

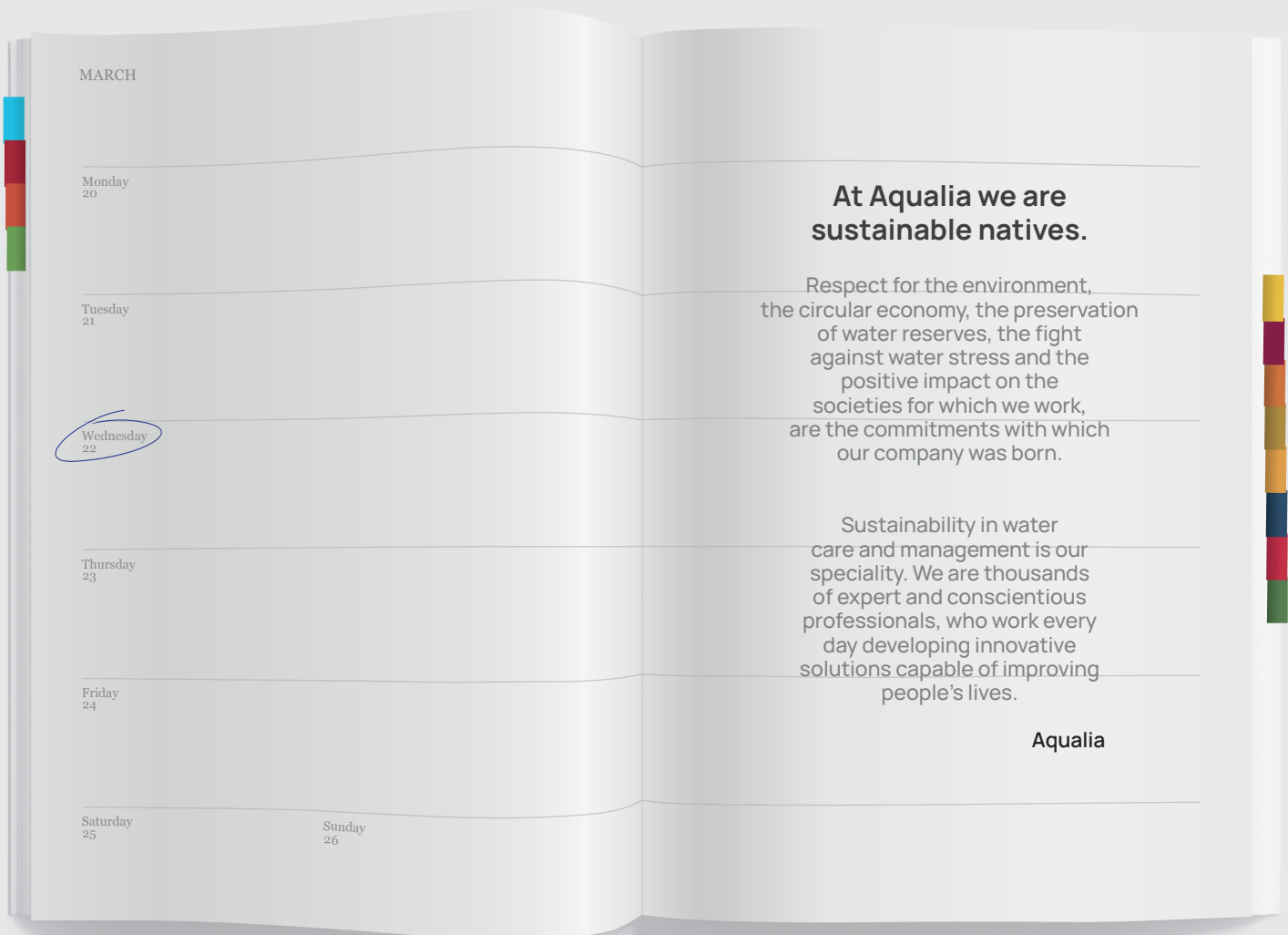
*We are* **FCC**

Nº 25

A 3D bar chart with four bars of increasing height from left to right. The bars are colored in shades of green and pink. The letters S, T, E, and M are placed on top of the bars respectively. The background is a gradient of pink and purple.

The **FCC Group**  
promotes  
**STEM careers**  
for women

# Our 2030 agenda began to be written in 1972



2023 Accelerating Change



First company in the sector to be certified by AENOR in the achievement of the SDGs



# SUMMARY



Group FCC



Business



Equality



People



Sustainability



Wellness



The Place



Communities



Innovation

“ Revenues stood at 7.7057 billion euro, 15.7% more than in 2021 ”



# FCC Group sees its EBITDA rise by 16.4% to 1.3114 billion euro in 2022

In the annual results for the 2022 financial year presented this morning by FCC Group, EBITDA (earnings before interest, taxes, depreciation and amortisation) stood out, having reached 1.3114 billion euro in 2022, an increase of 16.4% compared to the figure recorded for 2021. The positive performance across the Group's activities contributed to the rise in EBITDA, with increases in revenues and sustained and solid operating margins in the areas of Construction, Environment, Water and Real Estate, boosted by the various acquisitions carried out by the latter two.

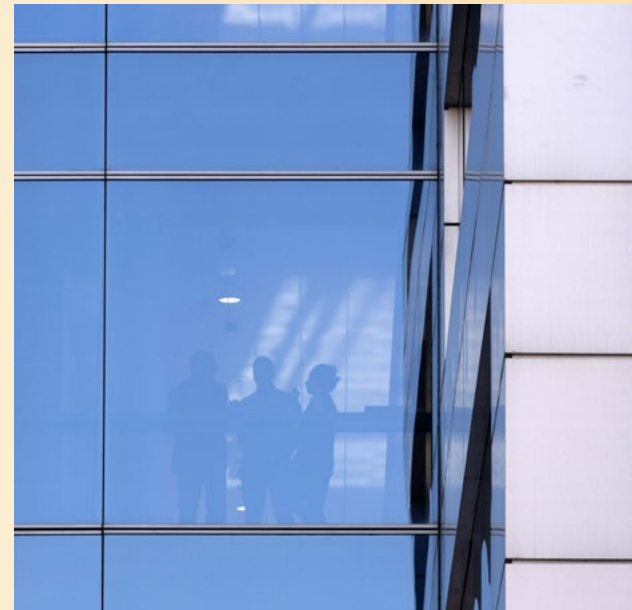
The increase in the Group's activity has translated into revenues standing at 7.7057 billion euro, a 15.7% more than in 2021. The result reflects the double-digit growth in activity experienced by all business areas, among which Real Estate stands out with a growth of 83.1% in activity compared to the previous year.

EBIT (earnings before interest and taxes) decreased by 23.9% in 2022, standing at 610.5 million euro, due to the value adjustment made to the commercial fund in the Cement business area, reflecting the impact of higher energy costs. Adjusted for the extraordinary effects recorded in other operating income in both years, EBIT increased by 17.4% in 2022. The same effect is reflected in net income.

On 31 December, the net debt stood at 3.1927 billion euro, registering a slight reduction compared to the end of 2021. It should be noted that this result was obtained even with the aforementioned major acquisitions.

Equity amounted to 4.939 billion euro, 11.2% higher than in 2021.

At the end of the year, the contracted backlog amounted to 40.2738 billion euro, a 33.4% more than in 2021. Of note was the 65.4% growth in the Construction business area, and of 32.2% in that of Water. In both business areas, the contracts obtained internationally stand out as representing more than 64% of the total.



“By the end of the year, the backlog had increased by 33.4% to 40.2738 billion euro”

## 2022 highlights

# The international orders for FCC Construction increase to over 2.7 billion euro

The following awarded contracts stand out:

**Saudi Arabia.** FCC is leading a consortium to build the first tunnels for high-speed and freight railways, as well as the 28-kilometre-long subway in the new city of Neom, for a total of 775.2 million euro.

**Norway.** FCC has been awarded the design and construction of the Sotra Link project as part of a consortium where the company holds a 35% stake. This project involves the construction of the RV 555 motorway, which will link the island of Sotra with the city of Bergen. This project forms part of the PPP Sotra Connection, the largest road infrastructure contract in Norway, with an overall budget of more than 1.23 billion euro, to be implemented as part of a public-private collaboration model. As at 31 December, the amount added to the backlog was 450.6 million euro.

**Romania.** Two railway contracts for a combined amount of 580 million euro: the design and construction of the rehabilitation of section 3 Poieni-Alesd and the modernisation of the Caransebes-Timișoara-Arad route.

**Mexico.** The business area signed an amendment to the construction contract for the Maya Train, adding a further 250 million euro to the value of the contract and adjusting the performance for the period.

### Canadá

- The consortium in which FCC Construction holds a 50% stake was chosen as the best bidder in the call for the construction of a suburban line in Toronto (RER-3). The contract includes the design, cons-

truction, operation and maintenance of a commuter rail network in the metropolitan area. The project has a total budget of more than 4 billion euro; the award and performance of the contract will be progressive, based on the agreement reached between the parties. The amount incorporated into the backlog by 31 December was 160 million euro.

- FCC was awarded (50%) of the Stations, Rail and Systems (SRS) contract for the Scarborough subway extension project, a municipality located in the eastern part of Toronto, for a total amount of around 1.8 billion euro. At 31 December, the amount incorporated into the backlog was 121 million euro.

**United States.** FCC Construction was awarded, as a member of a consortium, the Major Bridge P3 project in Pennsylvania, which consists of the design, construction, financing and maintenance of six bridges together with the connecting road and associated infrastructure. The total value of the contract is 1.5 billion euro. At the end of the year, 123.5 million euro had been incorporated into the backlog.

By the end of 2022, FCC Construction had increased its global backlog (65% year-on-year), nationally as well as internationally, exceeding a total of 4.7 billion euro.



Rehabilitation of railway sections in the Transylvania region, Romania.

## FCC Environment increases its presence in the US with more than 1 billion euro in contracts in waste collection and treatment

The subsidiary of FCC Environment providing integrated urban waste management and recycling services in the US has been awarded several contracts:

**Placer (California).** Renovation and operation of a municipal solid waste (MSW) treatment environmental complex in Placer County, involving a portfolio of 1.5 billion

**Hillsborough County (Florida).** Waste collection for the remaining fraction of the county's public schools for the next three years.

In December, a new acquisition was made in the North American market with the purchase of Houston Waste Solutions (HWS), one of the largest commercial municipal



Placer plant (California, USA).

dollars for a ten-year term and two possible five-year extensions. At 31 December, the registered backlog came to 595 million euro.

**Port Saint Lucie (Florida).** Contract for the residential collection of municipal wastes. The contract entails a backlog of more than 281 million euro for a seven-year term, with a possible extension of a further three years.

**Palm Coast and Lake County (Florida).** Award of the contract for the collection of MSW from these cities, for a combined amount of 146 million euro.

solid waste companies in the Houston metropolitan area. HWS also owns and operates a construction and demolition waste transfer centre in the city. The company serves more than 3,000 customers.

2022  
highlights



## FCC Environment remains a leader in the Spanish market, with new contracts worth more than 2.3 billion euro

In Spain, FCC Environment increased the size of its portfolio by more than 30%, as a result of several awards and renewals:

**Zaragoza.** Collection of urban solid waste (MSW) and street cleaning for more than 627 million euro for the next ten years.

**Madrid.** MSW contract for the west area of the city with revenues of 446 million euro.

**Girona.** Renewal of the city's urban sanitation contract for eight years and 107 million euro.

**Badajoz.** Eight-year extension of the contract for street cleaning and waste collection, amounting to 94 million euro.

**Mijas (Malaga).** Contract for street cleaning services and MSW, for ten years, worth 80 million euro.



Solid urban waste collection truck in Las Tablas, Madrid.

2022  
highlights

**Vigo.** Waste management and street cleaning for the next ten years, extendable to twelve, for an amount of 380 million euro.

**Salamanca.** Renewal of the contract for street cleaning and waste collection, including the renovation and operation of the light packaging sorting plant in Salamanca, with a backlog of 236 million euros for the next twelve years.

**Alicante.** Award of the street cleaning and MSW contract (in joint venture) for the next eight years for 196 million euro.

**Granollers (Barcelona).** Waste collection and street cleaning for ten years and 47 million euro.

**Tenerife.** The joint venture in which FCC Environment holds a 29% interest was awarded the contract for the management of the waste complex in Tenerife, for an amount of 107.7 million euro and with a contract term of fifteen years, extendable for a further four years.





## Aqualia is awarded new contracts in Saudi Arabia and expands its international end-to-end water cycle management platform

**Saudi Arabia.** Aqualia has been awarded two new management, operation and maintenance (MOM) contracts for the South Cluster and North Cluster in the months of February and September, respectively. The contracts (two of the six awarded for each of the clusters into which the country has been divided) are for seven years; the total population served is around eight million people and the combined associated backlog amounts to 196 million euro.

**Colombia.** Aqualia acquired 100% of the assets of Saur Colombia SAS, including six concessionary companies responsible for the production and distribution of drinking water and sewage in eleven towns across three regions on the northern coast of Colombia. Together, the various acquisitions undertaken in relation to the country's water cycle management amounted to 24 million euro.

**Georgia.** Aqualia acquired 80% of the water business area of Georgia Global Utilities JSC (GGU), the owner and operator of the water cycle infrastructures in Tbilisi, Mtskheta and Rustavi, Georgia, with an incorporated income backlog of 3.589 billion at year-end.

**2022**  
highlights



Abu Rawash wastewater treatment plant in Cairo (Egypt), one of the largest in the world.

## FCC Concessions acquires 100% of the Murcia tram for 48.5 million euro



Tramway in Murcia.

