SERVICES

28 DEPARTMENT OF SERVICES

29 ANALYSIS OF THE ENVIRONMENTAL SECTOR IN SPAIN

29 FCC BUSINESS ACTIVITIES

32 INTERNATIONAL ENVIRONMENTAL SERVICES DIVISION

34 TECHNOLOGICAL INNOVATIONS

37 FCC AQUALIA

41 FCC AMBITO

43 VERSIA

- 44 LOGISTICS
- 45 URBAN FURNITURE
- 46 CONSERVATION AND SYSTEMS
- 47 SALES OF CLEANING VEHICLES AND SPECIALTY VEHICLES (SVAT)

SERVICES

DEPARTMENT OF SERVICES

Citizen services, and especially those related to the environment, have been the company's core activities virtually since it was established more than 100 years ago. They contribute 38.3% of turnover and 64.9% of the EBITDA.

FCC groups its services business into two areas:

- **Services**, which includes the areas of environment, water and industrial waste as well as services related to urban sanitation, the collection, treatment and disposal of solid urban waste, street cleaning and maintenance of sewerage systems, the integral water cycle, the management of industrial waste and the conservation of green areas.
- **Versia**, which integrates businesses related to street furniture maintenance, logistics, maintenance and systems and the sale of commercial vehicles.

IN SPAIN, FCC MEDIO AMBIENTE SERVES 3,342 MUNICIPALITIES WITH A POPULATION OF OVER **27,6** MILLION.

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Analysis of the environmental sector in Spain

Last year a total of 246 public tender contracts were awarded in the field of urban sanitation, which includes the activities related to the collection and treatment of solid waste, street cleaning and the maintenance of sewerage systems; this is a 27% reduction compared to 2011. The total annual consignment related to these tenders has amounted to 605 million euros compared to 593 million for the year before. Despite 2011 being an election year, 2012 has been very similar to the previous one, with a notable impact of the crisis on the number of tenders. Local agencies tend to extend the bidding process rather than call new tenders.

The activity recorded in the subsectors related to the cleaning and maintenance of buildings, business premises and hypermarkets as well as the maintenance and conservation of green areas, which have been awarded contracts worth 620 million euros annually, was 47% lower than in the previous year.

FCC business activities

FCC provides urban sanitation services in 3,342 municipalities across Spain and serves a population of over 27.6 million inhabitants. During 2012, FCC collected seven million tonnes and treated nine million tonnes.

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FCC Medio Ambiente contracts awarded in 2012

Management and operation of the Exhibition and Convention Centre in Granada	25 years
Solid urban waste collection and transport in Otura, Granada	12 years
Solid urban waste collection and related services in the municipality of Valverde del Camino, Huelva	12 years
Solid urban waste collection, cleaning, maintenance and upkeep of containers in Lepe, Huelva	10 years
Street cleaning and solid urban waste collection services in the city of Melilla.	6 years
Urban waste collection, street cleaning and recycling centre in the municipality of Utrera, Seville	10 years
Cleaning, distribution of sanitary hygienic materials and disinfection of all buildings at the University of Zaragoza	2 years
Industrial cleaning of the Repsol plant in Puertollano, Ciudad Real	5 years
School cleaning services. Barcelona Education Consortium	2 years and 9 months
Collection, transport, treatment and disposal of municipal waste, street cleaning and beach cleaning in Oropesa del Mar, Castellón	11 years and 3 months
Security, upkeep, cleaning and maintenance of parks and gardens in Telde, Gran Canaria	2 years
Maintenance of gardens at the University of Las Palmas de Gran Canaria	4 years
Collection, transport and processing of paper, cardboard and light packaging on the island of Fuerteventura	8 years
Street cleaning, cleaning of public facilities, collection and transport of solid urban waste in the municipality of Pájara, Gran Canaria	10 years
Upkeep, maintenance, renovation of green areas, tree-related work and supply of plants in the gardens of Hospitalet de Llobregat, Barcelona	4 years
Cleaning of schools and municipal offices belonging to the Town Council of Cornellá de Llobregat	4 years
Street cleaning in Valencia de Don Juan, León	4 years
Cleaning of beaches along the coast in Guipuzcoa	2 years
Urban street cleaning in the municipality of Ansoain, Navarra	6 years
Collection, transport of solid urban waste, cleaning of streets and municipal buildings in Almassera, Valencia	4 years
Street cleaning in Segorbe, Valencia	10 years
Cleaning of municipal facilities and schools in Benidorm, Alicante	4 years
Street cleaning in Almansa, Albacete	4 years
Upkeep and maintenance of green areas and roadside trees in the city of Madrid. Zone 4.	1 year
Operation of two biomethane plants and one biogas treatment plant in Valdemingomez Technology Park, Madrid	14 years
Upkeep, maintenance and improvement of green spaces and urban trees in Oviedo, Asturias	4 years
Container sorting plant in Jundiz II, Vitoria	10 years
Street cleaning and landscaping in Gueñes, Vizcaya	8 years

