

We are **FCC**

Nº 9

FCC's commitment to people's well-being

live
healthy



SUMMARY

 Group FCC

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- Environment
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- Construction

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 Brief

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Results 2018



FCC increases its net profit in 2018 by 113.2% to €251.6M

In 2018 FCC obtained a net attributable profit totalling €251.6M, up 113.2% compared to the €118M recorded in 2017. This was essentially due to the good performance of operating activities, the reduction in financial expenses and the larger contribution from investee and associated companies.

FCC Group revenues in 2018 rose by 3.2% year-on-year and amounted to €5,989.8M. This improvement is largely due to the development of the Environmental (3.2%) and Water (8.7%) areas, accompanied by more demand in the Cement (9.5%) area.

There was a slight contraction in the Construction area, particularly internationally, due to the impact of the depreciation of certain currencies against the euro. Accordingly, adjusted by the effect of the exchange rate in the Group's various international business areas, consolidated revenue in constant currency increased by 4.4% during the period.

Gross operating profits (EBITDA) obtained by the Citizens Services company amounted to €861.2M at year-end 2018. This represents 5.6% growth over the preceding year,

thanks to the increase in the revenue from the Group's business areas, the operational actions taken to increase efficiency, new synergies and the diverse measures addressing increases in productivity.

The performance of the Environmental area in terms of EBITDA growth in the business areas is notable due to its large contribution to the Group, showing 3.7% growth to €441.4M. The Cement area is also showed strong performance, climbing 22.7% to €70.9M on the back of the improvement of the business in Spain. The

Milestones in 2018

“ Revenues rose by 3.2% over 2017 to €5,989.8M ”

Water area recorded a 2.5% increase year-on-year to €247.5M, 2.5% and Construction posted €65M, 7.6% less than last year due to the evolution of the work in progress.

Debt is another notable aspect of 2018. The Group reduced its net consolidated financial debt during the year by 24.8% compared to December 2017, primarily as a result of the September 2018 sale of a minority interest in the lead company in the Water area for €1,024M.

The Group's equity has been significantly strengthened, more than doubling compared with December last year to €1,958.8M.

“ Gross operating profit (EBITDA) grew by 5.6% compared to last year ”

FCC Medio Ambiente makes progress with the start-up of several waste treatment and reduction plants

Last December the subsidiary of FCC Medio Ambiente in the United Kingdom commenced the testing of the thermal plant in Edinburgh and Midlothian. Involving an investment exceeding £140M and a 25-year operating concession, the plant will treat more than 150,000 tonnes per year of waste and will produce electricity to supply more than 32,000 households. It is expected to enter into full operation over the course of 2019.

During the fourth quarter of 2018 a consortium led by FCC Medio Ambiente successfully bid for the second phase of the Environmental Complex in Guipúzcoa. This 20-year contract covers the construction, launch and operation of a facility costing more than €32M and an estimated revenue portfolio of €92M. The facility is expected start operations in the second half of this year.

FCC Construcción ends 2018 with a 5% year-on-year increase in its project portfolio

The volume of the Group's construction contracts throughout 2018 exceeded €2,000M, which allowed the portfolio to grow by 5% to €4,516.4M at December 2018. This is the first year in which an increase has been seen since 2014, and it was particularly supported by the contracts awarded for unique buildings and industrial construction projects. Among other projects not included in the portfolio, the consortium that includes FCC Construcción for the expansion of the new international airport in Lima (Peru) is noteworthy. The client, Lima Airport Partners, awarded the contract last September following an exhaustive pre-qualification process, which attracted expert international companies in airport construction. The infrastructure to be developed includes more than tripling the surface area of the current airport facilities.

The portfolio held by FCC Environmental Services reached \$550M in the United States

In November FCC Environmental Services (environmental services subsidiary in the United States) secured three new contracts in the State of Texas (Garland and Lewisville) that bring it to a total of 10 in the State and its portfolio to more than \$550M in the US at the end of the year.

FCC Aqualia adds around €600M in new contracts during the year

The lead company in the Water area obtained several integral concession contracts, BOT, execution and operation of water infrastructure, notably including international facilities. Aqualia is awarded its first contract in Panama for the design, construction, operation and maintenance of the Wastewater Treatment Plant in East Arraiján. This contract is for a total of €75M and is the first in the Central American country for the Water area. In Mexico, the Guaymas desalination plant (Sonora) BOT is to be developed, which includes its operation and maintenance for a total of 20 years. The project represents a total portfolio of around €75M. In addition, in the first quarter the joint venture known as SAOC,

comprising Aqualia and the government-owned company Majis Industrial Services was awarded the contract to develop and manage over the next 20 years the operation and maintenance of all water-related services (catchment, desalination, distribution and treatment) in the Sohar port area, which is the most important in northern Oman. The total volume of expected revenue associated with this contract amounts to some €120M.

FCC sells a minority interest in FCC Aqualia for €1,024M

The sale of a 49% minority stake in the parent company of the Water area, FCC Aqualia, to fund manager IFM for €1,024M was completed in September. The disposal proceeds were mostly used to reduce financial debt at the Group parent by more than €800M and, coupled with the new funding raised, repay FCC, S.A.'s previous syndicated loan. The remaining proceeds from the sale are earmarked for various corporate purposes.

FCC Aqualia maintained its corporate structure and management team after this transaction. The entry of the new shareholder enhances the company's ability to grow and is a testimony to its track record.

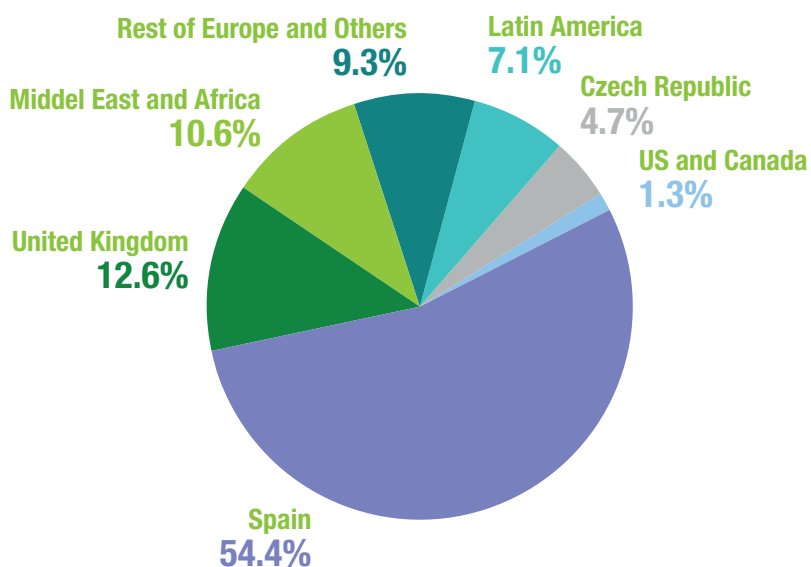
Presentation of the first electric-mobility platform for municipal environmental services

Over the past four years FCC Medio Ambiente has led a consortium that has developed a platform for highly versatile and efficient environmental service vehicles that combine 100% electric operation with an auxiliary natural gas system. This bus provides a solution that can be adapted to several types of needs, with more than 50% energy savings compared to conventional vehicles and the elimination of their polluting emissions.

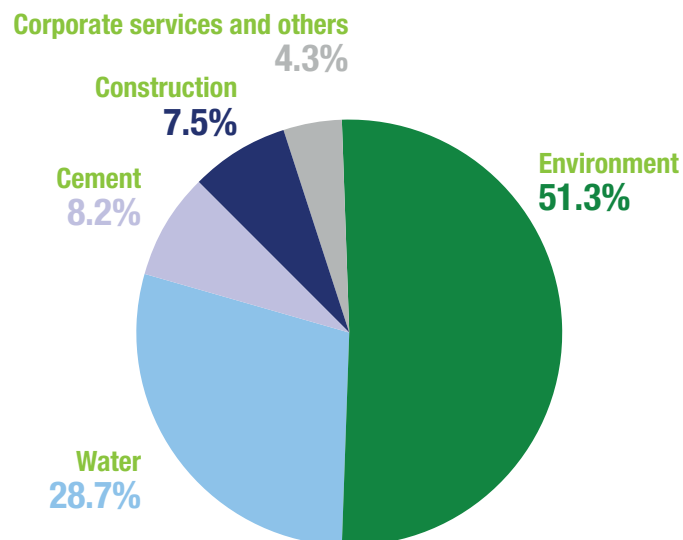
Key figures

(M€)	Dic. 18	Dic. 17	Var. (%)
Net sales	5,989.8	5,802.0	3.2%
EBITDA	861.2	815.4	5.6%
<i>EBITDA margin</i>	14.4%	14.1%	0.3 p.p
EBIT	485.9	435.9	11.5%
<i>EBIT margin</i>	8.1%	7.5%	0.6 p.p
Income attributable to equity holders of the parent company	251.6	118.0	113.2%
Net equity	1,958.8	938.5	108.7%
Net financial debt	2,691.4	3,579.5	-24.8%
Backlog	28,971.9	29,377.4	-1.4%

% income by region



% EBITDA by Business Area



Highlights 2018



FCC releases **video** **with the highlights** **of 2018**

Many events took place at the FCC Group throughout 2018. To this end, FCC has prepared a video with a compilation of the Group's and its business areas' highlights during the year.

The video is available on FCC Group's youtube channel and on the intranet and corporate website, as well as on the channels of each business area.





LIVE HEALTHY,

FCC's commitment to people's well-being

LIVE HEALTHY is a movement that represents the value and identity that FCC wishes to build and develop, by all and for all, with the aim of creating an organisation run and represented by healthier, happier, more skilled and fulfilled people, as one of the essential pillars of its strength as a company, group of people and social agent.

LIVE HEALTHY is also our brand, our motto and our commitment to the well-being of people, as a group and as individuals, and as an essential element of an exciting and challenging future.



Information desk at the Las Tablas Headquarters to disseminate the programme and collect employees' suggestions.

Action Plan

LIVE HEALTHY will be articulated through an annual health action plan, coordinated jointly by the different areas, that will focus on the needs detected during the diagnosis and its progress, and also on any aspect of interest that is in line with the improvement of the health and well-being of the company's people.

The plan contemplates the development of well-being programmes, awareness-raising campaigns and social responsibility actions, coordinated from the HR areas and our medical services, developed across

the organisation and using internal initiatives developed at the local level over the base of the objectives defined.

“ Our brand, or slogan and our commitment to people's well-being ”





How does it work?

LIVE HEALTHY is articulated through and driven by an on-going cycle of global and local initiatives and actions aimed at:

- Diagnosing our health as a group.
- Developing actions for improvement.
- Providing resources aimed at increasing the well-being of people.

- Satisfying the group and individual health interests, understood as total physical, mental and social well-being, not only as the absence of illness.

This on-going cycle combines the company's initiatives with those of any of its groups and people.