Last November, FCC Concessions completed the buy-out of the remaining 50% of Sociedad Concesionaria Tranvía de Murcia for 48.5 million euro. The company holds the management contract for the only tram line in the city for a period of 40 years, providing regular transport under a municipal concession. Its V-shaped structure is eighteen kilometres long and connects the northern area of Murcia (universities, department stores and residential areas) with the city centre.



## The Real Estate business area steps up its development potential acquiring a share in Metrovacesa

On 24 April, FCC Real Estate launched a partial takeover bid for 24% of the capital in Metrovacesa; following this transaction, and based on the results published by the stock market regulator on 21 June, this saw the company's share in Metrovacesa rise to an 11.47%.

Subsequently, last December, Metrovacesa distributed a flexible dividend, after which, according to the latest communication sent to the National Securities Market Commission (CNMV), FCC Real Estate owns 14.3% of the company.

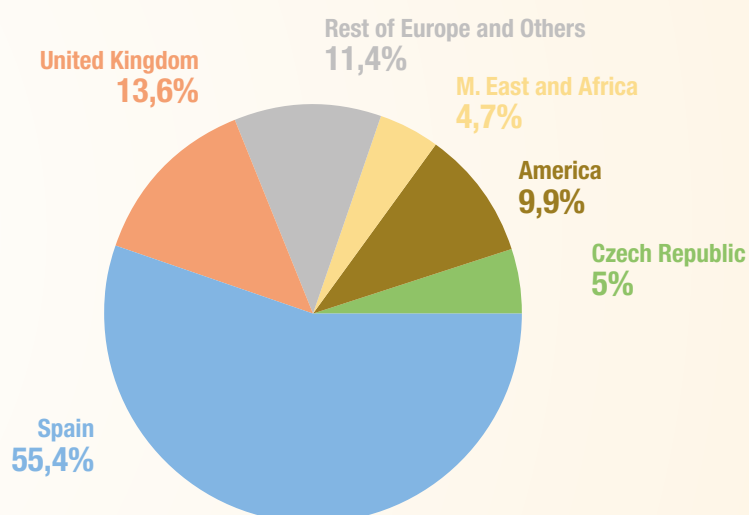


Residential building in Tres Cantos, Madrid.

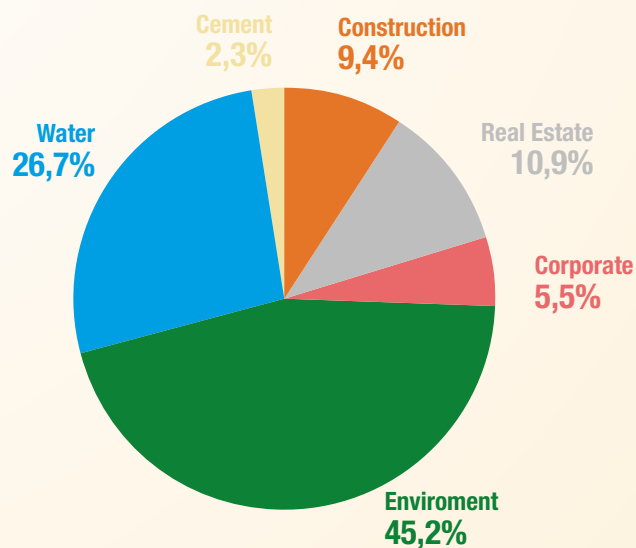
## KEY FIGURES

(Millions of euros)	Dic. 22	Dic. 21	Chg. (%)
Revenue	7.705,7	6.659,3	15,7%
Gross Operating Profit (EBITDA)	1.311,4	1.126,6	16,4%
<i>EBITDA Margin</i>	<i>17,0%</i>	<i>16,9%</i>	<i>0,1 p.p</i>
Net Operating Profit (EBIT)	610,5	802,2	-23,9%
<i>EBIT Margin</i>	<i>7,9%</i>	<i>12,0%</i>	<i>-4,1 p.p</i>
Income attributable to the parent company	315,2	580,1	-45,7%
Equity	4.939,0	4.440,7	11,2%
Net financial debt	3.192,7	3.225,7	-1,0%
Backlog	40.273,8	30.196,9	33,4%

## % EBITDA by Business Area

2022  
highlights

## % Revenue by geographical area



# FCC's corporate headquarters in Barcelona turns 100 years old,

Located at number 36 Balmes Street, the historic building is part of the city's architectural heritage.



In 1923, construction began in Barcelona on the building that would become the headquarters of Fomento de Obras y Construcciones (FOCSA), located at 36 Balmes Street, between Consell de Cent and Diputació, in the Eixample district.

The work was designed by the architect and then director of the company Jaime Torres i Grau (1879-1945), who was noted in his early years for his modernist works. From the 1920s onwards, after a trip to Italy to learn about classical architecture, his work adopted the baroque and classicist forms advocated by Noucentisme.

Built on a polygonal plot, it has five levels of elevation (ground floor and four storeys). Its layout is configured around three courtyards, one in the centre and two on the sides. It was built using stone from the quarries of Montjuic, the most commonly used natural stone in Barcelona and the surrounding area in the construction of the city's main buildings until the mid-1980s.

The façade is tripartite, with each floor representing a different composition. Most of the elements are of classical typology, although they also have a baroque character.

The cornice is crowned by four large statues by the sculptor Josep Tenas i Alives. Each of them carries different elements: a book, a column, flowers and fruit, representing, respectively, culture, architecture, art and agriculture.



Main entrance to the Balma building during its construction and today.

### Barcelona City Council Architecture Award

In 1925, the building was awarded first prize in the Annual Competition for Artistic Buildings, which the Barcelona City Council had been awarding to the best building constructed every year since 1899. This award is considered a precedent for the FAD Awards (Fomento de las Artes Decorativas) created in 1958. Today, this building is part of the Catalogue of the Architectural Heritage of Barcelona.



Award plaque on the Balma façade.



Compressed natural gas (CNG) side-loading refuse collection truck.



“The contract portfolio is 445 million euros for the next six years.”

# FCC renews the waste collection contract for Madrid's west zone

The Madrid City Council has awarded FCC Medio Ambiente the contract to collect solid urban waste in the western part of the city for the next six years. The estimated turnover is 445 million euro.

FCC has provided this service in different areas of the capital, uninterrupted since 1940. On this occasion, the lot assigned to FCC will serve more than one million inhabitants in the districts of Centro, Tetuán, Chamberí, Fuen-carral-El Pardo, Moncloa-Aravaca and Latina. In these six districts, more than 392 tonnes of urban waste is generated annually, including residual waste, bio-waste, packaging, paper and cardboard, glass and other waste.

## Sustained mobility

To carry out the service, a fleet of 209 new ECO or zero-emission vehicles is available. The collection trucks will be powered by compressed natural gas engines, which are much less polluting, except for two rear-loading collection trucks designed by FCC and the inspection vehicles, which will all be electric.

## New features of the service

The contract includes certain improvements in the service, such as an increase in the frequency of collection of the packaging fraction from four to seven services per week. It is also important to highlight the increase in the frequency of





Zero-emission refuse collection vehicle.

“ FCC will provide service to a population of more than one million inhabitants. ”

“ The fleet will have 209 ECO or zero-emission vehicles ”

collection of paper and cardboard containers, as well as the improvement in the areas with a door-to-door commercial cardboard service, and the increase in the number of containers for the collection of used clothing, from the current 50 to 500.

Although the fleet management and real-time monitoring system was already in place with the VISION platform, developed exclusively by FCC Medio Ambiente, this new contract includes the new Service Monitoring Centre (CSS), which will be connected to all networks/applications/social networking systems, VISION, and the council's real time warning and incident portals in order to revitalise, streamline and improve all services.

### Awareness campaigns

On the other hand, FCC Medio Ambiente will set up special campaigns to disseminate information and raise public awareness in order to support the communication actions to be carried out by the Madrid City Council. To this end, a team of environmental informers has been incorporated, made up of a coordinator and six educators.

## Trash in the early 20th century

Urban waste became a real problem for Madrid in the first third of the 20th century. Population growth and urban sprawl increased sanitation problems in large cities. The implementation and development of urban infrastructures and public services were necessary to avoid the collapse of large populations.

At that time, there was no waste collection service as we know it today. In certain areas, rubbish was removed by the cleaning service, which was also responsible for sweeping the streets, and the so-called rag-pickers who collected both rubbish and different items.

The street cleaning service and the collection and elimination of urban waste were the main factors that fa-

voured public hygiene and prevented the spread of infectious epidemics, the impact of which was greater in the most disadvantaged neighbourhoods of the cities.

According to sources<sup>1</sup>, the first public tender for waste treatment in the capital was launched by the city council in 1930. At the end of 1935, a tender was launched for the collection of household waste, which was unsuccessful and was called again in 1936. These measures were an attempt to do away with the work of the ragpickers, although in the midst of the Civil War licences were granted again and the ragpickers reappeared on the streets.

## More than 80 years serving Madrid



Presentation of Madrid's rubbish collection service in the 1960s.

It was in 1940 that FCC began to provide the waste collection service in the capital, which it has provided uninterruptedly to the present day, both in the city centre and in the outskirts.

It should be noted that the first glass recycling containers in Spain were installed in the Moratalaz neighbourhood in 1982. Subsequently, in 1998, selective waste collection was implemented, with the appearance of containers for plastics, cans, tetra-bricks (yellow container) and paper (blue container).

Another important milestone in the city was in 1995, with the extension of the household waste collection service to every day of the week. In addition, that same year, FCC used the first prototypes of alternative energy vehicles with liquefied petroleum gas (LPG). In 2003, Madrid

became the only city in the world to have an entire fleet of refuse collection trucks powered by compressed natural gas (CNG).

In 2006, the first fifteen electric trucks, developed by FCC, appeared in Madrid, allowing collection in an all-electric mode. In 2017, the fifth container was introduced in some of the city's districts for the removal of organic waste, in order to comply with the commitments made in Europe to reduce waste.

Currently, as part of the Madrid City Council's sustainability strategy, "Madrid 360" has been launched, with the aim of transforming the city into a more sustainable place from an environmental, social, territorial and economic point of view.

<sup>1</sup> Otero Carvajal, Luis Enrique; Rodríguez-Martín, Nuria (2019). "Infraestructuras urbanas y Modernidad. Madrid, nuevas necesidades y nuevos servicios de una metrópoli moderna, 1900-1936"; *Historia Contemporánea*, 59, 21-57. (<https://doi.org/10.1387/hc.18522>).

“Aqualia’s first major contract in France outside the Paris region”

# Aqualia grows in France beyond the Paris area, with two contracts in Brittany



Aqualia serves more than 90,000 inhabitants in the Ile-de-France region.

Aqualia has been awarded the contract for the management of drinking water for the next 10 years in the Forêt du Theil area in the department of Ille-et-Vilaine (Brittany/Bretagne region), with 24 municipalities and more than 40,000 inhabitants and a portfolio of 26 million euros. The service, managed to date by Veolia, is Aqualia France’s first major contract outside the Ile de France/Île de France region, the centre of the company’s operations to date.

Last summer, Aqualia had already gained access to the Brittany region with the award of the drinking water service for the towns of Merléac, Saint-Gilles-Vieux-Marché and Saint-Martin-des-Prés. This contract was the company’s first in France outside the Paris area and was a

clear sign of its consolidation in France.

## Contract in Ile de France

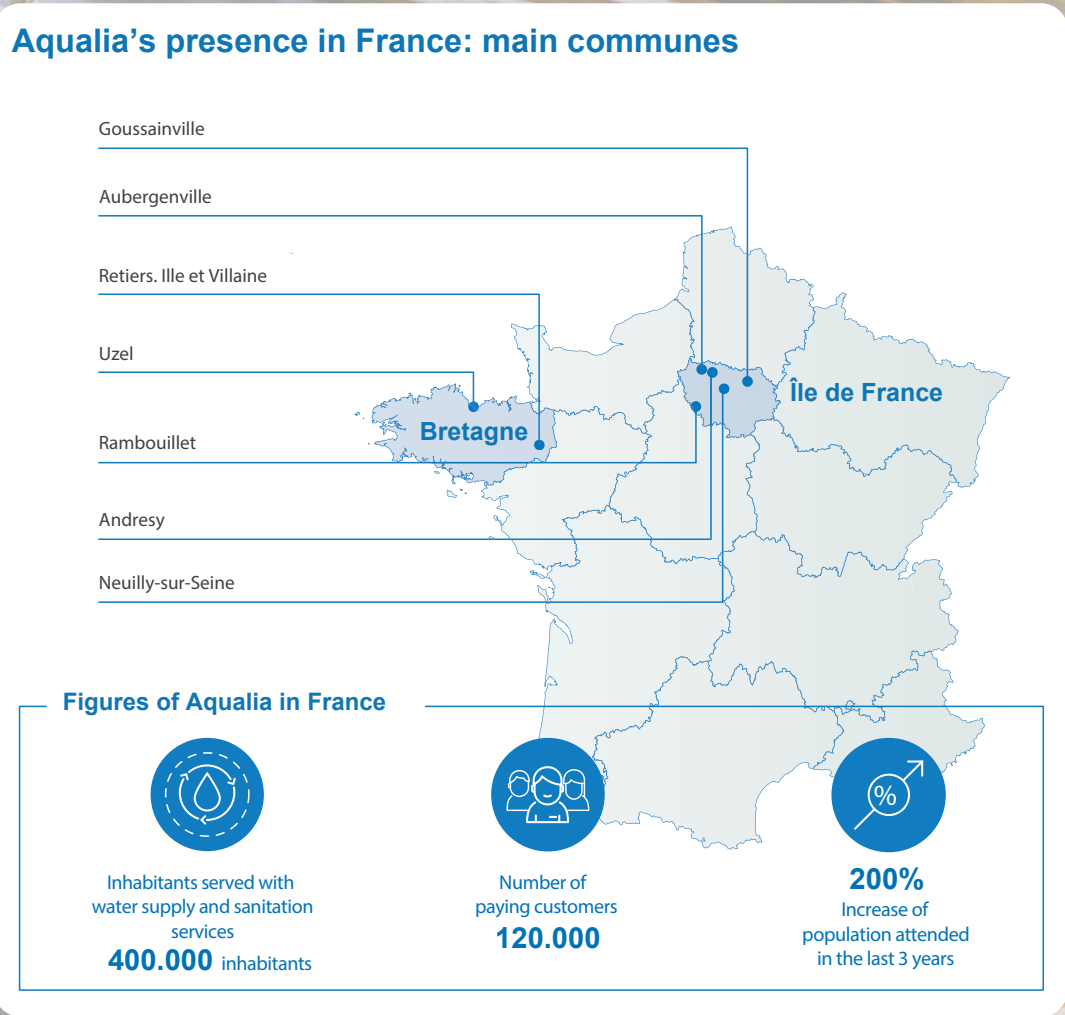
In June last year, the company SEFO -Société des Eaux de Fin d’Oise-, Aqualia’s French subsidiary, was awarded the management of the water supply in the municipalities of Rambouillet, Bonnelles and Bullion, and the sanitation of the municipalities in the area of Versailles, La Celle St. Cloud, Bois d’Arcy, Bièvres and Jouy en Josas, all belonging to the department of Yvelines, in the Paris region. Recently, the company was awarded the maintenance of public facilities in Enghien-les-Bains, also in Ile de France.