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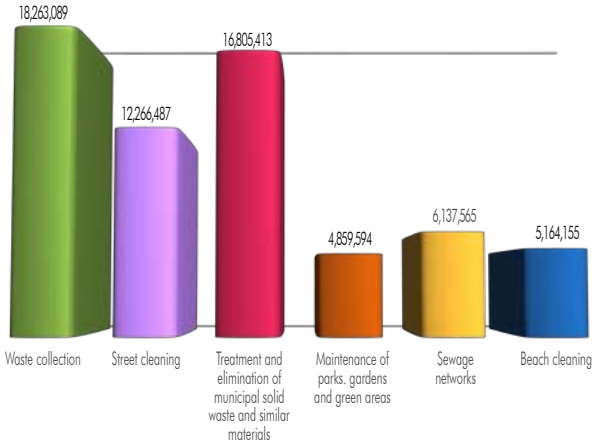
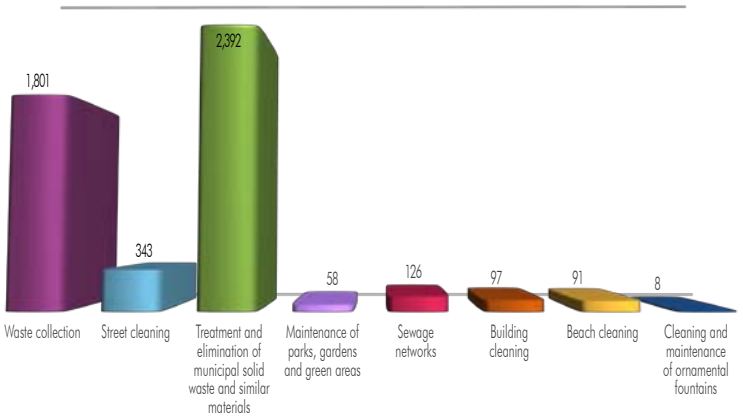
Population being served by services



Summary of the population being served (total inhabitants)* 27,809,338

*If several services are performed in the same municipality, the population being served is only counted once.

Municipalities being served



Summary of municipalities being served* 3,342

*If several services are performed in the same municipality, the municipality is only counted once.

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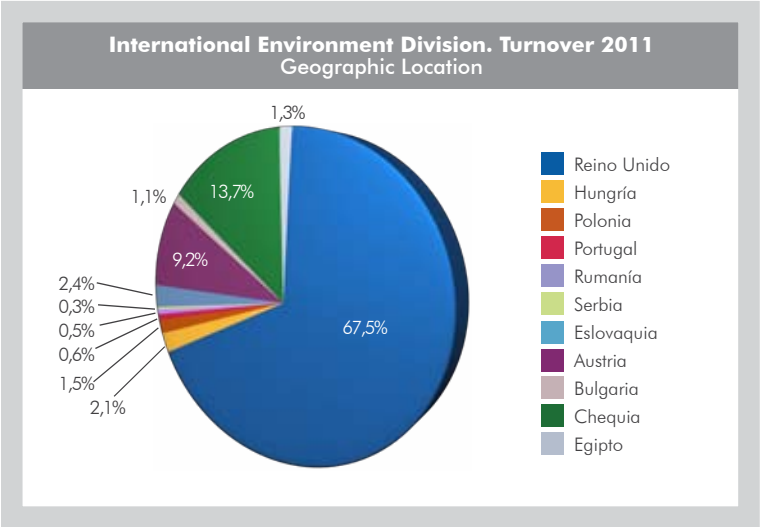
International Environmental Services Division

The International Environmental Services Division is a leader in the integral management of solid urban waste and energy recovery in the United Kingdom, Central and Eastern Europe and North Africa, and is present in 11 countries (the United Kingdom, Austria, the Czech Republic, Slovakia, Hungary, Poland, Romania, Bulgaria, Serbia, Portugal and Egypt).

