Communication Network

News for the people of FCC

FCC Safety and Health Awards

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FCC in the World is born

La Valdeza quarry and the commitment to sustainable development

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FCC in the world

a portal
open to professional
opportunities

Corporate

FCC is a global corporate group that operates in the Environmental, Water, and Infrastructure sectors. **FCC in the World** is born at the service of this global scope, an in-house portal for everyone in the Group who are interested in their career development.

> **FCC in the world** is much more than an information website; it is a space for FCC people who want to expand their professional opportunities, acquire new capabilities, and work in key projects

FCC in the World is the new space of the Citizen Services Group to encourage and promote the careers of its employees throughout the word.

The website provides detailed information on the works in progress, locations, the technical peculiarities of the projects, and useful notes on the places where the Citizen Services Group conducts its activities.

Intuitive, accessible, and with a revamped image of the Company, **FCC in the World** offers those of us who are part of this Group much more than detailed information on projects and destinations. **FCC in the World** is also a space to share professional experiences abroad.

The origins

The beginnings of this project at FCC Construcción date back to last summer after the Riyadh macro-contract was awarded as a tool to attract profiles and disseminate useful information for FCC employees who were travelling to the region. The commitment of the central Human Resources Department in the first stage and then in the second one of the departments of each division was decisive for the development of the project until it became what it is today: a space to promote professional development and to share information on the Company's major projects throughout the world.

Promoting the development of its professionals in a global scenario, the ability to adapt to change, and team work are the values that have been present throughout the development of this project.

The Future

The present and the future go hand in hand at this website. **FCC in the World** is a site that was designed so that it could grow and evolve. A space of dialogue where employees can share their experiences abroad and send their suggestions via the mail boxes that FCC puts at their disposal.

> "Intuitive, accessible, with a revamped image of the Company, **FCC in the World** is also a collaborative space where employees can share their professional and life experiences"

The objective

FCC in the World is currently an evolving space, representing the change process in which the Citizen Services Group is immersed: a Group that operates worldwide and that encourages professional development and the international careers of all of its employees. **FCC in the World**, however, is much more than an in-house employment site; it is the Citizen Services Group site for accessing information on key projects, information of interest, a space for sharing the experiences of our colleagues around the world.

FCC WORLDWIDE

We incentivize

DEVELOPMENT

PROFESSIONAL INTERNATIONAL

KPMG-El Confidencial award
for Business Best Practices

FCC has been awarded the "Business Best Practices" prize by on-line newspaper El Confidencial in partnership with KPMG.

Watch video
Ekostone Project

FCC, the Citizen Services Group, received the award in the Eco-efficiency category for its Ekostone project, which recovers steel mill slag and whose environmental advantages lie mainly in the high level of recycling and reuse of black slag, which has traditionally been disposed of in landfills.

The project is both profitable and environmentally beneficial for the steel industry, the construction industry and society as a whole since it is replicable and reproducible at electric furnaces worldwide.

Recovering black slag also rationalizes steel production costs, minimises waste production and recovers scrap metal that can be reused as raw material, and it transforms slag into a product that can be used as aggregate for concrete and other purposes such as road surfacing, airport runways, etc.

Juan Béjar, Vice-Chairman and CEO, collected the award from John Scott, Chairman of KPMG in Spain. Also present on behalf of FCC were Aurelio Blasco, General Manager of FCC Ámbito, and Guadalupe Bobadilla, Head of Safety, Quality and the Environment at FCC Ámbito.

The event was attended by Jaime García Legaz, Spain's Secretary of State for Foreign Trade. Other prize-winners included Seur (also in the Eco-efficiency category), Iberdrola, Computer Global Software and Zeltia (for Innovation), Mapfre, Imabe Ibérica and Tui Travel (in the Internationalization category), Room Mate Hoteles, KFC Spain and Telecoming Group (for Job Creation), and Rastreator, Egovolo.com and The Brubaker (Digitalisation).

Watch the video with the speech by Guadalupe Bobadilla, manager of FCC Ámbito's Prevention, Quality, and Environment department.

José Manuel Velasco
member of the State Corporate Social Responsibility Board

José Manuel Velasco Guardado, general director of Communication and Corporate Responsibility of the FCC Group, has been named a member of the State Corporate Social Responsibility Board (CERSE, Spanish acronym). This board is the main advisory body of the Government of Spain on issues relating to corporate social responsibility.

The State Board of CSR, presided by the Minister of Labour and Immigration, is a collegiate body formed by the administration, trade union and business organizations and prestigious institutions in the field of social responsibility. Its function is to advise the Government of the Nation to identify and promote best practices and to propose social responsibility policies to the Government's executive branch.

José Manuel Velasco, a member of FCC Group's Steering Committee, has a Degree in Computer Sciences from Universidad Complutense of Madrid, and is the chairman of the Association of Communication Managers (Dircom), member of the world council of the Global Alliance for Public Relations and Communication Management and an honour member of Forética.

FCC's communications
wins two international prizes

Two of FCC's communication initiatives were awarded several international recognitions. The grand content campaign carried out last Spring in the online edition of the Financial Times was one of the finalists for the European Excellence Awards granted by the European Association Communication Directors Awards.

This communication campaign was carried out by the advertising firm Shackleton for the Citizen Services Group, competing in the "Corporate Advertising" category with Germany's BMW, the Dutch ING Direct, the French company Dassault Systems, and the Portuguese company Zon Optymus which were the winners in this category.

The other international award went to last year's Christmas campaign "From junk to toy". On this occasion, the Citizen Services Group won a silver award at the Inspirational Festival. The contest is organised by IAB Spain, the association representing the advertising industry in Spain's digital media and aims to demonstrate year after year all the inspirational and innovative potential of digital advertising and communications.

The members of the panel of judges investigate all the sector's aspects that contribute new ideas, from technology to creativity as well as business strategies, applications, new ideas, research and new formats and supports.

A total of 269 advertising campaigns and digital advertisement and communication were registered in the twelve categories. FCC's "From junk to toy" initiative won a silver award in the Comprehensive Campaign category.

French attorney Claude Serra appointed director of FCC

The Board of Directors of FCC, the Citizen Services Group, co-opted Claude Serra as a director. Claude Serra is a member of the Paris Bar and a senior partner in the corporate department of New York law firm Weil, Gotshal & Manges, LLP.

A graduate in law from the University of Aix-en-Provence, FCC's latest director is one of Europe's most prestigious lawyers in the area of mergers and acquisitions and advises multinationals on major transactions.

An expert in shareholder disputes, Serra advises a number of boards of directors and executive committees on corporate governance, legal strategy, directors' fiduciary duties, and crisis situations

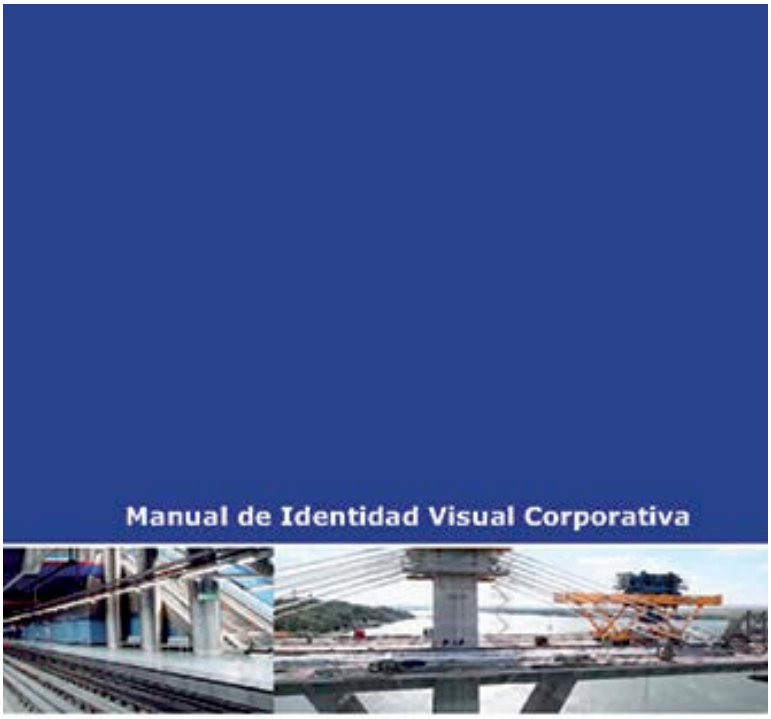
Claude Serra is a member of the Legion of Honour of the French Republic.

Cross of Honour of the Order of St. Raymond of Peñafort awarded to Felipe Bernabé García Pérez

Justice Minister Alberto Ruiz Gallardón has approved the awarding of the Cross of Honour of the Order of St. Raymond of Peñafort on Felipe Bernabé García Pérez, General Secretary and Executive Director of FCC, on the occasion of the 35th Anniversary of the Spanish Constitution of 1978 .This is one of the highest distinctions granted by the Spanish State in the area of justice.

Felipe Bernabé García Pérez graduated in law from the University of Deusto and obtained an MBA from ICADE. He also holds a diploma in European Union Law, Corporate Legal Counsel and Tax Law. He has been General Secretary of FCC Group, a member of the Board of Directors and Secretary of its Management Committee since 2004. García has spent almost his entire career with FCC, the Citizen Services Group.

The FCC Construcción Brand manual is launched



The new FCC Construcción Brand Manual, which explains how to use the brand correctly, is already available.

This Corporate Identity Manual defines the criteria and basic standards for the correct application of the FCC Construcción brand. It is addressed to all members of the company, particularly those involved in the design or execution of any image or communication element.

The business areas area classified into three different activities: Infrastructures, Environment and Water and are legally covered by the corporate name of FCC Construcción, S.A. in the case of this manual.

We are a large group of people working at the same organization but with very activities that are highly diversified geographically and by sector. Together, we must strive every day to build and feed a unique image of our FCC brand among our various target audiences.

Correct compliance with the standards contemplated in this guide by all of us will contribute to create a uniform image of FCC aligned, in its case, with the corporate descriptor, “Citizen Services” thereby making it easier to differentiate the company and contribute it its consolidating its market positioning.

Taking into account the foregoing, the objective of this manual is to address two objectives in the short term:

- Establish and illustrate, didactically, the standards for the correct use of the FCC Construcción brand, and the use of all related brand aspects (correct use of the graphic identity, colour, locations, and typography).
- Explain, by means of examples, the correct application of the FCC Construcción brand in some elements and points of contact, indicating the correct and incorrect uses in each specific case.

See Pdf

FCC Aqualia expands its presence in Latin America

New contract in Uruguay

FCC Aqualia has just been awarded the executive project and the construction of the Punta Yeguas underwater emissary, part of the works of the second stage of the urban sanitation plan of Montevideo, the Uruguayan capital. The award is valued at 37 million euros.

The objective of the outfall`s implementation is to give a proper disposal of the Rio de la Plata effluents to the west of the City (estuary`s left bank) and the recovery of the Bay of Montevideo. The start of the pipeline will be located on the peninsula of Punta Yeguas, and will venture more than 2 km in the river due south.

To conveniently channel 5,350 litres per second of the anticipated maximum flow, the project`s basic solution provides that the outfall is formed by a steel pipe inside diameter of 1,500 millimetres (mm.) with a coated concrete of 2,105 meters length. This pipe has more than 2,800 kilos per linear meter weight. Thirty-six diffusers of 200 mm. nozzle diameter will be installed in the diffuser section.

A technical solution is being contemplated to address the shallow outfall formed by muddy and unstable soils and bathed by waters of high turbidity, with suspended solids at the mouth of the Rio de la Plata. The solution adopted is dredging the trench and stabilizing the soil by means of stone columns, 80 inches in diameter and of varying depth.

This basic solution is being revised, validated and optimized by Aqualia Infrastructuras; an FCC Aqualia´s company specialized in design and construction of large water infrastructures as part of the contract along with the execution of the related works.

> “The construction of Punta Yeguas underwater emissary in Montevideo, will channel wastewater from the western part of the Uruguayan”

Activities in the continent

With this new contract in Uruguay, FCC Aqualia gains a foothold in a new country within a geographical region as strategic as Latin America where the company is developing water projects worth 1,500 million euros.

The company is currently building some of the most important infrastructures in Mexico: the II aqueduct system, the Realito water supply system, the Cutzamala potable water system, the waste water treatment plant in Salamanca, and the Caracol pumping station.

FCC Aqualia is also currently executing a project involving two desalination plants for the Chilean mining industry. One is at Copiapó (Atacama`s province) with 45.000 m^3/day of capacity which is already in the transient operations phase. The other 9,000 m^3/day capacity plant, located in the region of Antofagasta, is currently in the execution phase.

In its growth in this region, considered of strategic interest, FCC Aqualia has submitted bid for projects put out to tender in Colombia, Peru, the Dominican Republic, and Trinidad and Tobago and it is also studying investment possibilities in Brazil.

> “The 37 million euros contract bolsters the company’s presence in the region where it is currently developing projects worth 1,500 million euros”

http://www.montevideo.gub.uy/mvdtv/mvd-te-dice/la-ciudad-invisible-saneamiento-de-mvd

Toronto subway

The work team after completing the tunnels.

tunnels completed

Last November, FCC completed excavating the tunnels of the Toronto subway, a significant milestone in the execution of this project.

A total of 4,841 reinforced concrete segments were installed at a rate of 31 segments/day per each tunnel boring machine, about the fastest execution achieved by this type of tunnel boring machine in North America.

After nearly three years of work, the project is 67% completed. Once the tunnels have been built and with the rest of the underground structures in the completion stage, the main challenge for FCC will be the construction of the "Highway 407" Station which is 30% completed.

Overview of one of the completed TBM tunnels.

The Highway 407 Station

Highway 407 is a multi-modal underground station, 165 metres long, 22 metres wide, and 23 metres deep, with a central platform and three levels; two underground and one at ground level. It comprises a Y-shaped building with a bus terminal and an outdoor parking with 600 parking spaces. The project is expected to be completed by the end of 2015.

Authorities from India visit FCC Aqualia

FCC Aqualia's water management in more than 1110 municipalities in 17 countries played the key role in the meeting with the Indian delegation from the state of Punjab and the managers of FCC Aqualia. The company is one of the few specialised operators invited which is in the short-list for participating in the Punjab's sewerage and water supply system. Situated in the north-eastern part of India and with a population of more than 30 million people, Punjab is one of the most developed states in this Asian country.