“Aqualia now serves more than 400,000 French citizens in 90 municipalities”

“ The company has increased its presence in France by 250% in just three years ”

# Aqualia in France

The new contracts won since the summer add up to some 120,000 new inhabitants served, meaning Aqualia now serves more than 400,000 French people in 90 municipalities. The company has increased its presence in France by 250% in just three years - since it entered the country in 2019 with the acquisition of the services company Services Publics et Industries Environnement (SPIE) - and brings the company closer to its consolidation as the fourth operator in the neighbouring country after the three main competitors (Veolia, Suez and Saur).



# FCC Construcción achieves a key milestone on the **Major Bridge P3 project in Pennsylvania** (EE.UU.)

FCC Construcción Inc. reached an agreement with S&B USA Construction to develop the design and construction of six bridges in Pennsylvania for Bridging Pennsylvania Partners ("BPP"), a consortium formed by Macquarie Capital and S&B USA Concessions.

BPP announced financial close, through Bridging Pennsylvania Developer I, LLC ("BPD1"), with the Pennsylvania Department of Transportation ("PennDOT") for the first package of its Major Bridge P3 programme, replacing six bridges of the nine total bridges included in the statewide programme.

The project consists of the design, construction, financing and maintenance of six critical bridges: I-81 Susquehanna, I-80 Nescopeck Creek, I-78 Lenhartsville, I-80 Lehigh River, I-80 Canoe Creek and I-80 North Fork, as well as the roadway connecting them and associated infrastructure.

Reaching this milestone allows the BPP consortium and its partners to

proceed with the design and construction of the first six bridges in the programme, with construction to begin in September 2023 and be completed between September 2027 and June 2028. The total value of the contract is €1.5 billion.

The programme includes a total of nine bridges, six to be completed in this first package and three additional bridges in a second package. Macquarie Capital and S&B USA Concessions will work collaboratively with PennDOT to develop the second package of the programme under a pre-development agreement, similar to the process the parties underwent for the first package.

These bridges are essential pieces of Pennsylvania's intrastate and interstate transportation system. The Major Bridge P3 programme is a great example of how the public and private sectors can truly partner to deliver critical infrastructure projects faster and more efficiently than any alternative procurement process. This procurement

will also ensure that these bridges remain in good condition for years to come, as it includes maintenance of the assets for 35 years after construction.

With this award, FCC Construcción continues to grow in the US market and maintains its commitment to the development of key infrastructure throughout the country. FCC Construcción's objective is to continue developing projects committed to the local communities of Pennsylvania.

BPP is represented by local firms throughout the consortium, including S&B USA Concessions, S&B USA Construction and its subsidiary, Joseph B. Fay, Wagman, H&K Group, Kokosing, Michael Baker International, Alfred Benesch and Borton-Lawson, all located or based in the state of Pennsylvania and with a track record of more than 20 years of successful project execution with PennDOT.

Nescopeck Bridge



Susquehanna Bridge



Canoe Creek Bridge



North Fork Bridge



Lehigh River Bridge



Lenhartsville Bridge

# Pennsylvania and its bridges

Pennsylvania has the third largest number of bridges in the United States. In particular, it has more than 25,400 state-owned bridges. The average age of bridges in the state system is 50 years.

The Pennsylvania Department of Transportation (PennDOT) preserves its commitment to bridge maintenance and improvement through maintenance activities that include painting, repair or replacement of deck joints, rigid deck overlays, and more. PennDOT performs approximately 18,000 inspections on state highway bridges each year.

## FCC Construcción and Samsung C&T CORPORATION **sign an alliance to work together on international infrastructure projects**



From left to right Pablo Colio, Managing Director of the FCC Group, with Oh Se-Chul, President/Co-CEO of Samsung C&T Corp.

FCC Construcción and Samsung C&T CORPORATION have signed a Memorandum of Understanding (MOU) to work together on international infrastructure projects.

Both companies are international leaders with extensive experience in the design and execution of large civil infrastructure projects. Samsung and FCC will cooperate to maximise efforts and ensure the development of the international infrastructure project.

The cooperation model will remain flexible to adapt to the specific requirements of the target projects and maximise the parties' strengths for global markets.

### **Samsung C&T**

Samsung C&T's Engineering and Construction Group has completed many global infrastructure projects for roads, tunnels, railways

and airports. The group aims to create solutions for a better world and achieve sustainable growth.

Samsung C&T's engineering and construction group has more than 40 years of engineering and construction experience operating worldwide. The group focuses on the following key areas: commercial and residential buildings, civil infrastructure and plant construction. Its flagship projects include Burj Khalifa, the world's tallest building, the ongoing Riyadh Metro project in Saudi Arabia and the UAE's 5,600 MW Barakah Nuclear Power Plant Project.

### **FCC Construction**

With more than 120 years of experience, the FCC Group's Construction area is among the top 30 in the world. It has a recognised international track record in the execution of infrastructure pro-

jects, which consolidates its leadership and its clear commitment to innovation and sustainability.

With a presence in more than 25 countries, FCC Construcción has consolidated its world leadership in the design, execution and management of infrastructures that contribute to the construction of a world to live in, where sustainability and innovation are placed at the service of society to promote well-being and development.

Its experience and technical solvency diversify a portfolio that includes all types of infrastructures and civil buildings, from transport infrastructures such as bridges, roads and railways, to unique buildings such as hospitals, universities and football stadiums.



# Join to:

[www.enpositivofcc.com](http://www.enpositivofcc.com)

## Diversity adds





Group photo of the event organised at the FCC Group's corporate headquarters to mark International Women's Day.



## FCC and its commitment to STEM women on **International Women's Day**

For yet another year FCC is commemorating International Women's Day, which is celebrated every year on 8 March, a date that has taken on a global dimension and has become a space for reflection on the aspects that still need to be improved and the progress made by and in favour of women.

The company held an event at FCC's corporate headquarters in Las Tablas, Madrid, opened by its chairwoman, Esther Alcocer Koplowitz, under the format of a round table discussion and the slogan "Talking to STEM women", with the aim of raising the profile of women with careers related to science, technology, engineering and mathematics. During her speech, the chairwoman thanked all those colleagues who work to reinforce and guarantee equal opportunities for women and men in the FCC Group for their work and efforts. She also stressed that "today, more than ever, research, technology and innovation are especially important to make FCC's business areas leaders in sustainable business, and for that, it is a luxury to be able to count on all of you".

The round table, moderated by journalist Helena Resano, was

made up of outstanding scientists and professional women from the FCC Group with a STEM profile, who shared their experiences in this field, with the intention of supporting and conveying to the rest of the company a closer vision of the importance of the presence of women in the world of science and research.

The participating scientists are Ángela Nieto, scientist and doctor in Biochemistry and Molecular Biology, who is currently a professor at the Institute of Neurosciences in Alicante, and recognised for her research into the embryonic processes involved in the development of various diseases, including cancer; Cristina Romera, chemist and doctor in Marine Sciences, who also researches on organic matter dissolved in the ocean and its interactions with microorganisms, and on the quantification of organic matter released by plastics and its effects on marine microbes; María Retuerto, chemist, scientist and researcher, awarded for her work on advanced systems to optimise the electrolysis of water, and the ideal technology to accumulate renewable energies in the form of green hydrogen. All of them have been recognised with numerous international awards.

“ Esther Alcocer Koplowitz: she thanked all those colleagues who work to reinforce and guarantee equal opportunities for women and men in the FCC Group for their work and efforts ”

The FCC Group was represented by STEM women from the different business areas. Participating on behalf of FCC Ámbito was María Jesús Kaifer, a graduate in Chemical Sciences; on behalf of Aqualia was Marta Casao, a graduate in Chemical Engineering; from the FCC Construcción area was Natalia Abánades, an agricultural technical engineer; and from the Cementos Portland Val-

and making the STEM women of the FCC Group even more visible, a photographic exhibition was held at the company's main headquarters, which will continue to be on display at other work centres throughout 2023.

#### Equality policies and plans

FCC has an equality and diversity policy through which it reaffirms



Round table moderated by Helena Resano, journalist, and the FCC Group's women scientists and STEM women.

derrivas Group was Nieves María Lacera, a mining engineer.

The event closed with a video tribute to all the STEM women in the FCC Group who put their knowledge at the service of the company, serving as a model and inspiration to all the people who make it up.

In addition, in parallel to this event, and with the aim of recognising

its commitment to the fundamental principles of equality, non-discrimination in the workplace, support for diversity in the company and respect for the heterogeneity of people. This work, on which the company has been working for years, has already yielded important results and values, thanks to which a fair, serious and profoundly diverse working atmosphere is taking root.

“Research, technology and innovation take on special importance to make FCC’s business areas leaders in sustainable business”

On the other hand, it should be noted that during this year FCC has continued with the work of negotiating the Equality Plans. The result of all these years of work are the twelve Equality Plans that the company has, in different business areas, and which are the result of permanent social dialogue and the common interest of all of us in achieving, reinforcing and guaranteeing equal treatment and opportunities between women and men in the company.



From left to right, Helena Resano, journalist and moderator of the event; María Jesús Kaifer, a graduate in Chemical Sciences from FCC Ámbito; Marta Casao, a graduate in Chemical Engineering from Aqualia; Natalia Abánades, an agricultural technical engineer from FCC Construcción; and María Lacera, a mining engineer from the Cementos Portland Valderrivas Group.



VIDEO INTERNATIONAL  
WOMEN'S DAY 2023

8 International  
Women's Day

Chairwoman's Speech  
Esther Alcocer Koplowitz



Día Internacional de la  
8Mujer



COMMITMENT TO EQUALITY

FCC Construcción launches its campaign on International Women's Day under the slogan "It's being a person", in which it fights against stereotypes.



For yet another year, Aqualia has joined the "Inspiring and real" initiative, to give visibility to women who, with their innovative talent, pave the way for future generations.



Under the slogan "At your side", FCC Environment celebrates International Women's Day.



## FCC's Corporate Services area signs its **1st Group Equality Plan**



From left to right, Elena Martínez, from UGT Fica; Rosa Santacruz, member of the FCC Works Committee; Sonia Serrano and Isidoro Valverde, signatories of the agreement on behalf of FCC Group HR management; Paloma de Benito and Pilar Sancho, also members of the Works Committee; and Natalia Galán, from CCOO Habitat.

FCC has signed the First Equality Plan for the FCC Group's Corporate Services area and for the companies Fomento de Construcciones y Contratas and FEDEMES with the Federation of Industry, Construction and Agriculture of the General Union of Workers (UGT FICA) and with the Habitat Workers' Commissions (CCOO del Habitat).

The agreement was signed by the Human Resources Department, and by the aforementioned trade unions, represented by Natalia Galán Armero (CCOO del Hábitat) and

Elena Martínez Vidal (UGT Fica). They were also accompanied by the legal representatives of the workers on the Works Committee.

This Plan, which is valid for 4 years, consists of a set of measures that will enable further progress to be made in the incorporation of women in positions in which they are under-represented, as well as in the implementation of actions favouring the promotion of women. All of this, without forgetting other equally relevant chapters, such as the insertion and employment protection of

women victims of gender violence, the reconciliation of personal and working life or the prevention of occupational hazards with a gender perspective.

The signing of this new equality plan consolidates and renews the commitment of all the signatory organisations to equal opportunities for women and men, which has been in place since 2008, when the first equality plan for FCC was signed.

