ISSUE
06
March - April
2011

Communication Network

News for the people off FCC

The Wind men

The Annual FCC Management Convention 2011

FCC brings water to Querétaro (Mexico)

.A.S.A. stabilising a thyxotropic sludge deposit in Mydlovary, Czech Republic

Juan Losada at the Nuestra Casa de Collado Villalba Retirement Home

The foreman and his project at the Autovía del Cantábrico

Summary

Cover

The Wind men

Corporate

The Annual Management Convention 2011 true to its motto: "We're doing this together"
Pag 5
The first FCC international management seminar
Pag 7
FCC wagers on INCORPORA to put technology at the service of people
Pag 8
New brand, FCC Industrial
Pag 10

Business

FCC to build a section of Bucharest metro line 5 for 267 million
Pag 14
WRG secures first wind farm planning approval
Pag 16

People

The foreman and his work in the Cantábrico highway
Pag 22
A WRG team goes to work one day at several recycling sites
Pag 25

Social responsibility

Juan Losada at the Nuestra Casa de Collado Villalba Retirement Home
Pag 26
New activities by FCC volunteers
Pag 27

Well-being

Spring allergies
Tips for relieving its symptoms
Pag 32
High altitude work
Pag 34

Knowledge

.A.S.A. works on Stabilizing a thixotropic sludge lagoon in Mydlovary, Czech Republic
Pag 36

Guest-Column

How to use social networks
Pag 38

The Place

The Monte Seixo and Serra do Cando wind farms
The power of wind
Pag 40

Communities

FCC brings water supply to Querétaro, Mexico
Pag 42

The Annual Management Convention 201

"We're doing this

Under the motto of "We're doing this together", FCC held its Annual Management Convention in Madrid on 12 April in which nearly 350 executives from all Group companies participated. The Convention was preceded by an informal reception dinner on the previous night with the presence of the Group's core shareholder and vice-president, Esther Koplowitz.

> "Nearly 350 executives from all Group companies participated"

The purpose of the convention is to facilitate knowledge on the company and its key objectives and challenges and to motivate the management team and, through them, all of FCC's professionals. Baldomero Falcones, the Group's chairman and CEO gave the opening speech, focusing on the desire to consolidate and to promote the commitment among the Group's executives to share a common culture while at the same time, respecting diversity. The Group's top executive went over the current situation of FCC and its objectives and challenges that it will be facing over the next 18 months. He stressed FCC's strong shareholder structure, its management team and staff, the Group's most important assets and their capacity to face a period that will remain complicated, although he expressed his belief that "the worse part of the crisis

FCC Construcción executives, from left to right:
Javier Lázaro, deputy manager of Area I
Pedro Gómez-Prad, deputy manager of Studies and Procurement
Alejandro Tuya, deputy general manager of Area II
Hannes Schluga, assistant to the CEO of Alpine Energie
José Mayor, chairman of FCC Construcción
Jordi Piera, deputy general manager and deputy director of Area III
Avelino Acero, managing director
Santiago Ruiz, deputy director of Area IV
José Luis Poyatos, managing director of Technical Services

1 true to its motto: together”

had been left behind”.

The management teams played an important role in this convention. José Luis de la Torre, the CEO of the FCC Services division took his turn following the chairman's speech. He went over the main objectives of his division after which, Agustín García Gila, Tomás Núñez, Fernando Moreno, Aurelio Blasco and Carlos Barón took the floor. They were followed by Proactiva's managing director, Ramón Rebuelta who gave a speech on “Latin America, as a growth market for FCC Servicios”, and the managing director of Alpine Energie Österreich, Gerard Hofer, who in his excellent fluent Spanish and sharp sense of humor shared in his introduction, shared his vision (in English) of construction and energy as two complementary activities.

José Mayor Oreja, who had just arrived from a trip to Israel, analyzed the situation in the Construction division and then gave the floor to his team members, Avelino Acero, Jordi Piera, Javier Lázaro, Alejandro Tuya, Pedro Gómez-Prad, José Luis Álvarez Poyatos, and Santiago Ruiz.

Before the lunch break, the director of Corporate Marketing and Brand, Juan Pablo Merino described the results of a survey that had been conducted previously among those attending the convention. Integrity was considered by most executives as the principle with which they identified most closely, followed by results essential for increasing the Group's competitive edge, both aspects being the most widely mentioned in the nearly 300 questionnaires that had been handed out. On a more humorous note, they also said that they believed

FCC Services executives from left to right:

Carlos Barón, general manager of FCC Versia

Aurelio Blasco, general manager of Industrial Waste

Fernando Moreno, general manager of Water Management

Tomás Nuñez, general manager of International Environment

Agustín García Gila, general manager of National Environmen.

Baldomero Falcones Jaquotot, chairman and CEO of FCC, during his speech at the Annual Management Convention.

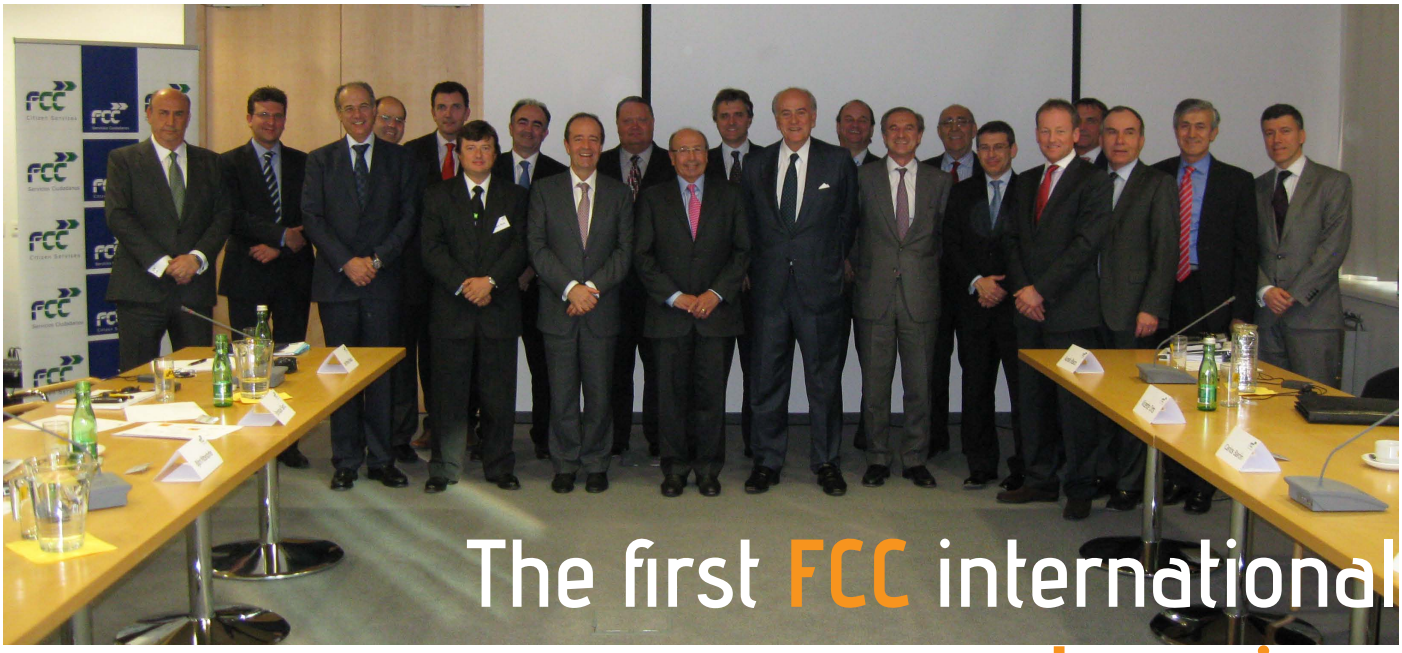
“A group that stands out for doing things well”

that the Barcelona soccer team would win the Champions League and that Sebastian Vettel would beat Fernando Alonso at the Formula 1.

Eduardo González, managing director of FCC Energy and Alejandro Seco, the manager of the Development department, were the first speakers in the afternoon session. They were followed by Dieter Kiefer, the CEO of Cementos Portland, who then gave the floor to José Ignacio Elorrieta, corporate director of Environment, Innovation, Sustainability, and Knowledge Management, and to Francisco Zunzunegui, industrial corporate director. The investee companies Globalvía and Realia then took their turn, represented by their respective chairmen, Juan Béjar and Ignacio Bayón. The general managers of Administration and Information Technologies, Antonio Gómez Ciria; Victor Pastor of Finance, Francisco Martín Monteagudo of Human Resources, Miguel Hernanz of Internal Audit, and Felipe B. García, secretary general and member of the Board of Directors participated in the discussion under the heading “Transversal Strategic Projects”.

Before adjourning, José Manuel Velasco, managing director of Communication and Corporate Responsibility gave a speech on the “Principles and attitudes: the FCC Brand” followed by the new FCC institutional film, in Spanish and English, that was widely applauded.

Lastly, Baldomero Falcones gave the closing speech, recapping the conclusions on this event. FCC’s CEO wanted to share with the executives the pride he felt for being part of a group that believed in integrity and whose most outstanding trait was their focus on doing things well, stressing efficiency as one of the most important characteristics. In his closing speech, the FCC chairman expressed his confidence and said that he was convinced that the Group would be stronger after the crisis “most importantly, thanks to the capabilities of its professionals”.



The first FCC international management seminar

The chief executive officers, managing directors, and general managers of FCC Group companies participated in the first international FCC management seminar that was held at the Alpine headquarters in Vienna on 23 April.

On 23 April, Alpine's headquarters in Vienna hosted the meeting of the senior executives of FCC's international businesses.

In his speech, the Group's CEO and chairman Baldomero Falcones reaffirmed the strategic lines that would be followed over the coming months in a still difficult economic scenario, stressing the strengths of FCC, which are precisely, its geographical and sector diversification.

The CEOs, managing directors, and general managers of FCC Group companies had the opportunity to discuss the operational lines to ensure compliance with this year's budget and to identify the synergies that would facilitate the development of their respective businesses.

The heads of Alpine, FCC Environmental UK (formerly WRG) and of the USA, plus ASA and SmVak, participated in the first international coordination seminar.

In his closing speech, Baldomero Falcones emphasized that the Group's main leverages for development, the activities which are in fast growth sectors with unlimited demand: environmental services, infrastructures, and renewable energies. He also mentioned that it was necessary to look for synergies in the various FCC divisions and activities and also stressed the excellent professional qualifications of the Group's employees whose commitment was essential for "coming out stronger after this crisis".