The group, which included members of the regional government of Punjab in charge of urban development, visited FCC's Aqualia's call centre and the facilities managed by the Company in Lleida. Carolina Serrano, head of the call centre and Guillermo Pérez described FCC Aqualia's customer service procedures and technology.

In Lleida, the Punjab toured the Aigües de Lleida facilities, the waste water treatment plant, the laboratories, and the installations of the city's new water deposit. They were accompanied by Francesc Quintillà, head of the Lleida and Tarragona regional offices, and other company managers. The guests showed special interest in learning how FCC Aqualia managers service such as the one in Lleida which includes the entire end-to-end water cycle.

From left to right, Ignacio Quintana, manager of the International Project; José Enrique Bofill, director for the Middle East, and Luis de Lope, FCC Aqualia-Zone IV international manager (the fifth on the left) with the delegation from India at the Las Tablas corporate offices. In the centre, Anil Joshi, Minister of Municipalities, Education, and Health of the State of Punjab.

FCC Construcción

Green World Ambassador for 2014

FCC Construcción, the infrastructures division of the Citizen Services Group has been honoured as a Green World Ambassador for 2014 at a ceremony at the House of Commons. This recognition comes as a result of FCC Construcción's environmental success at the Enniskillen Hospital in Northern Ireland.

The hospital project has received three awards to date:

- The Building Better Healthcare Awards for the exceptional work carried out.
- The Green Apple Award in the Built Environment and Architectural Heritage category.
- The Engineering News Record Global Best Project Awards in June 2013.

Barcelona awards Cemusa largest public newsstand contract in Spain

Barcelona City Council has awarded CEMUSA the contract for the maintenance and advertising operation of all the city's newsstands for a renewable period of five years.

The award of this public tender allows Cemusa to continue and expand the services provided since 1996, courtesy of the contract signed back then with the Professional Association of News Vendors of Barcelona and Province for the maintenance and advertising management of the city's newsstands. CEMUSA was at the time involved in their design, manufacture and installation, and over the intervening seventeen years the newsstands have blended in perfectly on public thoroughfares, enjoying excellent maintenance and administration.

Thanks to this contract, for the first time one single company will now be responsible for maintaining and operating the advertising panels of all the newsstands across the city of Barcelona. CEMUSA will see its stock increase by 50%, from the 263 newsstands currently managed to 396. After the expansion, this contract is the largest one as far as number of newsstands managed by CEMUSA is concerned, even more than such other major contracts as New York, Lisbon and Malaga.

New communication spaces

Cemusa Airports transforms airports

CEMUSA Airports has revamped the spaces of these airports, through which more than 160 million passengers have already passed, with a line of units developed by the King & Miranda Design studio. Thanks to their transparency, lightness and functional innovation, they succeed in creating a luminous space while also respecting the surrounding architecture. Among the new units are striking 5-m columns situated in large open spaces such as check-in halls, graphic presentation panels or large illuminated advertising panels, all of them using LED lighting.

Digital products have acquired greater relevance and CEMUSA Airports is committed to extending them to a higher number of airports. Currently, thirteen of them have given centre stage to these products in spaces with intense passenger traffic. Eye-level and free-standing elevated panels, columns with 70" screens or large formats such as video walls or projectors have been located in areas of optimal visibility such as check-in and boarding areas.

The commercial offering is complemented with the unlimited creative possibilities of spectacular marketing. Airports are an exceptional communications platform where it is possible to undertake virtually all kinds of actions and events, and with this in mind our technical solutions department.

Cemusa TEC

CEMUSA TEC, has developed novelty applications such as the CVision enhanced-reality App, which multiplies the power of advertising messages and transforms the airport into a startling interactive and entertainment space where the traveller is immersed in a world of unique experiences.

For further information on CEMUSA TEC and CVision, the augmented reality APP of Cemusa Tec, visit the websites: http://www.cemusatec.es
http://www.cvision-app.com

AENOR verifies FCC Ámbito's glass facilities

The glass facilities of FCC Ámbito have been verified by AENOR (the first in Spain) thereby certifying that the glass waste that arrives at the Company's installations has been processed and recycled and is considered recycled glass rather than waste.

FCC Ámbito, at its glass recycling plants, has been the first Spanish company to be verified pursuant to Regulation 1179/2012 which defines when the cullet can no longer be considered waste. This Regulation was drafted under Directive 2008/98/EC of the European Parliament and Council.

This is a very interesting milestone in Glass Recycling sector because the recovery rate and efficiency of our glass recycling processes are recognized, making our facilities essential by transforming the waste to raw material.

Thanks to this verification, FCC Ámbito shows its ongoing commitment to the safety of its workers and facilities, customer satisfaction, and respect for the environment, enabling it to reach the highest levels of quality for its activities.

This regulation outlines the criteria that glass waste must comply with, the specifications and regulations that make it usable in the production of glass substances or objects by means of its recasting. The criteria impose limits on the amounts of pollutants, such as metals, organic compounds, and stones in order to enable its classification as a secondary raw material.

FCC Logística expands its operations in Portugal

FCC Logística in Portugal has another pharmaceutical laboratory in its customer portfolio for its Farma business unit which currently provides logistics services to 18 companies in this sector.

The OMEGA Pharma unit is one of the 10 leading companies of the European Market for Consumer Care, which sells healthcare, hygiene and well-being products without prescription, including medicines (OTC and MSRM), medical devices, cosmetic and body hygiene products and dietary supplements.

OMEGA Pharma's and FCC Logística's logistics operation has been contracted for a minimum period of two years. The agreement contemplates, in addition to basic storage services, order preparation and deliveries, management of marketing material and carrying out special handling (co-packing/labelling).

Public-private collaboration for the benefit of the community

Seminar organised by El Confidencial, an online newspaper, with the collaboration of FCC to analyse challenges and opportunities for optimising the services provided to people in their municipalities.

The main subject of the Seminar for Public-Private Collaboration for Citizen Services was an analysis of the various formulas for collaboration between the administration and companies in the private sector. The seminar was organized by the online newspaper, El Confidencial, with the support of FCC. Inaugurate by Antonio Beteta, Secretary of State for Public Administrations, the participants included Iñigo de la Serna, the mayor of Santander and chairman of the Spanish Federation of Municipalities and Provinces (FEMP, Spanish acronym) and the Spanish Network of Smart Cities (RECI); Ibone Bengoetxea, deputy mayor of Bilbao and chairwoman of EUDEL (the Association of Basque Municipalities); Lluis Cases, layer, expert in administrative law and a member of the legal firm Garrigues; and Félix Parra, CEO of FCC Aqualia. Alberto Artero, general director of El Confidencial acted as the host and moderator.

The New Rationality and Sustainability Act of the Local Administration was the subject of the presentation by the secretary of state. Beteta described public-private collaboration as an "misunderstood issue" and wagered on this formula in order to enhance efficiency by modifying the current concession-award scenario which, he indicated, "should be provided at the lowest cost possible, combined with quality and efficiency and taking as much advantage as possible of resources". Lastly, he stressed that "in this year, 101 municipalities so far have taken advantage of the extraordinary financial support measures whereas another 161 cities and towns experiencing problems have been able to significantly improve their financial situation in 2013".

The Secretary of State also mentioned in his speech that the "law introduces the necessary flexibility so that each local entity can agree on the most efficient provision of public services that comply with the requisites of

transparency and control that must always go hand-in-hand with the use of public funds". He added that "the new law does not penalise indirect management but clearly maintains the possibility that enables local entities to take advantage of public-private collaboration for providing services thanks to indirect, legally regulated management formulas contemplated in the law on public sector contracts".

The necessary conditions

In his presentation, Iñigo de la Serna, mentioned that "up to now, private was usually associated with the obscure whereas public was white and transparent, when, in fact, this is not actually the case" and he wagered on "not penalising the private sector", indicating clearly the need to resort to public-private collaboration as a necessary in order to ensure that citizens continue to have good services. He cited as an example, FCC Aqualia's end-to-end water management activities in Santander.

The chairman of FEMP also highlighted the opportunities envisaged in the new law "which empowers the Federation to act as a central services procurement board for municipalities. Hence, we will be able to enter into agreements with the private sector and the city councils that might have an interest, may take advantage of this opportunity, regardless of their size and with full legal guarantees which will enable medium and small cities and towns to have and to provide certain services which they are not currently providing". He concluded his presentation insisting on "the need to continue working on defining public-private collaboration models, with full legal guarantees to provide quality citizen services in an efficient manner".

Ibone Bengoetxea, the deputy-mayor of Bilbao spoke in similar terms. She mentioned four basic ideas that should underpin the provision of public-private services: "connectivity, social cohesion, innovative management, and citizen's participation". The deputy-mayor described the transformation of her city "which was socially and industrially depressed in the 80s." She said that "the most

> **Félix Parra:** The debate should focus on the cost and the quality of the service rather than whether or not the service is provided by a public or a private operator

> **Ibone Bengoetxea:** The four basic ideas that should underpin the provision of public-private services: connectivity, social cohesion, innovative management, and citizen's participation

> **Iñigo de la Serna:** The new law on the reform of the local administration empowers the FEMP with the ability to act as a central services procurement board for municipalities

important thing to ensure a city's progress is that it must generate trust within and outside its territory". She described the characteristics of the model implemented in Bilbao, the fact that the city's transformation was driven by the public sector with the support of the private sector and that the transformation was made throughout the entire city".

Bengoetxea also stressed the importance of "wagering on human resources in the public sector, financial and economic strictness, efficiency and transparency: transparency that must be put into practice and which requires organisation, communication, and of reporting political decisions and of explaining why something that was promised was not actually carried out".

Strong administration

Lluís Cases, an expert on administrative law who, from his law firm, Garrigues, collaborates with RECI, argued that "in order to ensure the efficiency of public-private collaboration, it is necessary to have a potent public administration" adding that "collaboration should be not just in specific cases since, good projects are not usually considered in such cases and, therefore, these projects will not go very far".

At the end of his presentation, he stressed the need of having a predictable and reliable legal framework to facilitate this collaboration: "extended legal safety that ensure that companies may be able to rescind a contract and that service provision is governed by indicators and innovation are issues that must be taken into account as soon as possible".

In his presentation, Félix Parra, CEO of FCC Aqualia, mentioned the high level of services offered by Spanish companies as shown when these companies compete in international markets. He also mentioned the need of having a law for the sector that enables the standardisation of tariffs, one of the main problems affecting the water sector. He stressed the need of reinforcing legal security to ensure that the collaboration of both sectors is developed as best as possible.

Asked about the social consideration of water as essential for the development of the most disadvantaged societies, Parra confirmed that FCC Aqualia is firmly committed to the Millennium objectives of the United Nations. On this subject, he mentioned that "after the unanimous recognition of water as a human right, the difficulty lies in having specific definition since the challenges differ depending on the place in this planet where one lives". In this respect, and summing it up, he mentioned that the discussion between the public and the private is a false debate. "The debate", he said, "should focus on the cost and the quality of the service rather than whether or not the service is provided by a public or a private operator".

Spain/Brazil Investment and Business Cooperation Forum in Sao Paulo

FCC Construcción participated in the Spain/Brazil Investment and Business Cooperation Forum, which was organized by ICEX España Exportación and took place on 26 and 27 November last in Sao Paulo.

Vicente Mohedado, FCC Construcción's deputy corporate manager for Latin America, gave the presentation on FCC, highlighting the company's vast experience in marine construction.

The forum was supported by the economic and trade offices of the Spanish embassy in Sao Paulo and Brasilia. The event aimed at making it easier to identify investment and business cooperation opportunities and potential partners in the Brazilian market.

International Construction Economic Forum in Amsterdam

Miguel Jurado, general manager of FCC Construcción, participated in the International Construction Economic Forum (ICEF) held in Amsterdam.

In his speech, Jurado introduced FCC to the forum participants and spoke about its ongoing drive for further internationalization. He also had something to say about the present business circumstances and how FCC is clearly concentrating on strategic markets and projects in which the company can contribute added value.

Also participating in the event was Fernando Flórez, head of the technical office on the Vidin Bridge project and currently a member of FCC's Technical Services. He presented the Vidin Bridge project, which was selected as a finalist for this year's International Construction Project Award.

Vidin Bridge eventually took second place after the world's tallest skyscrapers, the 355-metre-tall twin towers housing the JW Marriott Marquis Hotel in Dubai.

The Chairman of EBRD visits the Las Tablas headquarters

Sir Suma Chakrabarti, chairman of the European Bank for Reconstruction and Development (EBRD) toured FCC's headquarters in Las Tablas (Madrid). Those present at this event included: the vice-chairman and CEO of FCC, Juan Béjar; Eduardo González, CEO of FCC Aqualia; Félix Parra, managing director; Luis de Lope, International director; and Mark Muller, manager of FCC Aqualia New Europe. Juan Béjar informed the chairman of EBRD on the new milestones achieved recently by FCC, particularly the conclusion of its financing, the entry of new shareholders, and the new contracts that have been recently awarded.

FCC's recent milestones, FCC Aqualia's commitment to international expansion and its growth strategy in other regions where EBRD operates, were among the key issues discussed in this meeting.

The chairman of EBRD expressed the positive opinion of the bank's relationship with FCC Aqualia New Europe and the company's participation in the construction and management of the New Cairo waste water treatment plant in Egypt.

The CEO of FCC talked about the company's commitment to growth in the water business and its international expansion.

Sir Suma Chakrabarti mentioned the entity's satisfaction on being able to participate in the project that FCC Aqualia and the local Egyptian company, Orascom Construction Industries (OCI) are currently executing in Egypt's capital.

FCC Aqualia's representatives described the Company's growth strategy in other regions where the EBRD also operates. Specifically, they mentioned the projects that are currently being executed in the Balkans where FCC Aqualia New Europe, jointly with FCC Aqualia, are participating in the tender process for a water management contract in Macedonia, in addition to the joint venture with Raja, the main regional Romanian operator, and lastly, they analysed the possible target countries for the medium term, particularly Russia.

European Bank
for Reconstruction and Development

The European Bank for Reconstruction and Development (EBRD) was founded 1990 with the objective of facilitating the transition into a market economy and of promoting private initiative in former East European communist countries.