**Día Internacional de la 8Mujer**

**"Estamos preparadas para escoger esa profesión que nos atraiga y hacer el mejor camino"**

Ariadna Alcáiz  
Enfermera del Trabajo  
Servicios Corporativos

**Día Internacional de la 8Mujer**

**"Una educación sin estereotipos es clave para el sector tecnológico"**

Ester Jiménez  
Arquitecta Técnica Obras Públicas  
Matinsa

**Día Internacional de la 8Mujer**

**"La ciencia y la tecnología no tienen género"**

Eva Montoya  
Ingeniera Geomática, Cartografía y Planificación  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Soy y seré quien yo quiera ser"**

Gloria Forcada  
Arquitecta e Ingeniera Obras Civiles  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Juntas descubrimos lo lejos que podemos llegar en el mundo STEM"**

Inés Pucyo  
Ingeniera Geomática, Cartografía y Planificación  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Practica igualdad consciente, cuestiona los roles que asumes"**

Izaskun Viñquez  
Ing. Organización Industrial  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Me gustaría aportar mi granito de arena en la búsqueda de un futuro mejor para nuestro planeta"**

Elena Rama  
Leda, Ciencias Ambientales  
Servicios Corporativos

**Día Internacional de la 8Mujer**

**"Estudiar una carrera STEM te permitirá poner en valor tus habilidades analíticas, innovadoras y creativas"**

Laura Davila  
Arquitecta e Urbanista  
FCC Inmobiliaria

**Día Internacional de la 8Mujer**

**"Debemos inspirar y motivar a las niñas para que alcancen su pleno potencial"**

Laura Hernández  
Ingeniera Industrial  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Investiga, pregunta, sé curiosa. Aprender es un arte y una ciencia"**

Laura Ordeñ  
Ingeniera Agrónoma  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Juntas descubrimos lo lejos que podemos llegar en el mundo STEM"**

Inés Pucyo  
Ingeniera Geomática, Cartografía y Planificación  
FCC Construcción

**Día Internacional de la 8Mujer**

**"La ingeniería me ha llevado a ser curiosa y crecer en mí, a no guiarme por estereotipos"**

Inés Quintana  
Ingeniera Industrial  
Servicios Corporativos

**Día Internacional de la 8Mujer**

**"La ingeniería busca soluciones prácticas y creativas, no depende del género"**

Ester Batanero  
Ingeniera de Minas  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Las niñas que son atraídas por la ciencia mañana serán mujeres sin barreras"**

Maria Teresa Vera  
Química  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"Referentes, inspiración y futuro. Porque de lo que no se habla, no existe"**

Marina Jiménez  
Ingeniera Geomática, Cartografía y Planificación  
Aqualia

**Día Internacional de la 8Mujer**

**"El cambio, su valor y el éxito dependen de uno mismo. Tú eres tu propio límite. Atrévete"**

Marta Casado  
Ingeniera Química  
Aqualia

**Día Internacional de la 8Mujer**

**"La diversidad en STEM mejora la aportación que podemos hacer a la sociedad"**

Marta González  
Ingeniera Geomática, Cartografía y Planificación  
Aqualia

**Día Internacional de la 8Mujer**

**"Es importante que las niñas con curiosidad por profesiones STEM vean que es posible"**

Marta Regal  
Ingeniera Industrial  
Aqualia

**Día Internacional de la 8Mujer**

**"Míra de superación y aprendizaje diario enfrentando grandes retos"**

Itzia Mancha  
Ingeniera de Minas  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Todo tiende a salir bien cuando trabajas en lo que te apasiona"**

Paqui Gómez  
Ingeniera Técnica  
Servicios Corporativos

**Día Internacional de la 8Mujer**

**"Ciencia es conocer el mundo y la ingeniería el vehículo para generar ideas que lo mejoren"**

Nuria Collado  
Ingeniera Geomática, Cartografía y Planificación  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Mi trabajo me permite ayudar a dejar un mundo más sostenible e igualitario"**

Andrea Rodríguez-Piñero  
Ingeniera Química  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Las carreras STEM suponen un futuro prometedor y es necesario aumentar la presencia femenina"**

Pilar Huerta  
Matemática  
Aqualia

**Día Internacional de la 8Mujer**

**"Con trabajo, esfuerzo y tesón puedes alcanzar el objetivo que te propongas"**

Guadalupe Bobadilla  
Química  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"La ingeniería enseña a resolver problemas, en la industria y en la vida"**

Silvia Fernández  
Ingeniera Química Industrial  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"La ciencia te ayuda a pensar, te hace libre y destruye barreras"**

Susana Pelegrín  
Química  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Solo aquellos que se arriesgan a ir demasiado lejos pueden descubrir lo lejos que pueden llegar"**

Yesica Montenegro  
Ingeniera Económica  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"¡Atrévete con la ciencia! Te permitirá encontrar respuesta a lo que ocurre a tu alrededor"**

Silvia Aullón  
Química  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"La satisfacción plena se alcanza en el camino a tus metas, y es un lugar perfecto para vivir"**

Beatriz Malagón  
Ingeniera de Minas  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"Es crucial aplicarse en impulsar el talento de las jóvenes hacia la ciencia"**

Nieves María Lacera  
Ingeniera de Minas  
Grupo Generación Portland Valdeirós

**Día Internacional de la 8Mujer**

**"La ciencia explica la realidad y es la base que nos va a permitir resolver los problemas actuales y futuros"**

Maria Jesús Kaifer  
Química  
FCC Ambiente

**Día Internacional de la 8Mujer**

**"La constancia, el esfuerzo y las ganas de aprender nos conducen a la innovación y a mantener la ilusión por lo que hacemos"**

Natalia Abanades  
Ingeniera Técnica Agrícola  
FCC Construcción

**Día Internacional de la 8Mujer**

**"Lo que deseas alcanzar comienza en tu mente, no te pongas límite"**

Ana Belén Paule  
Ingeniera Industrial  
FCC Medio Ambiente

**Día Internacional de la 8Mujer**

**"Todas nuestras ideas aportan, contribuyen y nos hacen ser más grandes y mejores como colectivo"**

Maria Ángeles Vicente  
Ingeniera Industrial  
Aqualia

**Día Internacional de la 8Mujer**

**"Hacen falta más personas que quieran plantar árboles, aun sabiendo que no serán ellas quienes disfruten de su sombra"**

Maria Megido  
Ingeniera de Medio Ambiente  
Leda, Ciencias Ambientales  
FCC Construcción

**Día Internacional de la 8Mujer**

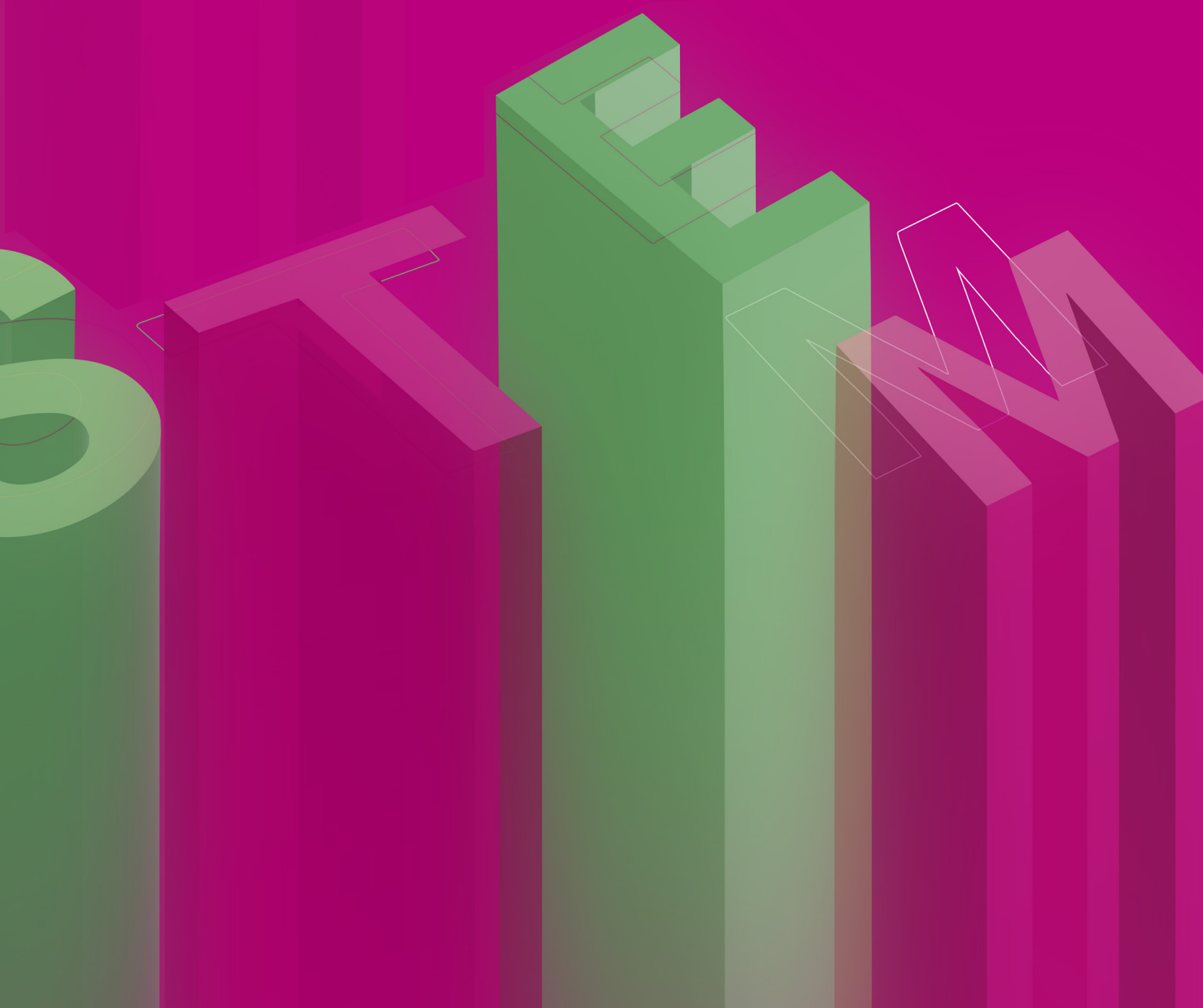
**"La perseverancia y la confianza en nosotros mismas son las claves para lograr nuestros objetivos"**

Patricia Zamora  
Dra. Química e Ingeniera Química  
Aqualia





# 8 International Women's Day



# Prefabricated Delta signs its I Equality Plan



Prefabricados Delta has signed its I Equality Plan, thus declaring the will to make effective the right to equal treatment and opportunities between women and men and the adoption of the necessary preventive and corrective measures so that our organization cannot produce discrimination for reasons of sex.

The company has committed to consolidating a culture of equality that promotes, among other things, the elimination of stereotypes in a sector represented mainly by men, as well as the application of the principle of gender equality in all actions that involve management and command over people. and especially at times such as hiring and promotion or professional development of people.

The implementation of the Equality Plan will mean a modernization of

the management system that will have a direct impact on the internal structure and will contribute to social progress aimed at achieving real and effective equality.

All this translates into favoring a corporate culture that permeates all areas of the company; ensure access to employment on equal terms between women and men; facilitate the access of women and men to all functions, professional groups, activities and departments of the Company, as well as work to achieve equality between women and men in positions where there is underrepresentation of women. Train and sensitize the entire workforce on equal treatment and opportunities, with specific levels depending on their impact; guarantee equal opportunities in terms of training and promotion as well as guarantee equal pay for jobs of equal value.

Facilitate the reconciliation and co-responsibility of work, personal and family life; ensure the use of inclusive language in internal and external company communications. Prevent sexual and gender-based harassment in the company; ensure specific working conditions for women victims of gender violence and ensure that Occupational Risk Prevention is designed and implemented taking into account the gender perspective.



Street cleaning team in the municipality of Massamagrell in Valencia.

## The Special Employment Centre FCC Equal Comunidad Valenciana begins the new street cleansing service in Massamagrell

Massamagrell Town Council has awarded the new street cleansing contract in full to the Special Employment Centre, FCC Equal from the Valencian Region, a subsidiary of FCC Medio Ambiente. This is a two-year contract with a possible extension for a further two years.

The new contract will triple the number of the workforce by incorporating 15 more people, which will improve the provision of the service. Staff will be doubled in the areas currently served, service hours will be extended and cleaning will be improved in other areas of the municipality.

FCC Equal CEE already has twelve contracts in the Valencian Region

in which it provides services entirely with its own personnel, such as cleaning and janitorial services in buildings, street cleaning and special cleaning in biology centres.

The company currently has a workforce of approximately 200 people, formed by three technical psychologists from the support unit, seven service managers, administration and management staff.

FCC Equal is a Special Employment Centre whose aim is the social and labour integration and training of people with disabilities, as well as the improvement of their health and safety conditions. The objective is not only to offer them job opportunities, but also to provide them with

skills, abilities and competencies for their professional development in the company.



# Laura Hernández Fernández

Head of Production of the Canary Islands branch office

She faces this new responsibility with great enthusiasm and motivation, and with the peace of mind and serenity that comes from knowing that she has the support of the company.

FCC Medio Ambiente has been established in the Canary Islands for more than 37 years and since then has been increasing its turnover year after year, with the provision of various service contracts such as the collection of solid urban waste, street cleaning, parks and gardens maintenance and waste treatment, among others.

FCC is currently the only service company in the Canary Islands that can boast of having a presence on all eight islands that make up the Canary Islands archipelago.

## Laura, what has your professional career been like?

I studied Industrial Engineering, specialising in Renewable Energies and the Environment, and almost as soon as I finished my degree I started working in the Canary Islands branch of FCC Medio Ambiente in January 2010.

I started as manager of a joint venture that was responsible for the management of an environmental complex on the island of Gran Canaria and little by little I took on the management of other contracts and more responsibilities within the delegation. In 2017 I was appointed head

of Operations and recently, in October 2022, head of Production.

## Apart from FCC, do you have any other role as an engineer outside the company's work environment?

Since 2017 I have been a member of the Board of Directors of the Association of Industrial Engineers of the Eastern Canary Islands and from June 2021 I will be acting as auditor.

Currently, I am also vice-president of the Association of Waste Managers of the Canary Islands (GESTO).

