui, following the cash generation strategy of FCC Group for 2013.

Since then, FCC Aqualia has continued running the day-to-day operations of the Czech business, with Mitsui as a relevant minority partner. Mitsui's exit is triggered by a change in the Japanese Group's strategy for water business in Europe and the transaction consists of the divestment of all of Mitsui's share in SmVaK and Aqualia Infraestructuras Inženýring. As the acquisition is of a minority stake, such acquisition has no significant impact in the earnings of FCC Aqualia.

### Aqualia's commitment to its stakeholders, underpins Aqualia's 11th CSR Report.

Aqualia published its 11th edition of its Corporate Social Responsibility (CSR) report that summarises the key economic, social, and environmental milestones of the Company throughout 2016.

Every year, the report provides in-depth information on the commitments acquired and the actions implemented over the course of the year as part of Aqualia's responsible management policy.

On this occasion, Aqualia underscores its real commitment to its clients, society and the areas where it operates. It does this through the three strategic lines that

cover, comprehensively, all of the aspects of the Company's activities and its relations with its stakeholders. The special attention paid to economic, social and environmental factors ensures Aqualia's sustainability over the long term and contributes to fulfilling its mission of providing the best service.



We present the last false myth of the information campaign implemented by **Aqualia** focused on explaining the false myths surrouding the end-to-end water cycle.