On the image, from left to right: the representatives of FCC Aqualia: Luis de Lope, international director; Eduardo Gonzalez, CEO, Mark Muller, manager of FCC Aqualia New Europe; and, Félix Parra, managing director, with Sir Suma Chakrabarti, chairman of the EBRD; Juan Béjar, CEO of FCC and Susan Goeransson, senior banker at EBRD in FCC Aqualia New Europe.

Alberto Fabra, the President of the Generalitat Valenciana, and the vice-president and CEO of FCC, Juan Béjar, inaugurated the solar thermal plant in Villena (Alicante), a one of its kind facility in the Valencia Autonomous Community, and the most modern one of the sixty plants that have been built to date in Spain. Termosolar, an FCC Industrial and Seridom joint venture, was responsible for the construction of this plant which was worth an investment of 280 million euros.

From left to right: the chairman of Aqualia, Eduardo González; the president of the Generalitat de Valencia, Alberto Fabra; the deputy mayor of Villena, Mercedes Menor; and the CEO of FCC, Juan Béjar. At the bottom, the FCC team that was involved in the execution of this project.

The President of the Generalitat Valenciana inaugurates the solar thermal plant in Villena (Alicante)

Occupying an area of 150 hectares (equivalent to the size of 185 soccer fields), 141,200 mirrors have been installed at this plant which has an installed capacity of 49.9 Mw, a supply of energy that is sufficient to meet the needs of the 35,000 people who live in Villena.

Work on this project was completed ahead of schedule. Construction began in July 2010, creating 500 temporary jobs. Management and maintenance of the plant has generated 35 direct and 45 indirect jobs.

FCC Aqualia's CEO, Eduardo González who is also responsible for the Energy department, recently sold to Plenium Partners, was present at the inauguration ceremony, alongside the FCC Industrial team who managed the plant's construction project and several authorities of the Valencia Regional Government and members of the city council of Villena, the site of this new plant.

Tramo Vilariños-Campobecerros. section (Galicia)

The secretary general of infrastructures of the Ministry of Public Works, Manuel Niño González, and the managing director of Administrador de Infraestructuras Ferroviarias (Administrator of Railway Infrastructures, ADIF, Spanish acronym), Antonio Gutiérrez Blanco, toured the project of the Vilariño-Campobecerros section which is part of the High Speed Line access project in Galicia.

The 7.9 km long section crosses the towns of Castrelo do Val, A Gudiña, and Vilariño de Conso, in the province of Orense.

This section includes several unique elements, such as the 6,780 metre long Bolaños Tunnel and the 41 metre long viaduct over Regato de Val de Parada. The only section executed using a tunnel boring machine in comparison with other sections of the tunnel that are excavated and supported by means of conventional methods, using the New Austrian Method.

Each of the twin tunnels measures 6 kilometres in length and will be excavated sequentially using the same tunnel boring machine.

Manuel Niño González, secretary general of Infrastructures of the Ministry of Public Works, and the managing director of ADIF, Antonio Gutiérrez Blanco.

Pajares Tunnels (Asturias)

The deputy manager of construction of Administrador de Infraestructuras Ferroviarias (ADIF), Manuel Puga Fernández, visited the waterproofing project of the Pajares tunnels, north side, currently being built by FCC.

This project, particularly complex due to the large water volume and pressure of the underground aquifers, is being carried out as an R+D+i test project at the laboratory at the Machinery Park in Arganda, with the collaboration of the project managers, the delegation and department of the Machinery Department, and the Technical Departments in order to reduce water seepage in the tunnels and to improve the waterproofing of the geocomposite of the sections.

Pajares tunnel work team.

FCC sells 51% of its energy division to Plenium Partners

FCC, the Citizen Services Group, has fulfilled another of the objectives of its Strategic Plan as the year ends: it has sold 51% of the company that owns its renewable energy assets to Plenium Partners. The agreement between FCC and the buyer includes compensation clauses in connection with the future share performance of the Energy business so that FCC may obtain remuneration in addition to the 49% shareholding that it will retain following the sale.

Read the entire news:
http://editor-comunicacion.fcc.es/comunicacion/actualidad/CSCP087002.html

FCC completes the second phase of Vía Brasil corridor

Vía Brasil Corridor II was officially inaugurated on 29 November and will benefit the more than 1.2 million Panamanians who use the Ricardo J. Alfaro and Simón Bolívar roads every day. The first part of this project was inaugurated last October.

The Paical-Simón Bolívar intersection was officially opened by Ricardo Martinelli, President of Panama; Jaime Ford Castro, Panama's Minister of Public Works; and Víctor Alberola Ruipérez, Chairman of FCC Construcción Centroamérica.

The project, built by FCC, cost 216 million Balboas (the Panamanian currency), and included the construction of an overpass, a roundabout, and an underpass as well as the placement of power and telecommunication lines underground and the relocation of two drinking water pipelines.

Mariano Blanco, manager of FCC Aqualia's International Clients, second on the left, described the company's international expertise.

The "Water arrives at the house" seminar was held at the B

Participating in forums...

Instituto Aragonés del Agua (the Water Institute of Aragón) and FCC Aqualia analyse water management challenges in a seminar held at the regional Bajo Cinca headquarters. Under the slogan "Water flows into homes...but where? the analysed the various proposals currently being considered to improve the potable water supply systems in urban centres.

The mayor of Fraga, Santiago Escándil, the chairman of the Cinca Region, Francisco García, and the director of Instituto Aragonés del Agua, Alfredo Cajal, were in charge of inaugurating this event. Jointly with the representative of the Government of Aragón in Huesca, José Luis Moret, they discussed the efforts made by FCC Aqualia in Fraga to revamp an obsolete water supply network. Óscar Lare, the FCC Aqualia representative in Aragón, described the work carried out by the company to improve water supply, where, in the last five years, water performance improved from 49 to 81%.

"Water and Economy" debate at the Technical ASAC Seminar.

The Asociación de Servicios de Agua en Cataluña (Water Services Association of Cataluña, ASAC, Spanish acronym) celebrated its 10th Technical Seminar at the Congress Palace in Tarragona. FCC Aqualia took part in this debate, participating in the "Water and Economy" debate: the effects of the water tariff, late payments, and social policies in services". Juan Luis Castillo, the director of FCC Aqualia's Zone II regional offices, spoke on consumption reduction in the services that the company manages in Cataluña, and the impact of the water fee on invoices. "This impact", he mentioned in one of his speeches, " also has an effect on our customers' payments and therefore, the collaboration of companies with administrations is necessary for managing social policies on providing services to citizens who face the risk of exclusion.

ajo Cinca region (Huesca).

Álex Rovira, with Enrique Hernández, FCC Aqualia's director of Corporate Social Responsibility and Management System, gave a speech entitled "Believe, create, achieve".

...Aragón, Cataluña and Andalucía

FCC Aqualia shares its international experience in a business summit

Organized by the magazine Andalucía Económica, FCC Aqualia took part in the 2nd Internationalisation Summit. Mariano Blanco, FCC Aqualia's manager of International Clients, was in charge of describing the company's experience and explaining how it has succeeded in gaining a foothold in new markets, contributing its expertise and adapting its management to ensure its alignment with various local models.

1st National Congress of the Network of Local Companies of General Interest

FCC Aqualia was one of the companies that sponsored the Annual ELIGE Network Congress, Association of Local Companies of General Interest, which was held under the slogan "Municipal services facing the challenge of efficiency in times of Change", which was held in Seville on 27 and 28 November to discuss crucial issues affecting the companies providing municipal services.

International seminars in... Abu Dhabi

FCC Aqualia participated in the International Water Summit 2014 which was held in Abu Dhabi 2014. José Enrique Bofill, FCC Aqualia's Middle East director described the company's technical expertise and the solutions implemented to enhance efficiency and to reduce water leaks in the networks as a specific example of the project executed in Riyadh, Saudi Arabia.

During the event, FCC Aqualia sparked the interest of the Arab news media that have a broad following in the Middle East. Bofill was interviewed by the CNBC satellite and cable TV channel specialising in economic news as well as by Sky News.

The stand set up by FCC Aqualia became a meeting point of potential clients who are interested in the projects being developed by the company in the Middle East and welcomed many visitors and personalities such as Spain's ambassador to the United Arab Emirates (UAE), José Eugenio Salarich; the commercial attaché, Manuela García, and Alan Thompson, General Manager of Abu Dhabi Sewerage Services Company, an FCC Aqualia client in El Ain.

World Future Energy Summit 2014

Coinciding with this forum, the World Future Energy Summit 2014, an international event on renewable energies with more than 650 exhibitors and 25,000 visitors from 155 countries was being held, where FCC Aqualia also participated.

At FCC Aqualia's stand, from left to right: Mark Barker, CEO of Water and Energy Exchange (WEX); José Enrique Bofill, FCC Aqualia's Middle East Director; Luis de Lope, International Manager of FCC Aqualia; Alan Thompson, Managing Director of Abu Dhabi Sewerage Services Company (ADSSC); and Chris Venemore, Managing Director of MACE.

Saudi Water and Power Forum (SWPF)

The Saudi Water and Power Forum (SWPF) and the National Water Company Focus Day were held from 1 to 4 December last year. The SWPF edition this year was entitled "Shaping the Future of Sustainable Utility Development".

José Enrique Bofill, Middle East director, participated in one of the sessions of the summit, "Efficiency Opportunities". FCC Aqualia was also invited to attend by the National Water Company Focus, the country's leading water management authority. It detailed during this summit its experiences in the design and implementation of the water network project currently being executed in Riyadh known as the "Enhancement water projects in Riyadh".

FCC participates in the EU's LIFE Zero impact environmental project

FCC Construcción is involved in the LIFE IMPACT ZERO project for the development and demonstration of the efficacy of an anti-collision screen for birds on high speed lines (HSL), a European Union funded program as part of the LIFE+ financial instruments which co-finances programs in the field of nature conservation, governance, environmental policies and environmental communication and information.

The presentation of LIFE IMPACT ZERO was held in Madrid in mid-November in a meeting with all participants, where the first activities where the first initiatives were launched. The key objectives of this 4-year project are to:

- Develop a proposed methodology for the determination of optimum measures for protecting birds in new High Speed Lines.
- Demonstrate the effectiveness of a new HSL design which includes protection measures for birds. This design is based on the concept of equally spaced tubular screens (PTE).
- Improve knowledge about the interaction between railway infrastructure and birds, with the aim of safeguarding biodiversity.
- Reduce the impact of existing and proposed HSL in the project area and on established bird populations in protected areas.

People

FCC Safety and Health Awards

FCC has given the awards of the second edition of its Safety and Health Awards. At this event, the first of an international scope, FCC's British subsidiary, FCC Environment, stood out and received three of the awards.

Juan Carlos Saez de Rus, director of FCC's Department of Safety, Health, and Welfare acted as the host of this event.

Juan Van-Halen Rodríguez, deputy-councillor for Employment of the Department of Employment, Tourism, and Culture of the Madrid Autonomous Community; María del Mar Alarcón Castellanos, general director of Work and Manager of the Regional Department of Safety and Health of the Madrid Community; Dolores Limón Tamés, director of the National Institute of Safety and Health at Work; and Rafael Martínez Mesas, deputy-general director of Work Inspection and Social Security in relation to the coordination in PRL, Equality, and Labour Relations; as well as senior management from the

corporate and business areas, participated in this event.

The awards were as follow:

The award in the Preventive Management Category for management development, was given to the FCC Environment work site at Wrexham (United Kingdom). Debbie Croft, in charge of Safety and Health at the FCC Environment (UK) north zone regional centre, collected the prize from Juan Van-Halen Rodríguez, deputy-councillor for Employment of the Department of Employment of the Madrid Community.

The award in the Preventive Management Category for the development of relevant measures was handed out to the Canary Islands Environment Office. Otoniel Santana, a prevention technical from this regional office, collected the prize which was given to him by Dolores Limón, the director of the National Institute of Safety and Health at Work.

The Technical Innovation award (R+D+i) was given to FCC Environment for its block

Juan Van-Halen Rodríguez, deputy-councillor for Employment of the Department of Employment, Tourism, and Culture of the Madrid Autonomous Community gives the award to Debbie Croft, head of Safety and Health at the North Zone regional branch of FCC Environment.general manager of Organization at FCC gave the prize to Paul Stokes, manager of Prevention, Quality, and the Environment at FCC Environment.

and locking systems during maintenance tasks. Alan Cork, head of safety and health at the south zone office collected the award which was given by Rafael Martínez Mesas, deputy general director of Work Inspection and Social Security.

As to the honourable mentions, Ana Villacañas Beades, FCC's General Director of Organization, delivered the first of these awards to Paul Stokes, director of Prevention, Quality, and Environment at FCC Environment for his work in leading the change, as part of his job responsibility, towards a culture of safety at work.

The following personal award was given to Javier Suárez, head of the Trainasa Sewerage Department at FCC Aqualia. The prize was given to him by Francisco Martín Monteagudo, Human Resources manager at FCC. And the last of these awards went to Ángel Sánchez, in charge of maintenance and conservation work of FCC's corporate buildings who was given the prize by Mar Alarcón, General Director of Labour and Manager of the Regional Institute of Safety and Health of the Madrid Autonomous Community.

Ana Villacañas Beades, General director of Organization at FCC gave the prize to Paul Stokes, manager of Prevention, Quality and the Environment at FCC Environment.

Dolores Limón Tamés, director of the National Institute of Safety and Health at Work gave the prize to Otoniel Santana, a Prevention technician at the Canary Islands Environment branch office.

Francisco Martín Monteagudo, manager of Human Resources gave the prize to Francisco Javier Suárez, head of the Trainasa sewerage Department of FCC Aqualia.

Rafael Martínez Mesas, deputy director General of Work Inspection and Social Security gave the prize to Alan Cork, head of safety and health and FCC Environment's south zone regional office.

María del Mar Alarcón Castellanos, general director of Work and Manager of the Regional Department of Safety and Health of the Madrid Community gave the prize to Ángel Sánchez, in charge of maintenance and conservation of all of FCC's corporate buildings.