## Congratulations Laura, what does this challenge of being head of production for the Canary Islands delegation mean to you?

This challenge is a great opportunity for my professional development and I also consider it a recognition of the effort and dedication I have put into my work.



Professionally, it gives me great satisfaction that a Group like FCC values my skills and my commitment, and trusts me to hold the position of Production Manager of the Canary Islands Branch.

This position is a great responsibility that I face with great enthusiasm and motivation, and with the peace of mind and serenity that comes from knowing that I have the support of the company.

**What has been the most important thing for you in accepting this position?**

Accepting this responsibility is an important step in my professional career as well as in my personal growth. It allows me to have a global vision of all the activities we carry out and to broaden my knowledge at all levels. I am motivated by the important social component required to be in permanent contact with the different teams of the company, as well as with customers, suppliers and all kinds of institutions.

I feel very fortunate because I like my job and I enjoy the continuous learning that comes with meeting the new challenges that arise on a daily basis.

On the other hand, this position will allow me to continue to have an impact on the great teamwork that is carried out in this Delegation, which is key for a good performance and for the success in the development of the business.

This position entails a great responsibility as it means the opportunity to contribute to further consolidate the FCC Environment brand in the Canary Islands as the benchmark service company that it already is.

**What objectives and responsibilities do you assume in your new position?**

The Canary Islands office currently has 58 contracts, 2,936 employees,

a fleet of 757 vehicles, and by 2023 it expects a turnover of more than 97 million euros, all of which is distributed throughout the eight islands that make up the Canary Islands archipelago.

Having said that, our main objectives in the Canary Islands are to consolidate our leadership position, expand our business in the locations where we have the possibility of establishing ourselves and develop new opportunities and lines of business in the specific activity of the Environment.

One of my main responsibilities is to ensure that the execution of these

and continue to be a benchmark company in the provision of services.

I think it is essential that as a company we propose actions that go further, demonstrating our commitment to the environment and society; for example, by contributing to the fulfilment of the Sustainable Development Goals through FCC Environment's Sustainability Strategy 2050; a business development plan focused on Sustainability with four main lines of action: environmental, excellence, social and good governance. An explanatory video can be seen at the following link:



Cleaning trucks operating in the port of Las Palmas.

contracts is carried out in the most profitable, efficient and sustainable way possible. We must earn the trust of our clients by demonstrating commitment, service vocation, and being creative in seeking efficient and innovative solutions.

**What do you consider to be the basic elements for achieving the objectives you set out?**

We must be very competitive and professional in the performance of our work and in the management of contracts, but, at present, I believe that this is not enough if we want to strengthen our leadership position



In this regard, I would like to emphasise that, of the delegation's fleet of 757 vehicles, 77 are electric, 14 are hybrid and we have 58 recharging points. In addition, we have recently added to the fleet the first 100% electric sweeper-cleaner in the Canary Islands, for the street cleaning contract in San Miguel de Abona, on the island of Tenerife; and two hybrid side-loading collectors with an electric container collection system, for the solid urban



Laura Hernández with part of the street cleaning team in Las Palmas.

waste collection contract, on the island of Lanzarote.

Another aspect that I consider basic to achieving our objectives is the management of human resources. We are a service company, labour-intensive, where our main asset is our people.

It is extremely important that we are a healthy company, promoting the complete wellbeing of our workers on a physical, mental and social level. Health is not only the mere absence of physical illness, but also mental and environmental health; that there is a good working environment, that the worker comes to work motivated every day, and that there is a work-life balance.

I am concerned about absenteeism and also about “presence”; a worker is not productive just for the mere

fact of “being there”. A truly productive worker is professional and responsible, has an attitude and is motivated, and a good working environment helps a lot in all of this.

I also consider the company’s commitment to social sustainability to be essential, promoting the integration of people with disabilities and other groups at risk of exclusion or with integration difficulties.

### Why do you think the company has placed its trust in you for the position of Production Manager?

I think they have put their trust in me because of my work capacity, my commitment and my dedication to the company.

I always try to carry out my work to the best of my ability, paying a lot of

attention to detail and counting on the team.

### Have you encountered any obstacles throughout your career?

None that I have not been able to overcome with hard work and effort. In addition, I have been lucky enough to have wonderful colleagues who have supported and respected me, and from whom I have been able to learn a lot.

Throughout my time at FCC Medio Ambiente I have felt valued, an important part of the team and I have been able to carry out my duties without major obstacles.

This is still a sector where the majority of people are men at all levels (workers, collaborators, clients, suppliers, etc.), but little by little the presence of women is making headway and I am finding more and more women in different positions of responsibility.

Specifically, in the Canary Islands Delegation, women represent just over 36% of the total staff and 50% of the management, technical and administrative staff. In my day-to-day work, I regularly deal with many female colleagues both at Central Services level and in the Delegation, with contract managers, administrative staff and middle management.

In this regard, I would like to highlight the equality policies being implemented at FCC Medio Ambiente with actions such as the executive training programmes (in which I have had the pleasure of participating), or the principle of Equal Pay, which have been recognised with the Equality badge awarded by the Ministry of Equality.

Finally, as a curiosity, the youngest woman is 20 years old and the oldest is 74 years old, accumulating more than 40 years of seniority in the company and with no intention of retiring for the moment as she is in good health and very happy in her job.



Garden maintenance service workers in Las Palmas de Gran Canarias.

### What professional profiles are you responsible for?

The team is made up of a wide variety of profiles, and in my day-to-day work I deal with the heads of contracts, as well as with the different departments of the Delegation and Central Services.

The contract managers have a technical profile, mainly engineers, who organise and control the company's resources on the different islands, which is absolutely essential for the smooth running of the Delegation.

As I said, we have 58 contracts (with their corresponding clients) spread over eight islands, so it is essential to have a good organisational structure of highly reliable contract managers on each of them.

### What is your day-to-day work like?

The day-to-day is a continuous learning process. I plan the week's agenda and, I imagine that, as happens to all of us, every day there are issues that have to be resolved on the spot and that take you off schedule.

You have to be highly organised, differentiate between what is urgent and what is important and prioritise in order not to lose sight of your long-term goals and objectives.

### What is the main contract?

All the contracts are important, but if I had to highlight one in particular, I would say the Street Cleaning of Las Palmas de Gran Canaria because of its age and what it represents.



Street cleaning staff in Las Palmas de Gran Canarias.

In 2022, we have to celebrate the award of the contract for the Maintenance of the Gardens of Santa Cruz de Tenerife because it is the first service contract we have with the capital of the province of Tenerife.

## Presence in the islands

We are currently the only service company in the Canary Islands that can boast a presence on all eight islands that make up the Canary Islands archipelago.

Historically the archipelago was made up of seven islands until 2018 when La Graciosa was officially declared the eighth island. This "new" island is less than 30 square kilometres in size and is inhabited by less than 750 people. However, although it has achieved the political status of an island, this is more symbolic than practical, as administratively it still depends on the island of Lanzarote and is part of the municipality of Tegui.

The Autonomous Community is divided into two Provinces; Las Palmas which consists of four islands and Santa Cruz de Tenerife with another four. Although the total population of the region is just over two million people, the bulk of the population and economic activity is concentrated in the two capital islands of Gran Canaria and Tenerife.

This gives rise to a phenomenon which we refer to here as double insularity, since the majority of services are centralised in the two capital islands, resulting in a greater intensity of the extra costs of ultraperipherality in the non-capital islands than in the capital islands.

## Curiosities about the Canary Islands

The Autonomous Community does not have a single capital, but is shared between the cities of Las Palmas de Gran Canaria and Santa Cruz de Tenerife, making the Canary Islands the only community in Spain with two capitals.

The Canary Islands is the only Spanish territory considered to be an outermost region (RUP) in the Community area, which means that it has a different economic and fiscal regime from the

rest of Spain. For example, VAT is replaced by IGIC (Impuesto General Indirecto Canario), which has a maximum rate of 7%.

The islands are of volcanic origin and have a diversity and contrast of landscapes and microclimates that make each one a miniature continent.

To date, the bulk of the contracts in the Canary Islands have been in the province of Las Palmas and in the coming years we want to expand the business and try to consolidate our presence in the province of Santa Cruz de Tenerife.

**How often do you have to travel and how do you travel?**

I generally work on the island of Gran Canaria, although I do travel to the

different islands on a regular basis to deal directly with certain matters or for specific needs.

I mainly travel by plane, although there are some routes, such as Lanzarote-Fuerteventura or La Gomera-El Hierro, which do not have a direct flight, basically because of their proximity, so this route is done by boat.

## Day held at the FCC Medio Ambiente Canarias branch office to mark International Women's Day



On 8 March last, Women's Day was celebrated with the organisation of a special day in which a large group of female workers took part, accompanied by the head of production.

The day included a visit to the GENEUS end-of-life tyre treatment plant, where the participants learned first-hand about the facilities and the different treatment processes carried out there.

The day continued with a workshop given by the psychologist Elena Lodos, the aim of which was for the participants to learn about their vital rhythms and to learn how to optimise their physical, mental and emotional resources.

The aim of the day was to provide a space for reflection and to convey the FCC Group's commitment to achieving an egalitarian, diverse, equitable and sustainable future.



# Hazte Amigo Museo del Prado

[www.amigosmuseoprado.org/colectivos/fcc](http://www.amigosmuseoprado.org/colectivos/fcc)



Imagen: Diego Velázquez, *Las meninas*, 1656, Museo Nacional del Prado.



Fundación Amigos  
Museo del Prado

## Miguel Ángel Cano, FCC Medio Ambiente employee in Zaragoza, receives the “Marta Paricio Lozano” award

The Aragón - Soria - La Rioja branch of FCC Medio Ambiente is launching for the first time the “Marta Paricio Lozano” award, in honour of a fellow engineer who died last year.

The aim of this award is to recognise and highlight the heroic and exceptional behaviour of the members of the company, extolling the values of dedication, devotion and sacrifice that Marta represented.

The award went to Miguel Ángel Cano, an employee of the Zaragoza street cleaning service, in recognition of his courageous act. During his working day, Miguel Ángel witnessed



Presentation of the diploma of recognition to Miguel Ángel Cano by FCC Medio Ambiente.

how a young man who was standing on a bridge intended to take his own life by plunging into the void. At that moment, without thinking twice, the worker stopped his truck to call the police, and immediately approached

the young man and grabbed him tightly, thus saving him from certain death.

## FCC Construcción and the Dr. Campos Castelló Association collaborate to promote the independent lives of people with intellectual disabilities

Asociación

DR. JAIME  
CAMPOS-CASTELLÓ



FCC Construcción and the Dr. Campos Castelló Association are working together to promote independent living for people with intellectual disabilities. FCC Construcción has joined forces with companies such as Seur, Canon, Mapfre, O2 Telefonica, Marco Aldany, Galp, Securitas Direct to support so many supervised flats for permanent stay, temporary training homes or training in the family home. At the same time, they push the development of the offices of independent life where the person with intellectual disability is encouraged to look for a housing in community, within certain characteristics.

The association Dr. Campos Castelló believes in the community integration of the people with intellectual disabilities, respecting the individuality of the people. They support the feeling of group betting for the strengthening of affective bonds between residents. They implement an education by values, allowing the facilitator staff to favour at all times the cultivation of values such as friendship, solidarity, companionship, respect, spontaneity.

It is an association with a disruptive and differential model in which no financial support is requested for the development of its actions and activities.

FCC Construcción joins this initiative, thus responding to the social sensi-

ty that the company has for different social groups. FCC Construcción is a pioneer in the implementation of egalitarian, inclusive and non-discriminatory policies. This collaboration reinforces our social commitment, thus supporting the “independent life” of people with intellectual or developmental disabilities, involving us in a 360° social inclusion.



MORE INFORMATION

Existe un  
espacio donde  
la diversidad  
empieza por  
you\_



**you\_***diversity*



# The origins of the concept of **sustainability**

Today we know that we live in an overpopulated world, and that the available capacities of the biosphere are insufficient to cope with the needs... But it has taken us too long to realise this.

The concept of sustainability as we know it today dates back barely three decades. It was Gro Harlem Brundtland, former prime minister of Norway, who put climate change and sustainable development on the global political agenda. In 1987, the World Commission on Environment and Development published a ground-breaking report entitled "Our Common Future", also known as the Brundtland report.

This report would lay the foundation for the summits, conventions and protocols of the next 30 years. From 1987 to the present day, we are still trying to solve the same problems, which are becoming more and more serious and obvious.

The whole world must come together to protect the planet, human rights and the future of generations to come.

The Rio Declaration of 1992 and the Lisbon Summit of 2000 were followed by two major milestones in our common commitment to sustainability: the Paris Agreement of 2015 and the 2030 Agenda.

The Paris Agreement was the first universal and legally binding agreement aimed at avoiding the consequences of climate change by limiting

greenhouse gas emissions into the atmosphere, with the objective of keeping the temperature increase below 2 degrees Celsius, and 1.5 degrees Celsius compared to pre-industrial levels.

For its part, the 2030 Agenda presented by the United Nations established 17 Sustainable Development Goals that were adopted by all Member States. These goals include 169 targets that the 193 signatory countries are committed to meeting in order to end poverty, protect the planet and ensure that all its inhabitants can live in a dignified and sustainable manner. A common and universal commitment on the part of governments, companies and third sector entities to achieve by 2030.

## ESG criteria

After these historical milestones, we can summarise these concepts in the current ESG criteria, i.e. environmental, social and good governance. They are better known by their acronym ESG (Environmental, Social and Governance).

These criteria help us to integrate sustainable management into an organisation and to transparently measure its contribution to sustainable development.