In 2012, the International Environmental Services Division was awarded a total of 24 tender service contracts for waste collection, transport, treatment, disposal and street cleaning. These contracts are distributed geographically as follows:

Tender contracts awarded abroad			
FCC UNITED KINGDOM (FCC Environment)		FCC CENTRAL AND EASTERN EUROPE (A.S.A.)	
Contracts awarded:	13	Contracts awarded:	11
Population served:	3,831,000 inhabitants	Population served:	223,708 inhabitants
Tonnes treated:	320,600 tpy	Tonnes treated:	31,750 tpy
Annual turnover:	53 million pounds	Annual turnover:	1,298 million euros



Some of the more significant contracts awarded in 2012:

FCC United Kingdom (FCC Environment)

Waste treatment in Buckinghamshire, United Kingdom

Services provided: Waste treatment in Buckinghamshire. Construction of an Energy from Waste facility and two transfer support stations; including transport between facilities.
Contract period: 30 years
Population served: 478,000

Phase 2 of the waste management contract for Wrexham, in northeast Wales

Services provided: Extension of the current waste management contract in Wrexham County Borough Council for the supply and mechanical and biological treatment of residual waste, including solid recovered fuel production, the recovery of dry recyclable materials and the recycling of street cleaning waste.
Contract period: 24 years
Population served: 135,000

Waste collection and treatment in Warrington, Lancashire, United Kingdom

Services provided: Waste collection and treatment in Warrington Borough Council and an extension for the treatment, transport and disposal of residual and commercial waste, as well as waste from centres for recycling household, street sweeping and washing, and bulky waste.
Contract period: 5 years
Population served: 195,000

Interim Framework of the waste treatment service contract for the MRWA, United Kingdom

Services provided: Treatment of residual waste for the Merseyside Recycling & Waste Authority (MRWA). Bid for a three-year framework contract with a one-year extension for the transport and treatment of household waste. The waste will be received and processed in FCC's new MRF in Arpley, producing SRF for heat treatment.
Contract period: 3 years
Population served: 1,353,400

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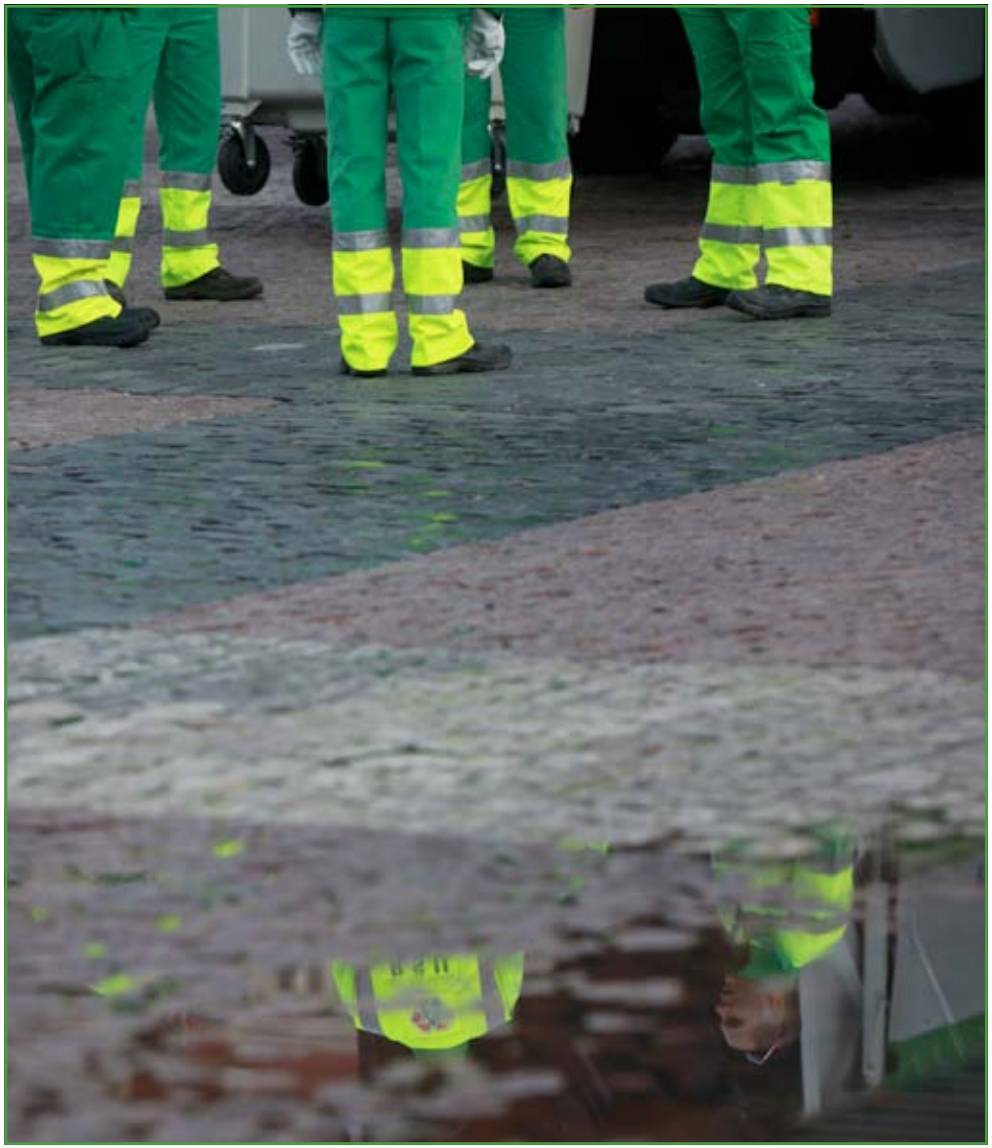