The legal department pays homage to José María Verdú

After 23 years at FCC, the moment has come to say farewell to José María Verdú, former managing director of FCC's Legal Department. He is retiring happily and looks forward to this new stage in his life. His co-llaborators have wanted to honour him and express their appreciation at FCC's offices in Las Tablas for all the years working together, living memorable, difficult, and successful moments.

José María expressed his appreciation for the comradeship, the efforts, and the team work of all the people in his department and for the support he has received throughout his professional career. During the event, members of the Legal Department gave him a gift as a token of appreciation for his career at FCC.

Letter from Felipe García to José María Verdú

See pdf

Watch video

Gemma Thatcher runs for life

Gemma Thatcher, Administration Manager for re3, ran the Race for Life in reading, Berkshire County, England, with a group of family and friends called the "Radiation Runaways".

Thanks to her efforts, 2,235 pounds were raised which will be earmarked for funding the necessary research for treating and curing cancer.

After receiving her own thyroid cancer diagnosis (now in remission), Gemma decided to complete her first Race for Life in 2012. Since then, her mother and two close friends have also received treatment for cancer.

Unfortunately, her mother died last September and Gemma is keen to encourage even more people to take part in future Race for Life events to help raise funds required to fight this disease.

The success of the Açu Port (Brazil) work team

After a difficult start, the work of FCC at the Açu Port project is progressing as schedule and, in January, 44% of the project had been completed.

This progress was achieved thanks to the team efforts and work which has made it possible to surmount the most difficult challenges.

Caisson number 15 was recently anchored at the Açu Port project; the sloping wall was completed up to the +3 level, and other caissons are going to be built at the Mar del Aneto production vessels.

All the caissons built in Spain were anchored by mid-January thereby completing 44% of the total project.

Congratulations for the Açu team for achieving this great milestone.

The project

The contract contemplates the construction of terminal TX-1 at the Açu Port located in São João de Barra (north-east Brazil), 315 kilometres north of Rio de Janeiro, a region which produces 85% of the country's oil and gas. The project involves the expansion of a dock previously built which requires a new dyke in order to be able to start operations.

“Coffee Morning”
raises funds for Macmillan Cancer Support

As part of the Macmillan Cancer Support “Coffee Morning” campaign, Christine Hunt organised a cake sale at the sales office in Doncaster, United Kingdom. The funds raised were given to this charity which is provides care to cancer patients.

From the Communications Network, we want to thank Cassie Beedle, Sandra Blakeley, Sarah Bond, Wendy Cunningham, Jan Ducker, Vicky Hird, Nicola Judge, Jackie Morrison, Mel Robinson, Mandy Webb, Amanda Welsh and Jane Widdison for their involvement in this project and for baking the cakes for this charity campaign.

See campaign
http://coffee.macmillan.org.uk/Home.aspx

20 million pounds

Coffee Morning is organised throughout the United Kingdom. At this breakfast event, people make their donations for a cup of coffee and cake. Thanks to this initiative, over 20 million pounds were raised in 2013 throughout the United Kingdom.

Henley Half Triathlon

Steve Bell, Development Manager at FCC Environment, took part in the Henly Half Triathlon which involved swimming 1,900 metres, cycling 90 kilometres, and running a 21-kilometre half marathon.

The funds raised will be split between two charities which the company works with as part of the household waste recycling centre contracts with Buckinghamshire and Hertfordshire County Councils.

Sue Ryder, the charity that provides care to people living with end of life and long-term conditions, runs a reuse shop at the Harpeden centre in Hertfordshire and the South Bucks Hospice, a hospice for cancer sufferers, and is in charge of the two re-use shops in HighHeavens and Aston Clinton in Buckinghamshire County.

hay salida

a la violencia de género

LIBRES
DESCARGA LA APP

016 ATENCIÓN A VÍCTIMAS DE MALOS TRATOS

GOBIERNO DE ESPAÑA
MINISTERIO DE SANIDAD, SERVICIOS SOCIALES E IGUALDAD

Social responsibility

Ecological spot in Panama

La Valdeza quarry and the commitment to sustainable development

La Valdeza and the Comunidad 19 de abril are two of the sectors situated west of Panama City, both of which share several characteristics.

Many adults get up early in the morning to go to work, girls and boys to go to school, housewives to take care of their families, men and women who struggle to make their homes a healthy place for their children.

In this ecological spot in Panama, hundreds of people work very hard to extract stones and rocky material for production at the La Valdeza quarry, raw materials for the execution of different works and projects; they take care of every detail when they work thanks to their environmental awareness acquired with the passage of time.

Since its creation in 2009, La Valdeza quarry has been managed by FCC under a 20-year concession agreement.

Situated in the neighbourhood of the two communities, the facilities the scenario of an essential production process for the development and progress of their country. In these surroundings, the company and communities have created a framework for dialogue, a mutually beneficial relationship, and every day, every one contributes their willingness, understanding and the necessary collaboration for peaceful coexistence.

FCC's conviction regarding responsible corporate, social, and environmental management is essential for focusing its per-

> "In keeping with its commitment to sustainable development, FCC promotes activities promote, among the workers and those who live in the area on the need for environmental awareness"

formance policies which also include its collaborators.

Neighbours such as Amade Hernández, one of the spokespersons of the La Valdeza community, say that things were not easy at first. "I was never of the opinion that the quarry had to go since this is a large company and the community is small and I always thought that the company could be a way of resolving the problems and, now that I see the results, I fell happy", she said.

Mrs. Hernández said that "FCC was aware that the work activity was generating problems in the community and, accordingly, it made efforts to control any type of situation that could affect it and to mitigate any possible impacts".

In keeping with its commitment to sustainable development, FCC promotes activities promote, among among the workers and those who live in the area on the need for environmental awareness.

FCC has carried out various programs fo-

cused on reforestation and has implemented measures to minimise dust, organizing and controlling the traffic of trucks through the roads, and the noise so that the neighbours can enjoy they hours of rest.

Responsible measures

Geordanis González, a resident in the 19 de Abril community, is another member of the community who has a positive opinion of FCC's work. Her role as a representative of this community has meant that she had to keep an eye on each of the Company's actions.

She said that the relationship between the communities and the company have improved in recent years and that the Corporate Social Responsibility measures to improve the situation of the community have made it possible for all to live in peace, harmony, and tranquillity.

She believes that there is still a lot to be done but is grateful for the constant medical visits organised by the company since these are beneficial and improve the health of people.

The construction of a multi-use park in the sector will benefit and make hundreds of children happy and she believes that this is one of company's best initiatives in this region.

People have become very involved in the activities that are organised, such as Mr. Bolívar Cano Cruz who has participated in cleaning the roadsides and in the health seminars, all of which he believes is of great help for the community.

The Company, in all of the activities carried out based on the FCC Corporate Social Responsibility program, encourages the participation of the community, carrying out communication and social actions that promote inclusion and the commitment of people to a corporate project of great importance for the country's development.

Health and safety, always!!

FCC Environment celebrated European Week for Safety and Health at Work (H&S Week) by showing the film 'It Changed Everything' that demonstrates the impact of fatalities and emphasises the importance of health and safety at work.

FCC Employees played a role in the film and shared their experiences with the rest of the staff.

FCC Environment is in the middle of a three-year plan to improve the health and safety of its workers and, therefore, H&S week provided an opportunity to reflect on the progress achieved to date.

Among the initiatives, the daily updates on the Intranet's SharePoint were particularly relevant, providing information on the achievements, including examples of near-misses. Posters on health and safety were also distributed at all work sites and the "Don't gamble with your health and safety" was also distributed. We believe that all of these actions generated useful discussions and encouraged a positive safety culture at all levels.

Health and Safety Best Practices Award

This work was recognised by the Chartered Institute of Waste Management (CIWM) with the Award for Environmental Excellence.

> "It is essential for all personnel to become involved each day and to perform their work in a safe manner"

FCC starts recycling for Staffordshire

FCC Environment won the contract for managing 14 household waste recycling centres (HWRCs) on behalf of Staffordshire County Council. This reinforces the Company's position as one of the leading operators of HWRCs in the United Kingdom since it managers over one hundred sites on behalf of 22 local authorities.

Up to five million pounds sterling will be spent on upgrading the urban waste recycling centres in Biddulph, Bilbrook, Burntwood, Burton, Cannock, Cheadle, Leek, Lichfield, Newcastle-under-Lyme, Rugeley, Stafford, Stone, Uttoxeter and Wombourne.

Charity work

Following the success of the re-use shops in other areas, members of the community will be able to donate unwanted household goods which will then be sold at the re-use shops to raise money for Katharine House, a local hospice that provides fee care for people with incurable diseases.

The objective is to save the Council about 240,000 pounds per year and to improve services by opening some of the recycling sites for longer hours and expand the range of materials and goods that can be recycled at these sites in order to make it as easy as possible for the people of Staffordshire to recycle a greater amount of waste.

In the photo, from left to right: Gill health, member of the Staffordshire County Council Environment Cabinet, and Nick Blake Regional Operations Manager of FCC Environment.

In Mazarrón (Murcia)

FCC Aqualia collaborates in the creation of social-sports school to encourage integration

FCC Aqualia entered into a collaboration agreement with the Real Madrid Foundation to promote the integration of children at risk of social exclusion. Learning through sports and spending leisure time in a healthy manner are the starting points of the project which is to be developed in collaboration with the city council.

A moment during the agreement signing ceremony. From left to right,, Juan Luis Castillo, director of FCC Aqualia's Zone II regional office; Ginés Campillo, the mayor of Mazarrón, and Enrique Sánchez, vice-chairman of the Real Madrid Foundation.

Emilio Butragueño and Juan Luis Castillo during the signing ceremony.

Thanks to the collaboration agreement, Mazarrón will have a social-sports school to be developed jointly with the city's local authorities to encourage learning values through sports and a healthy use of leisure time. This initiative is aimed at 50 children who are at risk of social exclusion who will be able to play sports with other children without this problem to ensure their integration and equal opportunities.

Juan Luis Castilla, director of FCC Aqualia's Zone II regional office signed the agreement with the foundation in a ceremony which was attended by Emilio Butragueño and Enrique Sánchez on behalf of the Real Madrid Foundation, and the mayor and sports councillor of Mazarrón's city council.

Juan Luis Castillo thanked the city council of Mazarrón for the opportunity given to the company to collaborate in this great initiative and, personally added that "this event has a special flavour for me and compensates the difficulty of being from Cataluña and a fan of Real Madrid".

Emilio Butragueño, former soccer player and director of Institutional Relations of Real Madrid explained that the girls and boys "will enjoy soccer, learn sports and social values that will help contribute to their team work on a day to day basis, motivate them and inculcate the values of solidarity, so important for being a better person which is, in short, exactly what we are striving for".

From left to right, José Carlos Gómez-Sal, rector of the University of Cantabria; Íñigo de la Serna, mayor of Santander; José Luis de la Torre, director FCC Aqualia's rest of the north regional office, and José Luis Gil, the city council's coordinator of the Strategic Plan during the press briefing.

Santander unveils its "Smart Water" management project

Íñigo de la Serna, the mayor of Santander, unveiled at a press briefing the project to be implemented in Santander known as Smart Water; smart water management of the Water Department thanks to new technologies.

It will be implemented firstly over the coming months as a pilot project in the Santander Nueva Montaña neighbourhood and will expanded later to the rest of the city.

Attending the event were the councillor for the Environment, María Tejerina; José Carlos Gómez-Sal, the rector of the University of Cantabria; José Luis Gil, project manager and former councillor of the Regional Government, accompanies José Luis de la Torre, director of FCC Aqualia's rest of the north regional office.

The project will start as a pilot project in Nueva Montaña, a neighbourhood in Santander where more than 1,200 devices will be installed over the next five months which, among its functions, makes it possible to read the water meters at the home from a distance, measure the flow, the quality of the drainage manifold headers, and regulate the water pressure.

Mobile applications were also developed to provide users with real time data on consumption, malfunctions, or water cut-offs thereby enabling them to make decisions on the consumption or the use that they make of water. These applications will be used to inform users of any scheduled water cut-offs, information on malfunctions, or warnings when there is excessive use of water.

Fernando de la Torre stressed that the Company has been "wagering on innovation for more than 20 years" and, as proof of this, he highlighted the fact that it is currently managing around twenty projects of this nature. The rector of the University said that the project was a "clear example of the knowledge that the University can provide which can then be applied to our day-to-day lives".

Well-being

FCC Aqualia wins more recognition for its prevention of occupational hazards

FCC Aqualia is the first company in the region of Murcia to be awarded the seal and approval to use the Company Committed to Safety and Health at Work brand. It recently won the Aragón Committed to Prevention award that was also awarded previously by the Valencia Autonomous Community.

Two photographs of the training courses on safety at work.

The Department of Education, Universities, and Employment publicly recognised the concern and positive management in relation to the prevention of occupational hazards and health at work carried out by FCC Aqualia, Gestión Integral del Agua, S.A., granting it the "Safe Company" seal of the Murcia Region. This award aims to recognise the merit of industries that show a greater concern for safety at work.

Pedro Antonio Sánchez, the Councillor for Education, Universities, and Employment, was in charge of handing the award to Manuel Calatayud, director of FCC Aqualia's regional office in the Levante region. The event, attended by numerous represen-

The Councillor of Education, Universities and Employment, Antonio Sánchez, gave the award to Miguel Calatayud, director of FCC Aqualia's regional office in the Levante region.

tatives of the media, took place at the company's offices in Murcia. "FCC Aqualia stands out in the Region of Murcia thanks to its work in safety and health at work, which has become its distinguishing mark. From this department, we want to publicly recognise its efforts and professionalism of its workers and management", Sánchez said during the event.

The Government of Aragón also publicly recognised FCC Aqualia's good management of the prevention of hazards and health at the work place in the services which the company manages in Aragón, specifically, Depurteruel. The implementation of this preventive management as contemplated in the contract with Depurteruel and, in general, in all of its facilities in Aragón, has contributed to reducing the number of sick-leave related incidents by more than 50% from 2009 to 2012.

No incidents resulting in sick leave have been recorded in the Depurteruel contract over the past 5 years. The success of this zero index, deserving the award, is due to the good management and common efforts of the 17 Depurteruel workers. In addition, the company has implemented accident-related preventive measures, policies, and practices, training and research.