21º

CONCURSO DIGITAL  
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DESCUBRE

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# y ODS6

CATALA

## aventura Pandilla Sostenible



# Five tips to increase your **online security**



Use strong passwords and multi-factor authentication (MFA) whenever possible.

Make sure you have a strong and unique password on your computer. Preferably never reuse passwords and try to change them regularly.



Always use antivirus and endpoint security software.

Run regular system scans with a security suite that offers anti-virus, anti-phishing, secure browsing, host-based intrusion prevention and make sure your computer supports basic firewall capabilities.



Use the internet with secure connections

Always try to use networks with passwords and avoid using public networks to prevent intrusion.



Learn how to spot phishing

Phishing is the most common attack in cyberspace; if you receive promotional messages that include links or attachments, do not click or download content. Always check the reputation of online sellers and that the site is official.



Never send personal content through unreliable channels

Whenever you are asked for personal information be careful and never send information through unsecured means such as chat rooms, WhatsApp, email or cloud links. If you are not sure who is on the other end, remember that all information/images passed through these channels become public domain.



## For the tenth consecutive year, FCC Construcción obtains the “Cálculo y Reduzco” seal from the Registry of carbon footprint, compensation and carbon dioxide absorption projects



FCC Construcción has once again renewed one more year and has been carrying out since 2012, its registration in the Registry of carbon footprint, compensation and carbon dioxide absorption projects of the Ministry for the Ecological Transition and the Demographic Challenge, for which presents the 2021-2025 Emissions Reduction Plan, thus obtaining the “Cálculo y Reduzco” seal.

FCC Construcción was the first construction company in Spain to

carry out this transparency exercise, thus repeating its participation since the Registry was established.

The calculated financial year has been 2021, the year in which, after achieving the objective in 2020, 100% of the activity has been verified, under the ISO 14064-1 Standard, which corresponds to the verification of GHG emissions. produced in 22 countries. This achievement represents the culmination of a path begun in 2010, when FCC Construcción began to integrate the concept of climate change into its organization with the design and implementation of a novel protocol for the quantification of Greenhouse Gas emissions under construction, becoming the first Spanish company in the sector to submit its emissions to external verification by AENOR.

In addition, for the calculation of emissions for the year 2021, the company has substantially expanded scope 3, expanding the calculations of units of subcontracted works, as well as using for the calculation factors that cover the complete life cycle upstream, of the materials. Despite this, total emissions have been reduced by 4% compared to 2020, thanks to the efforts made by the works, as well as by the sector, since it is important that the entire value chain is directed towards the same emissions reduction target if we want to continue seeing positive results such as the one achieved by FCC Construcción in 2021.



[MORE INFORMATION](#)

## FCC Medio Ambiente obtains the 2021 ‘Compenso’ seal granted by the Spanish Office for Climate Change

FCC Medio Ambiente continues to fulfil its commitment to reducing the carbon footprint established in its 2050 Sustainability Strategy and has obtained the “Compenso” (“I compensate”) seal for 2021 and second consecutive year. This third scope completes the “Calculo-Reduzco” (“I calculate – I reduce”) seal, obtained in this same year and in previous terms, granted by the Spanish Office for Climate Change. This seal is part of the “Carbon footprint registration, offsetting and CO<sub>2</sub> absorption projects” process established by the Ministry for Ecological Transition and Demographic Challenge, a process in which FCC Medio Ambiente has been participating without interruption since 2013.

The ‘Calculo-Reduzco-Compenso’ seal is awarded to organisations that calculate and register their Carbon Footprint for a minimum of four years, have a plan for reducing their emissions, make effective their commitment to reduction and take part in an absorption project. This year, FCC Medio Ambiente has achieved the ‘Calculate, Reduce and Compensate’ seal for scopes 1+2 and 3, which include emissions associated with fuel consumption, management processes, waste recovery and disposal, and from the purchase of network electricity. On this occasion for this scope, the company has managed to reduce 2.94% of the average emission intensity in the 2019-2021 three-year period. To achieve this reduction, FCC Medio Ambiente

is working on key aspects in the fight against climate change such as: the sustainability of its vehicle fleet, improvements in waste treatment facilities, the generation of renewable energy and the purchase of energy with guarantee of origin.



[MORE INFORMATION](#)

# FCC GROUP SUSTAINABILITY REPORT

# 2022

The FCC Group has published its 2022 Sustainability Report, approved by the Board of Directors at its meeting on 23 February 2023, including FCC's Statement of Non-Financial Information and the results of its Environmental Taxonomy on the Group's eligible and aligned activities with the environmental objectives of the European Union.

The report, verified by AENOR and drawn up in accordance with the international standards of the Global Reporting Initiative (GRI), also includes the 2022 materiality analysis, which has made it possible to identify the most relevant and outstanding SDGs (environmental, social and governance) issues for the Group.

The FCC Sustainability Report, which begins with a welcome letter from the CEO, Pablo Colio, mainly reports on the development of the Group's management and its business areas, as well as the main figures and actions during the 2022 financial year.

The sustainability performance of the FCC Group is supervised by the Board of Directors and its Audit and Control Committee, as established in the Sustainability Policy, which integrates SDG criteria into the Group's operations and its areas.

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## Carefor the environment

The report highlights FCC's contribution to caring for the environment, explaining the main impacts of its management and how it has increased the economic resources dedicated to preventing environmental risks, as well as the measures it has adopted to improve the challenge of climate change, move towards a circular economy, promote responsible water management and protect biodiversity.

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## Labour issues

With regard to performance in labour matters, the report shows how work continues on the ongoing improvement of talent management, diversity, equality, health and welfare. The evolution of the labour indicators highlighted in the report responds to an increase in the workforce, with more than 64,000 people working in the FCC Group.

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## **Commitment** to progress and well-being

The report also reflects the commitment to the progress and welfare of communities, promoting socio-economic development and materialising actions through education and solidarity initiatives, with an increase in social contributions to non-profit organisations, foundations, sponsorships and sectoral associations.

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## **Good** governance

With regard to good governance, the report shows how the FCC Group is based on a consolidated system and a robust compliance model, which seeks to ensure the integrity and exemplary behaviour of the company, making progress in the responsible management of risks, data protection and privacy.

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## **Dialogue** and communication

The report demonstrates that dialogue and communication with stakeholders is a priority for FCC, considering the entire value chain and including the management of the customer experience and the supply chain. This relationship is based on ethics, efficiency and transparency and the relationship with suppliers and contractors is carried out through the responsible purchasing procedures implemented by the Group.



[Read FCC's 2022 Sustainability Report](#)

# Sustainable habits for the care of the the environment

The latest study carried out by the United Nations in 2022 "Interim State of the World's Climate" warns that the last eight years have been the hottest on record so far. Below, we provide a series of sustainable habits to take care of the planet.



## Apply the 3Rs rule

Reduce, reuse and recycle are three simple and easy actions to put into practice. It is important to reduce the waste we generate as much as possible and to reuse whenever possible, as most materials can be given a longer life. Recycling is the last action to take, when the previous two have already been put into practice. It is important to separate each waste product in the different containers in order to favour its reuse, thus reducing the impact on the environment.



## Responsible use of wáter

Water is a scarce and valuable resource, the simplest strategy is not to leave the tap running unnecessarily, try to keep showers shorter, repair leaks or drips in taps and toilets are everyday actions to save water. Nowadays, we can use devices and computer applications to improve our consumption, as well as installing more efficient equipment such as taps, toilets and household appliances.



## Buy and consume responsibly

Consume less to reduce the impact that production and waste have on our planet. It is also important to choose companies that use resources responsibly and are committed to reducing gas emissions and waste. It is also possible to reduce our carbon footprint on the environment by buying local or certified organic products.



## Control energy consumption

Make the most of natural light and, if possible, use LED bulbs. Do not forget to turn off lights when they are not necessary. Reduce the use of heating and air conditioning, insulating doors and windows to avoid heat or cold loss. Use energy-efficient appliances and use the dishwasher and washing machine at full load. The use of renewable energies or self-consumption are other alternatives that also reduce costs.



## Sustainable mobility

Opting for public transport or electric vehicles for longer journeys, walking or cycling are the healthiest options, with benefits for our health and fitness, and also for the environment. If no other alternative is available and it is necessary to use the car, try to share journeys with other people. In this way, we can reduce greenhouse gas and CO<sub>2</sub> emissions.



From left to right, Daniel Basante, manager of Clínica Asturias, and Ernesto Barrio, director of the Northwest Environment delegation.

## FCC Medio Ambiente **signs a collaboration** agreement with **Clínica Asturias** following the **SIGOS** model

The northwest branch of FCC Medio Ambiente, in collaboration with its management, medical services and the Human Resources Department, has signed a collaboration agreement with the Asturias Clinic as part of the promotion of initiatives in the SIGOS healthy company programme, developed by this branch under the name Healthy Lifestyle (2022-2023), whose objectives are to improve the health, well-being and safety of the people in the organisation.

With this agreement, employees and their families will benefit from discounts, depending on the assistance they may require, in emergency medical consultations, check-ups, specialists, diagnostic tests or rehabilitation sessions, among others.

### **SIGOS**

SIGOS is a pioneering healthy organisation management system for companies in the sector, certified by AENOR, which FCC Medio Ambiente implemented in 2013. This model is based on four fundamental pillars defined by the World Health Organisation (WHO) and proposes, among its main actions, the

identification and assessment of risks and the implementation of programmes in each of these blocks:

- Health and Safety of people in the organisation.
- Lifestyle.
- Culture focused on the well-being of the organisation.
- Commitment to the community.

SIGOS integrates perfectly with the 2030 Agenda of the Sustainable Development Goals (SDGs), as all actions, policies and programmes are aligned with the goals of SDG 3: "Ensuring healthy lives and promoting well-being for all ages is essential for sustainable development".

Moreover, the model is aligned with the principles of healthy organisations as defined by the National Institute for Safety and Health at Work (INSST), which advocates that we aim to be 4S companies: Safe, Healthy, Sustainable and Supportive (and Inclusive).

## FCC Environment achieves five star grading in **British Safety Council Occupational Health and Safety Audit**

FCC Environment has successfully completed a best practice Five Star Occupational Health and Safety Audit conducted by British Safety Council demonstrating its commitment towards the continual improvement of their health and safety management systems and associated arrangements.

As one of the UK's leading recycling and waste management businesses, the company underwent a comprehensive, quantified and robust evaluation of its occupational health and safety policies, processes and practices. The audit process included do-

documentation review, interviews with senior management, employees and other key stakeholders, together with sampling of operational activities.

The audit measured performance against key health and safety management best practice indicators and a detailed review of over sixty component elements.

FCC Environment was awarded a five-star rating following the audit which is reflective of a best practice organisation.



From left to right, the team at the FCC plant in Eastcroft, which was one of the keys to this fantastic result: Ashley Corke, Vicky Traves, Lisa Peck, Jason Walton and Thomas Swingle.



# Safety as a value in **Cementos Portland Valderrivas Group**



Awareness-raising workshops held in different workplaces.

Cementos Portland Valderrivas Group has launched an awareness campaign aimed at its workers, focused on raising awareness of the most important aspects of the company's Risk Map.

Under the title "Safety is non-negotiable", the Health and Safety Management has programmed for 2023 a theoretical-practical training divided into four phases which will address safety aspects related to:

- Forklift driving
- Consignment of equipment
- Confined spaces
- Working at heights

With this new initiative, the Group wants to strengthen the preventive culture in the organisation and continue to promote safer behaviour and habits among its employees.

The "Safety is non-negotiable" campaign will reach all employees at work

centres in Spain, Tunisia and the United Kingdom with the ultimate aim of encouraging debate and opening up a forum for discussion about common day-to-day activities at work which, because they are normalised, have trivialised their risk.



Cementos Alfa factory in Mataporquera, Cantabria.





# SAFETY IS NON-NEGOTIABLE

## AWARENESS PROGRAM

These **8 rules** are vital to be able to guarantee your safety, start them up and work safely



## Do we share improvements?

We will hold 4 workshops throughout the year to discuss safety issues that affect our health and avoid accidents.

These are the topics we will work on.



I **identify** hazards and assess them before starting any activity



I **always use** my personal protective equipment



I **do not work** with equipment for which I have not been trained and authorized



I **apply** the isolation procedures and energy blockades before intervening in any equipment



I **get involved** and act responsibly to prevent unsafe acts from occurring. In security there are no hierarchies



I **never work** under the influence of alcohol or drugs



I **don't use** my hands or my feet as tools



I **report** all incidents in my workplace



**DRIVING FORKLIFTS**



**CONSIGNMENT OF EQUIPMENT**



**CONFINED SPACES**



**WORK AT HEIGHT**

# Bosque Metropolitano,

## the forest ring surrounding Madrid

The Metropolitan Forest will be a forest ring of 35,000 hectares surrounding the entire city of Madrid. A green infrastructure, with a total of 1,520,807 trees, which will extend over 75 kilometres. The project is part of “Madrid Isla de Color”, an initiative to promote green infrastructure in the city through urban planning.

It will be made up of native species representative of our natural heritage, which are adapted to the conditions of our municipality and the expected climate change scenarios, such as holm oaks, poplars, wild olive trees, strawberry trees, stone and Aleppo pines, carob trees, willows, ash trees, elms and other tree species, accompanied by broom, hawthorns, oleanders, rosemary, thyme, junipers, rockroses and other shrubs

and bushes. The woodlands will be accompanied by paths for walking and sports, with pedestrian and cycle routes, and other facilities that contribute to their use, recreation and enjoyment by the public.

In order to guarantee its continuity, eco-pipelines and green bridges are also envisaged to bridge the main transport infrastructures at certain points and contribute to the ecological and functional continuity of the corridor and the parts that make it up.