> "The heads of Alpine, FCC Environmental UK (formerly WRG) and USA, plus ASA and SmVak participated in this event"

ALPINE wins the 2011 SOLID BAUTECH prize

ALPINE's "Steg-Ast" project wins SOLID construction magazine's prize in the national project category. Once again this year the prestigious construction journal SOLID has handed out the SOLID Bautech prizes, in which an independent panel of judges chooses the year's leading construction projects in the national and international categories. This time around the focus was on building technology, rather than the budget of the projects submitted.

The winning project is a 38-metre-long footbridge between districts 13 and 14 of Vienna, giving pedestrians and cyclists safe passage over the Vienna River. The difficulty of the job lay in the specific treatment of the white cement used.

FCC wagers on INCORPORA to put technology at the service of people

FCC launched Incorpora, a strategic project to revamp the Human Resources management system and to offer a quality corporate and business service.

The Human Resources corporate division launched the Incorpora project last September with the objective of improving competitiveness and of providing a better service to all FCC employees. One of the key objectives of this strategic project is to design and implement an information and management system for the approximately 10,000 employees working in 52 countries worldwide.

At present, more than 30 professionals in the Human Resources and Information Technologies departments, an area that is collaborating very closely with this project, led by María Antonio González, manager of Incorpora, are working in the design of this new tool, a system capable properly addressing and with the utmost quality the current corporate and business requirements.

The multidisciplinary Incorpora team will be tackling three challenges. The first one involves the design, development and implementation of a Global Employee Master file, a homogeneous and unique tool that will make it possible to have computerized and parameterized information on the Group's entire workforce. This will redound in the most efficient management of FCC's resources.

> "Incorpora will make it possible to have computerized and parameterized information on the Group's entire workforce."

Incorpora's second challenge is to implement a single payroll system for all employees in Spain to replace the current multiple systems.

The last challenge is the construction and start-up of a Shared Services Center (SSC) for Human Resources that will make it possible not only to capitalize the human resources function, but also provide high quality service to address the operational and business needs.

Incorpora represents yet another step in FCC's strategy aimed at enhancing operational profitability so as to consolidate a more competitive structure to bolster our future growth.

Interview of María Antonia González, director of INCORPORA:

"It's an exciting project"

What makes the Incorpora Project different from other similar projects in the past?

Incorpora is a strategic project of the company which will mark a turning point in our HR management. The project is really ambitious thanks to the many activities, collective bargaining agreements, and processes that it will have to integrate in order to address the needs of the entire FCC Group. We are talking, for example, about more than 1,000 different collective bargaining agreements.

What does the Incorpora Project actually consist of?

The Incorpora Project is a strategic program to improve the FCC Group's HR management. We will introduce advanced IT management tools and will centralize this function at a single Shared Services Center (SSC) for the entire Group and this will enable the HR team to focus on greater added value activities, promoting career development and communication policies thereby creating a better work environment.

In what phase is the project now?

The Global Master team is performing tests with the files that we are receiving from outside and narrowing down the criteria the project's rollout. The payroll area is performing integration and user tests. And the organizational structure is being defined now at SSC in order to start working with the pilot project. In short, we are completing the preliminary work and tests so that we can start to implement it in the Construction division.

When will the Incorpora project be completed?

We expect that it will take a total of 30 months. Considering that we started working on the project on 23 September of this year, we believe that it should be completed in the spring of 2013.

What will be the sequence for the migration of payrolls to the new system?

According to the plan, we will begin with the migration of the payrolls of the Construction division first, and then Aqualia-Versia, then Environment and, lastly, Cement.

Will the centralization of payrolls imply staff downsizing?

No, the project will not mean any loss of jobs, but rather greater added value in the work of many people in the human resource division who will have to spend less time in performing administrative tasks. Those who are performing this job will be able to move on and will be performing other higher added value functions.

What was the reason for choosing Cap Gemini and Accenture for collaborating in this project?

In fact, it was not an easy decision. We asked the most important consulting firms in Spain to submit their proposals for developing this project and other companies, in addition to Cap Gemini such as Indra and IBM participated in the process. We looked very closely at all the offers focusing on the technical offers, proven experience in similar projects, and the most balanced budget. Furthermore, in the case of Cap Gemini, we had already collaborated with them in the preliminary phase of the project and, accordingly, had acquired knowledge by working on the project. Considering these and other aspects, we decided to entrust the project to Cap Gemini and Accenture.

What will the SSC do?

Simplifying it, SSC will be in charge of handling everything involving personnel Administration and Payroll. In short, SSC will provide services to the different businesses although these will continue to be responsible for contributing to the SSC's performance, furnishing the information required at all times: the businesses will enter data in the tool, including payroll, additions, attritions, overtime, etc.

How would you rate the collaboration of the business areas in this project?

Generally, all areas have been very cooperative. Now that we are about to start with the Construction division's payroll, the relationship with this business area is more intense and we are getting along very well.

And, on the personal level, what does this project represent for you?

It represents a very important change in my career. I had to move to a different workplace and there have been changes in my responsibilities, my colleagues, I work many more hours. Nevertheless, I believe it is a very exciting project, a great challenge and I feel privileged for being part of it, collaborating every day with the excellent professionals working at Incorpora.

Supply of prestressed pipes covered with a metal sheet and with elastic joints, manufacted at the Puente Genil (Cordoba) factory for the Monte Novo project in Portugal.

New brand FCC INDUSTRIAL

Under the new FCC Industrial brand, launched in November 2010, different companies will be operating within the FCC Construcción industrial scope. These companies possess long experience in building in this field and thus afford a better guarantee for a success-filled future together.
Parallel to the creation of this new brand and integrated into the process, two of the investee companies, Ibérica de Servicios y Obras (ISO) and Auxiliar de Pipelines (APL), merged in December last year and have been operating together since the first of this business year under the name of FCC Actividades de Construcción Industrial, a company which will be carrying out work in the following lines of business:

- All types of building, most especially industrial
- Turnkey and EPC contracts for renewable energy production facilities (Solar thermal energy plants, biomass plants and other projects related to this field)
- Turnkey and EPC contracts for industrial plants (refineries, combined-cycle, cement-manufacturing plants)
- Regasification plants and liquefied natural gas (LNG) storage tanks
- Construction of oil pipelines, gas pipelines, plus gas- and hydrocarbon-processing plants

Similarly, for boosting and unifying the Company's resulting image, to promote new business prospects and make the best of these companies' synergies, ESPELSA has changed its name to FCC Servicios Industriales y Energéticos and has taken over DENEO, ELCEN, EURMAN and GEINSA. The new company will be responsible for the following lines of business:

- Turnkey and EPC contracts for photovoltaic plants and energy plant facilities
- Railway contracts (railway catenaries, railway facilities and systems)
- Distribution networks (electric power substations, overhead and underground power lines, etc.)
- Maintenance and energy efficiency
- Electrical switchboard manufacture
- Systems (advanced computer system engineering)

Lastly, the following companies have also been incorporated into the FCC Industrial Group: Internacional TECAIR, specializing in building heating facilities; Prefabricados DELTA, devoted to manufacturing prefabricated components, and MEGAPLAS, providing corporate image services. All of the companies will continue operating under the same name as at present within the FCC Industrial Group.
The production planned for this business year for the Group's new Citizen Services brand, FCC Industrial, headed by Santiago Ruiz González, will be worth more than 500 million euro.

FCC, classified in SAM Silver Class by Dow Jones Sustainability Index

The Dow Jones Sustainability Index selects companies which are committed to sustainable growth and shareholder value creation; the businesses in the index comply with more than 90 strict economic, social and environmental criteria.

FCC has obtained the Silver Class category from Sustainable Asset Management (SAM), which publishes and licenses the Dow Jones Sustainability World Indexes, comprised of more than 300 companies from 27 countries.

SAM recently published its Sustainability Yearbook 2011, which compiles the awards given to companies that are outstanding for their commitment to and performance in sustainability and corporate social responsibility; FCC was distinguished with SAM's Silver Class and listed in the Heavy Construction sector.

This is the third consecutive year that FCC has been included in the Dow Jones Sustainability World and European Indices, and this distinction recognises the Citizen Services company's commitment to social and environmental responsibility.

Financial performance

The Sustainability Yearbook 2011, which refers to the 2010 figures, highlights FCC's economic performance, recognising it as a global leader in its sector (heavy construction), in the economic dimension and in three of the five criteria: risk and crisis management, codes of conduct (compliance, anti-corruption and bribery), and non-financial project evaluation.

Experts at Dow Jones, the world's leading securities and business index company,

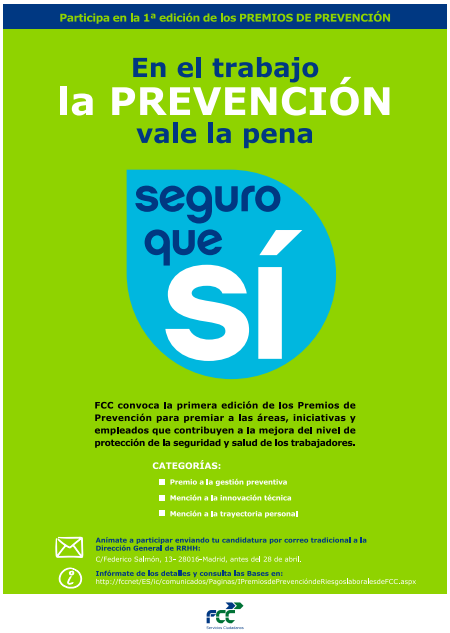
also gave FCC the top score in two of the environmental criteria: environmental reporting, and transport and logistics.

The consolidation of FCC's position among the world's most sustainable companies reflects a series of actions and achievements in the area of social responsibility by the Group, whose main shareholder is Esther Koplowitz. These included the promotion of integrity through awareness-raising and training, which facilitate compliance with the Code of Ethics, the equality and harassment prevention policies, and the creation of the Procurement Department, which applies social responsibility criteria when selecting and evaluating suppliers.

> "FCC is one of the most sustainable companies in the world"

The Citizens' Services Company has also implemented risk management initiatives, which address environmental and social risks. The company obtained a notable reduction in waste production and energy consumption, and it reduced greenhouse gas emissions, avoiding the release of more than 1.5 million tonnes of CO_2. The company's implementation of its Human Resources Strategic Plan, approved in 2009, was also viewed as very positive.

FCC stood out for its policies to attract and retain talent; provide training and professional development for staff; results in workplace health and safety (in both accident rates and in the culture and management of workplace safety); and its social dialogue and enhancement of programmes with social benefits for workers, their family members, and disadvantaged groups, such as the Familia plan with Adecco Foundation and the INSERTA agreement signed with Once.



Successful first edition of the Prevention Awards

The first edition of the Prevention Awards was announced last December. The purpose of this prize is to reward and recognize the work of FCC personnel aimed at improving the levels of safety and health within our organization.

The results of the announcement were excellent and more than twenty entries were submitted to compete in the three categories.

Preventive Management Prize: proposals were submitted by various business areas, including companies and contractors which have stood out for their management and preventive work that delivered results underscoring the success of their initiatives.