FCC Central and Eastern Europe (.A.S.A.)

Implementation of an integrated waste management system in southeast Macedonia

Services provided: Solid urban waste collection and transport. Cleaning of the existing landfill. Construction and operation of a new sanitary landfill. Waste treatment (sorting, composting) in a later stage.
Contract period: 30 years
Population served: 180,000

Construction and operation of the MBT plant in Zabrze, Poland

Services provided: Construction and operation of the second MBT waste treatment plant in Poland, with a treatment capacity 60,000 tonnes per year
Contract period: In operation since February 2013
Population served: 200,000

Collection and transport of motorway waste in north Austria

Services provided: Collection and transport of urban waste and bulky waste collected directly from the motorway.
Contract period: 5 years
Population served: 180,000

Waste management in one of Europe's largest Volkswagen engine factories in Poland

Services provided: Transport and treatment of hazardous and non-hazardous waste and outsourcing.
Contract period: 2 years
Population served: Volkswagen Motor Polska employees: 1,130

TURNOVER: **1,195.64** MILLION EUROS
INCREASE OF 10.86% COMPARED TO 2011

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Technological innovations

New technologies in electric vehicles

Technological development in the field of electric vehicles is a reality, and FCC now has a fleet of nearly three hundred vehicles. The goal is to be able to do all of our services with these vehicles. Currently, we have light (up to six tonnes) and medium tonnage (up to fifteen) vehicles, including versions for collection and cleaning.

The next goal proposed is heavy vehicles: the technological leap to electric vehicles with rigid chassis and the maximum service tonnage permissible, i.e., up to some thirty-two tonnes.

The vehicle now being presented is a four-axle chassis with three drive axles, an evolution of those already in service with natural gas and diesel engines, and with the maximum possible tonnage for collection and street cleaning services. The vehicle operates in electric mode for collection and hybrid mode for transport, is equipped with continuous electrical traction systems and lithium technology-batteries with 150 kWh of energy capacity that are also rechargeable from an external grid. This vehicle is probably the only one of its kind operating in Europe.

Its prototype is a 20-cubic-metre rear-loading compactor collector and has been in service since last May, it has the same features as equivalent gas or diesel vehicles, but with faster acceleration and an ability to cover the routes in less time than those with combustion engines.

Like its lighter predecessors, the new heavy equipment already in operation carry out the collection services with a pure electric drive (zero emissions and a virtually zero noise level), recharging their batteries during the journey and the waste discharge process, with performance similar to equivalent vehicles with combustion engines. This is the only possible feature that allows work to be performed in urban areas in electric mode as it can recharge its own batteries during the transport process and thus have the batteries sufficiently charged for the following route, i.e., its work capacity in electric mode can be very long and it can do two or more routes in a row in electric mode.