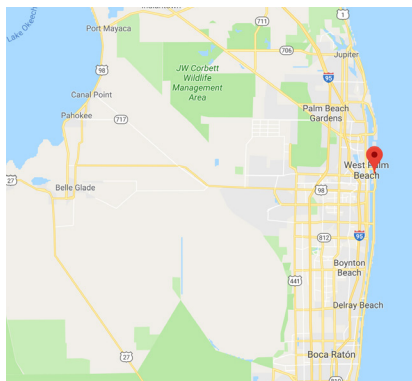
In the photos, the information desk at the Federico Salmón office building in Madrid



live
healthy

FCC Environmental Services

“The largest county in South-East Florida, the county is comprises 38 cities”



Founded in 1909, Palm Beach County owes its name to its first city, Palm Beach. Today, a century and ten years after its founding, the County awarded FCC Environmental Services (the U.S. subsidiary of the FCC Group environmental business area) a solid urban waste collection contract worth \$215M (about 191M€) for a seven-year term starting on 1 October 2019.

The Company's Environment Business Area has been providing municipal services for over more than 100 years. Its success is based on its commitment to innovation and to helping cities become smarter, more sustainable and more socially responsible.

The contract contemplates the provision of services in two of the four districts included in the tender, although no bidder could be awarded more than two of these. FCC was the only company to be awarded two of these districts.

The contract contemplates the collection of waste from approximately half of the county which has a total population of 1.3 million people.

Besides the collection of waste, the contract includes recycling, yard and bulky waste. It is important to point out that the service also includes the exclusive right for the collection of all commercial waste during the term of the contract in the districts awarded, something that is not very frequent in these types of tenders. This will contribute significant additional revenues due to the important tourist activity in Palm Beach.

FCC will provide the service with a brand new fleet of 108 vehicles, including 90 collection trucks and other ancillary units, and will generate more than 120 jobs, including a significant part of them among local companies that FCC will subcontract.

awarded a **\$215M contract** in **Palm Beach** (Florida)



Palm Beach County is the home of 38 cities and one of the three counties comprising the Miami Metropolitan Area. It is one of the counties with the highest purchasing power and one of the highest income in the United States.

Significant presence in Florida

FCC already has a significant presence in Florida in some of the largest counties such as Orange County and Polk County and will increase its activity in the southern portion of the state thanks to this new award.

FCC has signed ten contracts in Texas and three in Florida in the last few years, totalling more than 1.1 billion dollars, and is currently providing services to more than 8 million Americans.

In recent years, the environmental services area of the FCC Group has achieved important awards

in the international arena. Worth mentioning is the contract for the construction and management of the Materials Recycling Plant (MRF) of Dallas, at McCommas Bluff, which operates at full capacity and has been selected by the National Waste & Recycling Association (NWRA) as the Best Recycling Facility in North America. In January 2018 the Company was awarded the contract for the design, financing, construction and operation of the Houston plant, which will separate and reevaluate all the recyclable materials from the city and its subsequent sale for a period of up to 20 years. The facility, which recently started operations is fully automated and equipped with the most state-of-the-art technology in sorting of materials, being able to treat up to 145,000 tons per year .



FCC Environmental Services will provide the service using a fleet of 108 vehicles, including 90 collection trucks and other ancillary units to collect solid waste in Palm Beach County.



Several members of the laboratory team in front of the new facilities.

The **brain** that analyses **water quality**

Aqualia's laboratory in Oviedo becomes a **national benchmark**

Aqualia has invested 2.5 million euros in the renovation of the facilities, which have been inaugurated by the Mayor of Oviedo and the Deputy Minister of the Environment of the Principality. This laboratory is yet another example of Aqualia's commitment to Oviedo, by choosing this city to locate its Central Laboratory in Spain.

Aqualia, in collaboration with Oviedo City Council, has inaugurated its renovated facilities and new equipment for the Central Water Quality Laboratory, in which more than 2.5 million euros have been invested. The laboratory expands its analytical capacity, adapts to the new version of the recently published ISO 17025/2017 standard, and is at the forefront of water laboratories in Spain in terms of equipment, personnel and service.

The Mayor of Oviedo, Wenceslao López; the Deputy Minister of the Environment of the Principality of Asturias and President of Cada-sa, Benigno Fernández Fano; and

the Spanish Director of Aqualia, Santiago Lafuente, together with a broad institutional and business representation, toured the new facilities.

Oviedo, Central Laboratory in Spain

Thanks to the upgrading and enlargement of the laboratory and the renovation of analytical instruments, with the acquisition of 16 new pieces of equipment, the laboratory will be able to comply with the new sanitary regulations related to water consumption, making it possible to analyse 300 different parameters. It will also be able to

address new requirements such as those foreseen in the future drinking water directive.

Thanks to these improvements, Aqualia has doubled its analysis capacity to 280,000 parameters.

The current staff of 16 professionals has also been reinforced, of which nine are university graduates and the other seven are university technicians, and in accordance with Aqualia's equality policies, it has a female quota of 75% of the workforce.

After nine months of work, the building has been adapted so as to facilitate access by people with diminished mobility thanks to the removal of barriers and steps and the installation of an elevator.

The ground floor has been fitted for training purposes, both for company personnel and for the laboratory's external training activities. As part of this training commitment, the company has collaboration agreements with the Official College of Chemists of Asturias and León for internships by graduates.

Aqualia also has an agreement in force with the University of Oviedo, and specifically with the Faculty of Chemistry, by virtue of which a significant number of its students have already carried out internships in our laboratory.

Likewise, internships are carried out on a regular basis by students in higher cycles Professional Training II, the Avilés Employment Training Centre and the Universidad Laboral de Gijón, as part of their training to obtain the degree.

"We have made a great human, technical and economic effort to adapt the laboratory to the new regulations and to give it a dimension such as to provide the best service to the citizens of Oviedo and to become Aqualia's Central Laboratory in Spain", commented Santiago Lafuente, Aqualia's Spanish Director. "The accreditation of the National Accreditation Entity (ENAC), in accordance with ISO 17025/2017, gives the results obtained in the laboratory international recognition, which places it at a level of excellence in capacity, competence and analytical results".



Wenceslao López, the mayor of Oviedo, during his tour of the new Central Laboratory of Oviedo

Guarantee of reliability and rigour

The new laboratory has adapted to the requirements of the new ISO 17025/2017 standard, an international reference standard for evaluating and declaring the competence of a laboratory. This ENAC accreditation guarantees the highest level of competence and reliability of analytical results.

In addition, the laboratory is recognized by the Ministry of Health and Health Services of Asturias as an independent private laboratory for analysis and sanitary control of food, water and beverages with reference LAB 12-O.



Advanced equipment

The laboratory incorporates new equipment to expand its analytical capacity, reaching 280,000 analytical determinations this year, which means analysing one parameter every 22 seconds approximately. Some of the new equipment acquired includes:

- 1 liquid chromatograph valued at 266,000 euros.
- 2 Gas chromatographs valued at 363,000 euros.
- Mass spectrometry imaging (MSI) equipment, a technique that makes it possible to determine and quantify most of the elements of the periodic table worth 133,000 euros.
- Equipment for measuring environmental radioactivity (242,000 euros).
- In order to meet the high demand for sample preservation, the laboratory has been equipped with a temperature-controlled refrigeration chamber with a capacity of around 50 m³.



The project consisted of three phases, developed entirely by FCC Construcción, totalling more than 10 million euro.

FCC Construcción works on the enlargement of Hospital San Juan de Dios (Seville), a hospital with a history of more than 75 years

FCC Construcción was recently awarded a contract for the last phase of the enlargement project of the San Juan de Dios Hospital in Seville, with a budget of nearly 25 million euros.

The works consist of the completion of the interior of the new building, which includes masonry, carpentry, cladding, interior ironworks, painting, electromechanical installations, communication and security.

This phase marks the completion of the expansion work of this hospital, inaugurated in 1943. The project, which was under the technical direction of the architect Javier Jiménez Sánchez-Dalp, consisted



of three phases, developed entirely by FCC Construcción, totalling more than 10 million euro.

The first phase consisted in the realization of the demolitions, earthworks, foundations, execution of screen walls and slabs. The second and third phases contemplated the development of the structure of the new building, the completion of the exterior enclosure of all the facades, waterproofing and roofing.

During the second and third phases, FCC Construcción erected the structure of a seven-storey

building on a plot of land adjacent to the current hospital, completing the exterior enclosure of all the façades and the roof waterproofing and flooring work.

Experts in executing hospital facilities

FCC Construcción has extensive experience in the execution of international hospital infrastructures, which includes Ciudad de la Salud and Luis Chicho Fábregas Hospital in Panama; Enniskillen Hospital, in Ireland, or the Cojutepeque Hospital, in El Salvador.

Nationwide, FCC Construcción has developed: the Maternity of O'Donnell (Madrid), Hospital de La Línea (Cádiz), Son Espases Hospital (Mallorca), General Hospital of La Mancha Centro (Ciudad Real), Ciudad Real General Hospital, Hospital de Arganda (Madrid), Hospital de Torrejón (Madrid), Hospital de Salamanca, Reina Sofia Hospital (Murcia), University Hospital of Valdecilla (Santander), Campus Health Hospital of Granada and the Hospital of Cartagena (Murcia). To this we must add the recently awarded Santa Barbara Hospital in Soria.



FCC observes International Women's Day

FCC observes International Women's Day, a date that has acquired a global dimension and which has become a space to reflect upon the progress achieved by women and on aspects that still need to be improved upon.

A year on, FCC continues to support the cause, showing its commitment to gender equality, women's leadership and diversity, all of which are distinguishing marks of the Group, in addition to supporting the campaign of the Ministry of Healthcare, Social Services and Equality, under the slogan "Now is the time for women".

An event was held on 8 March at the corporate headquarters of FCC in Las Tablas; the opening speech was given by Pablo Colio, Chief Executive Officer of the company, and in which Esther Alcocer Koplowitz, Chairwoman of FCC Group, also participated.

The event was chaired and moderated by journalist Noemí Boza Cano, with the participation of David Lafuente Durán, Executive Advisor (Parliament and International area) of the Secretary of State for Equality, Ministry of the Presidency, Parliamentary Affairs and Equality; and Mar Medeiros Cuiña, Manager of the Corporate, Strategic Alliances and CSR-D area of Inserta (Fundación Once) and former Vice-President of the Spanish Association of Women Executives and CEOs. In addition, a round table discussion was held with women working in different business areas, who talked about their professional experience at the company and in male-centric environments.

Our colleagues, Ghorghita Petre, of FCC Medio Ambiente; Anastasia Hacar Zumalacarregui, of FCC Construcción; Marta Casao Maestre, of FCC Aqualia and Beatriz Malagón Picón, of the Ce-

mentos Portland Valderrivas Group, talked about their professional career in different areas of the company.