Technical Innovation: the largest number of proposals was received to compete in this category, all of which were interesting and very diverse, focusing on prevention management IT systems; machinery, and novel and practical work tools and devices that enhance safety and comfort; installations committed to safety, health, and the environment; collective protection measures and fire prevention measures as well as projects aimed at improving the health and quality of life of workers.

Personal career award: although the entries for this category was the lowest among all proposals, the ones which were submitted highlighted the fact that there are workers with names and surnames committed to prevention of whom their colleagues are proud enough to submit their names so that they achieve public recognition.

We take the opportunity to mention in Communication Network our appreciation, particular to the participants for their efforts and for wanting to share their work with the rest of the organization.

FCC wins award for its "Eco-Efficiency Prizes"

FCC won an award at the contest sponsored by the magazine Actualidad Económica for "The best 100 ideas of the year" under the sustainable ideas category for its project: "Good ideas deserve a prize. First edition of the FCC Eco-Efficiency Awards".

The purpose of the "Best ideas of the year" prize, awarded every year by the magazine Actualidad Económica, is to reward the 100 most innovative ideas in different categories

that have stood out for their originality and quality in 2010.

That eco-efficiency becomes one of the trademarks of the company is one of FCC's main objectives. More than 100 projects participated in this contest which recognizes the initiatives or actions taken by FCC employees that contribute to sustainable development, the implementation of appropriate measures to make the best use of natural resources, and the implementation of new technologies that make a positive contribution to the environment.

NOSOTROS GENERAMOS ENERGÍA RENOVABLE. TÚ LA UTILIZAS DE MANERA INTELIGENTE.
LO ESTAMOS HACIENDO JUNTOS
Servicios Ciudadanos
ENERGÍA ELÉCTRICA
EJECUCIÓN
GERENCIA
TESORERÍA
PLANIFICACIÓN
IMPLEMENTACIÓN
INVERSIONES
DTO. CONTABILIDAD
MANTENIMIENTO
INVERSIONISTAS
ENERGÍA EÓLICA
EJECUCIÓN
GERENCIA
TESORERÍA
PLANIFICACIÓN
IMPLEMENTACIÓN
INVERSIONES
DTO. CONTABILIDAD
MANTENIMIENTO
INVERSIONISTAS
SEGUIMIENTO
MANTENIMIENTO
sd europe
SOLAR DECATHLON

FCC to build a section of Bucharest metro line 5 for 267 million

FCC has been awarded a 267 million euro contract to design and build section 1 of Bucharest Metro line 5 in Romania. The citizen services company entered its bid in consortium with the italian company Astaldi and two Romanian companies, AB Construct and ACM Delta.

The contract, awarded by Romania's national metro company Metrorex, includes civil engineering work to build the 6.1 kilometres of line. Nine stations will be built along this section of line, and the project also involves work on the surface to restore the roads affected by the construction project. Work is scheduled to begin in the second half of this year and will take at most 25 months.

The route includes two parallel 5.7 metre diameter tunnels measuring 4.85 km. each, and a third tunnel measuring 260 metres linking lines 1 and 5 at Eroilor station. A total of 240,000 m^3 of earth and rock will need to be excavated. The nine stations will be located between 15 and 20 metres below ground level.

The construction project will be financed by the European Investment Bank (EIB) and the Romanian government.

> "The project will stretch over 6.1 kilometers and will include nine metro stations"

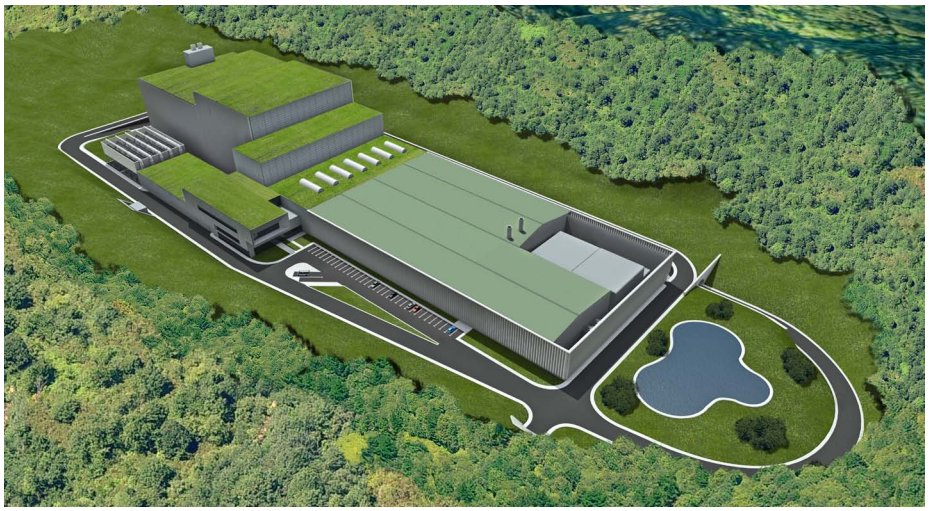
Operating in Romania since 2004

Romania is not a new market for FCC. In fact, the company has been working there since 2004. FCC has participated in a number of projects to upgrade highways and viaducts and it employs over 500 people in Romania.

Its main projects currently under way in Romania include the Basarab viaduct in Bucharest (114 million euro); the Bucharest north bypass, which includes building a bridge over the railway line at Otopeni; the Constanza bypass (119 million euro); and the Arad-Timisoara-Lugoj section of the DNC1 motorway.

FCC to build and operate Guipúzcoa Waste Management Park for 322 million euro

FCC has been awarded the contract for the design, project management, construction and commissioning of the Guipúzcoa Waste Management Park, as well as its operation for 5 years, extendible by additional 5-year periods. The contract is worth 322 million euro.



Municipal solid waste from the entire Guipúzcoa region will be treated at these facilities which comprises a mechanical biological pre-treatment plant, an energy-from-waste plant, and ancillary facilities The plant will be located in Arzabaleta, in the San Sebastián neighbourhood of Zubieta.

Energy for 68,000 households

The facility will be built on a 54,268 m^2 site. It will have an annual treatment capacity of 320,000 tonnes, of which 208,000 tonnes/year will be general household waste, 62,000 general commercial waste, 20,000 non-compostable non-recyclable waste, and 30,000 biosludge.

The centre will produce 203,320,000 Kw/hour/year, equivalent to the annual consumption of 68,000 households.

Link to Press Room

FCC wins contract for another railway line in Algeria worth over 1.23 Billion euro

The Algerian government, through Anesrif (Agence National de Études et Suivi de Réalisations des Investissements Ferroviaires), has awarded FCC, in consortium with Algerian Groupe ETRHB HADDAD, a contract to build 66 km. of railway line for 1.232 billion euro. This is the second largest railway contract awarded to FCC in Algeria, following the contract obtained in May 2010 worth over 930 million euro.The line covered by this new contract from the Algerian Transport Ministry will link the city of Tlemcen (500 km. west of Algiers) with the frontier post at Akkid Abbas and will form part of the planned line connecting Oued Tlélat to the Moroccan border. This segment of line must be built in 48 months.

This investment is part of the economic development programme for 2009-2014, which has a budget of approximately 150 billion dollars (around 110 billion euro) and is focused basically on infrastructure.

The first two-thirds of the route, in western Algeria, crosses quite abrupt terrain and will require the construction of 34 viaducts and 9 tunnels. Tunnels and viaducts will account for over 30% of the total length of this section of line.

Link to Press Room

WRG secures first wind farm planning approval

The first planning permit awarded to WRG since it entered the wind power sector in 2010.

Waste Recycling Group (WRG), an FCC subsidiary and one of the leading waste and resource management services companies in the United Kingdom, has been given the go-ahead to site two wind turbines at its closed Carnaby Landfill site, near Bridlington in East Yorkshire. This marks its first planning approval since moving into the wind energy sector in 2010.

As an environmentally aware company, WRG has been looking at additional ways it can use its landholding to help generate renewable energy in the UK. Developing wind turbines on suitable operational or closed landfill sites was identified as the next logical step, and it has now submitted three wind farm planning applications, with another three due to be submitted in the next couple of months.

The Carnaby Wind Energy Project will see the development of two turbines, each capable of generating up to 3MW of renewable electricity, which together are enough to power more than 2,500 homes. WRG anticipates that construction will commence early in 2012, and that the site will become operational by Summer 2012. The planning application to the East Riding of Yorkshire Council, followed a rigorous environmental assessment of the site and months of consultation with the local community.

> “FCC Enería operates 14 wind farms in Spain with 420 MW of installed capacity and another 45 MW are in the pipeline”

Aqualia, the first Spanish company awarded a contract in the Middle East

Aqualia won the first water management contract ever awarded to a Spanish firm in the Middle East. The FCC specialist in end-to-end water management will be implementing and executing in two years an innovative plan to detect and repair water leaks in the city of Riyadh in order to reduce these incidences and to increase the efficiency ratio of the network and of its sector plan.

NWC CEO Loay A. Al-Musallam and Aqualia's Deputy-Manager for Development and Internationalization, Miguel Jurado, executed the agreement in the presence of the Spanish Ambassador in Saudi Arabia, Pablo Bravo.

Loay Al-Musallam mentioned at this event that "the award of this Contract is part of NWC's strategy which aims to attract the leading international companies in this sector to Saudi Arabia". He added that "the strength of the Saudi economy is one of the main reasons for attracting international operators", also mentioning the Government's intention of promoting the country's development in areas such as water management.

Spain's ambassador to Saudi Arabia, Pablo Bravo, congratulates Loay Al-Mussalam, CEO of the National Water Company, after the execution of the Agreement. On his left, Miguel Jurado, Aqualia's Deputy-Manager for Development and Internationalization

The contract, worth 27 million Euros, opens the door to a market such as Saudi Arabia which has the greatest potential in the world in the water sector and whose Government aims to allow the entry of the world's leading companies in the sector in which Aqualia is the third-ranking company.

> "We will implement a plan to optimize, sectorize, and monitor the water distribution network in the capital of Saudi Arabia"

Distinguished Company prize awarded by the University of Extremadura

Aqualia was recognized as a "Distinguished Company" by the Economics and Business Department of the University of Extremadura for its collaboration and commitment to training students in the various services managed by the company in the Autonomous Community, an initiative that was launched in 2007.

Since that time, more than 30 students from this department have been involved in in-house training in the cities where Aqualia provides its management services, such as Castuera, Santa Marta de los Barros, Guareña, and Badajoz.

Among the participants at the award ceremony held at the Economics and Business Department of the University of Extremadura, were María Dolores Aguilar, deputy-director and councilor of the Economy, Trade, and Innovation Department; Carmen Muñoz, the director of the department, and Segundo Piriz, dean of the University. Jesús Rodriguez, director of the Extremadura delegation, accompanied by Julio Gómez, head of Client Management and tutor of the students over these past few years, attended the event and collected the prize.