The chassis was designed so that the combustion engine – used exclusively for power generation – can be powered by diesel or natural gas fuel, and consequently emissions

during transport are the minimum possible and well below those required by the current law on exhaust and noise emissions.

Technology has led to the development of specific electronics for control and power that were created exclusively for this application. These constantly optimise energy consumption and ensure that all the machine's braking and stops are taken advantage of to generate energy, which is stored in batteries. This is a decisive factor in the services, because the number of stops and starts in the average collection reach an average of over fifteen per kilometre covered and provides a significant generation of power that goes directly to the special batteries created for this purpose.

The outcome obtained during the assessment of the prototype provides very interesting results: firstly, a major optimisation of energy. It is now possible to reduce energy consumption with equal performances between 30 and 40% compared to a conventional lorry equipped with a natural gas combustion engine, something that until now was an unreachable goal. This means lower costs and a very significant reduction in emissions, and places the vehicle in a very technologically advanced position that, in the medium term, will enable the provision of very high quality services.

Given that diesel service costs are very high and are also increasing year by year – and likely will continue to do so – and that service contracts are for up to ten or more years, it is highly probable that, in a very short time, this equipment will be even cheaper in terms of operating costs than its diesel equivalent.

An important technological advance that has been achieved is battery optimisation. We have gone from a weight of more than 20 kilograms per kWh to just over 10, which means this technology has a positive future ahead.

The project should continue, applying the application to other associated equipment such as the side-loaders, which must have their own design, and extending it to street cleaning systems and possibly to any application of an urban nature.

Technological innovations in fixed facilities

There is constant concern in the services fleet regarding improving fuel consumption and emissions. Water consumption reduction and renewable energy systems are still being implemented along with improvements in energy efficiency, such as more suitable and efficient heating and cooling systems.

These systems include the use of underfloor heating with boilers based on a combination of combustion and solar panels, replacing earlier standard forced air heating equipment and savings in terms of heating and cooling of around 30% are achieved.

Improvements continue to be made in the choice of enclosure elements. These are aimed at achieving minimal energy losses and maximum inside comfort, as these factors have an impact throughout the life of the facility with hardly any maintenance costs.

Another key aspect during this year has been the study of energy improvements for lighting, both inside and out, using the latest available technologies, assessing their return rates as well as the reliability and maturity of each technology. The plan is to extend these efficient lighting systems to all facilities.

Concerning the use of solar energy for heating sanitary water, we have installed solar panels in our facilities. There are currently 355 of these panels with a radiating surface of over 839 m2, leading to an annual saving of more than 635,555 kWht and representing an operational autonomy in terms of consumption of over 6 months a year.

Microgeneration of landfill biogas using turbines

FCC has installed a biogas microgeneration plant based on the use of two 65 kWe turbines and a 210 kW heat recovery steam generator for both, in the Solid Waste Treatment Environmental Facility in Barbanza (La Coruña).

A blower, emergency torch, biogas processing unit (compresses and dries the biogas), charcoal tank (removal of siloxanes), a biogas captured and recovered meter, biogas analyser, network analyser, main switchboard with a SCADA control system – even from a remote location – and a switchboard for choosing whether to recover or burn the biogas are also part of the facility.

The biogas recovered derived from sections of the landfill for rejected materials from the environmental facility which are built, used and sealed on a regular basis. This biogas is generated in the landfill due to the presence of anaerobic conditions and biodegradable material.

SERVICES

The power generated is used in the facility for its own needs and the surplus is uploaded to the grid. The recovered heat is used in the facility's leachate treatment plant, in particular in its thermal section where it helps to heat the water entering the evaporator and for which there is a biomass boiler of 2,500 therms.

The overall performance of the microgeneration plant is 80% (29% electric and 51% thermal).

aqualia

INDUSTRY ANALYSIS

In 2012 and, especially, in 2013, water management is an important issue for the general public due to Spanish governmental agencies' need to reduce their deficits and adjust their budgets for expenses and investment for the 2013-2015 period. This is going to result in a large number of contracts being awarded for integrated water management that will require significant capital investment. In order to get this investment, an inspiring public debate is needed to facilitate the entry of investment capital.

In any event, an analysis of the domestic market can't be carried out without taking into account the Water Quality Plan (2006-2015) which to date has achieved only 15% of its initial objectives. The stagnation in government investment has been identified as the main reason for these poor results which hinder compliance with the standards set by the European Water Framework Directive and the further development of the industry.