The event was part of FCC Medio Ambiente's "BY YOUR SIDE" campaign in this area, which was launched on November while observing the day for eradicating violence against women. On International Women's Day, Aqualia launches the Speeches for equality, a space of the #AqualiaEquality, campaign that includes the events held in Santander, Lleida, Jerez and Madrid in relation to the use of innovation as the lever to achieve gender equality. In addition, Aqualia joins Fundación Adecco's #EmploymentForAllWomen campaign and asks others to stand in the shoes of women at a risk of exclusion with the interactive game "Excluded". Moreover, FCC Construcción asked its staff to participate in the "Committed to you" campaign with images and testi-



Esther Alcocer Koplowitz, chairwoman of FCC, and Pablo Colio Abril, the Company's CEO with those who participated at the event held at the Las Tablas Headquarters.

monials of women working in the infrastructures and industrial divisions.

Proof of FCC's on-going commitment is its active participation in promoting equal opportunities and the fight against gender violence. Therefore, on such an important date, we also want to share and join the campaign launched by the Government Delegation to help fight against Gender Violence, within the framework of the initiative "Companies united to achieve a society free of Gender Violence" disseminated today, with the hashtag #weareone on Twitter and Instagram.

FCC has implemented an equal opportunities and diversity policy, through which it reaffirms its commitment to the fundamental principles of equality, non-discrimination at the workplace, helping improve diversity in companies and the respect for heterogeneity. The company has been working in this area for years and is already reaping the rewards and results of these initiatives, thanks to which it is consolidating a fair, professional and very diverse work environment.

Some of the FCC Group's milestones include receiving the four Corporate Equality Seals in the Environmental Services, Water, Construction and Industrial areas; first company to sign equality plans in the Construction, Urban Services and Water activity sectors; first company to deliver training on a vast range of topics associated with equality and the prevention of sexual harassment and harassment at the workplace for the entire company; pioneer with a group of leading companies in the promotion of Master's degrees for pre-executive women of the EOI, as well as in the participation of the Promociona Project, the Executive Programme for Women in Senior Management.

Likewise, FCC endorses the "Women's empowerment principles" of the UN Global Compact, and the Diversity Charter, reinforcing the equality, diversity and non-discrimination principles, promoting inclusion and the work-life balance measures.



One of the moments at the round-table discussion.

“ Commitment to equality, women's leadership and diversity, the Group's distinguishing traits. ”



Innovemos para el cambio
#AqualiaIgualdad

¡Gracias por vuestra implicación en #AqualiaIgualdad!

Un año más, con motivo del Día Internacional de la Mujer, los empleados de Aqualia nos hemos unido para apoyar la igualdad de género.

Gracias a todos por vuestra implicación y compromiso con la Campaña #AqualiaIgualdad y con las acciones organizadas en los distintos centros de trabajo.

Esta galería de imágenes es una muestra de nuestro impulso al cambio.



Esta acción se integra dentro de las actividades que Aqualia desarrolla como empresa con el sello Distintivo de Igualdad otorgado por el Ministerio de Sanidad, Asuntos Sociales e Igualdad.

 **aqualia**
Tu compañía del agua

FCC Medio Ambiente BY YOUR SIDE on International Women's Day



A TU LADO

8M DÍA INTERNACIONAL
DE LA MUJER

The **FCC Group's Construction** area starts the **"Committed to You"** campaign in women's week

FCC Group's Construction area launched the "Committed to You" campaign as part of the different actions carried out by the company during Women's Week. The aim of the campaign was to disseminate FCC Construcción's values and vision regarding gender equality. The campaign is divided into four sections with four women from the Company's different areas who describe the role of women in the construction sector by means of computer graphics and headlines.

This action is part of the enpositivofcc project.



www.enpositivofcc.com

8 de Marzo

Comprometidos contigo

Día Internacional de la Mujer

"Mi trabajo en FCC Construcción ha sido mayoritariamente rodeada de hombres pero siempre tratada con total normalidad y naturalidad"

Síguenos en: www.fcc.es www.enpositivofcc.com

Anna Camps Vila
Jefa de Obra
Túneles Les Glories (Barcelona)

8 de Marzo

Comprometidos contigo

Día Internacional de la Mujer

"No esperes el cambio. Conviértete en él"

Síguenos en: www.fcc.es www.enpositivofcc.com

Susana Turrillas Lopez
MATINSA
Servicio de bomberos del Consorcio Provincial de Pontevedra

8 de Marzo

Comprometidos contigo

Día Internacional de la Mujer

"Las mujeres aportamos otra visión de la seguridad y salud laboral en cada proyecto"

Síguenos en: www.fcc.es www.enpositivofcc.com

Marta Ibáñez Abia
Técnico de Prevención
Zona Centro-Norte, FCC Industrial

8 de Marzo

Comprometidos contigo

Día Internacional de la Mujer

"Es fantástico poder compatibilizar la vocación profesional con la vida sin tener que renunciar a nada"

Síguenos en: www.fcc.es www.enpositivofcc.com

Margarita Sánchez Jiménez
Asesora Jurídica
Metro de Riad

8M
2019

DÍA INTERNACIONAL
DE LAS MUJERES

Tiempo de Mujeres



GOBIERNO DE ESPAÑA
MINISTERIO DE LA PRESIDENCIA, RELACIONES CON LAS CORTES E IGUALDAD

SECRETARÍA DE ESTADO DE IGUALDAD
INSTITUTO DE LA MUJER Y PARA LA IGUALDAD DE OPORTUNIDADES

35 años Instituto de la MUJER
el futuro empieza hoy



We reproduce the excellent interview conducted by Gaceta de Salamanca with **Ana M^a Escribano Sánchez, head of Aqualia's water purification department in Madrid.**

Ana María Escribano Sánchez, Aqualia's head of water purification in Madrid, was one of the four speakers who participated in the eWoman Salamanca event on successful women in business and in the digital and technological environment, organized by La Gaceta and Prensa Ibérica, with the participation of the Junta de Castilla y León.

Ana is a biologist by profession, with a master's degree in engineering and environmental management, and has been with Aqualia for 23 years, where she holds a position of responsibility and which she combines with teaching as a collaborating professor at the Escuela de Organización Industrial (EOI).

What is your job as Aqualia's head of water purification in Madrid?

I am responsible for the operation of a series of water purification contracts. I am in charge of people management, economic control, relationship with the administration, commercial work... What's the hardest part of your job and the most rewarding?

The most difficult thing is the relationship with people. Trying to make the most of every individual, ensure that people work in groups and that everything adds up. The most rewarding thing is when you set yourself a challenge and see that with the collaboration of everyone and the small contribution you have made, you can move forward.

How did you start your career at Aqualia?

I joined Aqualia in 1995 as head of a laboratory in an installation and since then I have held different positions with different responsibilities, always related to the end-to-end water cycle, both in drinking water and wastewater. I have been head of production in significant production contracts. Thanks to the mobility at Aqualia, we are able to move quite a lot within the organization.

For a biologist like you, how was it to change the laboratory and the flasks for management?

The bulk of my career within the company has been in management rather than technique. The management is often difficult and, at the end, you take the problems home with you. Otherwise, I am very happy with the rest. When I was studying for my career, being a manager was not part of my calculations, but it's true that I've always liked doing things of responsibility and having to involve people, since I was a little girl.

Water is one of the elements that most influences the quality of life. What importance does Aqualia have in society?

We are a company dedicated to public service. It is an essential service. When I have had responsibilities in drinking water it was very important because the water supply for many

people depends on you. It is a very stressful job because water is very important. You don't realise this until a problem arises and there is a lack of water, either because of a drought situation, breakdowns or lack of infrastructure. The same is true when I worked in wastewater since quality is very important and one must ensure that discharged water complies with certain parameters. We have a responsibility as guarantors of the environment to leave our future generations a quality environment. We work in a very important area for society and Aqualia makes us aware of this responsibility.

What is it like working in a male-centred sector?

What I miss is the lack of visibility of the many women who work at my Company who are often not sufficiently visible. I miss that fact that in meetings, as in the rest of society, is greater diversity, that there is not a female head of production and 15 men in similar posts. Nevertheless, in my case, as a woman, I have not found such barriers at work. Since I started over 20 years ago, I have witnessed substantial changes in the management methods and in the way we work. Even my male colleagues. At first, it was unthinkable that they would take three days off because their kids did not have classes. Now they take leave and this is very normal. You notice a change since Company management is involved and we go along with the social changes.

Is a successful career compatible with family life?

I have been fortunate since I was always able to count on the help of my family. My mother has been able to help me a lot, otherwise it would have been impossible. My daughters' early years were complicated because they got sick, you had to play and study with them, and with job that is so absorbing, this is often difficult. But I don't have the feeling of having sacrificed great things and I feel fortunate. Luckily, thanks to my bosses, colleagues, my husband... I have managed to take steps and did not have to give up important things. I have achieved a certain reasonable balance.

What are the keys to professional success?

A little help from those around you, inner strength, believing in your capabilities, and training and skills.

How has work improved with the technological revolution?

There has been a total revolution in service management and this has resulted in better work schedules. The remote control systems in the facilities free up time. These new technologies make it enable teleworking and are there to be used.

Women's entrepreneurship is still lower than men's. Are women afraid to take risks?

I believe that that is the case. Aqualia has leadership programs and I have noticed that in all of them, women are afraid to take risks because we are watched very closely. For men, taking risks is something that they know from their childhood. It seems that it is written in our DNA that we should not take risks because we could make mistakes. Because of this, women often are afraid to undertake, to get in-

involved in projects that they don't know how they could end up. When facing a challenge, if all goes well, perfect; if not, we can always learn for the next challenge.

What would you tell women to fight for their dreams?

That they have dreams and that they try to jump over all obstacles to achieve what they want. Don't give up. Obviously it requires effort and you have to sacrifice many things. Devote a lot of time to training and try to make those around know that if you do well, it will be good for everybody.

8 de Marzo.
Día internacional
de la mujer trabajadora

**NECESITAMOS
IGUALDAD
PARA QUE
NADA SEA IGUAL**

Apostamos por la integración laboral
de mujeres en exclusión social.



Grupo FCC en colaboración con Fundación Integra, apoya la mejora de la empleabilidad y el acceso al mercado laboral de mujeres en situaciones vulnerables.



Some of the participants of the working days.

FCC EQUAL CEE meeting with the Levante I and Castilla y León Environment delegations

FCC EQUAL representatives from the Levante I and Castilla y León Environment delegations organised a working day to share their experiences in managing the special employment centres in both delegations.

During the event, they shared ideas and working methods and discussed the problems that might arise and how to solve them.

The meeting was a complete success, learning from each other. They agreed to hold at least two meetings a year and to invite the rest of the delegations from the environment area that also manage a special employment centre. All EQUAL staff were involved, from managers, support technicians to management staff, each contributing their vision and experience.