The “Metropolitan Forest” project seeks to generate environmental and social benefits that will increase the quality of life of all citizens. This green ring will contribute to the reduction of CO<sub>2</sub> emissions, fight against climate change, and achieve ecological and landscape restoration of degraded areas.

FCC Construcción and its participation in the project

FCC Construcción is currently carrying out work in Valdegrulla and in the Valdesenderín site in the Fuencajaral-El Pardo district through contracts with the Madrid City Council.



Other projects developed by FCC Construcción in the Metropolitan Forest and renaturalisation on a local scale, through contracts with Madrid City Council:

- Metropolitan Forest Project kilometre 41- Avenida del Talgo. Development of two kilometres of accessible walkway through native vegetation, connecting the commercial area of Pozuelo with the local train station.
- Bosque de los Abrazos Perdidos Project. Almost two kilometres of accessible walkways through native vegetation.
- Actions in the area of renaturalisation.
- Arroyo del Fresno Project. Network of paths and trails through gallery forest connecting different playgrounds, exercise areas and observation of the riverbed. Widening of pavements in Calle Arroyo del Monte.
- Eternal Smile Child Gardens Project. Parallel paths at two heights, giving continuity to the green strip promenades to the southwest and northeast of the area.
- Slope stabilisation and conditioning project for plot 4.3 UZI.0.07 Montecarmelo. The denaturalised slope is crowned by a later action, which connects the northern part of the Montecarmelo neighbourhood with the Renfe station.
- Old Elm Garden Project. Connects the footbridge over the M-40 at Calle Vía de los Poblados with Calle Tomás Redondo. Improved access to the educational centre.
- Lili Álvarez Project. 455 metres of accessible cobblestone walkway.

## Butterfly Oasis in Arroyo Fresno, Madrid



FCC Construcción has developed this project in conjunction with the city council and the Spanish Association for the Protection of Butterflies and their Environment (ZERYNTHIA), creating a favourable space for butterflies and other pollinators.

Its main objectives are to raise awareness of the need to conserve this type of insect and to increase the permeability of urban environments for biodiversity.

Eleven wooden micro-greenhouses, with wild and native seeds, were distributed in the streets of Madrid to raise awareness of the Metropolitan Forest.



FCC Construcción's wooden micro-greenhouse to raise awareness of the Metropolitan Forest.

The delegate of the Urban Development Area of the Community of Madrid, Mariano Fuentes, presented a campaign last January to publicise the Metropolitan Forest to the public. The campaign consisted of 11 pieces of wood filled with fertile soil with native and wild seeds, which exemplify the work of treating the soil to house nature that is part of the Metropolitan Forest.

This action seeks to transmit the main values of the project, such as sustainability, care for the environment, ecological restoration and the promotion of the well-being of the population.



## Natalia Abánades Velasco

Project Manager of the Bosque Metropolitano project

### What does the Bosque Metropolitano project mean for FCC?

The Bosque Metropolitano initiative is a revolution in the way we understand green areas for the city of Madrid. It is a clear commitment to improving sustainability in the way we live and develop. It is committed to promoting the recognition of what is known as 'green infrastructure', whose benefits for citizens are not merely functional. It has been demonstrated that the best way to improve the habitability of cities is through the integration of nature into our way of living. The project is full of expectations that have to do with innovation, sustainability, optimisation of resources, integration and continuous improvement. And it is precisely these values that fit closely with FCC's philosophy.

## INTERVIEW

### In your opinion, how do you feel about participating in this sustainable project for Madrid?

I am proud that FCC has counted on me to lead our participation. It is an unbeatable opportunity to be able to put into practice all the innovations in terms of landscaping and public use, from a truly agroforestry point of view. The design and the intervention are at the service of the vegetation and not the other way round. And, on the other hand, the use of degraded spaces is recovered, giving them a new life and transforming them into green areas for everyone.

### What is FCC's role in the project?

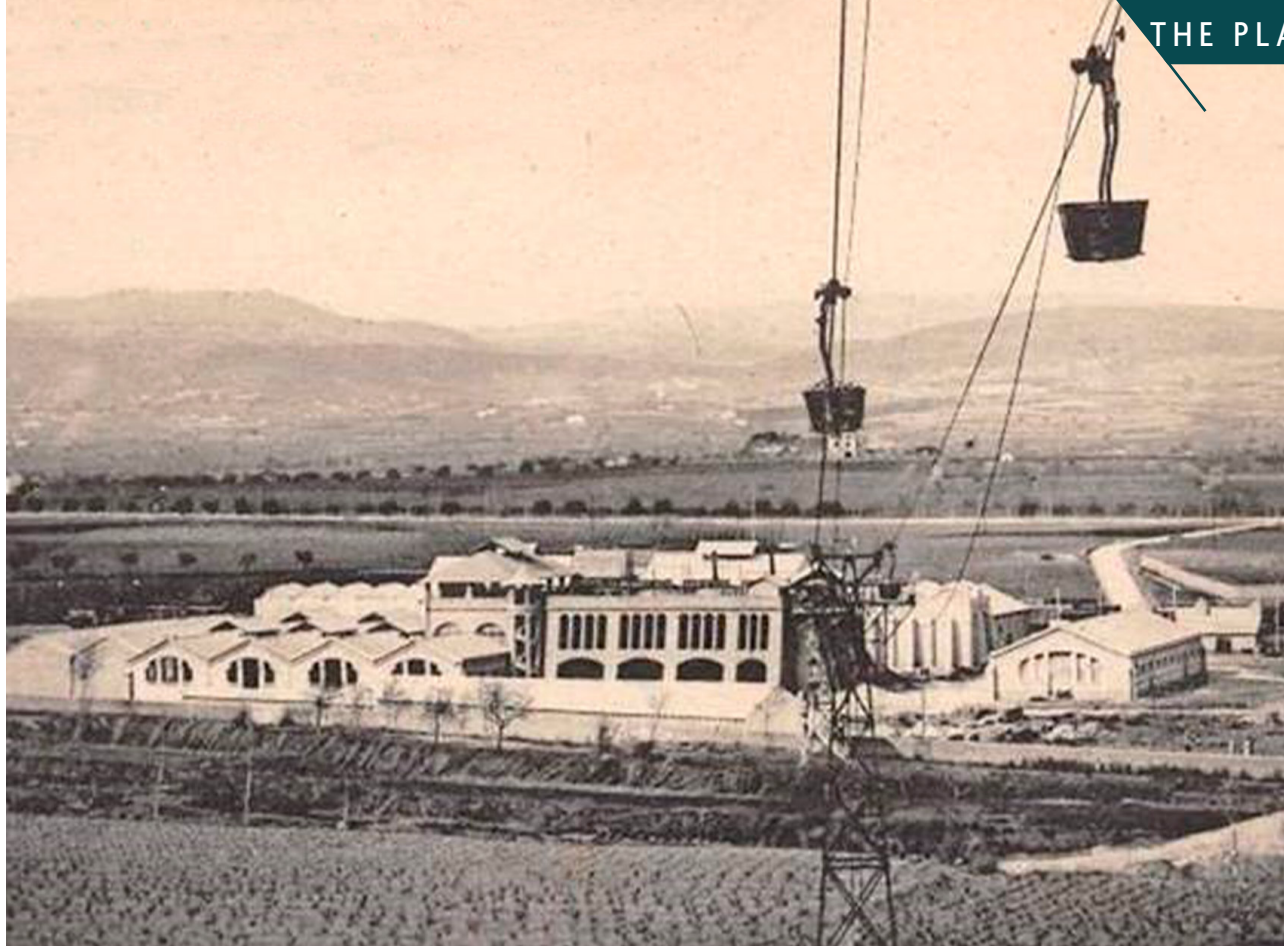
FCC is a key player in this strategy, as we have been the pioneers in creating the first two large Metropolitan Forest areas. Based on our pilot experience, when it comes to making it a reality, it is proving that this project is viable. Our work began by studying the different soils that would house these first Metropolitan Forests. We made progress in the selection of the most viable species and in the search for selected nurseries. We promoted soil correction work to provide a good support to

ensure the durability of the plantations. We were able to manage waste dumps on vacant plots, devise a process to transform these dumps and obtain by-products suitable for reuse in the creation of the forests themselves. I believe that in these two and a half years we have worked daily on improvement, innovation and good practices. And our future generations will see how FCC was a fundamental part of creating a more sustainable, beautiful and lively city.

### How do you see the city of Madrid once the Metropolitan Forest is completed?

This strategy has a 20-year implementation period, so I hope that it will be able to clearly improve the whole concept of green spaces integrated into cities. I hope that we will be able to respect and value them because they benefit our comfort, our health and our lives.





Former Cementos y Cales Freixas factory in Santa Margarida i els Monjos, Barcelona.

## Transfer of the historical archive of the former Cementos y Cales Freixa factory to the Santa Margarida i els Monjos Town Council (Barcelona)

Cementos Portland Valderrivas has ceded the historical archive of the former Cementos y Cales Freixa factory to the Santa Margarida i els Monjos Town Council so that the documentation can be incorporated into the Municipal Archive and can fulfil a cultural and social function, due to its high heritage value.

The collection includes 62 documents with notarial deeds, correspondence, plans of the factory installations and advertisements; as well as 5 albums with 638 original photographs and reproductions, mainly from the beginning of the 20th century. The documentation has been revised and catalogued by the municipal archivist and will now be made available for public consultation, under the heading of the Documentary Fund of the company Cementos y Cales Freixa.

The signing of the agreement took place on Monday 20 February at the

Santa Margarida i els Monjos Town Hall between the mayoress Imma Ferret, the operations director of Cementos Portland Valderrivas, Rafael Oyagüez, and the director of the factory located in Els Monjos, Juan Carlos Izquierdo.

Cementos y Cales Freixa was created by the Catalan banker Antoni Freixa in 1898, although the official name was not acquired until 1912, after the banker's death and with the company in the hands of his heirs. His nephew Darius Rumeu took over the presidency and his brother Josep was appointed technical director. In 1973 the Rumeu family proposed a merger with another Catalan cement family, the Fradera family, from which the company Uniland Cementera was born, which in 2006 was acquired by Portland Valderrivas, making this group the leading Spanish cement producer.



Imma Ferret, mayoress of Santa Margarida i els Monjos, and Rafael Oyagüez, corporate director of operations of GCPV, during the signing of the transfer.

# Castilla-La Mancha and Aqualia commit to improving the circular economy in the **integral water cycle**



Presentation of Aqualia's pilot projects at the Estiviel WWTP in Toledo.

Last December, several pilot projects promoted by Aqualia were presented at the Estiviel Wastewater Treatment Plant (WWTP) in Toledo. The presentation of the study was attended by the Director General of Circular Economy of Castilla-La Mancha, Javier Ariza.

The Regional Ministry of Castilla-La Mancha is developing, together with Aqualia, a project with the aim of providing solutions and promoting new specific circular economy actions in the end-to-end water cycle. This project, presented by Ariza, called "Specific actions to be implemented to promote the circular economy in the complete water cycle in Castilla-La Mancha", will focus on promoting solutions for the entire

region, taking into account the existing water infrastructures and aligned with the needs derived from the distribution of the population and economic activities. Specifically, the project will encompass the areas of drinking water treatment, minimisation of consumption, leak detection, purification, reuse, sustainable urban drainage, water-energy integration and digital transformation.

Javier Ariza stressed that the project is focused on providing solutions to the rest of the wastewater stations in the region of Castilla-La Mancha, and also to align with the Circular Economy Strategy of Castilla-La Mancha 2030 and the 2021-2025 Action Plan that is being implemented in the region.

## Solutions for the end-to-end water cycle

Among the most outstanding aspects, in terms of drinking water treatment, solutions are proposed for the control of nitrates and sulphates, optimisation of processes, minimisation of waste and its use. In the area of networks and leak detection, initiatives are addressed to avoid inefficiencies and innovation in maintenance equipment for drinking water supply networks.

Along the same lines, in the field of wastewater treatment, the focus is on process optimisation with a reduction in energy consumption; proposals in wastewater treatment in small towns with intensive-exten-

sive systems; energy use of urban wastewater; decentralised wastewater treatment in urban environments in intelligent buildings; co-digestion projects that favour urban-industrial synergy; and new innovative forms of wastewater treatment plant sludge management, such as solar drying, bioplastics, energy recovery, thermochemical treatments, etc.

In addition, the reuse of wastewater for use in agriculture and proposals for sustainable urban drainage will be addressed. Finally, reference was made to the digital transformation of the end-to-end water cycle.



## Solutions for the end-to-end water cycle

The Toledo Wastewater Treatment Plant (WWTP) is one of the most efficient wastewater treatment plants in Spain, guaranteeing wastewater treatment that respects the environment and the Tagus River.

It is located to the west of the city, some nine kilometres from the town centre, in the area known as Estiviel. Prior to the expropriation, the plot was used for irrigation. The effluent is discharged into the river Tagus, except for a part which undergoes more advanced tertiary treatment for subsequent irrigation or urban uses, such as street washing.

The Estiviel WWTP is among the most advanced in the country and has modern equipment for the treatment of wastewater and sludge, as well as a gas line with energy from the biogas produced in the sludge digestion process.



# FCC Carriage Museum,

a stroll through Barcelona's history



Vehicles used by FCC to clean and collect rubbish from the streets of Barcelona.

To the north of Barcelona, in the Vall d'Hebron district, is the FCC Carriage Museum, a journey into the past where you can contemplate part of the city's history through a collection of more than 40 carriages and carts, both working and touring.