Internationally, contracts for managing water utilities show a move towards management based on Key Performance Indicators. This system certifies that the service is correctly delivered and sets out the remuneration for the service provider. Many countries around the world are beginning to implement this model that rewards management quality, regardless of whether the managing entity is public or private. With this objective in mind, the industry's main players are starting to offer "a la carte" services: contracts for installation and management using smart meters, or for projects aimed at network optimisation are becoming more frequent. **aqualia's** business activity is in line with this trend, as the company includes this type of ad hoc services in most of its service offers.

In terms of markets, Eastern European countries are seen to be interested in making new investments based on a PPP model (public-private partnership) that is pioneer in the region and will enable them to improve compliance with European directives. Meanwhile, in emerging countries like India, there is a clear government commitment to improving the quality of water supply, aiming to provide water 24 hours a day. Other large countries like Brazil have targeted building new hydraulic infrastructure as a priority for the coming years. **aqualia** has taken these market trends into account to design and implement its strategy for international expansion.

All this adds significant value to the technological solutions that specialised companies can offer the market to optimise available resources and to improve customer service in the milieu of 'smart cities', where water plays a key role.

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BUSINESS ACTIVITY IN FCC

Thanks to the national and international geographic diversification process, the Water Management Department has continued its growth trend in 2012, with an increase in turnover of approximately 2.5%, supported by a double-digit international growth in terms of turnover. This development has been accompanied by an improvement in efficiency, which has resulted in a 6% increase in operating income. This means that the impact of higher financing costs has been mitigated, improving competitiveness and positioning the business portfolio at the historic figure of 13,600 million euros. Strong commercial activity has resulted in the study of a total of 274 contract tenders. Of these, the Company has participated in a total of 210 tenders and was awarded 76 new contracts. Also worthy of note are the 158 contract renewals. This recognition of the work performed by **aqualia** is further reinforced by the satisfaction shown by 71.9 % of the 4,000 people surveyed by a specialist company on the quality of service provided by **aqualia** during 2012. All this has contributed to the year closing with new contracts worth 1,272 million euros.

International activity has resulted in the award of significant new contracts, such as the one to manage the sewerage and water treatment system in the eastern area of the Emirate of Abu Dhabi (United Arab Emirates), comprising a 2,400 km long network with 68 wastewater pumping stations and 19 wastewater treatment plants, for a period of seven years. This contract is the first water management contract in the UAE awarded to a Spanish company.

As a strategy for the future, overseas expansion will be pursued through projects in areas such as Central Europe and Eastern Europe, MENA (Middle East and North Africa), Mexico, Peru, Colombia, Chile, Brazil without ruling out countries such as the United States of America, India and China, which have increased thanks to agreements such as the implementation of investment vehicles with the EBRD (European Bank for Reconstruction and Development) and the World Bank, which permit the participation in calls for tenders related to water projects in the areas of influence of these multilateral institutions.

FCC's water-related business' strong commitment to International markets has been recognised with several awards. Recently, the Company was recognised by Frost & Sullivan for its expansion in the Middle East and North Africa and, nationally, it was recognised with an award for being the "Spanish company with the greatest international presence" at the First Edition of the Energy and Environment Awards organised by the publications InfoPower and InfoEnviro.

In addition, **aqualia's** ability to finance international projects has been recognised by the awards received for the El Realito project in Mexico. With their awards, both the prestigious publication Global Water Intelligence as well as Project Finance Magazine, published by Euromoney, have highlighted the innovative solution developed by the Company to finance this huge infrastructure.

In Spain, the Company has prolonged important concessions such as the one in Llerida until 2037, or Vigo. These are national contracts whose value is even greater, given that they are medium and long-term contracts, of a strong anti-cyclical nature and with a low level of default (these services are charged directly to the customer, just like any other utility).

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Numerous contracts have also been awarded in Spain for different municipalities, among which are: Piedrahita (Ávila); Barbate (Cádiz); Arcos de la Frontera (Cádiz); Almansa (Albacete); Valverde del Camino (Huelva); Tomelloso (Ciudad Real) and Yecla (Murcia). In the meantime, Algeciras (Cádiz) and Ecija (Seville) have entrusted **aqualia** to operate their wastewater treatment plants.