FCC Medio Ambiente is committed to the integration of underprivileged groups in the workplace, with the aim of collaborating in achieving socially responsible cities and achieving a healthy working and living environment, promoting the improvement of labour insertion and the social integration of groups in vulnerable situations and with difficulties in accessing employment.

Félix López, a worker at the street-cleaning service in Pozuelo (Madrid) **honoured by town's residents and by the City Council**

A group of neighbours from Pozuelo de Alarcón collected many signatures to convey to the City Council their desire for recognising the work of a worker in the street cleaning team, Félix López Costalago. This is what they wrote:

"In representation of the 64 neighbours who have signed this petition, I want to express in this document our satisfaction for the excellent work performed by Félix López, a street sweeper in the Cábilas neighbourhood in Pozuelo de Alarcón. Thanks to his motivation and work, he keeps our streets clean and in the best possible conditions. This is why we hope that his work will be recognised with a prize or a public homage for his professionalism and day-to-day work".

As a result of this petition, the mayor of Pozuelo de Alarcón, Susana Pérez Quisiant, met with the worker to

convey the congratulations of the residents of the Station neighbourhood and to highlight the excellent work that he performs in the city's cleaning service and the resources that the city earmarks to ensure that Pozuelo is a benchmark for cleanliness. The mayor also congratulated the rest of the team who make it possible that the town remains clean every day.

The mayor stressed that Pozuelo provides a "quality service that pursues excellence and has an organization as flexible and effective as possible to be able to respond rapidly and resolve any incidence".



Read the interview published in **Vive Pozuelo**, the municipal magazine.

Since 1982

FCC Medio Ambiente has been present in the municipality of Pozuelo de Alarcón since 1982. Since then, and given the importance and innovative demands that urban sanitation and street cleaning services demand in cities, FCC has been adapting and incorporating new high-tech equipment and machinery in the city of Madrid for the proper development of its activity and for the benefit of its citizens.

In Pozuelo, FCC serves a population of more than 86,000 inhabitants and has a modern fleet of vehicles powered by Compressed Natural Gas (CNG) and electricity, providing low rates of polluting emissions, thus contributing to the fight against climate change.

FCC Medio Ambiente has been working for more than a century on the implementation of new technologies and developing new research projects that contribute to more efficient management.



From left to right, Carlos Ulecia Rodríguez, Councillor for the Environment at Pozuelo de Alarcón Town Hall; Félix López Costalago, street cleaning worker; Susana Pérez Quisiant, Mayor of Pozuelo de Alarcón Town Hall; Leo Juan Guldentops López, FCC Service Manager of the Pozuelo de Alarcón contract; and Roberto Pérez Martín, FCC area foreman in Pozuelo.



The **FCC Group** included in the **FTSE4Good Index**

FCC has been included in the prestigious sustainability stock market index, the FTSE4Good Index, produced twice a year to highlight the performance of companies that demonstrate sound environmental, social and corporate governance (ESG) practices.

This index can be used by a wide variety of market participants for the making of sustainable investment decisions.

FCC's inclusion in the FTSE4Good Index was due, in particular, to the trust its stakeholders have placed in the socially responsible commitment of the Group and its subsidiaries to

integrate environmental, social and good corporate governance indicators into their business performance. To reinforce this commitment to sustainable performance, in 2016 the Board of Directors approved the Group's CSR policy and, in 2017, the Fourth Master Plan in Corporate Responsibility, which is valid until 2020.

Furthermore, in 2018, the Board gave the green light to a new Code of Ethics and Conduct and approved a compliance model for criminal risk prevention.

The FCC Group's Purchasing Department participates in the preparation of the **Technical Guide of Good Purchasing Practices for Event Services**



María del Carmen Plans Lluch, head of FCC's Purchasing Processes, and Juan Manuel Blanco, from the Group's Purchasing Department.

María del Carmen Plans Lluch, head of FCC's Purchasing Processes, and Juan Manuel Blanco, from the Group's Purchasing Department, participated in the drafting of the Technical Guide of Good Practices for Purchasing Event Services, promoted by Agencias de Eventos Españolas Asociadas (AEVEA - Associated Spanish Event Agencies) and Asociación de Profesionales de Compras, Contratación y Aprovisionamientos en España (AERCE - Association of Purchasing, Contracting and Procurement Professionals in Spain).

The Guide includes good advice, recommended and necessary to incorporate in public institutions and private companies when a tender is announced for the award and contracting of an event. It contains a wealth of very useful technical information for the professional departments of Purchasing and Marketing of the companies, as well as for the Agencies that contribute value with their management and professionalism.

Those responsible at the main companies in their respective sectors, Purchasing, Marketing and Agen-



cies, participated, jointly with María del Carmen and Juan Manuel, in drafting the technical guide, collaborating in shaping and defining the best business practices.





FCC Construcción obtains the registry of the **Carbon Footprint, Offset and Absorption Project** register of the Ministry for the Ecological Transition

The company has registered its carbon footprints from 2012 to 2017 in the Carbon Footprint, Offset and Absorption Projects register, created in 2014 by the Ministry for the Ecological Transition.

FCC Construcción has registered its carbon footprint in the register of Greenhouse Gas (GHG) emission reduction companies, obtaining the registration and seal of carbon footprint, offset and carbon dioxide absorption projects from the Ministry for the Ecological Transition.

The calculation year for inclusion in the registration and obtaining the seal has been 2017. FCC Construc-

ción has reduced its average emission intensity by 26.1% in the triennium 2015-2017, compared to the triennium 2014-2016.

Additionally, for the carbon footprints of 2015, 2016 and 2017, we have obtained the "calculate and reduce" stamp, which, in addition to recognizing the implication and the fact of being able to quantify and verify our emissions of greenhouse gases, distinguishes to the company as one of the organizations that reduce their carbon footprint effectively.

A few weeks ago, the Company also published the Greenhouse Gas Emissions Report 2017. FCC Construcción materialized its commitment in 2010, with the design and implementation of a protocol for the quantification of greenhouse gas emissions in construction processes.

Pioneer

Since then, the Company prepares and verifies its Greenhouse Gas Emissions Report on an annual basis and is the first Spanish construction company to have the AENOR certification and since 2012 its Carbon Footprint Certificate has been awarded the "Verified Environment CO2 Certificate". In 2012, this initiative received an honourable mention in the category "Management for sustainable development" of the European Environment Awards, granted by the Entorno Foundation.

Obtaining this seal is yet another step forward in the development of the Company's sustainability policy.



CLICK HERE TO READ THE REPORT.

Environmental-friendly trucks = Efficiency and responsibility



New trucks for the collection of waste from Allerdale, United Kingdom.

The **new trucks** take to the road in **Allerdale**, United Kingdom

Residents expect to receive a better waste collection and recycling service thanks to the nearly 40,000 blue-lidded bins for paper, with twice the capacity of the former bins to be delivered to each household in Allerdale. This new service will improve even further its recycling rates.

The Allerdale Municipal Council and its recycling and waste partner FCC Environment introduced the residents to the two new vehicles added to the fleet. All residents will also receive

detailed information on the novelties of this services.

The service includes the provision of 17 new Dennis Eagle Collection vehicles, all but one of which will be 26t vehicles. Each vehicle has a Euro 6 compliant 6 cylinder, 7.7l engine which will deliver significant reductions in emissions compared to the current service, delivering cleaner, greener services in the Borough from the outset. The vehicles will be capable of carrying 16.8m3 of either resi-

dual waste, mixed recycling, garden waste or paper and cardboard. There will also be one smaller 18t vehicle to carry out collection work in areas of restricted access.

Besides the novelties in the bin collection services, the Company is investing in a new fleet of environmentally-friendly vehicles.

Unveiling of the new waste and recycling service in Allerdale County, United Kingdom.





At the Santiago Bernabeu Stadium., from left to right, Enrique Sánchez, executive vice-president of the Real Madrid Foundation, Alicia Jiménez, mayor of Mazarrón, Higinio Martínez, director of the Levante delegation of Aqualia, and Emilio Butragueño, director of Institutional Relations of Real Madrid C.F.

Partnership with the **Real Madrid Foundation** and the **Mazarrón City Council** (Murcia) for **children's integration through sports**

The collaboration agreement aims to promote the integration of children at risk of exclusion through the practice of sport.


Thanks to the collaboration agreement signed between Aqualia and the Real Madrid Foundation, the city of Mazarrón in Murcia will have, for the sixth consecutive year, a social-sports school, the objective of which is to promote education in values through sport. The initiative is

aimed at around a hundred children between the ages of 5 and 17 at risk of social exclusion, who will share their sports practice with many other children who do not suffer from these problems, in order to guarantee their integration and equal opportunities.

The signing of the agreement has taken place in the Santiago Bernabéu stadium with the presence of the mayor of Mazarrón, Alicia Jiménez, Emilio Butragueño, director of Institutional Relations of Real Madrid, the executive vice-president of the Real Madrid Foundation, Enrique Sánchez, and the director of

the Levante delegation of Aqualia, Higinio Martínez.

Sports activities take place weekly in the Mazarrón municipal sports complex. The participants will enjoy soccer as an educational and integration agent based on the methodology of the Real Madrid Foundation.



Greenhouse Gas Emissions Report 2017

The **FAST** consortium: 20 million hours worked without accidents



The FAST consortium, led by FCC Construcción, has obtained the certificate for 20 million hours worked without work accidents in the project Lines 4, 5 and 6 of the Riyadh Metro (Saudi Arabia).

This milestone has been reached thanks to the high safety standards

implemented on the site and the commitment of all the members of the consortium to adopt health and safety as a priority within the execution of the suburban transport infrastructure.

The first test carried out on lines 4, 5 and 6 of the Riyadh Metro (Saudi Arabia) has recently been successfully developed. The tests include demonstrating the performance of the railway system, from energy supply to signalling systems, using the trains delivered by Alstom to the consortium.

FCC Construcción and the expansion of Line 4 of the Metro system

A few months ago, the FAST Consortium was awarded a contract for the extension of Line 4 of Riyadh Metro, adding another two stations that will provide service at the King Khalid International Airport (KKIA).

The extension includes the construction of a 1.5-kilometre-long viaduct and two elevated stations with direct access, via elevated walkways, to terminals 1/2 and 3/4 of the international airport in the Saudi Arabian capital. In this way, Line 4 of the Riyadh Metro will directly connect the future financial centre of the city (King Abdullah Financial District - KAHD) with KKIA, making it a key corridor for the development of Riyadh's urban transport. The execution of the stations and associated infrastructures by the FAST Consortium will allow passengers to benefit from a direct transport link to the airport.

Start of train circulation tests in manual mode

The FAST Consortium, led by FCC, has achieved a new milestone in the Riyadh metro project. On March 2, the first train circulation test on the main line was carried out in manual mode.

The test was successfully completed in a 10.5 kilometre section of Line 4.