FCC unveils in Badajoz its waste collection and cleaning machinery

FCC unveiled in Badajoz the machinery that will be used to collect urban waste and to clean the city's streets. The service which FCC has been providing since 1 October of last year has meant a substantial change in the quality of life of the community and has significantly improved the image of the city.

During the official presentation, Miguel Celdrán, mayor of Badajoz mentioned that cleanliness had been one of the pending items in the city's agenda and that the city had noted the improvement since the service had been implemented. He also said that the company had the support of the City Council since so far it was satisfied with the level of compliance.

From left to right: Alfonso Sánchez, head of FCC's Badajoz Department; Francisco Cortés, director of the FCC Extremadura Contract; José María Moreno, Director of the FCC Center-Extremadura branch office; Miguel Ángel Celdrán Matute, mayor of Badajoz; Antonio María Ávila Fernández, councilor for the Environment; and Antonio Díaz, municipal Environmental technician.

FCC invested 9.5 million Euros in the cleaning service that it will be providing under a 12-year concession, plus an 8-year extension, a contract that is worth 106 million Euros. The investment was mainly earmarked for acquiring new vehicles and machinery thanks to which the company has already implemented 98% of the services.

The company hired 220 people to provide this service and has a fleet of 90 vehicles, 17 of which are powered with electricity. Thanks to their design, the new vehicles are able to reach narrow and difficult to access areas. Each of the city's districts will have their own vehicles and containers designed to meet their specific requirements.

Opening of the new section of Line 2 of the Madrid Metro

Madrid's mayor, Alberto Ruiz Gallardón and Esperanza Aguire, president of the Madrid Regional Government, during the inauguration of the extension of Line 2 of Madrid Metro.

On 16 March the president of the Community of Madrid, Esperanza Aguirre inaugurated the new section of Line 2 of the Madrid underground system which goes to the Las Rosas district, and opened the four-station expansion of Line 2 of the Metro underground system to the Las Rosas district. The expansion was built by FCC.

She was accompanied by the head of the regional Transport and Infrastructure Department, Ignacio Echeverría, the head of the regional Environment, Housing and Land Planning Department, María Isabel Mariño, and the mayor of Madrid, Alberto Ruiz-Gallardón, other members of the Regional Assembly, FCC Chairman Baldomero Falcones, FCC Construcción Chairman José Mayor and the company's managing director, Avelino Acero.

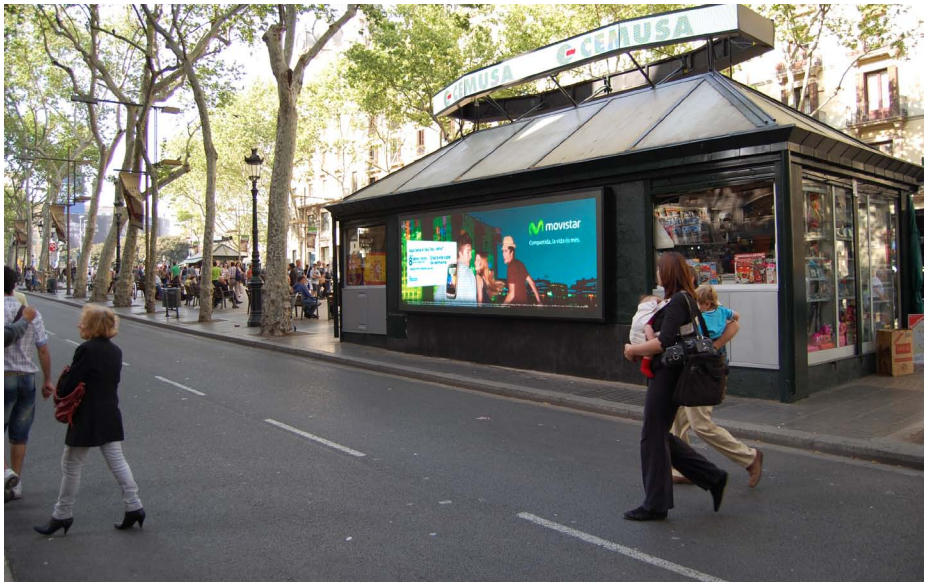
The 4.5-kilometre underground section has four new stations, which have been baptized with the names of La Almudena, Alsacia, Avenida de Guadalajara and Las Rosas. More than 65,000 people will benefit from the new section.

> "A tunnel up to 4.6 Km-long plus more than 4 stations added to Line 2: La Almudena, Alsacia, Avenida de Guadalajara, and Las Rosas"

The run begins in the Bilbao district, where the first station is located, to facilitate access to La Almudena Cemetery. From there the tunnel continues beneath calle Nicolás Salmerón to the second station, travels along Avenida de Guadalajara to the third station at the intersection with Avenida de Canillejas to Vicálvaro and finally crosses the M-40 to reach Paseo de Ginebra, where the fourth station lies.

"Rambla Digital", the first outdoor urban digital advertising network in Spain

CEMUSA has installed the first eleven newspaper kiosks with LED technology screens in the Ramblas of Barcelona. The kiosks, with digital screens, are at the vanguard of the new advertising formats.



Barcelona City Council is behind the plan to renew the image of all news kiosks along the pedestrian Las Ramblas in Barcelona, expanding the number of products which can be sold and developing the inclusion of new public interest services related to information technology, with the aim of improving citizen information and service facilities, for example by means of Internet access points, Bluetooth and Wi-Fi transmitters, etc.

The improvements covered include updating the advertising platforms of the kiosks and fitting them with the latest features of the outdoor advertising market, such as digital screens.

A total of eleven news kiosks have been remodeled, and each of them has been fitted with a LED screen measuring 4.6 meters wide by 1.5 meters high (nearly seven square meters) along with a LED screen on top of the structure measuring 38 cm high by 13.9 meters long, around the entire perimeter of the kiosk.

See link: http://www.cemusa.com/resources/noticias/00003159Noticia.pdf

Inauguration of the La Caleta desalination plant in Adeje (Tenerife).

Aqualia, through its subsidiary Entemanser, and the Adeje City Council, inaugurated the new La Caleta desalination plant that will guarantee the quality of water supply to the residents in this city in Tenerife.

The inauguration ceremony was attended by Adeje mayor José Miguel Rodríguez Fraga and by Félix Parra, director of Aqualia's central zone. The participants toured the plant guided by Francisco Urquijo of Aqualia Infrasestructuras, who explained to the visitors how the desalination plant functions. The mayor said that the "infrastructure would cover 40% of Adeje's current water demand, guaranteeing supply and diminishing dependence on other supply sources". He then thanked "the effort s of the construction company which would be managing the plant over the coming years. Félix Parra highlighted that "from the perspective of the design of the installations, the principle of the minimal energy consumption had been applied.

The plant has four treatment lines and will initially produce 10,000 m3/d with the possibility of doubling this capacity. It incorporates the most advanced environmental and energy savings technologies, and its design and construction are environmentally friendly being the only one of its kind in Spain that is completely underground. It features an energy recovery system that is able to recover 60% of the energy used that is subsequently reintroduced in the system.

NOSOTROS RECOGEMOS Y TRATAMOS LOS RESIDUOS. TÚ LOS SEPARAS.
LO ESTAMOS HACIENDO JUNTOS
Servicios Ciudadanos
RECOGIDA DE RESIDUOS
TRATAMIENTO DE RESIDUOS
ORGÁNICA
INORGÁNICA
PROCESOS
INCINER
RECEPCIÓN
GESTIÓN
COMPOSTAJE
VALORIZ
CONTROL
CLASIFICACIÓN
ENERGÍA
DESAR
PREVENCIÓN
sd europe
SOLAR · DECATHLON

The foreman and h
in the Cantábri

César López López, foreman at the Las Dueñas- Muros de Nalón section project for the A-8 Cantábrico Highway in Asturias

He has many years of experience in similar projects. César López was one of the foremen of the Navia Viaduct project, also built by FCC in Asturias. He is currently in charge of the construction of the Las Dueñas-Muros de Nalón section of the Cantábrico Highway.

The new 8.7 km-long section will contribute to reducing traffic congestion of this road currently in use. The most salient aspect of this route is that 37% stretches over singular structures and 27% is above ground in the Concha de Artedo Viaduct.

Once the 1,118m-long viaduct is completed, it will be the longest one in Asturias and the highest one upon piles, some of which are over 100 meters high.

Difficulties encountered during execution

Cesar mentioned that the strong wind in this region had an impact on the execution of the foundations as well as the assembly of the piles. The up to 90 mm/h winds made necessary to suspend work on several occasions. This has been particularly difficult, he told us.

This is why it was necessary to stress the experience and professionalism of the employees who were involved in assembling the piles, and to this purpose, special training was also provided. Complying with safety measures during the execution of the project was absolute, and we can say that, thanks to this, we did not have any accidents.

No accidents during project execution

The difficult terrain and its composition was one of the many problems that were encountered during the execution of the foundations and the piles.

Environmental aspects

The project was very demanding in respect of the environmental impact. All services and existing roads were respected and the slopes were restored, acoustic screens were installed, animal crossings were built, shrubs were planted, and all corrective measures to

The route of the project

is work
co highway

prevent environmental impact and respect the environment were implemented.

The fish were caught, as one of the protective environmental measures, and local amphibians such as frogs, tritons, and salamanders were transferred to a protected environment during the project execution phase and then returned to their natural habitat once the project was completed.

100 % FCC

It is a source of pride for us to be able to say that the work was executed 100% by FCC. The design, calculation, execution, quality control, topography, the technicians, personnel, all belonged to FCC and nothing was outsourced, César told us. This, he said, was not usual in major projects of this type and gives us an indication of our company's diversification and the professionalism of our people.

The Las Dueñas – Muros de Nalón section of the Cantábrico highway features several structures, such as the Concha de Artedo Viaduct, one of the most unique structures of this project, as well as the Santa Ana, Pieria, and Santa Olaya viaducts that were built so as not to have an impact on several streams, and the 500 meter-long Somao Tunnel and the San Juan tunnel measuring 221 meters were also built.

The Concha de Artedo viaduct has two 1,188 meter-long lanes and measures 22.80 meters in width. Some of the piles are more than 100 meters high. The viaduct crosses the Uncín River, the N-632 road, and the narrow-track railway.

It was built using 16 piles each consisting of a hollow shafts that become wider the closer they are to the road platform, creating a solid concrete base featuring all the definitive supports of the viaduct.

The platform is built using prefabricated voussoirs which were built at the manufacturing plant and were placed along the aqueduct supported by formwork or voussoir installers owned by FCC and which can measure up to 115 meters.

Due to the curves and counter-curves, no two voussoirs are alike and each is specially reinforced and perfectly assembled.