The director of FCC Aqualia's Zone II delegation, Juan Luis Castillo, stressed "the important work that the company has carried out in implementing novel and efficient prevention systems that significantly improve safety and health conditions at work".

FCC's campaigns

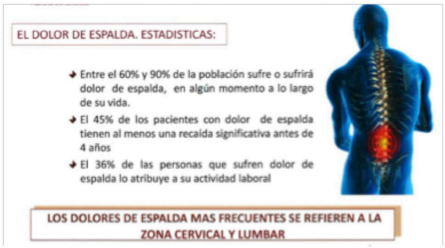
Promoting health
"Taking care of your Back"

The key objective of this campaign is to promote a healthy back and prevent complaints.

> "Take care of your back for a healthier life"

As part of the measures aimed at promoting health, the TAKE CARE OF YOUR BACK campaign covers the main health problems affecting people in their personal and professional lives: the discomforts, pains, and injuries affecting our backs, which diminish the quality of life of people in their day-to-day lives.

FCC, in collaboration with the Sociedad de Prevención FREMAP, organised several events to build awareness and to provide information on back discomforts and on the need to take care of our bodies and our movements to prevent musculoskeletal injuries and discomforts.



After publishing information at work places on back pain caused by handling loads, driving, and being overweight more than 30 live sessions have been organised at various business areas. During the training courses, the key risk factors for back pain have been explained as well as the preven-

> “Good posture habits are essential for ensuring the health of our backs”

tive measures and recommendations on posture to prevent injuries or to ease the pain when the back has been hurt.

Healthy posture habits are essential for ensuring the health of our backs. Bad posture over time, nevertheless, can change the statics of our backbone, and produce pain in the cervical (neck), dorsal (central part of our backs) and lumbar (lower part) areas; injuries and muscle spasms, traumatism (due to slams or brusque movements) or diseases caused by erosion such as arthrosis or vertebral disc hernias.

Preventing and practicing good posture habits can be very beneficial for the health of our backs. It is essential to maintain good posture in the different situations of our daily lives, perform simple exercises to strengthen and tone our back muscles, and to practice the right sports to maintain the health of our spines. It is also recommended that we avoid other risk factors such as being overweight, smoking, leading a sedentary life, excessive physical exercise, and certain psychological factors than can cause or aggravate certain back disorders.

FCC's Campaigns

Safety and health in winter
"Adapting your driving to cold temperatures"

During the winter months, when weather conditions are adverse and place our road safety at risk, FCC made several recommendations and issued warnings so that we can all adapt our vehicles and our way of driving to inclement weather conditions.

- Don't forget to have the following in your vehicle: a reflective vest, warning triangles, chains, lantern, ice scraper, antifog cloth, battery cables, and a spare tire.
- In case there are any incidents, it would be useful to have warm clothing, gloves, waterproof footwear, calorie-rich foods, a cell phone and charger for the car.
- Proper maintenance of the vehicle is essential: control the levels of liquids (anti-freeze and refrigerant), oil, and fuel deposit, and ensure that the windscreen wipers are in good working order, as well as the tires (pressure and treads), brakes, heated real glass window, hood, and lights.

Watch the Traffic Department (DGT) video

Driving tips

- Keep the headlights on.
- Reduce speed.
- Increase the distance between cars.
- Don't put on the breaks abruptly.
- Check the conditions of the roads
- Don't change the speed sharply or move from one lane to another or change directions abruptly.

Healthy Christmas

FCC organised for the first time its Healthy Christmas campaign which consisted of a contest to receive ideas on healthy habits and tips during the Christmas holidays and, thereby, launch the new year and the "Healthy Community 2014" project.

Some of the ideas were:

- Surprise everyone with an original, healthy and light lunch or dinner.
- Enjoy an active vacation.
- Give the gift of vitality, health, and well-being.

Some of our colleagues sent their proposals, all very interesting, for putting into practice once the holidays were over.

M. Antonio Carmona, from FCC Construcción, tells us not to go to bed angry and to try to solve the day's problems especially those with those we love (inspired by a text by Gabriel García Márquez).

Marta Agudo, from FCC Ámbito, encourages us to do something for the environment, to consume responsibly, and to recycle waste.

Alberto Terrón, from FCC Aqualia, proposes the activity "the race of repentance" which implies spending as much time as you did enjoying a generous meal by doing some physical activity to offset the binge eating.

Other advice and recommendations included happiness recipes (smiling and creating illusions); giving, sports and health; purifying treatments; handmade gifts; homemade desserts; keeping active; spending time with the family at the park or shopping,; sharing some time; enjoying the outdoors; and, spreading a healthy spirit.

Learn about the campaign
For more information and if you want to be part of the Healthy Community 2014, get in touch with: direccionprl@fcc.es

Blood donation

The blood donation campaigns of the Madrid Autonomous Community and the Spanish Red Cross were carried out last November at FCC's headquarters in Federico Salmón and Las Tablas, respectively.

A total of 106 FCC employees, showing their solidarity, donated blood at the transfusion and blood donation centres, making a valuable contribution.

When people lose a great amount of blood due to an accident, an operation, or a health problem, they may need a blood transfusion. Blood cannot be manufactured, at present and, therefore, it is necessary to obtain blood from another person, a blood donor. To ensure that blood is available at all times, it is necessary that a sufficient number of healthy people donate blood on a regular basis.

From each blood donation, three components can be obtained which can help according to the different needs:

- **Platelets:** mainly for sick people undergoing chemotherapy.
- **Plasma:** for major bleeding and those who have suffered burns.
- **Concentrated red blood corpuscles:** congenital and chronic anaemia, leukaemia, transplants, and accidents.

For further information, See pdf

> "Donating blood is altruistic, voluntary, and responsible"

Promoting Health

By:
Dr. Silvia Montes Fernández
Physician specialising in Occupational Health – FCC Medical Department

Promoting Health is defined by the World Health Organisation (WHO) as "the process that enables people to increase control of their health".

Promoting Health (PH) encourages changes in the environment that help to promote and protect health. It is a global concept that implies the involvement of individuals, organisations, communities and institutions that collaborate to create the conditions that guarantee the wellbeing of everybody.

Health is not just a synonym for the absence of diseases. Being healthy implies a permanent state of emotional, physical, and mental wellbeing, something that we should strive for to improve the quality of our life. Knowing how to take of our health is essential for living a better and a happier life.

The programs and projects developed in different surroundings: educational, medical, community, and at work.

Common effort

When we speak about Promoting Health at the Work Place, we refer to the common efforts of businessmen and workers to improve welfare at the work place and, secondarily, global health. Promoting Health is much more than merely complying with legal requisites on Safety and Health. It implies that companies must contribute actively to improve the health of its workers.

This clearly has a positive impact on the company. Studies that have been carried out in various European countries and in the United States show that Health Promotion programs decrease the direct costs associated with medical care, and also prevent absenteeism due to sickness, reduce personnel turnover, and accidents at work. This evidence is increasingly more solid and companies should not ignore it, especially if they want to be sustainable and competitive. Improving the health of workers does not have to be expensive for the employers and the benefits are multiple, for the company and for workers.

> "Being healthy implies a permanent state of physical and mental wellbeing"

The idea is to act comprehensively; protecting employees from specific risks related directly to their activity, and, encouraging the creation of healthy work places that make it possible for the worker to acquire and maintain good habits.

These measures are aimed at improving work conditions and surroundings, physical

> “Promoting Health requires the active commitment of the company and its employees”

and psycho-social, focusing mainly on the following aspects:

1.- Improving the job's organizational method. For example, allowing more flexibility in the working day, encouraging teleworking, offering permanent learning opportunities, job diversification.

2.- Improving the work surroundings. Encouraging support among colleagues, improving psycho-social conditions, offering healthy food at the company's cafeteria.

3.- Facilitating the involvement of workers in healthy activities, encouraging physical activities by organising sports and other activities.

4.- Promoting personal development, offering training courses to fight stress or to stop smoking, encouraging healthy work habits, particularly good posture.

5.- Offering the resources for taking care and monitoring health; vaccination campaigns, giving the worker the possibility of having periodical medical checkups to learn about their health conditions.

Monitoring health is particularly important since the company offers us this possibility by being able to have medical checkups, of detecting the impact of the job on our health, making early diagnoses and preventing pathologies that could appear repeatedly in a specific group of workers. Moreover, these health controls enable the detection of hazardous occupational situations thereby making it possible to adopt corrective measures to prevent them.

By analysing this information, it is possible to know the actual situation of the workers at each company in order to define individualised and specific action strategies to address the problem detected and contribute to creating a healthy work environment.

We can also detect alterations not related with the job surroundings which are due to acquired cultural habits, such as smoking, drinking alcohol, unhealthy diet, which can also cause preventable diseases that must be controlled to improve the worker's overall health.

This information can also make it possible to define the programs that are more necessary to try to change these habits.

Promoting Health, in short, requires an active commitment of both parties: the company, by offering healthy work conditions, and workers, by being actively involved in health promotion programs.

FCC at the 5th Congress on the Prevention of Occupational Hazards in the Public Administration

The 5th Congress on the Prevention of Occupational Hazards in the Public Administration, held on 3 and 4 December in Valladolid, gathered an import5ant group of experts and included the participation of the Public State Administration and various authorities from different departments of the Junta de Castilla and León (Castile and León regional government, Treasury, Health, General Department of Labour and Occupational Hazards, and Work Inspection and Social Security).

The most relevant and current safety and health issues were discussed during the two days of the seminar. The blocks discussed focused on updating various technical and medical aspects, particularly in respect to biological hazards, non-ionising radiation, and an interesting presentation on the voice as a work tool; plus other issues related to mobility, road safety and traffic accidents, predictive and personalised medicine, and healthy habits.

FCC was in charge of the closing conference with the speech by Carlos Sáez de Rus, director of Safety, Health, and Welfare at Work, with the title “Opportunities for safety and health at work in times of crisis” where he discussed, based on the current political, social, economic, and job situation, the need to focus company’s actions towards the healthy company concept which, besides improving the quality of life of those working at the company is vital for their productivity, competitiveness, and sustainability.

> “No company can be better or worse than the people who comprise it”
>
> *Professor Ishikawa*

> “In times of change, learners inherit the earth; while the learned find themselves beautifully equipped to deal with a world that no longer exists”
>
> *Eric Hoffer – American writer and philosopher*

Children's Prevenland Prize-giving ceremony

PREVENLAND, is a virtual world where children can have fun, safely and with an educational background on preventing accidents, living a healthy life, and conservation of the environment. In June 2012, FCC signed an agreement with the Mapfre Foundation for the use of the contests of the Educa tu mundo (Educate your world) website and, through this site, the development and access to the PREVENLAND contest for the young family members of FCC employees, an event which has been repeated since then.

In this year's 2nd edition of the contest, the prize winners were:

María Martínez Sola (11 years), daughter of Juan Alberto Martínez Rocillo (Megaplás, Construction Division), winner of the first prize, a bicycle and a safety helmet.

Clara Donadiós Muñoz (9 years) and **Jesús Donadiós Muñoz** (12 years), children of José Vicente Donadiós Algarra (FCC Industrial), who came in second and third and were given skates and protective gear, and a racquet and a sports bag, respectively.

The prizes were given by Francisco Martín Monteagudo, managing director of FCC's Human Resources Department; Antonio Guzmán Córdoba, managing director of the Institute for Prevention, Health, and the Environment of the Mapfre Foundation, and Jose María Seoane Yarza, manager of FCC's Corporate Expenses and General Services, in an event where the prize-winners were accompanied by their family members.

Some of the advice and tips that María, Clara, and Jesus wanted to highlight from what they had learned during the games was:

María: "trash must be thrown in the appropriate container and we must be careful with the objects that we find and use", "we should not eat too much fat or sweets and must exercise a lot".

Clara: "you have to wear the helmet and ride the bicycle carefully", "eat less junk food and more vegetables", "you should not throw garbage on the floor".

Jesús: "you have to put on sun protection and not a tanning lotion", "turn off the TV and the computer completely", "the wheels of the car must be in good condition and we must put on our seat belts", "we should not eat too many sweets and must play some sports".

During the event, there was a very special moment when everyone wished Jesús a happy birthday. After the prize ceremony, the crowd enjoyed a birthday cake in honour of Jesús.

The 2nd edition of the Prevenland contest has ended for FCC although the one organised by the Mapfre Foundation continues at the www.prevenland.com website.

For more information, contact:
direccionprl@fcc.es

Knowledge

The most efficient waste collection truck in the market, FCC technology

> The electric truck was developed thanks to the research conducted by the Citizen Services Group

> The new vehicle slashes energy consumption by 60%

The most efficient waste collection truck ever designed, it is a side-loading, electric hybrid, latest generation collection vehicle that consumes 60% less energy than conventional diesel-powered trucks. It also offers several other advantages such as reduced pollution, less maintenance, and better performance.

An exclusive FCC technology, it is the result of more than six years of research conducted by the Citizen Services Group jointly with other international energy management companies in the automotive, electric traction, and battery sectors. It is the equipment with electric propulsion technology for urban waste collection services that has achieved the greatest reduction in energy consumption and, accordingly, of pollutant emissions.

Zero emissions vehicle

In fact, it is a zero emissions vehicle when it provides waste collection services within a city. During its journey to the landfill sites or recycling centres, the truck charges its batteries by means of a natural gas fed engine. That is, it operates at all times with the electric engine when travelling as well as when performing loading and unloading operations and only uses the thermal engine for charging the batteries.

The truck does not need a gearbox or indirect transmission since the wheels receive the propulsion generated by the electric engine. This means greater energy performance of the electric load, three times more than that of a combustion engine.

An electronic system was developed to control electric power which controls the three engines of the equipment: the traction engine, the engine that drives the bodyworks, and the compacting services.

A very sustainable vehicle. for a more
Barcelona pel Medi Ambient
Gestió de residus
900 226 226

STRALIS
IVECO
270

Barcelona pel Medi Ambient
Gestió de residus

> This project reflects FCC's commitment in the field of innovation applied to services

The bodyworks are driven by a hydraulic pump fed by an electric engine that only starts to function when power is required by the operators who drive the vehicle. This reduces the noise produced in loading and unloading operations to a minimum.