This section was electrified just a few weeks ago and runs from the depot located on this same line to station 4G1, which is one of the three stations which are located at King Khalid International Airport.

The first train circulation tests of the main line in manual mode





José María Morales, Director of Security at FCC, gave a presentation on security and protection strategies and initiatives at companies and universities.

FCC participates in a conference on **safety and security**, in United Kingdom

The FCC Group's Corporate Security Department took part in an event organised by Critical Arc in the United Kingdom.

Critical Arc is the company that provides FCC with the SafeZone platform, a worldwide mobile application designed to support employees during their travels and stays abroad with which expatriates or frequent travellers can share their location whenever they wish with the Security Department, send alert messages and communicate with security personnel, receive instructions from the nearest FCC control centre, and so on. To request the installation of this application, go to safezone@fcc.es.

During the working sessions, José María Morales, director of security at FCC, gave a presentation on security and protection strategies and initiatives at companies and universities. José María also led a workshop on the protection of international travellers, which analysed, among other issues, the most suitable tools and platforms for contributing to the safety of staff abroad.

The FCC Group is committed to the support and safety of expatriate employees or frequent travellers during their travels and stay abroad. These conferences serve to exchange experiences and learn about the best practices of other companies and institutions that,

like FCC, have a broad international presence and operate in scenarios with different levels of risk and uncertainty.



Family photo during the presentation of the initiative to promote reading in collaboration with the Anastasio de Gracia-FITEL Foundation, UGT-FICA and the Ministry of Culture and Sport, as part of the Be Aqualia programme.

Aqualia promotes the habit of reading amongst its employees in collaboration with the **Anastasio de Gracia-FITEL Foundation, UGT-FICA and the Ministry of Culture and Sport**

The company's initiative is part of the campaign "Books, to factories" to promote reading, developed by the Foundation Anastasio de Gracia-FITEL, UGT-FICA and the Ministry of Culture and Sport.

This edition will bring reading closer to 1,400 workers from 14 production centres in the construction, chemical, metallurgical and agri-food sectors in Andalusia, Aragon, Castile-La Mancha, Castile-Leon, Catalonia, Extremadura and Madrid.

A literary colloquium with the writer, journalist and coach Maria Paz Ruiz who has presented her book "Sex, wine and travel. Chronicles" was organized at the Company's facilities in Madrid.

The meeting is part of the campaign "Books, to factories" organized by the Foundation Anastasio de Gracia-FITEL, which collaborates UGT-FICA and has the sponsorship of the Ministry of Culture and Sport.

Carmen Rodríguez, director of People at Aqualia, presented the event, indicating the reasons why Aqualia supports this campaign to encourage reading in the workplace: "reading makes us freer and better people, and that is why Aqualia supports this project".

Through its "Be Aqualia" programme, the company develops a wide range of initiatives aimed at promoting a healthy lifestyle and the well-being of its employees. In this case, it has been chosen to collaborate with this initiative to promote the habit of reading among Aqualia's team.



Presentation of the literary colloquium as part of the "Books, to factories" initiative to encourage reading.

Aqualia celebrates World Water Day

World Water Day was celebrated on 22 March. The theme selected by the United Nations for 2019 was “Leaving no one behind”. As part of this celebration, Aqualia launched several initiatives in which nearly 10,000 people, mainly school children participated.

For example, in the Zone 1 branch office, open door events were organized at several of the facilities managed by the Company such as the Moaña (Pontevedra) and Oviedo facilities, or tours to the water reservoirs that supply the city of Santander. In Zone II, besides visiting the El Molinar wellspring, in Alcoy (Alicante), the IV Environmental Seminar was

organized in Arnedo (La Rioja) with the collaboration of the Town Council. Children’s events were organised in Zone III with workshops for experiments with water and plays in Ronda (Málaga) and Jaén; the inauguration of the Mamelón fountain restoration in Jerez, play activities in the Apemsa Water Classroom in Puerto de Santa María (Cádiz), and organised tours for children at the Fonsalía desalination facility in Guía de Isora (Tenerife). In Sicily, Caltaqua handed out the prizes for the contest entitled “L’acqua è vita. Sprecarla è un crimine” (Water is life. Wasting it is a crime).



Different events organised by Aqualia to celebrate World Water Day



Allergies

an increasingly common problem

Allergy is a disproportionate reaction of our body's defences to a substance that is harmless to most people. In the allergic person the immune system treats that substance, called allergen, as harmful, and there is a response that causes symptoms ranging from mild discomfort to life-threatening problems.

Symptoms

Symptoms vary greatly in location, intensity, and severity. There can be severe allergic reactions that can even have a fatal outcome for the person suffering from allergies.

The most frequent allergy, is the allergy to pollen or hay fever that appears especially in urban environments more than in rural areas, probably because atmospheric pollution enhances the allergenic effect of pollen.

Allergic symptoms are generally but very annoying: tears and itchy eyes, what we call allergic rhinoconjunctivitis, as well as nasal congestion, sneezing and coughing. More serious would be symptoms of respiratory distress and asthma. The most serious condition

secondary to allergic reaction would be anaphylactic shock, a medical emergency that requires immediate action by a health professional.

From an allergic process to a cold process

Sometimes, it is not easy to distinguish an allergic process from a common cold. There are some differences that allow us to identify them:

- The duration of symptoms is usually shorter in the common cold, viral processes usually last half a week.
- Fever and muscle pain do not appear in allergic processes.
- Although coughing could appear in an allergy, it is much more frequent and prolonged in cold processes.
- The evolution of the symptoms and the response to treatment is clearly different, while the common cold requires only symptomatic treatment, allergies clearly respond to antihistamine that decreases or eliminates the symptoms.

Treatment

The treatment in cases of allergy are antihistamines, drugs that block the release of histamine, which is the substance responsible for allergic symptomatology, it is important to take them regularly in periods of allergy, preferably at night. There are two types of drugs, classic or first generation antihistamines, and non-sedating or second-generation antihistamines, which are more commonly used today because they act more selectively and penetrate less into the central nervous system, reducing drowsiness, so they are considered safer and do not interfere with daily activities. We can find them in tablets, syrups, nasal sprays or eye drops. To this group belong drugs as well known as Loratadine (Clarytine), Desloratadine (Aerius), Ebastine (Ebastel), Rupatadine (Rupafin, Alergoliver), Azelastine (Aflun)..

It should also be considered as treatment Immunotherapy or vaccines can be considered for treatment. The vaccine treats the cause of allergy by administering small amounts of allergen to the patient in order to eventua-

lly change the response of the body getting it to be harmless and therefore produce no symptoms.

Vaccines should not be used in all cases. If the symptoms are mild, isolated, respond well to the medication, evolve favourably spontaneously, and the allergenic substance is easy to avoid, it will not be necessary to use vaccines.

If, on the other hand, the symptoms are intense, frequent, incapacitating or limiting, with a bad response to the medicines or they evolve in an unfavourable way, the treatment with vaccine should not be delayed. The recommendation to start a treatment with vaccines is issued by the specialist after a detailed study.

Prevention

Avoiding contact with the allergen is better than treating the symptoms of an allergic reaction. This measure is possible in allergies to drugs, certain animals or specific substances that can be avoided. At other times it is not possible to avoid it completely, but it is necessary to take all necessary measures to reduce exposure as much as possible.

If you experience any symptoms of allergy, you should consult your doctor, who will compile the medical history and perform the diagnostic tests necessary to determine exactly the type of allergy and recommend, if necessary, the appropriate treatment.

Tips for avoiding dust mite allergy

- No need for carpet floors, carpets, upholstered chairs, large stuffed animals, etc. Wooden floors and, above all, ceramic floors are the best.
- Smooth walls are better and easier to clean.
- For storing books, use showcases or closed shelves.
- Ventilate the house frequently to avoid humidity, as microscopic animals proliferate with temperatures above 20 °C and humidity between 70% and 80%.
- Pillows and mattresses are true reservoirs of mites, so it is necessary that they are made of synthetic materials or sheathed in non-permeable materials.
- Wash bedding frequently, with water above 65 degrees. It is also advisable to use anti-dustmite covers to protect the mattress, pillows and sofas, which are the preferred places for these microscopic beings.

Tips for preventing pollen allergy

- Avoid those places that concentrate more pollen: parks, gardens, rural environments, etc.
- Do not go for a walk on windy days since wind carries large amounts of pollen.
- Use glasses to protect your eyes and even a mask.
- The highest concentrations of pollen occur early in the morning (between 5:00 and 10:00 am) and in the evening (7:00 to 10:00 pm), therefore, exercise or other outdoor activities are not advisable during these hours.
- Keep house windows closed.

Main allergens

- Pollen: grass, olive trees, cupressaceae, Arizona cypresses, among others.
- Environmental fungi.
- Dust mites.
- Animal skin cells. Cats, dogs, horses and rodents as the most frequent cause.
- Certain foods such as milk, eggs, seafood, wheat, nuts, chocolate peanuts and soybeans.
- Medications.
- Insects.

Aqualia unveiled its efficient and sustainable management model for public water services at the SIGA Trade Fair



Aqualia's stand at the SIGA Trade Fair held in Madrid Stand de Aqualia

At this international event, Aqualia presented the innovation project "Clean fuel for resilient cities", where Frank Rogalla, Director of Innovation and Technology at Aqualia, presented the practical case study "All-gas", as a success of public-private collaboration in favour of sustainability.

The second edition of the Innovative Water Management Solutions Fair, the largest business platform for the complete water cycle, featured Aqualia as one of the promoters, where it presented its model for efficient and sustainable management of public services. Aqualia's objective, in the words of Juan Pablo Merino, Director of Communication and CSR at Aqualia, "is to convey our daily commitment to achieving triple sustainability - environmental, social and financial - that guarantees the continuous provision of services associated with the complete water cycle with a high level of efficiency". In

this sense, Aqualia's performance in the towns where it provides services is guided not only by technical parameters, but also by values such as transparency, commitment, connection with citizens and the commitment to the circular economy.

Among many of the novelties that have been seen in SIGA, the way in which vehicle biogas is generated from the wastewater of Aqualia's municipal treatment plants stands out. The company presented the innovation project "Clean fuel for resilient cities" at its stand, where Frank Rogalla, Aqualia's Director of Inno-



Frank Rogalla, Director of Innovation and Technology at Aqualia during the presentation of the case study of the All-gas project.

vation and Technology, presented the practical case of the All-gas project, as a success of public-private collaboration in favour of sustainability. This project, developed in Chiclana (Cadiz) since 2011, currently has the largest facilities in the world for the cultivation of microalgae for the production of vehicle biogas.

Rogalla explained how “this project is, in reality, a total change of the purification paradigm, because instead of investing energy to purify wastewater, we now obtain a valuable energy resource that is also sustainable”. The project currently supplies seven cars in the municipal park and the Chiclana water service.

With its presence and support to SIGA, Aqualia bet on this Fair as a great international event to connect the protagonists of the sector in Spain, Latin America and the Mediterranean Arc.