Once completed, this highway section will be part of the High-Capacity Network of the Asturias Principality. Our company was previously involved in building some of these other sections of the highway.

> "The viaduct is supported by 16 piles, the highest one, the ninth going westward, measures 133.3 meters."

The story of two ALPINE colleagues with an adventurous spirit

Ruth Walch and Hans Lechner are two indefatigable adventurers who love the mountains, facing great challenges and aspirations both of whom never give up. Their secret is to always have a very positive attitude.

Ruth Walch is an Alpine employee in Tyrol who knows what it's like to struggle to reach an objective despite the difficulties. She crossed the second largest sand desert tin the world, the Taklamakan desert in western China, experiencing temperatures of up to 60 degrees and zero humidity, leaving behind the comforts of modern life. They took just the right amount of water and food.

In three and one half weeks Ruth and her group walked 250 kilometers over the desert sand. Despite the hardships, she was able to bring back very positive and inspiring impressions for her professional as well as for her personal life; for example, the certainty that almost any goal can be achieved with mental strength and the good thing about a team whose members fight for the same objective to try to make it a reality.

Hans Lechner, the director of Information Technologies at ALPINE is an active member of the Austrian mountain rescue team in his free time. He patrols the slope five days every winter and performs other tasks during the week-ends.

The wounded are rescued with sleds or helicopters. Up to seven people seriously injured are treated each day. Most of the emergencies, such as rescuing avalanche victims and the search and rescue for missing people, occur in the winter months.

The most dangerous mission that he has had to face was the rescue of three snowboarders in Flachau (Austria). They had to be brought down with ropes down frozen streams. The rescue team is trained in mountain safety and in high-performance mountain climbing. They also attend first-aid courses and also a one-week training course for work on rocks, ice, and winter conditions plus a three-day course in first aid. Three-hour training exercises are also performed once a month.

A WRG team goes to work

one day at several recycling sites

The management team handling the contracts at Barnsley, Doncaster, and Rotherham, three of the most important cities in the metropolitan area of South Yorkshire in northern England recently participated in the "Going down to work for a day" initiative launched at four of the solid waste recycling facilities managed by FCC's English subsidiary. Members of the three city councils also joined this initiative.

Paul Mace, one of the supervisors in the contract department came up with the idea and Warren Steele, the manager of the contract contributed to bringing it to fruition.

The objective of this initiative was to put themselves in the place of those who work at the urban waste recycling sites to be able to gain an understanding, from a different perspective, of the level of efficiency and requirements.

Session for the exchange of ideas

The experience was studied in detailed at Doncaster in order to be able to improve the service and the collaboration expectations. Their remarks were generally positive and some of the city council employees expressed their desire of participating in similar initiatives since they believed that it was a good way to gain first-hand knowledge of what was being done well and what needs improvement at these sites.

Since October 2008

The company started to provide services to the three city councils in October 2009. It is in charge of the operations of 14 urban waste recycling facilities (six in Doncaster, four in Barnsley, and four in Rotherdam).

Social Responsibility

Juan Losada, at the Collado Villalba, Madrid home

The singer Juan Losada performed at the Nuestra Casa de Collado Villalba (Madrid) home last 19 April, accompanied by the Preciados musical band. Juan performed a life show for the elderly without resources who live at the home.

Esther Koplowitz and her daughters Esther and Carmen as well as Baldomero Falcones, CEO of FCC attended the event.

Losada sang several songs that were applauded by the entire audience. Besides his own compositions, he also sang classics such as "The River" y Bruce Springsteen, "I want to break free" by Queen, and the Beatles' "Love me do". The event is part of the corporate citizenship programs organized by FCC Volunteers jointly with the Esther Koplowitz foundation at the three homes built in Madrid, Valencia, and Barcelona. The FCC Corporate Volunteer program aims to have employees become involved in the social aid and is in keeping with the objectives of the Esther Koplowitz Foundation which has been carrying out an intense campaign in recent years in the benefit of those most in need and that is funded exclusively with the contributions made by Esther Koplowitz.

Juan Losada in the center surrounded by the "Preciados" musical group

FCC Volunteers

The FCC Volunteers initiative was launched in April 2008 as part of the FCC Group's Corporate Responsibility programs.

The FCC Volunteers program aims to create a solidarity network among Group employees, family members and friends who contribute their knowledge and time to improve the quality of life and welfare of the social groups most in need.

The program is currently carried out in three cities. In Madrid, the volunteer initiative focuses on the needs of the Nuestra Casa de Collado Villalba home; in Barcelona, volunteer work is carried out at the Nostra Casa de Fort Pienc, accompanying the elderly residents. In Valencia, the volunteers accompany the physically and mentally disabled senior citizens who live at the La Nostra Casa home.

New activities by FCC volunteers

Almost coinciding with the arrival of spring, FCC Volunteers had at its second Cycle of Friday Conferences at the Residence, guest speaker Eduardo del Rosal, the FCC Group Safety Director, who gave a speech "The presumption of Innocence" and explained to the residents the steps taken by the police after a crime is committed, the various phases of police investigation, and the role of the district attorney's office and the examining magistrate.

Francisco Martín Monteagudo, general manager of Human Resources, also visited the Nuestra Casa de Collado Villalba residence, and described his experience, in Spain and abroad, in the field of human resources.

Rubén Sánchez, a podologist and professor at Universidad Alfonso X El Sabio, also repeated his experience at the Collado Villalba home and, on this occasion he was accompanied by a group of friends, presenting a dance choreography before the residents under the title "Reliving dance is reviving your life".

In April, Father Bennet visited the residents and offered a recital together with Justo Muñoz, one of the frequent visitors at these Friday cultural events; Fernando Dal-re Compaire, Corporate Director of Human Resources, IT Systems and of General Services at the Cementos Portland Valderrivas Group, also spoke to the residents about his professional experiences abroad.

Before the Easter holidays and, changing roles, Javier López-Galiacho Peron, FCC's director of Corporate Responsibility, spoke at this Friday event on the curious aspects of Spanish civil law during his career as professor of civil law at Universidad Rey Juan Carlos. Lastly, to cap the season, the volunteers also organized an event with the journalist and writer Antonio Pérez Henares, accompanied by his editor, Basilio Rodríguez Cañada who gave a preview of his new poetry book "El vuelo de la garza" (The flight of the heron).

The Nostra Casa home in Barcelona had as a guest speaker the stylist Marcel Montleó who gave a conference on the haircut as a mirror of personality.

FCC Volunteers participate in the Volunteers' bicycle day

The FCC team of volunteers participated in a bicycle day organized by the Adecco Foundation as part of the European Year of Volunteers 2011.

A total of 140 volunteers from different companies rode 980 kilometers to encourage the integration of people with disabilities and promote children's rights. The teams also had to compete in various other sports activities such as the "sack race", human scrabble, the chain, and the labyrinth. The kilometers run by each of the participants are added to the international Win4Youth initiative of the Adecco Group which means that every five kilometers is worth a dollar and all the money collected will be donated to organizations that defend the rights of children in developing countries, such as the charity Se Essa Rua Fosse Minha in Brazil, The Smile of the Children in Greece and Roter Keil in the Philippines.

"Let us save the planet" .A.S.A. participates in the international exhibition

.A.S.A. Bulgaria took part in the international exhibit "Let us save the Planet", celebrated in Sophia (Bulgaria) from 13 to 15 April, and which dwelled on issues related to waste treatment and recycling, energy efficiency, and renewable energy.

Exhibitors from 23 countries participated in the "Save the Planet" environmental event. .A.S.A. Bulgaria promoted the services rendered in Bulgaria as well as all of the activities of .A.S.A. International. During the 3-day event, new relationships were formed among trade partners and clients that will be of interest for the company in the future.

Cemusa participates once again in Earth Hour

Once again, Cemusa participated as partner and contributed space in more than 4,500 bus stops and kiosks in Spanish cities to the international organization WWF for the largest campaign ever in defense of the environment which took place on 26 March.

Earth Hour 2011 beat all records, and more than 135 countries and 4,500 cities around the world participated. In Spain, 250 cities joined this initiative and turned off the light of their monuments during one hour as a symbolic gesture in the fight against climate change.

Earth Day wants governments, citizens, and companies to get involved in a joint action to call attention to the effects of global warming and demand that political leaders take actions to control CO_2 emissions.

In keeping with its socially responsible policy, FCC is committed to the fight against climate change, one of the preferred guidelines in its corporate responsibility master plan. As a citizens' service Group, FCC aims to acquire voluntary commitments to environmental responsibility and promote initiatives the objective of which is a clear reduction of the impact of our activities on the environment.

Cementos Portland Valderrivas celebrates trees and aggregates day

On 14 April and coinciding with the fourth Tree and Aggregates day, the aggregate business unit of Cementos Portland Valderrivas organized an environmental event at eight of its mining operations in which 306 students helped to plant more than 500 trees and shrubs in restored areas. The Trees and Aggregates day is an initiative sponsored by the Image, Environment, and Regional Planning Association of Aggregates Manufacturers (ANEFA, acronym in Spanish) with the collaboration of the Association of Cement Manufactures of Spain (OFICEMEN, acronym in Spanish).

This is one of the campaigns that the United Nations Environment Program (UNEP) it its Good Practices Guide: Quarries and Biodiversity, considers exemplary, and it is also part of the European "European Minerals Day" campaign.

The main objective of this initiative is to increase awareness of this activity and to bring this issue closer to the community and to instill in children the importance of caring for and respecting the environment.

Aripresa receives an award for its contribution to the local economy of Andújar, Jaén

Aripresa was awarded the first prize in the category of Major Companies: their Contribution to the Economy/Added Value to the Community in the FdA Sustainable Development Awards.

Aripresa submitted its entry for this national prize being certain that the activities carried out at the Andújar (Jaén) plant encourage good relations and contribute to the economic and social development of the local community.

Aripresa is highly involved in trying to ensure that the community and the environment develop and maintain good relations so that all who are part of the production system by working directly at the exploitation, or as a supplier of materials and/or services, a consumer of finished products, or simply as a member of the community that lives side by side with a company involved in extractive activities.

Ninth edition of Aqualia's Annual Children's Drawings

Aqualia launched the ninth Edition of the Annual Children's Drawings which this year, under the slogan, "Water, the most transparent luxury", aims to build awareness on the importance of having sufficient amounts and quality of a treasured resource such as water. It also tries to stress all the work that goes behind in order to bring water supplies to households and return it to the environment after its use in the most optimal conditions, a work that is often ignored by citizens.

Since its launching, this social marketing activity has received more than 250,000 drawings from Spain, Italy, and Portugal and has become a reference in the industry and anxiously awaited by clients. Without the collaboration of Aqualia's staff, this campaign would not have been possible.

Thanks to this initiative, the employees of Aqualia become the brand's ambassadors, disseminating the message of the contest to institutional as well as end clients.