This collection brings together pieces from the 19th and 20th centuries. Among the vehicles used for work, the wagons for transporting stones and construction material and for trans-

porting water stand out. The collection of street cleaning and sweeping carts and the collection of vehicles for rubbish collection, urban irrigation and sewer cleaning used by FCC in the early 20th century, in 1911, when the company entered the field of public services with a contract to clean and maintain the Catalan capital's sewage system, is exceptional. Five years later, it won the tender for street cleaning and rubbish collection in Barcelona. This award marks a transcendental

milestone in the history of the company, as it was its first foray into the field of public services.

The museum's valuable tack room contains more than five hundred pieces of accessories, harnesses and clothing, together with a complete collection of gala and everyday uniforms for coachmen and footmen, as well as smocks for the so-called carters, who spent most of their time on the roads transporting goods.



Also of note here is the image and altar of Saint Anthony the Abbot, patron saint of animals and the muleteers' guild, as well as certain gala objects used to harness the Catalan-style mules used in the ceremony of the traditional Tres Tombs festivities in Barcelona, a parade in which the saint blessed the horses.



Carts for transporting stones and gravel.



Carts for transporting stone from the Montjuic quarries in Barcelona.



Presentation of the solid urban waste collection service in Barcelona at the beginning of the 20th century.

## Three generations looking after the museum

During the interview with Jaume Pérez, who is in charge of the maintenance of the FCC Carriage Museum, one can appreciate the family feeling and the passion he feels for his work.

For many years, this museum has been cared for with great care by grandfather, father and grandson. The first of this generation was Jaume's grandfather, Camilo Romero, who worked for Fomento de Obras y Construcciones for more than 70 years. He began transporting the gravel used for the construction of the Palau Nacional in Barcelona in wagons.

According to his grandson, Camilo, after retiring, he frequently visited the museum and helped to maintain

the collection. From an early age, Jaume used to ask his grandfather to take him on weekends to see the carriages, and little by little, between games and more games, he began his exciting history with the museum.

After his grandfather, his father, Juan Pérez, was the next to take over this magnificent legacy; and now it is Jaume who is responsible for this task, which he carries out with great pride and enthusiasm.

### A family's passion for the museum



# Jaume Pérez Romero

in charge of maintenance at the FCC Carriage Museum



Jaume posing next to the trolley used to water the streets of Barcelona. This model began to provide service in 1916 and continued to operate until the 1970s.

### How did you start working at the Museum?

At first there were two people in charge of the museum's maintenance. After my father's partner retired, I had the chance to work alongside him. It was my father who taught me how to look after the pieces in the collection, such as the fabrics and wood, how to maintain the furs and sew them, among many other things.

### What feeling do you get from working here?

Above all a familiar feeling, as if it were my own, like something that has always been there, that's why I like my work in the museum so much, it's like someone who has a car and likes to clean it and look after it.

### How do you organise your daily work?

I start on one side of the enclosure and little by little I do the maintenance work. In the same day I sometimes change functions. I clean the harnesses, which I have to do with great care to clean off the green mould that forms on the collars, or I start the maintenance of one of the carriages.

### What kind of products do you use for the maintenance of the pieces?

Depending on the pieces I use everything from glass cleaner, beeswax marinade, for special leathers, furniture cleaner, Kanfort, etc., and if there are any holes in the wood, due to woodworm, I use products to remove them.

### What is the most difficult to maintain?

The most complex to maintain are the leather items, as some of them are in a more delicate state with the passage of time, given that most of them are original, as are the fabrics.

### What do you like most about your work?

Above all, the peace and quiet and the fact that I can go at my own pace, although sometimes I miss being able to talk to someone. And within my maintenance duties, what I like most is cleaning the carriages, I love to see them in perfect condition.

### What is your favourite carriage or vehicle?

The Landó, the watering truck and the palanquin, the latter for its uniqueness and decoration, donated by the engineer Carlos Slim.

### Would you like to retire in the museum?

Of course I would, I am proud of the link I have had with the museum since I was a child and, above all, I am proud to be the heir to the work carried out by my grandfather and my father.

### How would you like to see the museum in the future?

I would love it to be open to the general public, so that people can enjoy a little bit of the history of the city and our company.



# FCC Neunkirchen: Serving the "Magic Mountain"



Camión eléctrico de recogida de basuras junto al Ferrocarril de Semmering, en Austria.

Semmering, in Austria, is quite rightly known as the 'Zauberberg' or 'Magic Mountain'. From hikers to mountain bike enthusiasts and skiers, the spectacular trails it offers are a real delight. In addition, a true highlight for any railway enthusiast is the UNESCO listed technical monument that runs through it; the Semmering Railway. Semmering can be reached from Vienna in about one hour.

A short distance from Semmering, in the municipality of Gloggnitz, the FCC Environment CEE site that serves Semmering and its surroundings can be found. Let's find out some more about this fascinating region.

## FCC Neunkirchen Abfall Service GmbH - Partner of the region

FCC Neunkirchen Abfall Service GmbH has been providing services in the district of Neunkirchen since 2002. We serve communities, industrial and commercial companies, as well as trade chains and private households in the region. As a long-standing regional player in the waste management sector, FCC Neunkirchen also plays an important role supporting two of Semmering's most prestigious attractions: The Semmering Railway and FIS WOMEN SKI WORLD CUP SEMMERING.

In addition, we provide support during Mountain Clean Ups at the

Zauberberg Semmering resort, in line with our commitment to the environment, and with nature and a clean future always at the forefront of our activities.

## Semmering Railway: The first mountain railway in Europe

From 1848 to 1854, the engineer Carl Ritter von Ghega attempted what some said was a near impossible task - to build a railway line crossing the mountains of the Viennese Alps. A gigantic project, whose conception and construction is still astonishing people from all over the world today. In the first half of the 19th century, people had merely shaken their heads in disbelief at the idea of overcoming

the Semmering mountain by rail, with too little locomotive power and a high gradient slope speaking all too clearly against it. However, Carl Ritter von Ghega was not to be discouraged. He directed the construction of the first high-altitude railway in Europe - the Semmering Railway. And, thanks to him and the 20,000 men and women who participated in its building, the first alpine railway in Europe was established. The Semmering Railway has been on the UNESCO World Heritage list since 1998.

## Mikaela Shiffrin and Petra Vlhová ride our gondola

Semmering is known all around the world for its women's ski world cup races, the first of which was held there at Hirschenkogel, back in December 1995.

Since 2002, FCC Neunkirchen has been a proud partner of the FIS WOMEN SKI WORLD CUP SEMMERING, which is organized on the slopes of Zauberberg Semmering ski resort every second year.

With our services, FCC ensures that the event always takes place in environmentally-friendly, clean and safe surroundings, by making sure that all of the event's waste disposal requirements are perfectly met.

During the winter of 2019/20 we proudly introduced an FCC Environment gondola in our colours. We are sure that lots of skiers at Semmering will enjoy riding it again in the future, including some of the top participants at the FIS WOMEN SKI WORLD CUP SEMMERING.

This time, at the event in December 2022, we were also pleased to present our new electric collection truck to visitors for the first time.



Gondola in the ski resort of Zauberberg Semmering, Austria.

## A technical masterpiece for all railway lovers

The train ride from Gloggnitz to Mürzzuschlag is a must for those who appreciate tunnels, bridges and mountain panorama. You can also admire the beauty of this monument by taking the train from Vienna to Graz or Klagenfurt. And why is the route so unique?

- The construction itself features 14 tunnels (including the 1,431m summit tunnel), 16 viaducts (several two-storey), 118 stone arch bridges and 11 small iron bridges. Most of the portals of the tunnels are simple but monumental in design and feature various kinds of ornamentation.
- In total, the fourteen tunnels are 1,477m long, constituting nearly one-tenth of the entire line and are, by some coincidence, exactly the same length as the sixteen major viaducts (also 1,477m long).
- Beginning at Gloggnitz station, at an elevation of 436m, the railway line reaches its highest point 29km through the route over the pass at 895m above sea level and ends 12km later at Mürzzuschlag station, 677m above sea level. The total length is 41km.
- The 57 two-storey attendants' houses, located at approximately 700 m intervals, are a characteristic feature of the Semmering line and were built from coarse rubble masonry with brick trimmings. Little remains of the original stations, which were planned as no more than relay stations and watering points, but some were later restored or converted into more impressive structures as tourist traffic increased.

FCC Neunkirchen also plays its part in the smooth operation of the railway, to the delight of passengers and visitors to the region, by providing waste removal services at all of the stations along the Semmering Railway. In this way we help to preserve the unique heritage of this historic, technical masterpiece.

# Alejandría, FCC Construcción's knowledge management and documentation tool



Data processing centre executed by FCC Construcción.

The Alexandria Project has developed tools and methodologies for the use of knowledge generated in construction projects, in organisations and in the people who make up the company. The systematic generation and management of the organisation's explicit knowledge has been defined, taking into account the different states of these documents, "in development, shared, published and archived". In this way, the knowledge generated will be available, even if the organisation changes or people cease to belong to it.

In FCC Construcción, the existence of a high volume of unstructured documentation with very limited availability was identified, mainly due to technical issues and the governance model followed for the management of this knowledge. This risk, added to the

time spent searching for information and the constant growth of documentation, led to the need to create Alejandría, a platform based on SharePoint utilities, which allows us to easily manage all the documentation in a single repository and work collaboratively, both in our departmental areas and on site projects.

### What are the main benefits?

Managing the knowledge generated in a multinational company.

To be able to make available the information generated during the work cycle, with the aim of promoting and speeding up collaborative work, avoiding duplication of documentation, exploiting the knowledge generated in history and saving time in the search for information.

Facilitate access to information available in FCC Construcción, so that users can locate it quickly, with the minimum navigation effort, and make use of it in other projects, either in their area or crosses.

Generate an automatic labelling model which, without requiring any effort on the part of the user, allows documents to be classified by means of patterns. In this way, facilitating the loading, filtering and location of documents.

### What is the current status of Alejandría?

Currently, different departments and delegations are already working (Area 1, USA and Canada, ...) and

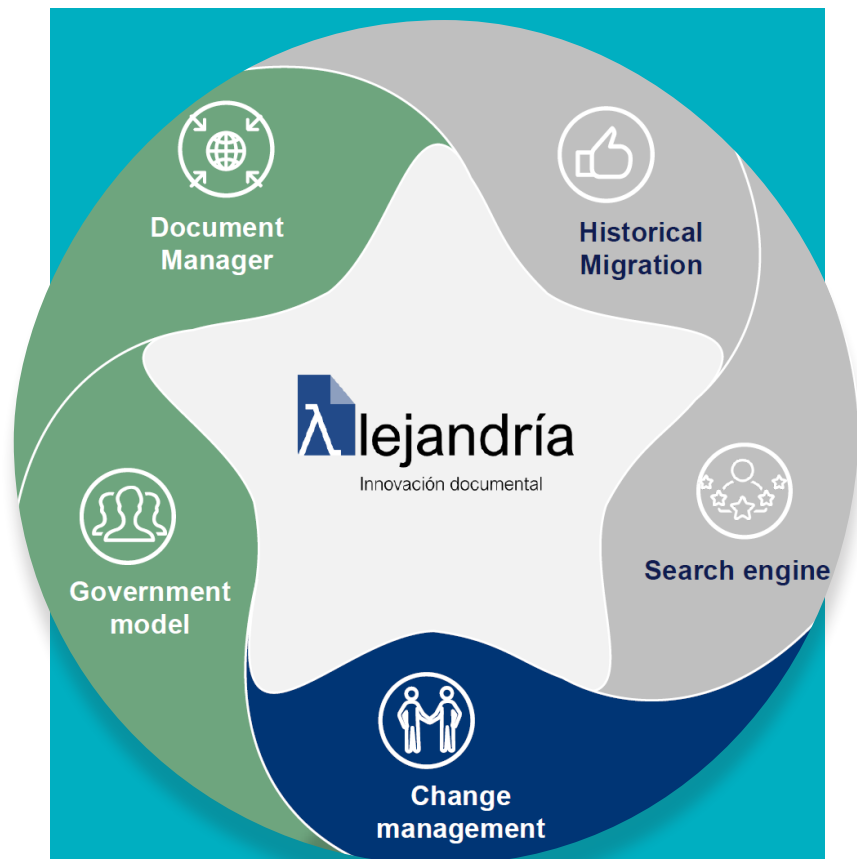
there are around 100 active work projects in Alexandria, of which 11 are in the production phase.

All this deployment is possible thanks to the involvement of the ambassadors, the improvement proposals of a team of advanced users (SuperUsers) and the efforts of all the professionals involved in the management of the documentation of the works.

It will soon be deployed in the rest of the remaining delegations and an artificial intelligence tool will be integrated to facilitate accessibility and search for information and documents.

#### How does this project impact on the company's strategic model?

Every organisation must learn from its successes and mistakes, and nowadays the amount of data, documents, information and knowledge generated in organisations and projects is increasing. The use of efficient systematics, together with state-of-the-art tools, make this learning a reality and companies with these concerns are in a position to improve their impact on society. In other words, if we can repeat those processes that are excellent, and stop applying those that are not, the company will improve, the projects will improve, society will improve.



## Key foundations on which the tool is based

- The centralisation of documentation, having a common repository that centralises departmental information and the definitive files of the works, and allows access to their history.
- Fast and efficient search, based on the use of tags, generation of metadata and definition of document typologies.
- Consistency and common structure, taking into account the standards and procedures established to work with a jointly defined governance model that guarantees the security of the information.
- Collaborative work, having an online space for collaboration and joint work between areas through the provision of shared libraries and chat and conversation spaces.
- Cybersecurity, applied to all Alexandria sites and tools.

you.