The business platform for the complete water cycle

A total of 75 companies and 96 brands from 16 countries have presented their most innovative proposals, solutions and services at SIGA, the business platform for the complete water cycle, in the 5,000 m2 fitted out in Pavilion 2 of the Feria de Madrid.



All-gas is a worldwide pioneering project that is revolutionizing the paradigm of wastewater treatment by obtaining clean energy in a sustainable way from effluents.

Line installed at the Cadrete plant (Zaragoza)

FCC **Ámbito** launches a new line to increase the efficiency of its glass treatment plants

A new line has been installed at the Cadrete plant (Zaragoza) which will also allow processing of material from the Sagunto plant (Valencia). In these facilities, domestic glass from selective collection is handled, sorted, cleaned and conditioned by various technological processes to produce a raw material called calcine that can be used to produce new glass containers.

The project, which has involved an investment of 400,000 euros, will enable more glass to be recovered by reprocessing the waste flow

from the main treatment currently destined for landfill. This rejection flow, known as CSP (Ceramics, Stones and Porcelains), is mainly made up of pieces of glass with adhered labels, which is why during the treatment process they are confused by the optical sensors with opaque bodies and diverted to the rejection flow along with the rest of improper minerals.

The different equipment that make up this new line, including a label scraper, two optical separators and a resonance sieve, have been

mounted on a tower, a configuration that allows the material to fall from one piece of equipment to another due to its own gravity, with the consequent energy saving, and whose design has taken into account FCC **Ámbito**'s own technical contributions based on its extensive experience in glass treatment.

The new line also incorporates the most advanced automatic systems currently available, achieving greater optimisation for controlling the treatment and for the overall efficiency of the process.

The Cadrete plant in Zaragoza.

The excellent performance of these facilities was recognised by AENOR, as underscored by the fact that they were the first ones in Spain to be certified. The quality management system implemented makes it possible for the end product, the recycled glass, to be considered not waste but rather recycled glass, complying with the EU Regulation No. 1179/2012 of the Commission enacted on 10 December 2012 which defines the criteria for determining when recycled glass can no longer be classified as waste.

Fine glass of optimal quality

One of the main materials obtained from recycling is fine glass. It is a product with great ecological and environmental advantages, as it is free of contamination and has a high quality in terms of dimensions, colour, texture, etc.

Thanks to its non-porousness, hardness and resistance to scratching, it is a material with multiple applications, and other products can be obtained such as worktops, facades and floors, industrial craftsmanship, artistic paints, etc.

But in addition to fine glass, in the plants of Cadrete, Muel and Sagunto, mixed calcine and industrial calcine are obtained. The first is a raw material for the manufacture of new glass containers (bottles, jars...). The industrial one is used to manufacture new glass products (flat glass, tiles for swimming pools, glass wool, spheres for paintings...). The use of calcine allows an energy saving of 1% for every 4% of calcine, which also results in the reduction of CO₂ emissions and other gases during the smelting process.

Serious recycling

FCC Ámbito has been operating in the glass recycling industry for more than 40 years. Besides handling household glass containers, the Company offers its services to multiple industries that generate glass waste such as window manufacturers, bottling plants, automobile scrapping facilities, etc.

The Cadrete and Muel facilities, both in Zaragoza, as well as the plant in Sagunto Harbour (Valencia) treat a total of more than 160,000 tonnes of different types of glass each year, the essential prior step before incorporating these materials in production cycles.



Glass,

a 100% recyclable material



Recycling glass is part of the daily routine of citizens. So much so that it is the most recycled material because it is the first one that we started to sort in the early eighties. Spain can boast of being one of the leading countries in recycling this material.

According to Ecovidrio, a non-profitable organization in charge of managing the recycling of all glass containers deposited in bins throughout Spain, the glass recycling rate in 2018 in Spain was 76.5%, representing a 3.5 point increase over the estimate for 2017.

The glass recycling rate in the European Union should be nearly 95% by 2030.

Why should we recycle glass? This material is recycled because all of it can be reused, thereby preventing the extraction of other raw materials. This reduces the environmental impact produced by mining these other materials.

Ecovidrio indicated that in 2019 it was possible to prevent the emission of nearly 520,000 tonnes of CO₂, equivalent to flying more than 120 times

around the world. It prevented the extraction of 1,072,800 tonnes of raw materials, equivalent to 100 times the weight of the Eiffel Tower and made it possible to save almost 1,400,000 MWh of energy, sufficient for supplying all hospitals in Spain over a three-month period. Furthermore, selective collection in green containers in 2008 amounted to 840,261 tonnes of glass containers, 6.5% up year-on-year.

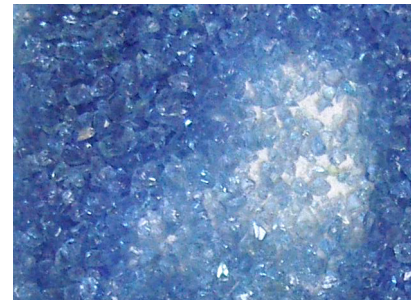
Each citizen sorted and deposited an average 18 kilograms of glass per inhabitant, that is, about 68 glass containers per person.

“ The glass recycling rate of European Union countries should be around 95% by 2030 ”

From an obligation, to a habit

This awareness is the fruit of years of social education. The message transmitted to the population about the transcendence of a simple gesture such as sorting waste is expanding generation after generation. School campaigns reinforce the example of household recycling. Involving the youngest children in the recycling cycle is essential to enable them to adopt it as a habit rather than an obligation.

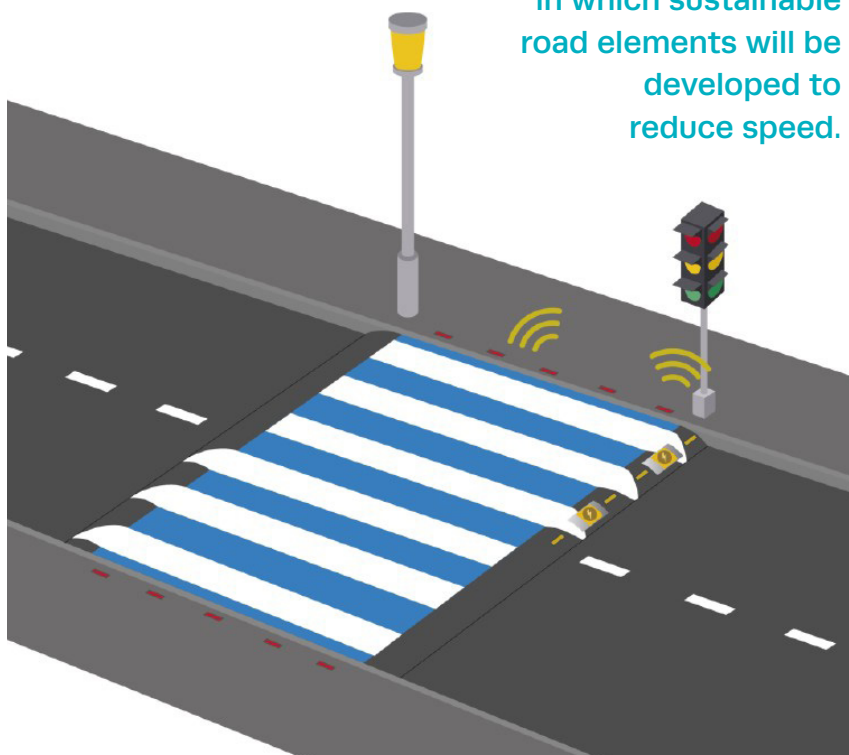
Nonetheless, companies in the beverage sectors assume this obligation, as their participation in the glass recycling cycle is essential. Producers and distributors of beer, wine, cider and spirits must comply with the guidelines imposed by Eco-vidrio to reduce the amount of glass used in packaging.



Glass obtained through different processes.

Seeking to improve the efficiency of Smart Cities

FCC Construcción undertakes the "RESALtO" R+D+i project, in which sustainable road elements will be developed to reduce speed.



FCC Construcción constantly seeks to improve the effectiveness and efficiency of the Smart Cities. The company is innovating in traditional building materials, also seeking to broaden its knowledge of unique products integrated into urban roads to provide a more complete range of services to its customers.

The company's policy includes the creation of value in the organisation by providing the management and services necessary to design, build and operate infrastructures and services that contribute to optimising driving and improving road circulation in cities in an efficient, sustainable and safe manner. The company's policy includes the creation of value in the organisation by providing the management and services necessary to design, build and operate infrastructures and services that contribute to optimising driving and improving road circulation in cities in an efficient, sustainable and safe manner.



FCC Construcción is currently developing a project of sustainable road elements for reducing speed in the urban environment, known as RESALtO.

This project, approved and financed by the Centre for Industrial Technological Development (CDTI) of the Ministry of Science, Innovation and Universities, will be developed with the collaboration of the Leitat Technological Centre throughout the academic years from 2018 to 2021.

In order to validate this new multi-function speed reducer design, FCC Construcción will construct a pilot test for subsequent monitoring and will complete the study with a technical-economic evaluation.

Sustainable road elements for speed reduction that meet the objectives of energy generation, safety signs and connectivity with the environment will enable FCC Construcción and

the FCC Group to have a new line of business that complements their current services for town councils, both nationally and internationally. The future of Smart Cities

There is a clear trend in the incorporation of ICT technologies in constructive elements to obtain smart systems and improve services for the residents of "Smart Cities". Its global technology market will grow from \$212.3 billion in 2013 to \$668.5 billion in 2019, with an annual growth

rate of 17.9%, according to an innovation report from BCC R&D. Transportation is among the areas expected to be transformed by disruptive technologies. In particular, infrastructure, mobility and traffic management in cities.

Specific objectives of the project

The generation of energy

- It will be based on solid-state materials.
- Designs will be studied for its better integration in the speed reducing elements for the maximization of energy generation and to support the fatigue produced by the passage of vehicles.
- Energy management and storage systems will be evaluated in order to maximize the efficiency and use of the energy generated.

Safety signposting

- Intelligent light signalling activation systems will be investigated to manage energy consumption while facilitating its identification by drivers and pedestrians.

Connectivity with the environment

- Investigate low-power, low-data-transfer communications systems.
- Comparison of new communication protocols and emerging technologies.

MEXICO

Aqualia starts work on the Guaymas desalination plant to **resolve the scarcity of drinking water** in the State of Sonora



Claudia Pavlovich Arellano, governor of the Mexican state of Sonora, presided over the ceremony to begin construction of the new Empalme-Guaymas desalination plant.

“Construction and management of the facility during a 20-year period contributes 75 million euros to the Company's portfolio”

Aqualia started work on the Guaymas desalination plant in the State of Sonora. The project awarded includes the design, fittings, construction and commissioning as well as operation and maintenance for a total period of 20 years. The project represents a total portfolio of about 75 million euros.