Commitment to innovation

This project reflects FCC's commitment to innovation applied to services. The Citizen Services Group's sustainability policy is directly aligned to the needs of public administrations and citizens' demands, aware of the importance of managing financial and natural resources with sustainable criteria. It also underscores FCC's leadership positioning in the management of urban services,

FCC wins prize for its electric waste collection truck

FCC was awarded an Innovation + Sustainability + Network Prize, organized by the financial newspaper Expansión, in the category Great Sustainable Company for its electric waste collection truck.

The vice-chairman and CEO of FCC, Juan Béjar, collected the prize which was given to him by Miguel Arias Cañete, minister of Agriculture, Food and the Environment. Alicia Alcocer Koplowitz, CEO of the Citizen Services Group and vice-chairwoman of Cementos Portland Valderrivas was also present at this event.

Béjar stated that "innovation is an essential vector for competitiveness and fundamental at times like these when the Spanish economy needs a boost". Bejár acknowledged the merit of the engineers working at the company which has more than 100 years experience in waste collection. He indicated that there are currently more than 300 vehicles of this type circulating in Spanish cities such as Madrid and Barcelona. It is also a Zero Emissions vehicle (less stress for workers and less accidents at work) and its development benefits FCC and represents a competitive edge versus its peers. A proprietary technology offering clients, in tender processes a profitable, low consumption technology and an alternative to conventional fuels.

The prize is awarded as recognition of innovation in the design of products and services in organizations in the context of an integration process in a more sustainable society.

Finalist in the World Smart Cities Awards

The FCC-technology truck was also a finalist at the third edition of the World Smart Cities Awards 2013. Of the more than 250 projects submitted, the international experts committee of Fira Barcelona selected FCC as one of the finalists in the project category for the design of the side-loading, hybrid electric compactor vehicle.

The other five finalists in this category were: "Funabashi Morino-City" of the Mitsubishi Corporation (Japan); the i3 inter-mode mobility model, integrated and innovative of the city of Offenbacham Main (Germany);

such as handling household and industrial waste, the end-to-end water cycle, street cleaning, and maintenance of roads, parks and gardens.

The vice-chairman and CEO of FCC, Juan Béjar, collected the prize from Minister of Agriculture, Food, and the Environment, Miguel Arias Cañete.

the proposal of Smart Landscaping de Fredericia (Denmark); the technological integration of Coruña Smart City, A Coruña (Spain); and the Things and Smart Community internet project of Wuxi (China).

The aim of these prizes is to identify the best cities, the best projects, and the best innovation initiatives in the smart city concept.

.A.S.A.

Scrap metal is not for the scrap heap

"This is for the scrap metal dealer" is a constant refrain can be heard often. The fact is that something is ready for the scrap heap, but this does not necessarily mean that it has come to the end of its useful life. There is still the chance that it could be of interest to somebody, which is the theme of this story.

> "The Třinec iron and steel Works is the largest one in the Czech Republic"

Everybody knows that it pays to choose quality tires. Their road handling depends on many components. One of them is a metal component, the so-called cords, which are manufactured with several items, including scrap metal from .A.S.A.

But let's start from the beginning: Pieces of rail, old pipes, sheet metal, etc. That's what the motley pile of scrap metal looks like accumulating in the yard of SD Kovo in Mladá Boleslav, which belongs to the group Demonta Trade SE (www.demontatrade.cz). The company .A.S.A., a traditional partner of SD Kovo, has made its contribution to this pile.

A major portion of the carefully sorted scrap metal from this yard goes to Třinecké Železárny (Třinec Ironworks) – Moravia Steel. This iron and steel colossus is the largest steelworks based on Czech capital that produces the most steel in the Czech Republic. Every day the scrap metal entering the gates here is changed with other admixtures into new products for the construction, engineering and automotive industries. The scrap is put into the blast furnace of the mill, melted down, and combined with alloying ingredients to make cast ingots. If the final product should be wire, it has to be rolled into different diameters.

Wire is the best-selling product offered by Třinec Ironworks. The wire then goes to customers all over the world. They include ŽDB Drátovna in nearby Bohumín (www.dratovna.cz). Here, the purchased wire is manufactured to make steel cords and tire wire for the automotive industry, cable wires and lines that are reliably used by skiers in the Czech mountains or miners in mines, springs for locomotives and cars, and wire for manufacturing screws for cars. It's a product that's a part of practically every step of our process," says Stanislav Sosna, ŽDB's Technical Director: "Every fourth car in the Czech Republic is driving with screws made from the wire manufactured in Bohumín."

Cord wire is used for manufacturing steel cords for automobile tires. It is made of high carbon steel with high requirements for quality, testing and inspection. It decreases during the flow process by drawing its diameter, adding brass and increasing its strength, thereby increasing its quality and fatigue properties. The final shape of the

cord is then obtained by stranding several wires. The final product must meet a number of critical features laid down by a fixed standard, including breaking force, copper and zinc content in the coating, thickness of the coating, residual torsions or static adhesion to rubber. If only a single parameter fails, it heads for the scrap heap. “Every year ŽDB manufactures about 8.000 tons of cords, which is 3,691.544 km of wire that would, for better illustration, wrap around the Earth 92 times, be enough to go to the moon 10 times and to the sun 2.5 times,” adds Mr. Sosna.

Quality is a prerequisite for safety, because wire is one of the basic structural components of new tires. The cords made from wires from ŽDB Drátovna are used by many tire producers around the world, including Continental, because it contributes to the desired quality of the tires produced by these manufacturers. Thanks to these steel cords, they have great road handling. And if you have them for your car, then you know better than anyone else.

More about metal recycling can be found at http://www.asa-group.com/en/ASA-Group/Waste-to-Resource/About-the-materials.asa
What happens to tires that are worn out? Other stories about waste and their “new transformation” can be read about it here.

In Riyadh

Spain's Infrastructure Minister meets FCC's Chairman and CEO to discuss the subway project

Spain's Infrastructure Minister, Ana Pastor, met in Riyadh with FCC Chairman, Esther Alcocer Koplowitz, and Vice-Chairman and CEO, Juan Béjar, to discuss the details and schedule of the project for three new lines of the Riyadh subway, in Saudi Arabia, which are being built by a consortium led by the Citizen Services Group.

The total budget for designing and building the 176-kilometre subway system exceeds 16.3 billion euro. FCC, the Citizen Services group, is leading the FAST consortium, which is building lines 4, 5 and 6 for 6 billion euro. The other partners of the consortium include the Korean company Samsung and French company Alstom. The other members are Strukton (The Netherlands), Freyssinet Saudi Arabia, Typsa (Spain), Atkins (UK), and Setec (France).

> "Ana Pastor shows her interest in the characteristics and timetable of the longest subway in the world under construction"

In a meeting at the Spanish Embassy in Riyadh, Juan Béjar, vice-chairman and CEO, and Jaime Freyre, the director of the consortium, discussed in the detail with the minister the work that has been carried out since the contract was awarded at the end of July 2013. Thus far, geological studies and terrain exploration have been completed, in line with the proposed timetable. Those present in the meeting included Joaquín Pérez-Villanueva, the Spanish Ambassador in Saudi Arabia and Miguel Jurado, General Manager of Construction at FCC.

Around 160 people, 40 of whom are FCC employees from Spain, are part of the consortium team in Riyadh. Another 220

From left to right: Rafael Catalá, the secretary of State for Infrastructures, Transport, and Housing, and Esther Alcocer Koplowitz, the chairman of FCC. Ana Pastor, minister of infrastructures and Juan Bejar, vice-chairman and CEO of FCC.

people are located in Madrid, Paris, London, New Delhi and Dubai to provide support for the project. In total, FAST will employ over 15,000 people from more than 15 countries. FCC expects FAST to commence construction of the three subway lines by mid-2014, and to complete the project within five years, as stipulated in the agreement.

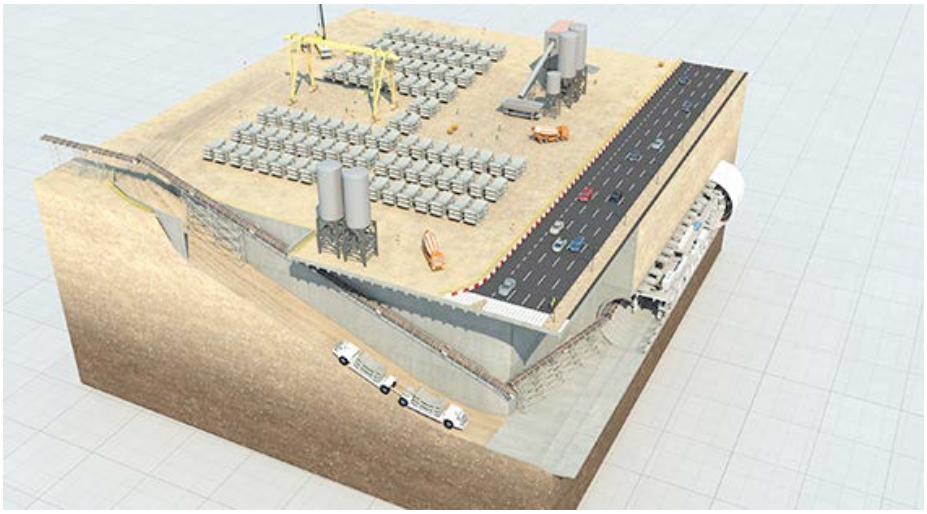
The contract awarded to the FCC-led consortium, includes the design and construction of lines 4 (yellow), 5 (green) and 6 (purple), which will have 25 stations. Construction will include 65 kilometres of track: 24 kilometres of viaducts, 28 kilometres of underground track, and 13 kilometres of overground track. A total of 69 driverless trains will also be built to operate on these three lines.

The largest subway project in the world

The six lines comprising the Riyadh metro project will span more than 176 kilometres, making it the largest subway under development in the world at present. Construction will require 600,000 tonnes of steel (80 times the amount used to build the Eiffel Tower), and 4.3 million cubic metres of concrete (11 times the amount used for Burj Khalifa, the world's tallest skyscraper.

This new metro will transform Riyadh, reducing traffic congestion, strengthening and driving the Saudi economy and improving living standards for citizens.

Riyadh currently has a population of 5.7 million, which is expected to reach 8.3 million by 2030, according to official calculations.



> “Work on the project, scheduled to begin before the end of the second quarter of this year, will create more than 15,000 jobs”

The subway is a solution to daily traffic problems: of 7.4 million daily commutes, only 2% use public transport.

Experience in Saudi Arabia

FCC has been operating since 2011 in Saudi Arabia, where FCC Aqualia optimised Riyadh's water supply network (6,000 kilometres long). This project has created 160 jobs and will improve the services provided to more than 3 million people.

This was the first water management contract awarded to a Spanish company in the Middle East. A few months later, FCC Aqualia was awarded another contract, this time to operate and maintain the sewers and sewage treatment system in eastern Abu Dhabi.

FCC also has offices in Qatar, where it is currently building two pedestrian walkways as well as phase II development of the Barzan camp residential area in Al Wajba, 15 kilometres from the capital city. It has also built other landmark projects in the zone, such as the Dubai Cricket Stadium.

From left to right: Esther Alcocer Koplowitz, Mohamed Khalid Al Suwaiket, Ana Pastor, and Jubara Bin Eid Al-Surisri in Riyadh.

Extensive experience in subway construction

Besides lines, 4, 5 and 6, the company is currently building line 1 of the Panama metro, which is scheduled to open soon, at a cost over 1 billion euro; the Toronto-York Spadina Subway Extension (TYSSE) in Canada, which includes construction of the North tunnels and the Highway 407 Station and is worth 304 million euro; and section 1 of Bucharest Metro's line 5 (Romania), for 267 million euro. In Spain, the company is also building the metro in Malaga, and line 9 of Barcelona's Metro.

Participating in

Barcelona's Smart City Expo World Congress

"24 hours with the citizen"

The slogan chosen by FCC

The Smart City Expo World Congress, organised by Fira de Barcelona, is the leading international event of the smart cities sector. A must and the place where the public and private sectors get together to offer a vision of the future of cities and citizens and to offer ready-to-implement solutions to make our cities the best places to live and work.

The FCC Group participated at this international key event for Smart Cities, informing about the Company's institutional projection and promoting the cohesion among the initiatives and interests of its three business areas. The goal was to show the market that FCC, in collaboration with city councils and public entities, is the only one able to offer all the basic services that a city requires, doing this while promoting the smart option. The event provides an excellent opportunity for demonstrating the Company's potential and leadership positioning, its commitment to listening and to sharing the different innovative trends and ideas for developing Smart Cities.

FCC's participation in the third edition of this event focused on being actively involved in presentations and meetings, having a stand with on-the-spot and digital interactivity, and on organizing demonstrations at the Smart Plaza of some of the projects already in operations in several municipalities.

Meeting point and networking.

The FCC Aqualia team attended the presentation of the book “La Ingeniería y la Gestión del Agua a través de los Tiempos”.

Over 3,000 professionals from several worldwide institutions received information on FCC thanks to the speeches, B2B meetings with national and international delegations, innovation companies, and through other initiatives. More than 300 people participated in our activity program, including clients, authorities, companies and delegations. The involvement of professionals from various FCC Group business units ensured the success of this edition of the Smart City Expo.

About 400 cities, 160 companies, 29 international delegations, and 9,000 registered visitors, 3,000 of them participants, attended this Congress.

Other activities were also conducted by the various business units which were of great interest:

- The presentation of the Can Buxeres project in L´Hospitalet by Luís Fatás García, head of the Cleaning and Green Areas Department of the City Council of L’Hospitalet de Llobregat.

- A presentation on the ELAN Project, Sustainable Waste Water treatment, by Pilar Icaran López, the manager of the project who works at FCC Aqualia’s R+D department.

- A presentation on the Intelligent Platform for Service Management developed Miquel Pérez, from FCC Medio Ambiente’s Systems and Information Technologies Department.

- The presentation of the Enercity 2020 and ECOE projects by Teresa Ugarte, head of FCC Energía in Cataluña, the representatives of IREC (Institut de Recerca en Energia de Catalunya) and the representative of CETEMMSA Centro Tecnológico.