AENOR hands out the new R+D+i certificates to Aqualia and Aqualia Infrastructures

AENOR, the Spanish Standardization and Certification Association awarded Aqualia and Aqualia Infrastructures the certificates for its R+D+i management system in accordance with the UNE 166002:2006 standard.

Ramón Naz, director general of AENOR, which this year celebrates its 25th anniversary, gave the certificates to Antonio Vassallo, and Javier Santiago, general manager of Aqualia's procurement department and Javier Santiago, managing director of Aqualia Infrastructures.

This certificate, created by AENOR, is now being implemented in other European countries, enhancing the value of R+D+i in companies which obtain it.

From left to right; José María López, director of the Management Systems Department of FCC Services; Antonio Vasallo; Ramón Naz; Javier Santiago, managing director of Aqualia Infrastructures; and Enrique Hernández, manager of Aqualia's Services Management.

WRG employees, in a cleaning campaign in Suffolk, England

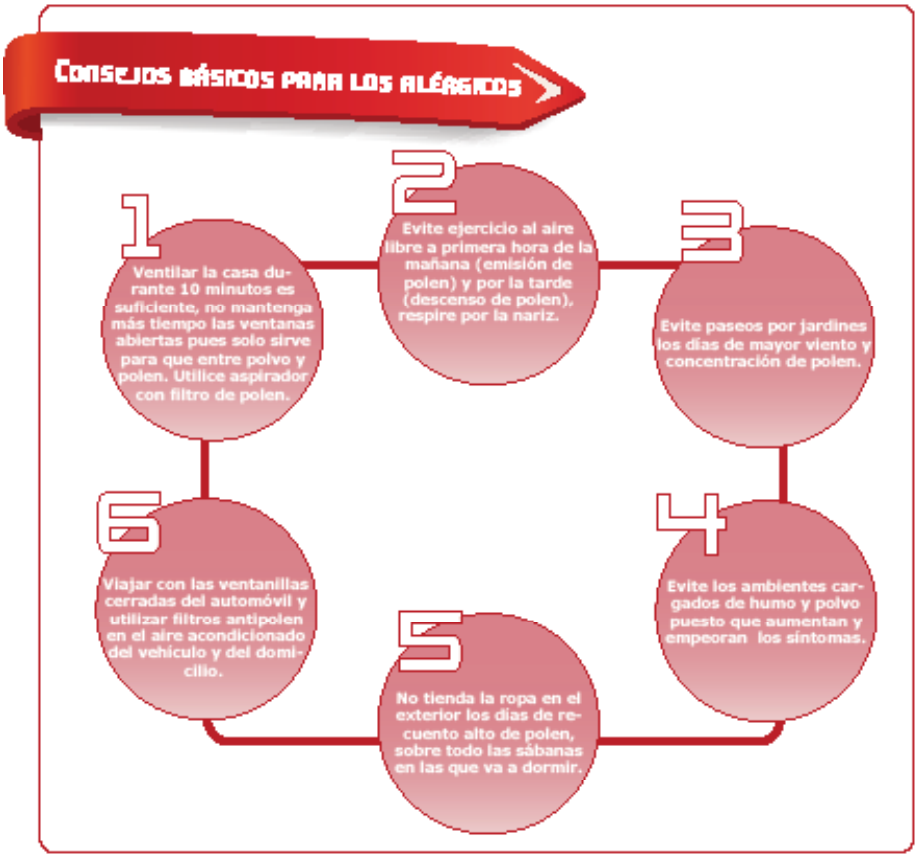
The "Don't be a tosser, keep Suffolk clean" campaign was launched at the BBC Breakfast Show on 28 March. Mark Murphy, Gordon Fergus, the group's sales manager, and Heidi Greener, in charge of the city's recycling and education at Suffolk, participated in the show. The campaign was launched for the first time when Mark Murphy complained in his show about all the waste that he had seen at a rest area in the A14 highway.

The campaign's objective is not only to convert Suffolk into the cleanest and greenest town in the United Kingdom, but rather to build awareness and social rejection of littering and uncontrolled dumping sites, also focusing on eliminating graffiti.

This year, the city council has presented a specialized team comprising WRG colleagues, to respond rapidly to reports on uncontrolled dumping sites.

The event provided a good opportunity to hand out the cheque to the Treehouse Appeal Hospital at Ipswich with the money donated and the bills and cons found among recycled articles.

Spring allergies,
tips for relieving its symptoms



Spring allergies are becoming increasingly frequent and are feared because of their discomforts.
Its manifestations are teary eyes, itching, red eyes, nasal congestion, and sneezing.
Some practical advice for preventing and relieving these symptoms.

Now that spring is with us after a rainy winter, it seems that all plants are just waiting to blossom and start to disseminate pollen with all their strength.

To fight allergy, the first thing to consider is that it is much better to prevent it and to prepare ourselves before we reach the uncomfortable sneezing phase, experience difficulty in breathing, etc. rather than just taking antihistamines.

Allergy to pollen usually starts in infancy or in adolescence, and some of the symptoms could disappear (statistically) although this is not always the case. The tiny grains of pollen usually start to affect us in the early hours of the day when pollen is released from the plants, and in late afternoon, when the temperatures drop and pollen falls from the higher levels of the atmosphere to the ground. Climate also plays a role. Pollen is at its lowest levels on rainy days due to the atmospheric clearing up, and at the highest levels on warm and windy days after it has rained.

Treatment

Treatment consists of preventing and avoiding contact with people allergic to pollen. Another method of prevention is to prepare our bodies by having injections so that we can get used to the allergens, even though only 10% of people affected with allergies have vaccinations.

Dr. Joaquín Garde Fernández, head of FCC's Medical Service.

Once we reach the allergy phase and start to feel the symptoms, we should take antihistamines to reduce the symptoms, as well as following some practical advice that help us prevent congestion and allergic reactions to pollen.

> "Prevent and prepare ourselves before we reach the unconformable phase."

High altitude works

FCC pays special attention to on-the-job safety, promoting all measures aimed at preventing accidents at all its business areas, complying with and making other comply with regulations, and increasing the human and material resources that may be required for this function as much as may be necessary.

High altitude work is work executed at an altitude of more than two meters in buildings, scaffolds, machines, vehicles, structures, platforms, stairs, etc. as well as work at depths, such as excavations, holes on the ground, wells, etc.

> “A preventive approach is the first step for ensuring safety in these types of works.”

Many of the activities conducted by FCC require working above ground, on many occasions at very high altitudes. Performing these jobs in appropriate safety conditions implies the use of protective gear and equipment by individuals and groups as defined for each activity, specific training, and a responsible approach in order to perform the work in safe conditions.

We went to two of the FCC activities where high altitude work is carried out: the construction of the Concha de Artedo Viaduct in Asturias, and the façade cleaning operations at Torre Picasso Madrid to check the prevention measures required for this type of work.

FCC Medio Ambiente

Service: Cleaning buildings. Cleaning the façade of Torre Picasso Madrid.
Height of the building: 157 m.
Number of floors: 51.
Glass surface of the façade: 9,000m^2.

The façade of the Torre Picasso building in Madrid is cleaned six times a year using a platform called a “gondola” which is anchored to the façade and hooked on to two rails, contemplated in the construction of the building precisely for these cleaning operations.

The gondola is fully mechanized, has two protection rails, and slides vertically up and down the façade. Under normal conditions, two operators can clean the four outer walls in six days.

These operators receive specific training on the platform’s functioning and the safety measures required for this activity. The gondolas are inspected once a month by the company in charge of installing it.

Workers use, as protective measures, boots, helmets, harnesses, and safety gloves, in addition to sunglasses which are essential to prevent glare from the façade and the broadcasting stations that allow them to be constantly in contact with the building's control center.

> "High altitude work requires a responsible approach in line with existing risks."

FCC Construcción

Project: Cantábrico Highway. Muros de Nalón – Las Dueñas section. Asturias. Construction of the Concha de Artedo highway.
Height of piles: 100 m.

Workers at the Concha de Artedo (Asturias) viaduct have had to work at pile heights of more than 100 m. Because of this considerable altitude, the emergency plan contemplates as one of the exceptional measures the evacuation by helicopter in the event of an emergency. To this end, the coordinates were provided to the 112 emergency telephone number. There is also an ambulance, a registered nurse, and a driver available 24 hours a day at the work site.

Separate stairs are used to reach the scaffolds, and there are rails, protection nets, etc. Within the scaffolds, separate stairs, with protection rings and various sections are used to climb the different levels.

> "Specific training was provided for climbing climbing the piles due to the high altitude."

Another additional risk at this project is the very strong wind in this region. Safety measures were reinforced because of this and, among other features, the cranes and formworks have wind gauges to measure the force of winds and when the safety limit is reached, the formworks and hanging scaffolds are anchored as a safety measure.

Knowledge

.A.S.A. works on stabilizing a thixotropic sludge lagoon

in Mydlovary, Czech Republic

Stabilization/solidification is one of the main methods used by the company .A.S.A. to remedy ecological damage. This method is used to handle waste when recycling would be impossible or very costly in economic and technical terms and because dumping it in landfill sites is prohibited or would represent an unacceptable risk for human health or for individual environmental components.

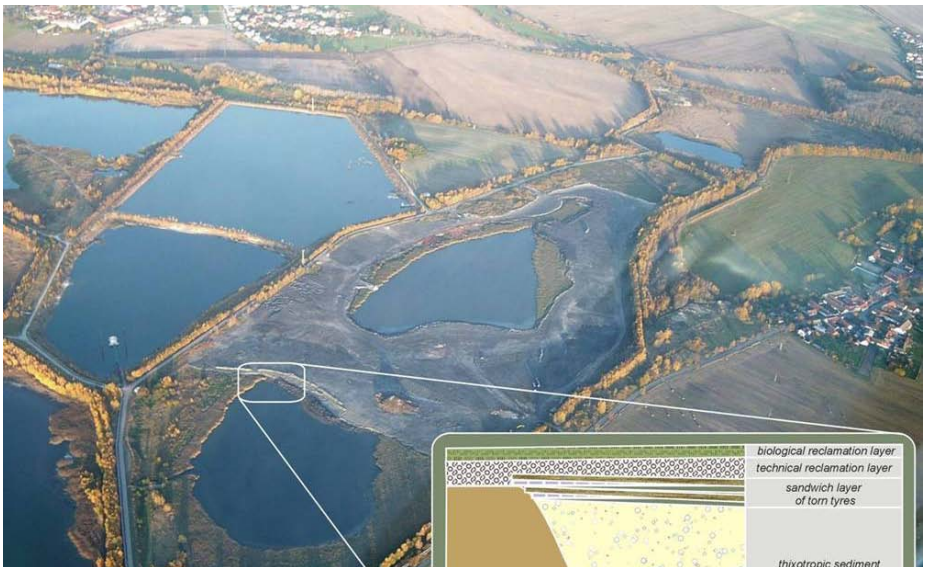
This technology is used to handle solid and liquid waste. The method consists of combining this waste with agglutinant reactive agents with the subsequent alteration of its physical and chemical properties. If a stabilized/solidified product complies with current regulations, it may be used as filling material. .A.S.A. group companies are operating several solidification units with an annual capacity of 100,000 tons.