The governor of the Mexican state of Sonora, Claudia Pavlovich Arellano, presided over the ceremony to begin construction of the new Empalme-Guaymas desalination plant, which will involve an investment of almost 32 million euros.

This desalination plant will try to alleviate the problem of water shortage in the state of Sonora and will serve nearly 100,000 inhabitants of the municipalities of Guaymas and Empalme, localities located in the Gulf of California, in the state of Sonora, Mexico.

The new infrastructure, once in service, will produce up to 18,000 cubic meters per day. The plant will have a system of deep seawater wells, filtration and microfiltration, reverse osmosis, remineralization and impulsion to the distribution network.

Aqualia receives the governor of Sonora (Mexico) on her visit to Spain.

Fourth desalination plant developed in Latin America

Guaymas is the fourth desalination plant developed by Aqualia in Latin America, after the Candelaria, Sierra Gorda and Huechún projects in Chile under the EPC (Engineering, Procurement and Construction) modality and, in some cases, with operation and maintenance.

With this contract, in which Aqualia was awarded ahead of three other consortiums that took part in the tender, the FCC Group company will develop its third BOT (Build, Operate, Transfer) project in the Aztec country.

Desalination, an alternative for obtaining water

Desalination is an interesting option to supply the population with drinking water in areas where there are no other viable alternatives. In this sense, Aqualia has extensive experience in the construction and management of this type of infrastructure, as it has participated in multiple projects of this type.

In 2015, the United Nations adopted the Sustainable Development Goals (SDS). Water management (ODS N°6 - Clean Water and Sanitation) is postulated as one of the key factors for improving the lives of citizens and, at the same time, taking care of the Environment.

“ The new treatment plant will serve more than 100,000 people ”



Jaime Lobato, Chief of Service, guided the governor's visit along with David Díez, Country Manager of Mexico, and Antonio Vasal'lo, Aqualia's Director of Development.

Last February, a delegation from the Mexican state of Sonora, led by Governor Claudia Pavlovich, visited Spain on a tour to strengthen institutional ties and attract Spanish investment in the Mexican state.

During her stay, Pavlovich was accompanied by the executive member of the State Water Commission (CEA) of Sonora, Sergio Ávila. Both met with representatives of the public administration and Spanish companies to address issues such as the state of water infrastructure in Sonora, economic cooperation between the Mexican state and Spain or the potential of public-private partnerships (PPPs) for the development of infrastructure and public services.

The governor took advantage of her visit to get to know Ávila's service and the daily management that Aqualia carries out in the municipalities where it operates. Jaime Lobato, head of the Ávila Service, guided the governor's visit together with David Díez, Country Manager of Mexico, and Antonio Vasal'lo, Aqualia's Development Director.

“ The budget for this project is 62 million euros and the term for its execution is 21 months ”

FCC changes





the

look

of Plaza de España

In the heart of Madrid, very close to the Royal Palace, is Plaza de España. The monument to Cervantes overlooks the enclosure and, while presiding, it does not lose sight of its famous characters: Don Quixote and Sancho Panza.

The Plaza de España is ready to undergo an important transformation. It is immersed in an extraordinary remodelling, centred on environmental commitment and on the use and enjoyment of people. Madrid's symbolic location is expected to be dressed up in gala for its spring 2012 debut.

Its nearly 37,000 square meters of surface have been transited by millions of people who have posed in this majestic square as a symbol of Madrid and as a souvenir of their passage through the city also known as the "Villa and Court".

For more than four centuries, the Plaza de España has been the centre and one of the most significant pla-

ces in Madrid. It has been a place of encounters and recreation, and the passage of centuries has served to strengthen the historical value of this unique space used for different purposes and different establishments.

Recreational area

Writings show that in the sixteenth century, during the reign of Philip II, this site was full of orchards that fed on the waters from the stream of Leganitos. It was also a place of recreation where in summer many locals came to cool down with the air that came from the Sierra de Guadarrama and spend a pleasant time.

Later, in the 18th century, this space became the centre of social life in the capital, which was visited mainly by the aristocracy with some frequency. In this century, urbanization began and, by order of Carlos III, a monastery was built that was never inhabited and was later used as a military unit. In 1909 it was demolished due

to the works of the enlargement of Madrid, a necessary project for the demographic growth that the city was experiencing and that was approved in 1911, year in which the construction of the Plaza de España is announced.

Over the years, new reforms were carried out, new buildings were built around it, some of them emblematic and recognised as the Torre de Madrid building, which for a long time was the tallest building in the capital; or the España building, a skyscraper with a staggered silhouette, the protagonist of many films.

“The project will substantially improve mobility, reducing pollution and therefore benefitting the city's sustainability”

Today, more than 100 years after its construction was approved in 1909, FCC has the privilege of refurbishing Madrid's Plaza de España, one of the largest squares in the world. Together with the company PACSA, the FCC Group's construction area won the contract for the complete remodelling of this important enclave in the city.

A 62 million budget

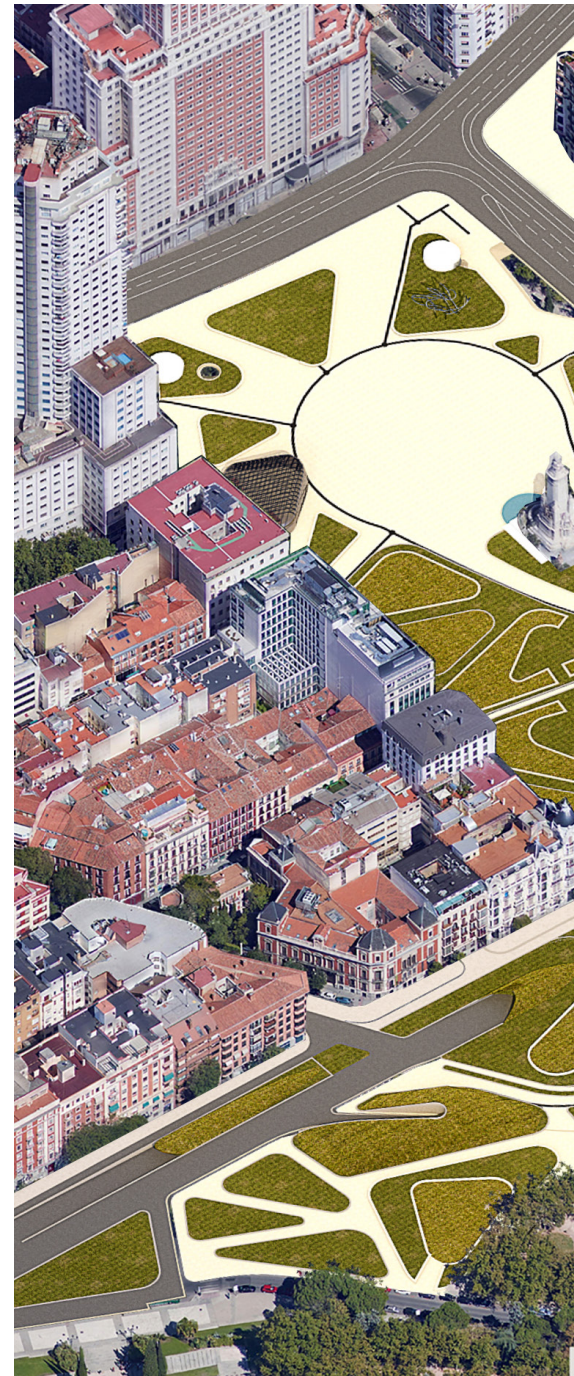
The budget for this project is 62 million euros and the term for its execution is 21 months.

The remodelling of the Plaza de España has been designed by the architects Fernando Porras Isla-Fernández, Aranzazu La Casta Muñoa and Lorenzo Fernández-Ordóñez Hernández, whose project was the winner of the ideas competition organized by the City Council after being selected as a finalist by a jury of experts and later elected by the citizens of the capital “through a broad process of participation”.



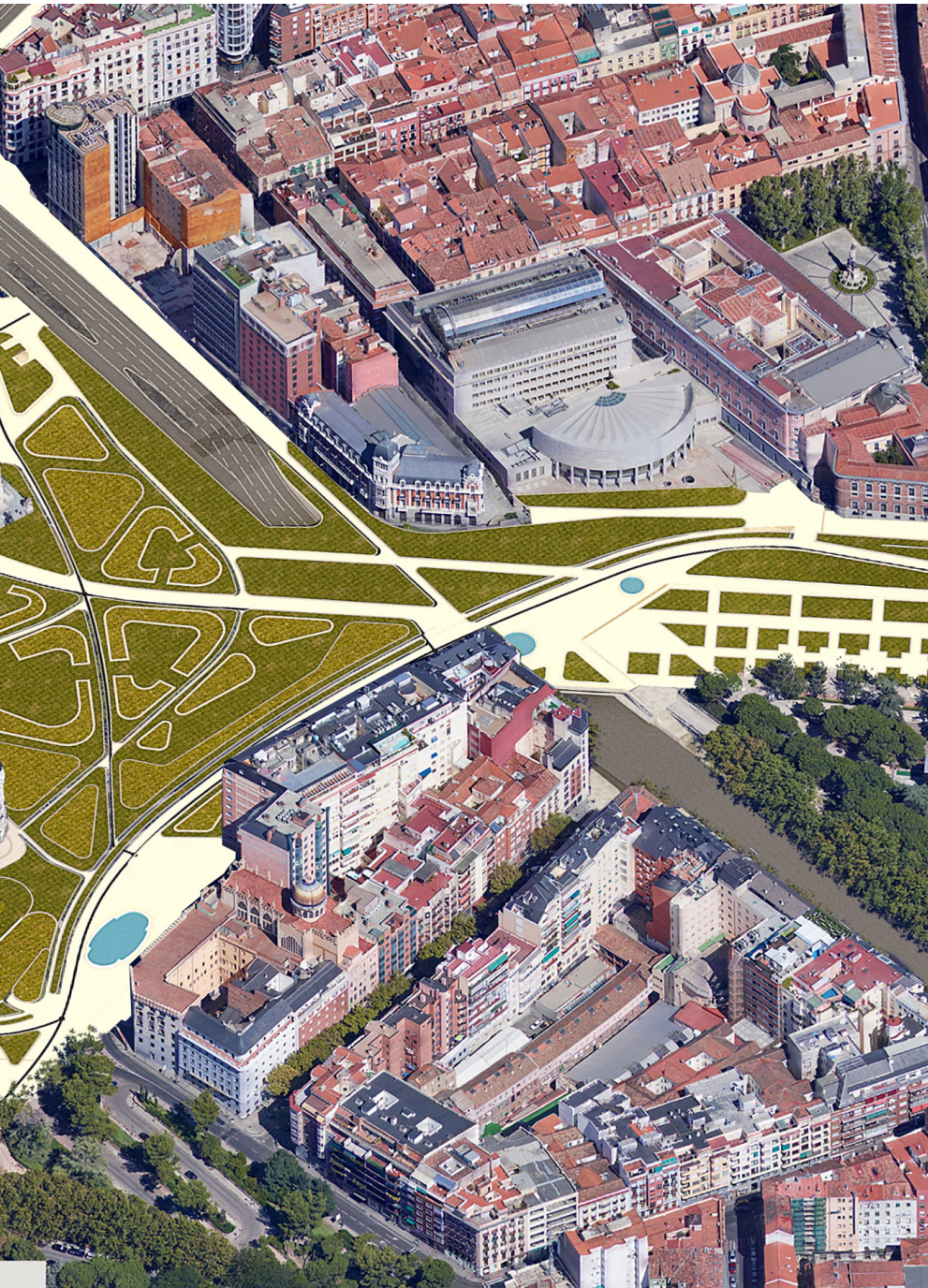
With the reform to be executed by FCC, a substantial improvement in mobility will be allowed, reducing pollution and therefore benefiting the city's sustainability.