- Presentation of the book: “La Ingeniería y la Gestión del Agua a través de los Tiempos” (Engineering and Water Management over Time), with the presence of Félix Parra, managing director of FCC Aqualia, Jordi Agustí, director of Agencia Catalana del Agua (Catalan Water Agency, ACA Spanish acronym), and Enrique Cabrera, director of ITA, professor at Universitat Politècnica de València (UPV) and the book’s coordinator.

Jordi Payet, managing director of FCC Medio Ambiente, accompanied by members of his team welcomed Víctor Calvo-Sotelo, secretary of State of Telecommunications and for the Information Society, at the stand, as well as Iñigo de la Serna, the mayor of the city of Santander, chairman of Red Española de Ciudades Inteligentes (Spanish Network of Smart Cities, RECI, Spanish acronym) and the Spanish Federation of Municipalities and Provinces (FEMP).

Our speakers at the congress

Representatives of the Group's three business areas participated in various sessions and presentations on behalf of FCC:

Plenary session:

THE FUTURE OF URBAN SUSTAINABILITY.

FCC's speaker: **Antonio Alfonso Avelló, deputy manager of the International division of FCC Medio Ambiente.** What are the most urgent challenges that cities must tackle in the 21st Century? What is the key priority in the political agendas for sustainable urban settlements? Technology provides new tools for helping cities to become more sustainable, inclusive, innovative, and economically efficient.

Parallel session:

PUBLIC-PRIVATE COLLABORATION.

FCC's speaker: **Emilio Fernández Rodríguez de Liévana, director of FCC Aqualia's office in Santander.** How do companies and public administrations collaborate to provide new and more efficient services?

The stand: 24 hours with the citizen

FCC's stand at the congress made a great impact thanks to the fusion of the sustainability and smartness concepts, with recycled materials, based on the concept that "FCC is with the citizen 24 hours a day".

The stand became a meeting point for the three business areas, a brand scenario and a platform for presenting the Group's strengths, demonstrating what we are and what we do.

Relevant information on the Company and its market positioning within the Smart Cities concept was shown on screens, panels, and interactive supports. All the business areas were reflected, representing the diverse activities of the company, as well as some of its most relevant smart projects and solutions.

A 3D interactive support was also used to present the services that FCC provides 24 hours a day, in addition to the corresponding charts, bolstering the above-mentioned concept.

All of this was done without overlooking our international positioning and vision.

Numerous contacts were made at the stand with several delegations and clients. There were also private presentations on initiatives and projects, meetings with potential clients and with contacts who showed an interest in generating business opportunities.

Once again, the need and willingness of having greater contact among the different business units for generating business opportunities was evident and the stand became the perfect spot for networking.

Parallel session:

IMPROVING URBAN WASTE MANAGEMENT.

FCC's speaker: **Ignacio Arespacochaga Maroto, director of Systems and Information Technologies at FCC Medio Ambiente.** Waste poses a great challenge in cities from homes to landfill sites, and, even though it is not often taken into account, from its origin to homes. How can we ensure that the process is more efficient?

Round table discussion:

THE BUILT ENVIRONMENT FOR MOBILITY.

Javier Ainchil Lavín, technical manager of FCC Construcción acted as the moderator of this round table discussion. Mobility explained through the built environment. How can we give priority to the public space in our cities, the space between buildings?

Smart City Plaza: Active participation

In this 2,000 m^2 space, the organization reproduced a city with various types of smart solutions that contribute to improving the lives of people, reduce the environmental impact of human activities, and optimise the quality of services.

FCC was one of the most relevant representatives in this space, and, in addition to urban fixtures (benches, waste bins, etc.), also presented two major projects.

One of these was the Can Buxeres Park in L´Hospitalet de Llobregat, where people can receive information through an app on the landmark buildings, the vegetation in the park, and are also able to report incidences to the city council in real time.

The other important project was the side-loading waste collection and compacting truck which runs on electricity when it performs waste collection services and then a hybrid vehicle when travelling to and from the treatment plants. This was certainly one of the elements that attracted the most attention. The truck is patented by FCC and was developed by the team of Alfonso Gar-

RECI holds its annual board of directors' meeting at Smart City Expo 2013

The Board of Directors of Red Española de Ciudades Inteligentes (RECI), with Íñigo de la Serna, the mayor of Santander, chairing the meeting, and whose members are the mayors of the 25 municipalities that were among its founders, met last 19 November in Barcelona at the Smart City Expo World Congress to review and approve the steps taken by the Network's five working groups:

- **Governance, Economy and Businesses.**
- **Social Innovation.**
- **Energy.**
- **Environment, Infrastructures and Habitability.**
- **Urban mobility.**

The most relevant one was the one relating to the Governance, Economy and Business group which considered new models of administrative technical specifications for a Smart City in 2014 and also proposed working on an agreed definition of a Smart City to submit it to AENOR's sub-committee of Indicators and Semantics.

Collaboration between the public and private sectors was also stressed as essential for the development of smart cities. The legal framework, in this respect, should never hamper this process; it should facilitate new initiatives proposed by public administrations and private operators. To this purpose, RECI has hired a major law firm to develop a proposal that would modify the

> “FCC is a company, a brand that listens and interacts and strives to address the needs of people”

Alfonso García, director of FCC Ambiente’s Technical Department at the award ceremony.

cía, manager of FCC Medio Ambiente’s Technical Department.

The waste collection truck was a finalist in the World Smart City Awards and received a special mention. The vehicle was shown to various authorities, international delegations, and clients who were present at the three-day congress.

Among the various personalities who came to the event, the truck was shown to Xavier Trías, the mayor of Barcelona, and Víctor Calvo-Sotelo, the current Secretary of State for Telecommunications and for the Information Society The mayor of Mecca, Osama bin Fald Al-Bar, who was also present expressed his interest in our truck.

legal and administrative framework for contracting urban services in order to innovate and create new models for public-private collaboration in Smart Cities.

The Environment, Infrastructures and Habitability Group focused on analysing innovative experiences in efficient and sustainable waste management, in the application of efficiency and urban quality indictors which are used frequently in various cities, and automated and smart management of the sprinkler systems in city parks and gardens. Today, more than ever, FCC as a driver of the development of smart cities, with expert knowledge of the territories of the city, is aware of the challenges in this new social-economic context and of the necessary collaboration among companies, the public administration, and members of the community.

The participation of FCC Citizen Services in Smart City Expo World Congress 2013 was not only driven by a business communication strategy of the company in line with our current brand repositioning process, but also by the values of each of the three business areas. It also represented an opportunity to strengthen our relations with customers and to establish new contacts.

FCC is a company, a brand that listens and interacts and shows its concern to address the needs of the members of the community. It is a company that strives to improve the quality of life in cities, maximising the value of the basic services of a city, essential for the sustainability of smart cities, and encourages shared responsibility among companies, the administration and citizens.

Guest Column

By: Alfonso Tomás Solares
Manager of the Service in Oviedo (FCC Aqualia)

When and how is water consumed in Oviedo?

Five years' experience with smart meters

In the image, the work team that is carrying out the study in Oviedo. From left to right: Miguel Toyos, data processing manager; Alfonso Tomás, manager of the service; Valentín Fuertes, operating manager of the installations; and Ricardo Álvarez, manager of the Clients Department.

End-to-end water management is an environmental service par excellence since, without this commodity, it would be impossible to carry out our daily lives. Although the Smart City concept has many definitions, all of these include three elements: efficiency, sustainability, and closeness to the citizen. Five years ago, when this concept came to the limelight, at the Oviedo's Municipal Water Service, we decided to tackle a project that would enable us to learn about the consumption habits and trends of this resource by household users. Once data had been compiled and interpreted correctly, we would have valuable information that would be essential when making management decisions, strategic as well as operating.

The technological element which served as the basis for the first study is a latest generation electronic meter. This sophisticated, smart measuring equipment is a hybrid system with a mechanic sensor and

Alfonso Tomás, manager of the Service in Oviedo, with the city's mayor Agustín Caunedo.

an electronic sphere which incorporates two-way communication via field-bus. All of this makes it possible to obtain, store, and process a large volume of data provided by the hydraulic part of its integrated microprocessor and learn not just the amount, but also how and when water is consumed in a home.

The smart meter pilot plan involved the installation of these innovative devices at the homes which were considered to be statistically representative, located in the metropolitan area, occupied, with an individual meter, an average water expense, and without a deposit or an interior water pressure group.

The information recorded by each of the devices is extracted periodically by means of the Portable Meter Reading Terminals. These data are then downloaded and processed with specialised software installed in our offices which provides detailed reports on the hours of consumption, maximum and minimum flows, number of the meter's effective starts, incidence reports by type – leakages in interior installations or magnetic fraud, and dates, hours and times of flow, histograms, etc.

Conclusions of the study

After five years of continuous work, one of the key results of the study was that the most commonplace instant flow consumed in Oviedo's homes was between 300 and 700/litres/ hour 66% of the time, and less than 300 litres/hour 26% of the time.

> "Besides analysing domestic consumption patterns with smart meters, Oviedo has implemented remote management of major consumers and the control by sector of the consumption of its distribution network"

> The consumption of water at homes throughout the day is three and a half hours

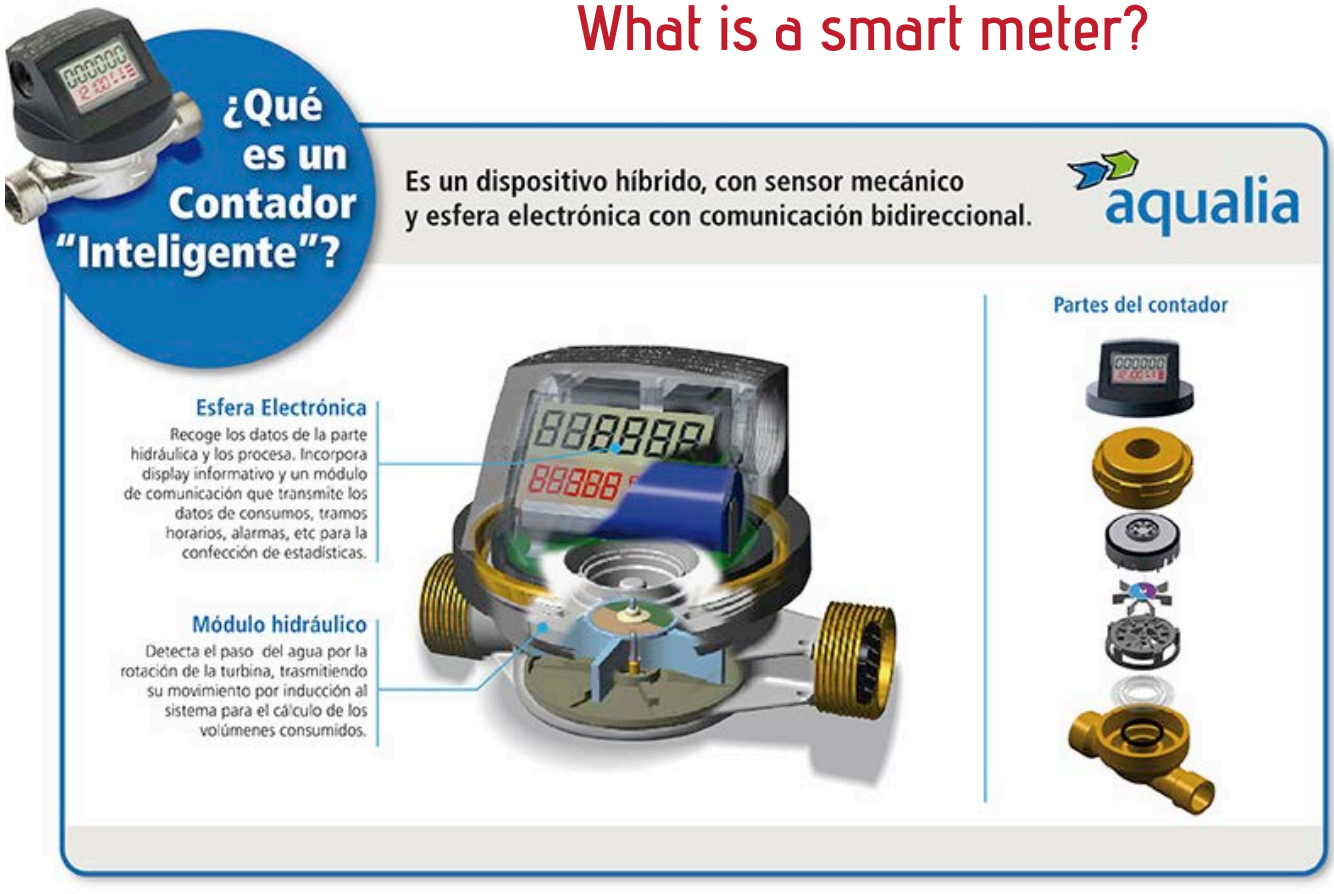
The volume of more than 1,350 litres/hour was less frequent and it was practically never the case.