In relation to employees' occupational accident rates over the past year, the Company has achieved the best results since the Health and Safety Management System was implemented in 2000. The main reasons for these positive results are the ongoing improvements in employees' working conditions along with the campaign launched by the Company to educate workers about the importance of adopting all the safety measures while carrying out their jobs.

The Management System has been expanded throughout 2012. In particular, the Company has implemented ISO:9001 and ISO:14001 certification in the public-private partnerships and joint ventures in which it has holdings. On an international level, these certifications were also obtained for various **aqualia** (Riyadh and Sicily) and **aqualia infraestructuras** (Montenegro, Mexico and Chile) contracts. Furthermore, the Energy Management Certificate has been implemented in the service provided in Alcoy. All these certifications already have their pertinent AENOR seal.

The Company's "core business" has other business units. These are responsible for the design and construction of all types of hydraulic and water treatment infrastructure elements for industrial use. In relation to **aqualia infraestructuras**, it should be noted that already more than 90% of its turnover comes from outside Spain. This data is especially relevant considering that only 20% came from overseas in 2006. Some of the countries where the Company is already executing hydraulic infrastructure projects (water treatment, purification or desalination plants) are Algeria, Egypt, Chile, Mexico, Romania and Montenegro.

For **aqualia industrial**, which has very positive outlooks due to the fact that it has over 200 references in all industrial sectors with its own equipment and technology, the signing of a collaboration agreement for the development of food and agricultural market with the U.S. firm Aquatech marks the entry into the U.S. and Canadian markets.

Research and development (R + D + i) tasks involving water-related business activities have experienced increased growth. The projects focus on three priorities:

- **Quality**
- **Sustainability**
- **Integrated management**

It is important to point out that once the projects have been completed, there will be different returns on investment for the company, such as know-how, new products or services available for production and patents, as well as synergies and elements that can be used for other current projects.

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The projects being developed in 2012 include:

- **ITACA - Investigation of water treatment, reuse and control technologies for the sustainable use of water**: This project is being developed in collaboration with the University of Alcalá and the University of Santiago de Compostela.

- **ALL-GAS Sustainable biofuel production based on growing low-cost microalgae**: this is part of the "Algae to Biofuel" initiative of the Seventh Framework Programme (FP) of the European Union, and its first milestone was passed in September 2012 with the approval of the first results. The project was presented internationally in London (March 2012) and achieved significant international repercussion.

- **CENIT VIDA**: **Research into advanced integrated algae recovery technologies**: This project proposes the development of a sustainable and self-sufficient city based on the cultivation of microalgae, which are used not only as a source of clean and renewable energy, but also to provide the basic needs and requirements of its inhabitants. Aqualia's work focuses on the efficient processing of nutrients in biomass wastewater and on converting the algae into high purity biogas.

- **DOWNSTREAM**: **Co-funded with the Ministry of the Economy and the Treasury aided by INNPACTO**

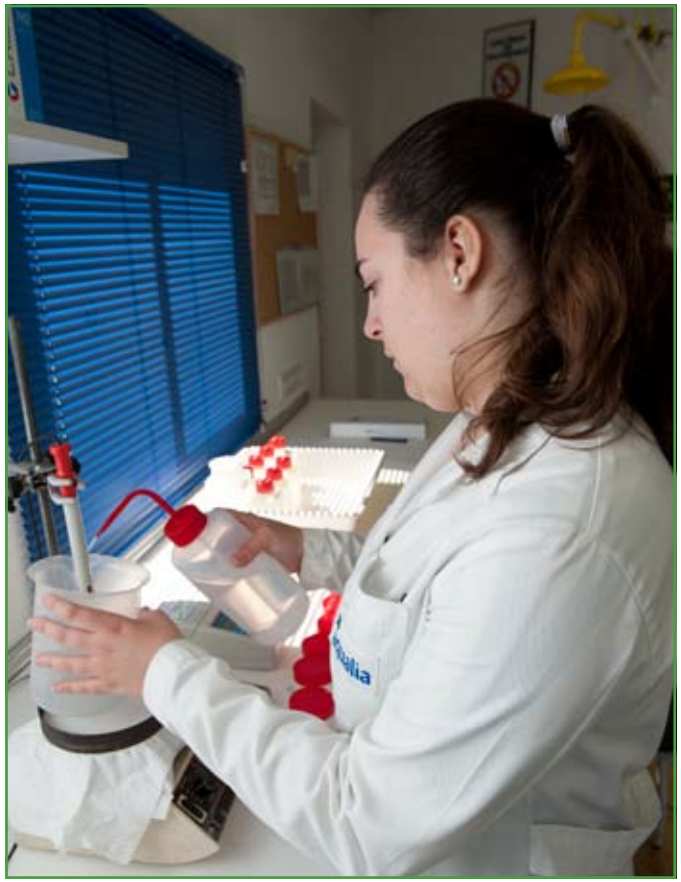
- **SWAT-Salsnes water to algae treatment.**