The project will reduce the motorized traffic, thus increasing the pedestrian spaces and establishing a continuous line of pedestrian and green areas connecting the gardens of the Plaza de Oriente with the Sabatini gardens, the Parque del Oeste and the Templo de Debod and Madrid Río.



In addition, a pioneer pedestrian crossing will be created in Spain between Gran Vía St., Princesa St. and Reyes St., as it will allow pedestrians to travel simultaneously in all directions and even diagonally.

In addition, thousands of jobs will be created that will allow the revitalization of commercial activities and hotels in the area.



The remodelling project for Plaza de España in Madrid

Broad experience

FCC Construcción has extensive experience in the remodelling of districts and strategic streets of cities: Las Ramblas in Barcelona, urban environment of the City of Arts and Sciences in Valencia, various urban streets in cities such as Malaga, La Coruña, Seville, among other.

“ The architects involved in the design of this project are Fernando Porrás Isla-Fernández, Aránzazu La Casta Muñoa and Lorenzo Fernández-Ordóñez Hernández ”

Key data

The execution project was drawn up on an area of 127,684.82 m² above ground level and 31,800.61 m² below ground level.

It contemplates planting more than 1000 trees, excluding shrubs and ground cover plants.

Areas for pedestrians



- Surface paved with 27,284 m² of stone materials.
- Surface paved with 15,901 m² of earthy materials.
- Green area, 16,785 m².

Areas for private automobiles



- Paved surface with stone materials 5.290 m².
- Paved surface with asphalt materials 3.515 m².

Areas for cyclists



- Paved surface with asphalt materials 1.675 m².
- Cycling tracks on roadways 3,376.52 metres.
- Cycling path over spaces without car traffic 389.69 metres.



FCC to build and operate in the United Kingdom of the largest energy-from-waste plants in Europe

FCC Environment (the British subsidiary of the Environmental Services area of the FCC Group) and the Danish fund Copenhagen Infrastructure Partners (CIP), holding a 40% and 60% share, respectively signed the financial closing documents for the construction of the Sustainable Energy Plant at Lostock, northwest of England. The construction of the project requires an investment of GBP 480 million (approximately EUR 560 million).

FCC Environment awarded several recycling centres in Suffolk County, United Kingdom



Suffolk County awarded FCC Environment a contract for managing its network of 11 recycling centres throughout the county providing services to 750,000 inhabitants for a term of eight years and a portfolio worth more than 30 million euros.

Q" Tourist Quality Award from the Xunta de Galicia



The Xunta de Galicia, through its Tourism Agency, has awarded FCC Medio Ambiente a diploma of recognition for having received the "Q" quality mark.

Present at the Climate Change Conference in San Sebastian



FCC Medio Ambiente participated in the International Conference on Climate Change, "Change the Change", held from 6 to 8 March 2019 in San Sebastián, the aim of which is to mobilise citizens towards a personal commitment to climate change. The conference, part of the UN initiative Momentum for Change and organised by the Basque Department of the Environment in collaboration with the Spanish Government, the Guipúzcoa Provincial Council and San Sebastián City Council, was held as part of the "Climate Change Week", Asteklima.

Animal adoption campaign launched in Almuñecar (Granada)

FCC Medio Ambiente and Almuñecar City Council collaborated with APAMA; the Animal Protection Association in launching a campaign to encourage residents to adopt abandoned animals.



New recycling centre opens in Fengate, UK

The new Peterborough Recycling Centre in Fengate, Cambridgeshire in the UK has been brought into operation. Over the next 10 years it will be managed by FCC Environment, which has also designed and built this new centre, which has twice the capacity of the previous plant in Dogsthorpe. The centre also includes an educational area so that residents of the municipality can learn more about the different recycling processes.



The FCC Chair in Occupational Risk Prevention and Human Resources is one year old

The FCC Company Chair in Occupational Risk Prevention and Human Resources was created in March 2018 in conjunction with the University of Zaragoza with the aim of supporting studies and research in the area of Occupational Risk Prevention and Human Resources and to mutually benefit from the results of these R+D+i projects.



FCC at the Sustainable Urban Mobility (SUM) Congress Bilbao 2019

FCC Medio Ambiente participated in the first edition of the Sustainable Urban Mobility (SUM) international congress, an event that was created with the aim of reflecting on the future of mobility and its impact on the achievement of the Sustainable Development Objectives (ODS) in 21st century cities, held in Bilbao.





The new “North Runway” project a Dublin Airport (Ireland)



Last February, at a ceremony organized by the Airport Authority of Ireland (DAA), which convened the Minister of Transport, Tourism and Sports and the Prime Minister of Ireland, along with various personalities directing the client, DAA, started the design and construction project of the new runway

“North Runway” of Dublin Airport (Ireland). The event was attended by FCC Construcción, the director of area Europa as well as the Country Manager of the United Kingdom and Ireland.

Haren Prison wins the IJ Global Awards 2018



The prison of Haren (Brussels) has been awarded, in the category “social infrastructure” of the international IJ Global Awards 2018. In a gala held on March 21 at the Museum of History in London

The President of Peru visits the Environmental Remediation work of the Expansion Project of the Jorge Chávez International Airport

The President of Peru toured and supervised the expansion project for the Jorge Chaves International Airport. Accompanied by members of Lima Airport Partners (LAP), as well as of the AMANCAE consortium, led by FCC Construcción, the reviewed the project as well as the preliminary measures executed prior to the expansion of the airport.



More than 2.6 million passengers use the Panama Metro during the WYD



More than 2.6 million passengers travelled on line 1 and 2 of the Panama Metro during the celebration of the World Youth Day (WYD). Over 2 million passengers used line 1 while line 2 was used by nearly 600,000 passengers. During the WYD event, the metro trains travelled more than 150 kilometres and the metro system as available nearly 100% of the time.

FCC participates in the Climate Infrastructure Forum

FCC Construcción participated in the most important international event on infrastructure sustainability of the year: the Climate Infrastructure Forum. FCC Construcción was represented by the Director of Quality and CSR, Antonio Burgueño, who held a session entitled Metrics for Sustainable Infrastructure: Defining the Boundaries, Unlocking Institutional Investment.



Technical Conferences on “Continuous Permeable Pavements”

FCC Construcción, together with Madrid City Council and CEDEX, has organised the “SUDS: Continuous Permeable Pavements” technical conference in the auditorium of the Wanda Metropolitano Stadium.



FCC Construcción updates the training of its prevention technicians

During the months of February and March 2019, retraining was carried out for the prevention technicians of the Construction Area Managers in order to optimize their Hygiene and Ergonomics skills. This is a specific course of 20 classroom hours taught by the SGS Safety School and was held at the Las Tablas and Federico Salmón facilities. The title of the course is “Evaluation and measurement methodologies in the fields of ergonomics and industrial hygiene”.





A year of sustainable management



Aqualia closes its corporate campaign #CompromisoAqualia with the launch of a video in which it reviews the most significant data harvested in the last year. The campaign has discovered more than 60 facts, based on real data, which contribute

to the transformation of the territories in which the company serves and the achievement of the United Nations Sustainable Development Objectives (SDOs) for the year 2030.

Pioneering circular economy project at the Guijuelo wastewater treatment plant (Salamanca)



The ADVISOR project, led by Aqualia, will develop an integral recovery system for animal by-products and sewage sludge to obtain vehicle biofuel and bioplastics. The project has a budget of 1.4 million euros, subsidised by the CDTI through the FEDER Interconecta programme, with the support of the Ministry of Science, Innovation and Universities and the European Union through the European Regional Development Fund (ERDF) until the end of 2020.



SmVaK will undertake major infrastructure improvements in the district of Frýdek-Místek (Czech Republic)

The investment plan for 2019 of SmVaK, Aqualia's subsidiary in the Czech region of Moravia-Silesia, presents important projects in the field of interventions in sewage networks, wastewater treatment plants and supply networks in the municipalities of the district of Frýdek-Místek.

Aqualia will purify Ávila's water until 2038

The City Council of Ávila has renewed the contract with Aqualia for the management of the municipal wastewater treatment plant. Thus, the company will manage the integral water cycle of the municipality until the year 2038. The new contract is valued at around 35 million euros.

Aqualia receives "Three stars" for its trajectory in the European Benchmarking Cooperation (EBC)

The EBC-European Benchmarking Cooperation, the programme that compares and evaluates water services at an international level, has awarded Aqualia its "three stars" certificate, the highest category. This distinction recognises the continuous improvement of water services and the company's commitment to organise or host improvement activities with other companies.



2nd International Health and Safety Conference for a healthy organisation

Over the course of three days, Aqualia held the annual Occupational Risk Prevention training sessions for its Health and Safety technicians (HS Manager) in both the national and international areas.



Gluglú packs its bags and travels with Aqualia to Panama

The Ministry of Health and the Sanitation Programme of Panama are going to use an adaptation of the comic book Gluglú, created and developed by Aqualia, to introduce the children of the district of Arraiján to the processes of the sewage treatment plant that is being built in that area. The animated story, which will be distributed among the children attending the next act of beginning of work, reveals the exciting journey that makes a nice drop of water from any home until its return to the natural environment.



Personas que trabajan para personas



En el Día Mundial del Agua, y cada día

En 2015 la ONU aprobó la Agenda 2030 sobre el Desarrollo Sostenible. Los Objetivos de Desarrollo Sostenible (ODS) definen las prioridades y buscan movilizar los esfuerzos en torno a un conjunto de objetivos y metas comunes. Los ODS unen a gobiernos, empresas y ciudadanos para poner fin a la pobreza y crear una vida digna y de oportunidades para todos, dentro de los límites del planeta.

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

En Aqualia, 8000 personas, aportando soluciones tecnológicas, especialización, experiencia y un servicio cercano contribuyen a la consecución de los ODS, **sin dejar a nadie atrás**.

Descubre más en
conexionesaqualia.com



2019 No dejar a nadie atrás



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