In Czechoslovakia's South Bohemian region

This treated material is being used in the Mydlovary project to stabilize a sludge lagoon produced by the treatment or uranium at the former MAPE Mydlovary processing plant. The sludge lagoons and the MAPE processing plant are situated in southern Bohemia in the Czech Republic, in the central part of the Ceské Budejovice district, near the municipalities Mydlovary and Olešník.

> "Consumption of stabilized/solidified waste for the K IV/E lagoon is approximately 79,000 tons per annum."

The purpose of the work being performed as part of this project is to remedy and recover thixotropic sludge in the MAPE's IV/E lagoon in Mydlovary, where the leaching waste from the uranium which was deposited in the K IV/E sludge lagoon is up to 25 meters deep. The remediation concept addresses the need for filling and sealing the sludge lagoon to prevent rain or surface



water from seeping into the waste deposits. The necessary technical measures are also implemented for the subsequent incorporation of the remedied area in the landscape.

Treatment of the K IV/E sludge lagoon consists of the construction of an elastic layer formed by alternating layers of whole tires and layers of shredded tires interlaid with recycled materials to achieve an effective cover. Approximately 79,000 tons/year of stabilized/solidified waste is used at the K IV/E lagoon. Since 2002, 1,123,000 tons of stabilized/solidified waste have been used in this project (750,000 tons of stabilized/solidified waste plus 228,000 tons of tires).

Stabilization/Solidification

This technique aims to reduce the solubility, reactivity, or mobility of polluting elements by changing their chemical state or by physically immobilizing it using a stabilizing agent or by converting the pollutant waste into an easy to handle and safe solid material thereby avoiding the risks of volatilization, leaching, or leakage (solidification).

Generally, these methods do not destroy the pollutant substance; instead, they prevent these substances from contaminating the environment as a result of leaching processes, chemical reactions, etc.

Guest-Column

By Gianluca D'Antonio

Manager of the Information Security and Computer Risk Management of the FCC Group and member of the Advisory Committee of the European Network and Information Security Agency

How to use soci

Nowadays, social networks have become communication channels with characteristics very similar to those of newspapers, radio and television. Nevertheless, these networks offer the incredible potential of two-way communication, making the user a consumer and, at the same time, a generator of contents.

Companies that want to offer a product or service, have already started to consider social networks as another channel for influencing consumers and for communicating with their clients.

This new digital ecosystem is now a full part of the daily lives of many people, increasing its penetration among the community since it can be used in mobile terminals (cell phones, PDAs, tablets, etc.) without having to use a traditional PC.

The launch of these new technologies has brought social networks closer to users, boosting their interaction and communication capabilities.

Are we aware, however, of the risks to our privacy when we use social networks such as Facebook?

The information we publish and disclose through these media can be used by companies for commercial purposes as well as by other people for illegal purposes.

A photograph in an electronic format is more persistent and manipulable that its paper counterpart. Information that we put at the disposal of our friends and contacts could be published and disseminated without our knowledge and consent.

To avoid these types of problems, the "cyber security" European Network and Information Security Agency (EINSA) published eleven months ago a list of practical advice for users on how to be online more safely, at any place or time. These are the golden rules

1. Consider carefully which images, videos, and information you choose to publish.
2. Never post sensitive or confidential information. Don't publish your home address or financial data in your profile.
3. Use a pseudonym. Accept in your contact network only the pseudonyms of people you trust.
4. Do not accept friend requests from people you do not know. It could be people using false identities for purposes other than what they seem (often criminal purposes).
5. Verify all your contacts periodically, eliminating those that are not necessary or unknown.
6. Use your personal e-mail rather than your work e-mail.
7. Be careful how you portray your company or organization online.

ial networks

8. Do not mix your business contacts with your personal contacts. It is better to use two different profiles.

9. Do not let anyone see your profile or personal information without your consent.

10. Do not leave your mobile device (PDA, tablets, smartphones, PCs, etc.) unattended.

11. Do not save your password on your mobile phone.

12. Use the security features available on your mobile phone (encoded screensaver, localization service, remote deletions, etc.).

13. Be careful what you publish about someone else. Don't publish photos, videos or personal data of other people without their consent.

14. Read carefully and in full the privacy policy and the conditions and terms of use of the social network you choose.

15. Use privacy-oriented settings.

16. Be careful when using your mobile phone and pay attention to where you put it.

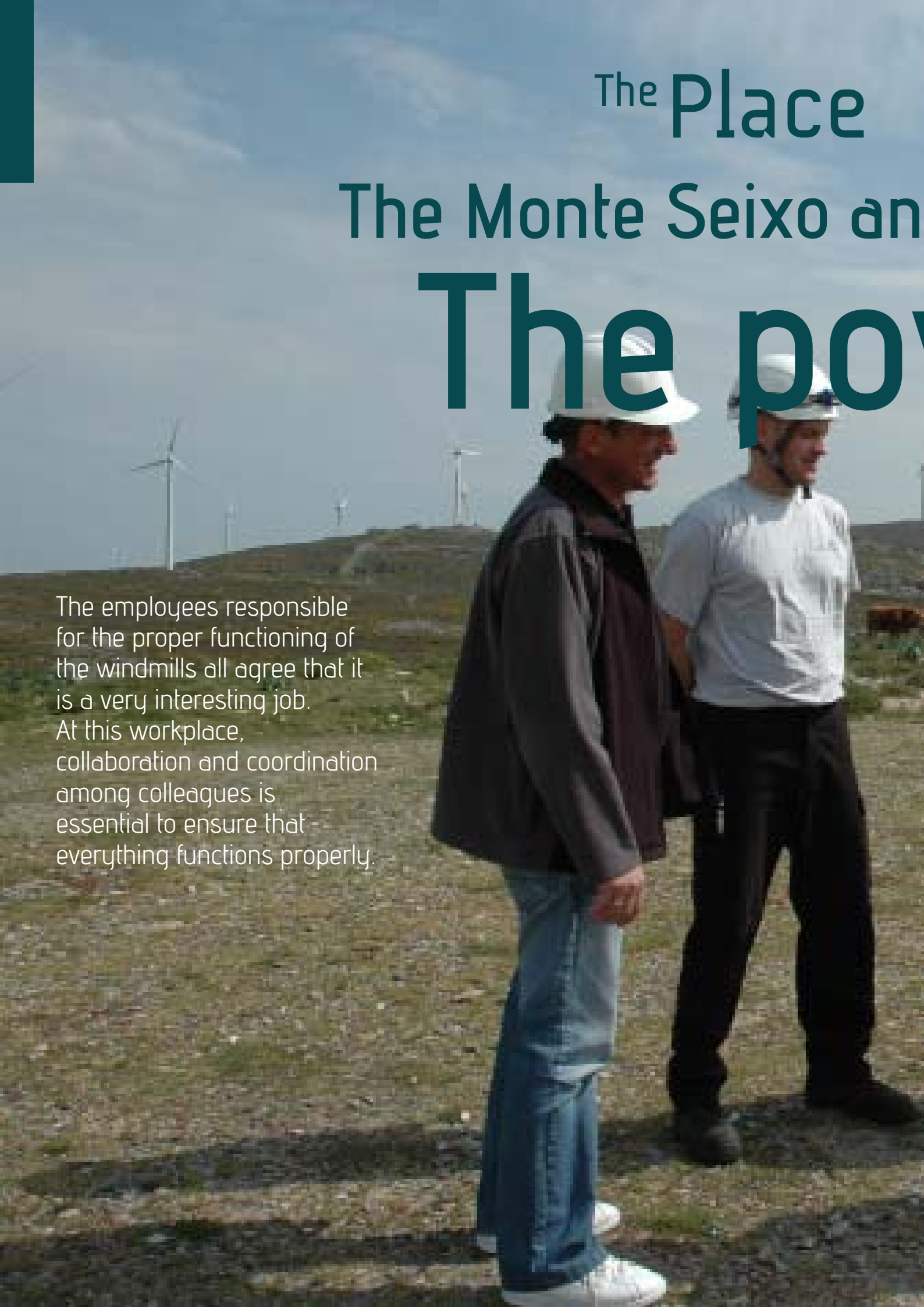
17. Deactivate location based services when not using them.

> "A photograph in an electronic format is more persistent and manipulable than its paper counterpart."

For further information:

http://www.enisa.europa.eu/media/press-releases/instantly-online-17-golden-rules-for-mobile-social-networks/?searchterm=gold

http://www.protegetuinformacion.com/ENISA



The Place

The Monte Seixo an

The pov

The employees responsible for the proper functioning of the windmills all agree that it is a very interesting job. At this workplace, collaboration and coordination among colleagues is essential to ensure that everything functions properly.

d Serra do Cando wind farms

wer of wind

At 50 km from Santiago de Compostela, surrounded by exceptional fauna and flora, wild horses and pasturing cows, FCC Energía has three wind farms with a total combined installed capacity of 100.21 MW. Serra da Loba, Monte Seixo, and Serra do Cando.

The Monte Seixo and Serra do Cando wind farms are situated in the La Lama, Cotobade, Forcarei, and Cerdedo municipal districts in the province of Pontevedra. The Monte Seixo windfarm has 53 wind turbines with a total capacity of 34.98 M and the Serra do Cando windfarm has 44 wind turbines with 29.23 MW total installed capacity.

Eight million square meters

Over the past years, windfarms have become a common in many Spanish regions. During our visit to Monte Seixo and Serra do Cando, we were able to confirm the great technological development of wind power.

> A good atmosphere and comradeship is prevalent among the workers, all of whom attend safety courses on a regular basis

Nearly eight million square meters are filled with wind turbines that use wind to generate electricity. Nemesio Silva Vidal, the head of the Cando windfarm tells us that this is one of the top category windfarms in Spain.

In addition to a supervisor, eight employees currently work at the windfarm, six in the morning and two in the afternoon shift. The ones who work the morning shift perform jobs at a high altitude, preventive and maintenance work on the turbines, while the two who work in the afternoon shift are in charge of detecting failures and executing pending tasks.

During our visit, we had the opportunity of meeting Carlos Blanco, Pablo Barros, Javier Novoa, Luis Rodríguez, and Rubén Rey who are in charge of ensuring that these windfarms function properly. All agree that this is a very interesting job and the cooperation among colleagues is essential so that everything functions well, “we have a very good work atmosphere”, he told us.