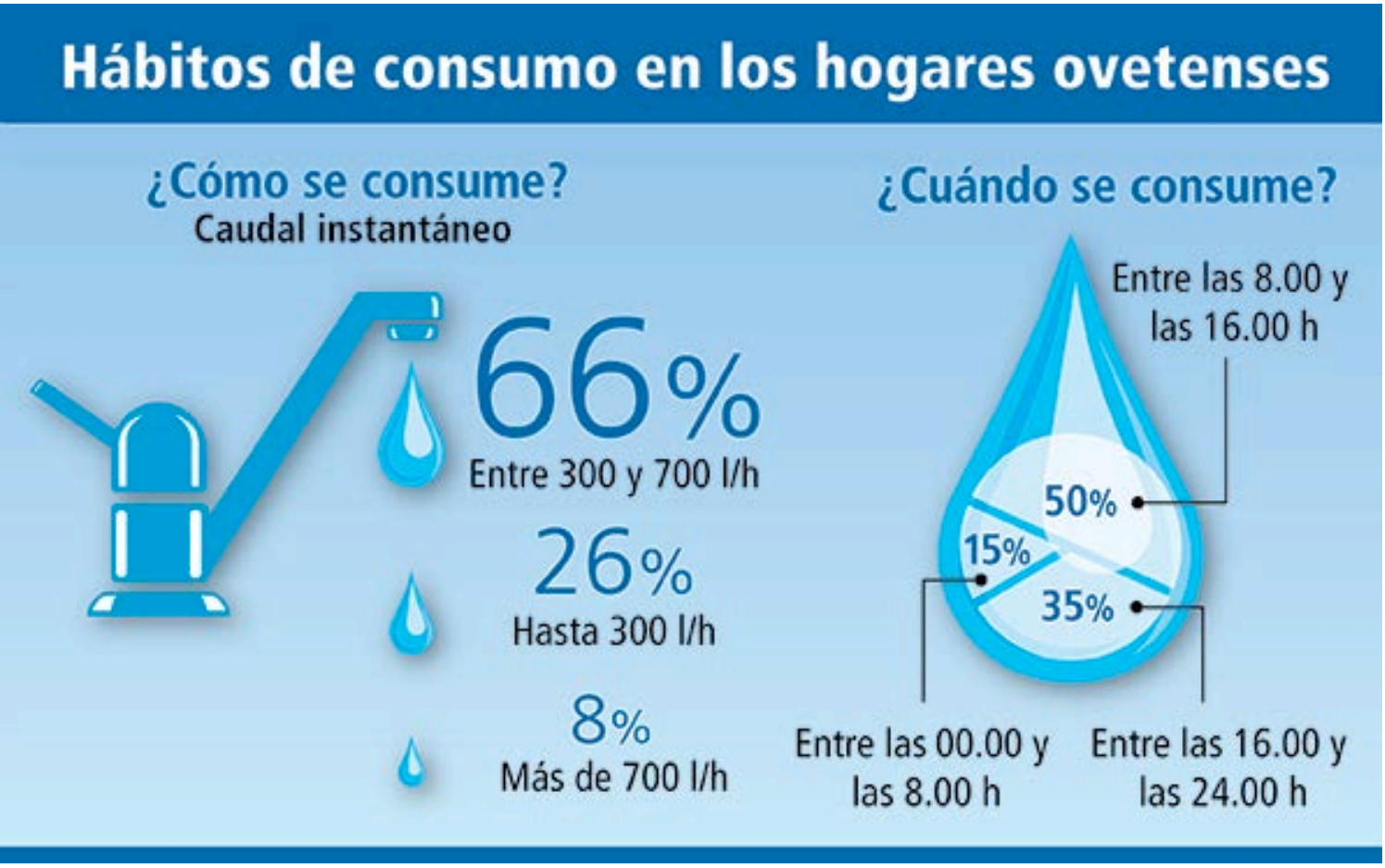
As to the hours of consumption, 50% of demand was between 8:00 a.m. and 4:00p p.m. and more than 35% between 4:00 p.m. and midnight. Demand between midnight and 4:00 a.m. was only 5%.

Another important conclusion was that the total time that homes actually use water throughout the day was about three and a half hours per day.

In short, thanks to this very practical pilot plan, it was possible to obtain the different volumes consumed by households in the Principality of Asturias. This enabled us to learn about the average household's water consumption and to improve management of end-to-end water demand. It also made it possible to optimise the criteria for the replacement of meters, both technically and in terms of financial profitability, allowing us make the control of water consumption more efficient. This is all done to encourage the sustainable development

What is a smart meter?





of water resources in line with the Smart City concept.

Other studies of interest

As to the analysis of non-household users, a remote-management system has been installed for main consumers to permanently manage the large water meters of Oviedo's Municipal Water Service in real time.

This innovative system consists of a complex analyser that collects and sends the necessary basic information automatically and remotely via GSM to the monitoring software, thereby enhancing the value of the service provided to these core users in terms of operations, sales, and billings. The system provides their consumption patterns and the functional characteristics of the meters, enabling us to analyse their work dynamics as well as their demand schedule and alarm notices. Based on these results, these meters are right-sized according to their specific metering capabilities.

The sector meters placed strategically throughout the distribution network provides us – through the Service Telecontrol System – with relevant information on the situation and global trend of the city's consumption (continuous, average, peak, minimum night time volumes, etc.) It should be mentioned that demand varies significantly during major sports events such as a soccer match between the Barcelona and Real Madrid teams. Thus, we know that supply during a game is 16% less than the normal value for this time of day and 17% higher when the match is over.

Communities

Empuriabrava, the largest marina in Europe

The population of Castelló d'Empúries and Empuriabrava, separated by a distance of six kilometres, make up the municipality of Castelló d'Empúries i Empuriabrava. The first mention of this village dates back to 879 although it was not until 1064 that the Counts of Ampurias moved to this villa and made it the capital of the county for a period of more than four centuries.

The city is currently divided into three different districts: Villa Condal, Parque Natural de Aiguamolls de l'Empordà, and Empuriabrava, situated in the Gulf of Rosas, just 25 km from the French border and 2 km, from Castelló de Empuries.

The medieval ages are still alive in Villa Condal, a district with narrow streets and squares, the Basilica of Santa María, seve-

ral convents, city walls, and other historical buildings and constructions that bring us back to the past.

La Marina Empuriabrava is considered the largest residential marina in Europe, with homes and more than 23 km of navigable canals. It has more than 5000 fixed moorings of which 700 are for visitors with vessels measuring up to 26 metres in length.

The population in winter is 8000 and during the summer months, it increases to 70,000 people.

The Control Tower, at the mouth of the harbour and a height of more than 47 metres, is one of the landmarks of Empuria Brava. It also has a small airfield where paratroopers from all over the world come together.

> “More than 23 kilometres of navigable canals”

Construction at Empuriabrava began in the mid-60s with an original urban structure based on its navigable canals that cross most of the city and connect with each other.

The best way to get an idea about the canals is from the water. Most of the homes can be reached either by land or by sea, since many have moorings in their gardens and can rapidly go out to the sea.

The sports, gastronomic and cultural offering is very important in this area, making it a great tourist attraction.

Parque Natural del Aiguamolls de l’Empordà is one of the most important wetland in the Iberian Peninsula. It is made of freshwater pools and ponds and is the home of many birds, many of them autochthonous, and flora characteristic of this region.

Its three beaches which spread over nearly seven kilometres, and where one can enjoy the sun and the sea, is another of the attractions of Empuriabrava.

A pioneering sewerage system in Spain for Empuriabrava

Santi Vila, councillor for Territory and Sustainability of the Generalitat de Catalunya (Catalan regional government) inaugurated last November the sewerage project in Empuriabrava. He was accompanied by the mayor of Castelló d'Empúries, Xavier M. Sanllehí, and Jordi Aguilera, director of FCC Aqualia's Cataluña and Aragón headquarters which is in charge of managing the municipal water service and of the project's execution.

The start of operations of this new sewerage network marks the end of a period of 40 years without sewers in Empuriabrava. Work on the project commenced in 1998 and was developed in three phases. Firstly, the construction of a sewer system adapted to the peculiarities of Empuriabrava, applying an innovative system in Spain that does not require different levels to transport waste water and which prevents leakages. It also guarantees hassle-free maintenance, without wells or gas pumping chambers. "This system has been successfully implemented in the United States and in some European countries , particularly in the Netherlands, where there are very few variations in the levels of the terrain and very high water tables, such as in Empuriabrava", Jordi Aguilera explained.

The city's mayor said that "it has been a great infrastructure project involving 73,406.8 metres of different types of pipes, with an innovative drainage system.

We must bear in mind that Empuriabrava is built on very flat land, without any slopes and that most homes used septic tanks for drainage".

In addition to the financial efforts of the community to expand and upgrade the sewer system, the Town Council also made an investment effort and paid for the entire cost of replacing the 1,865 street lamps, as well as for asphalting more than 163,500 m2 of streets.

> "Completion of the project puts an end to 40 years without a sewerage system in Empuriabrava"

Implementation of the vacuum sewer network in Empuriabrava

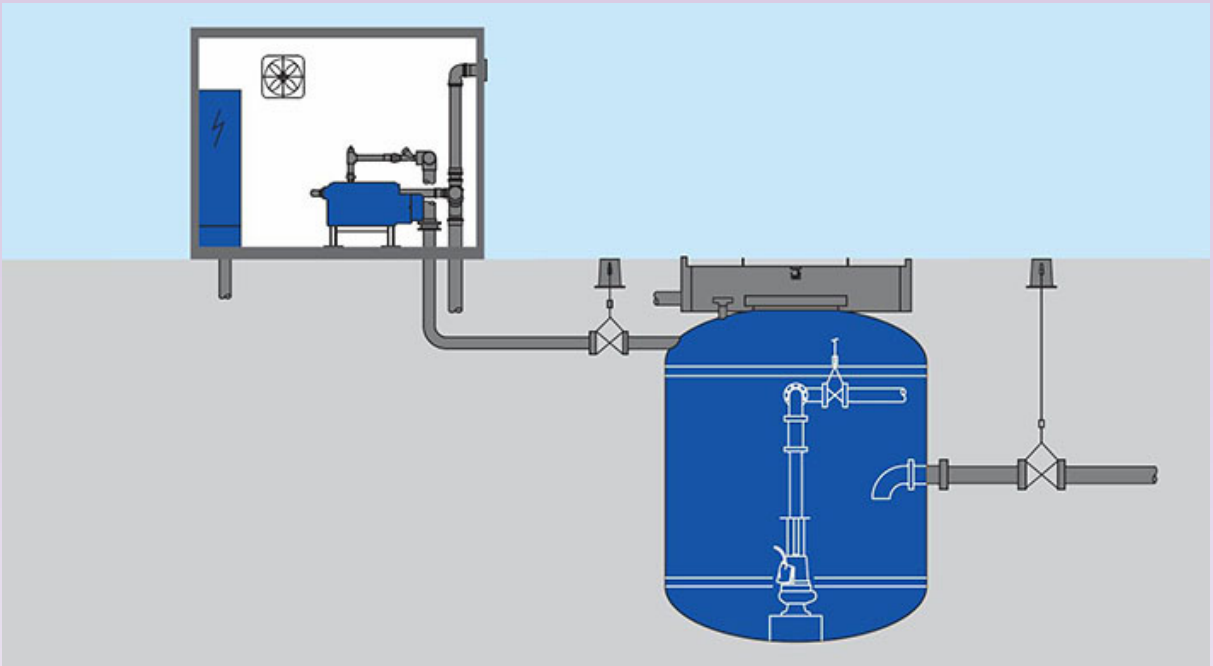
FCC Aqualia has implemented a pioneering vacuum sewer network in Empuriabrava. The system does not need different levels in order to be able to carry waste water and its maintenance is extremely easy. Because of the excellent results achieved, this technology could be extended to other municipalities with characteristics similar to those of Empuriabrava or to zones with difficult terrain, rural areas with buildings that are very separated from each other, or areas for protecting underground water, for example. The sewer networks usually collect waste water by means of a system of collectors that function with gravity, a system that requires that the collectors have a at least some slope.

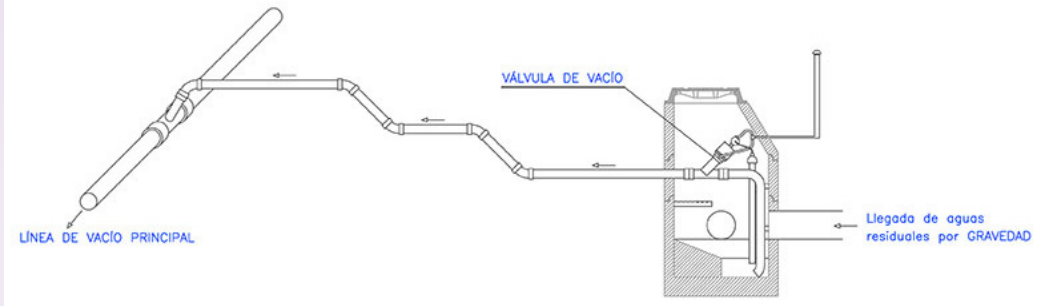
Due to the topographic conditions of this urbanisation, the homes are situated between 1 and 2 metres above sea level and the terrain lacks the necessary slope. A possible solution is to install several pumps, but this implies a high cost of materials and energy. In the case of Empuriabrava, the waste water collection system that used was septic tanks, with all the related environmental and financial problems that this entails.

In order to do away with these septic tanks, it was decided to implement a vacuum, sewer system, one of the first and one of the longest in Spain after the project was completed.

For complete information, check the article in the magazine Tecnología del Agua.

> The project, which cost 15 million euros, implemented a pioneering system in Spain





Interviewing

Santiago Cané,

head of the Empuriabrava service

What are the difficulties of building a sewerage system in a marina?

Empuriabrava is residential marina with several kilometres of totally flat streets and navigable canals many of which are at the doorsteps of the homes. The urbanisation was originally designed with a conventional sewer system for areas where there were multi-family buildings, and septic tanks for one-family homes (around 10,000 homes).

In 1998, the city council decided to eliminate the septic tanks and to build a conventional sewer system. Because there were no slopes, underground water began to flow as soon as they started to dig one metre in the ground, making the construction very difficult, dangerous, and expensive. The situation was so critical that the project was halted for a few months until a solution could be found. Finally, the solution was to build a vacuum sewer system.

Is this a first of its kind project in Spain?

In 1998, it was a completely innovative project. City council representatives and those in charge of the project travelled to Holland to check the appropriateness of this system in situ. They were impressed and did not hesitate to implement this system for the Empuriabrava sewers. The installation is currently the longest in Spain and provides service to 10,000 households, that is, approximately 35,000 people in the high season.

> “It is the largest installation of its type in Spain and provides serves to 10,000 homes, that is, approximately 35,000 people during the high season”

What would you highlight about this project?

Its technology, innovative but simple and robust at the same time, which has made it possible to solve waste water collection at the Marina.

A group photo of the workers at Empuriabrava who are members of the team headed by Santiago Cané, the service manager.

What improvements have been perceived by the community at the completion of the project?

The improvement is twofold: firstly, at the individual level, it was possible to eliminate the septic tanks at the homes, thereby solving the problems of bad odours and the hassle of having to empty the tank; secondly, it was an improvement for the community as a whole since there were 10,000 septic tanks situated a few metres from the canals and many of these tanks were deteriorated with the passage of time and the leakages were having a serious impact on the quality of the water in the canals. Thanks to the gradual elimination of the tanks, the quality of the water is the first benefit enjoyed by all the neighbours in the Marina.