Constant training

They are not afraid of heights and everyday they climb up 55 meters, the height of the wind turbines. “It’s the same as working in a 23-floor building”, they told us, “ we do this very carefully and are also very well trained for working at high altitudes, and know exactly what we have to do”.

Every six months, they check all of the machines to ensure that they function perfectly. One of the operations performed most frequently involves changing the wind gauge and vanes which usually deteriorate because of the climate in this region. The operator reaches them through a hatch situated in the gondola using a harness with safety ropes. The blades are removed periodically using a crane for polishing or for their replacement.

Nemesio told us that winter conditions are extreme, and that working conditons were very difficult because of the very low temperatures, strong winds, sleet, and frost. Nevertheless, in the spring work was a pleasure thanks to the combination of technology and the spectacular landscape.

A good atmosphere and comradeship was widespread among workers who periodically take courses on safety, high-altitude work, rescue operations at the turbine and stairs. Since machines and equipment are constantly evolving, employees are continuously recycling themselves and taking training courses.

Building a wind farm of these characteristics requires a preliminary study of the wind, installing wind gauge towers which during

Wind turbines that are 55 meters tall

The 8,000 meter square windfarm has wind turbines that are 55 meters tall, the same height as a 23-floor building. The blades spin a maximum of 30 times per minute, at a speed of 4 m/s to 25 m/s. After reaching the speed of 25 m/s, they stop to avoid spinning at a greater speed.

two to three years record the hours and the direction of the winds to be able to find the most profitable conditions.

High production peaks in the winter months

The greatest amount of energy is generated between October and April, with the highest production peaks recorded in the winter months. In the summer, there are days when a lot of energy is generated although sometimes the machines have refrigeration problems because of the high temperatures of the gondola which can reach more than 50°C. When this happens, the machines come to a halt until the temperature goes down. Energy from each windmill is transferred through an underground cable system. The generators are hooked on series, joined together into different groups. The fiber optic power cables are placed in 130 cm-deep ditches, and transport the electricity and information to the substation. The voltage is transformed here to about 220,000 V and redistributed through the power grid by means of high-voltage cables and towers.

FCC brings water su

Santiago de Querétaro, the capital of Mexico's Querétaro State, is a city that is proud of its past, its architecture, and its landmark aqueduct that was built in the eighteenth century. Its historic district was declared a World Heritage Site by UNESCO. A perfect balance between the modern age and historic wealth.

Querétaro is one of the smallest states in Mexico, situated in the country's central region and north of Mexico City. Founded in 1531 by Spaniards, Santiago de Querétaro is considered one of the cities that best reflects Spanish city planning in America.

The city's first aqueduct was built between 1726 and 1738 thanks to the decision of Juan Antonio de Urrutia and Arana, The Marquee of Villa del Villar del Águila to comply with the desires of the Capuchin nuns and to take water to the city.

The aqueduct is now city landmark and one of the largest in Mexico. Measuring 1,280 meters in length and supported by 74 arches, the aqueduct has been used to bring drinking water supply to the population.

From left to right: Enrique Aguilar (CIAQSA), Luis Alberto Palacios (AQUALIA INFRAESTRUCTURAS), Lucas de Marcos (AQUALIA INFRAESTUCTURAS), Emilio Soler (AQUALIA INFRAESTRUCTURAS), Abel Asin (AQUALIA INFRAESTRUCTURAS). Kneeling from left to right: Humberto Díaz (CEA de Querétaro), Alfonso López (AQUALIA INFRAESTRUCTURAS), Faustino Pérez (AQUALIA INFRAESTRUCTURAS)

upply to Querétaro, Mexico

Querétaro's water supply problem

In the past 25 years, the metropolitan Querétaro area started to experience major water supply problems because of the growth in population and the economic boom.

A large percentage of the water supply came from the Valle de Querétaro aquifer that was 60% over exploited and measures had to be taken to limit consumption; reuse of treated water; incorporate ground and underground water from other sour-

ces; the start-up launch new supply projects; and use water resources in a more efficient manner.

In mid-2007, a consortium led by FCC won the largest hydraulic project ever put out to tender in Mexico, contemplating a 20-year concession, construction, and exploitation of the hydraulic system known as the Aqueduct II in Querétaro.

The FCC staff involved n this project were: Emilio Soler Rangel, the representative of Aqualia Infrastructures; Lucas de Marcos de la Torre, manager of Aqualia Infrastructure's Aqueduct II Construction project; Alfonso López González, the superintendent of the ETAP, Bordo de Seguridad y Tanques de Reserva civil works division; Luis Alberto Palacios Moreno, superintended to Aqualia Infrastructure's Electromechanical Equipment; Roberto Sánchez Merecías, superintendent of FCC Construction's impulsion Line; Luis Miguel Mira, superintendent of Equipos Electrónicos ETAP, Aqualia Infrastructures; and Abel Asín Belsue, superintendent of the Aqualia Infrastructure roll-out department, all of whom made this project possible. It will certainly become one of the most important urban civil projects of the 21st century.

> "The Aqueduct 11 system will supply 50 million cubic meters of Water/year, making it one of the most Important urban projects of the 21st century."

Inauguration

This project will have a major impact on the future of Querétaro, Mexico's President Felipe Calderón Hinojosa stated when he, jointly with Jose Calzada Rovirosa, the governor of the state, inaugurated the new FCC-built potable water distribution system. "It is a great day for Querétaro and for the country" the president said. He also mentioned that thanks to this project, Querétaro's population would have guaranteed water supply and that this would be very beneficial.

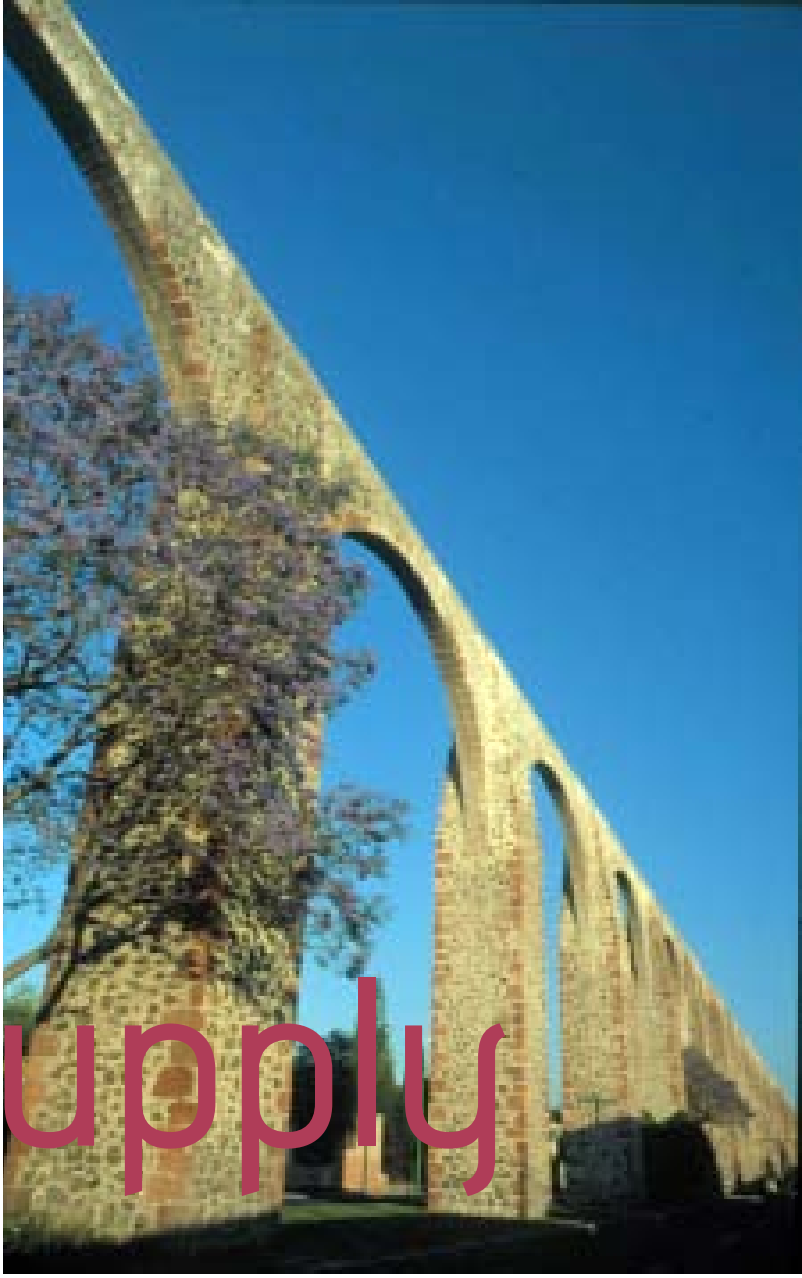
With this civil work, it will be possible to transfer 50 million cubic meters of water of water every year from the semi-desert region to the Querétaro metropolitan area.

The water router runs 128 kilometers northeast to southeast in the state of Querétaro, crossing the Panúco and the Lerma-Chapala river basins. The source of the water is the Infernillo springs in the Moctezuma River, four kilometers downstream from the rock formation where the canyon, with the same name, is born.

With the rollout Aqueduct II, the drinking water supply for the citizens of Querétaro is guaranteed for the next 30 years.

The project consisted of the construction and exploitation of a pump, conduction, potabilization and water distribution system from the Infernillo springs, in the Moctezuma River basin, to the city of Santiago de Querétaro

Description of Querétaro's water supply system



Querétaro's first aqueduct, built between 1726 and 1738, has become the capital city's landmark.

The project is divided into two parts: impulsion and gravity. The impulsion section which runs along 24 kilometers of difficult terrain from the Infernillo springs to the San Javier water deposit.

Water from the Infernillo springs is captured by means of a 16 meter high and 100 meter wide concrete gravity dam situated 800 meters downstream from the capture point where the first pumping plant is located and another one 700 meters down, both of which are capable of pumping water at a height of more than 1,100 meters, producing a flow of water of up to 1.8m^3/second.

From here, conduction is by means of a five kilometer-long tunnel across the "El Doctor" mountain range. A safety deposit was built at the end of the impulsion section with a capacity of 400,000 m^3 and a water purification plant, the operations hub of the entire automated system.

The gravity section runs along 90 kilometers from the purification plant to the San José el Alto drinking water reserve which has a storage capacity of 50,000 cubic meters and the possibility of increasing it to 200,000 cubic meters, connecting to the drinking water distribution system, known as the Acuaférico, in the Querétaro metropolitan area. The flow from the drinking water treatment plant is 1.5 m^3 per second, supplying water to a population of nearly 700,000 inhabitants.

The project required the construction of 41.5 kilometers of roads, high voltage power lines, and a communications system featuring the most advanced technologies in the market in terms of engineering and construction.

FCC
Servicios Ciudadanos