In addition, in 2012 LIFE funding was secured from the European Union for the following project:

- **REMEMBRANE**: strategic research on recycling desalination membranes in order to reduce investment and operating costs. It also opens new perspectives in waste reduction and water reuse.

The Company's innovation activities focused on "stakeholders" have been strengthened with the event held in December 2012, the **First Aqualia Seminar on R & D** under the title of "R & D in a water utility company: challenges and opportunities", where government agencies, businesses, customers and collaborating bodies shared experiences at the Colegio de San Ildefonso, part of the University of Alcalá, thanks to support from IMDEA Agua. The participation of the Ministry of the Economy and the Treasury and the Centre for Industrial Technical Development (CDTI) favoured the exchange of ideas between attendees.

The "R+D+i Project Management System" certification passed in December 2010 was audited by AENOR and renewed in November 2012 for a period of one year. This renewal was obtained in a brilliant fashion without a single "nonconformity".



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Despite the significant overall reduction in the industrial waste management industry in the markets where FCC Ámbito operates, estimated at more than 20% compared to the previous year, FCC Group's Industrial Waste Division has managed to end the year with a production decrease of only approximately 5% and FCC Ámbito's annual sales were slightly above 300 million euros.

A slight recovery in industrial activity is expected for 2013. This, together with the measures taken during 2012 to adjust and resize production to the current production reality, which are to be implemented in early 2013, is expected to produce a turning point in the results of the company in Spain.

The extraction and sludge treatment phase per se of the Flix project will also begin in 2013, once the construction, commissioning and preconditioning phase carried out in previous years has finished.

The construction of the IACAN landfill in Cantabria was finished towards the end of 2012, so it will begin to operate in the first quarter of 2013.

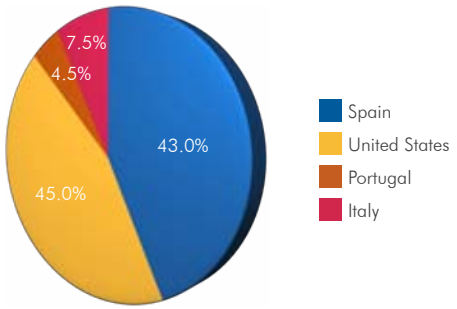
The integral waste management service for all the AIRBUS-EADS consortium plants in Andalusia began satisfactorily in 2012, with FCC Ámbito having been shortlisted, due to its good management, to qualify for the international tender for the integral management of the rest of the consortium's facilities worldwide.

FCC Ámbito was also awarded contracts for three of the four areas in a nationwide tender for the management of all the wastes in the Integrated Phytosanitary Waste Management System (SIGFITO).

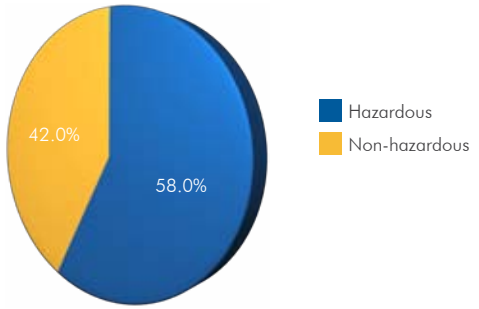
On an international level, it is important to highlight the significant increase in sales in this area, around 8% over the previous year, bringing the percentage of sales outside Spain to 57% of the Industrial Waste Division total.

It is worth mentioning that in the International Department the returns were much-higher-than-expected in Italy, thanks to the implementation of a system that has doubled the maritime logistics operations and has significantly increased the speed of sludge disposal in the Syracuse contract, thus saving costs and improving service efficiency.

Geographical scope of action



Distribution by service type



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The sludge management activities in Syracuse will end this year, although there are potential one-off projects in the pipeline that could lead to continued operations in Italy.

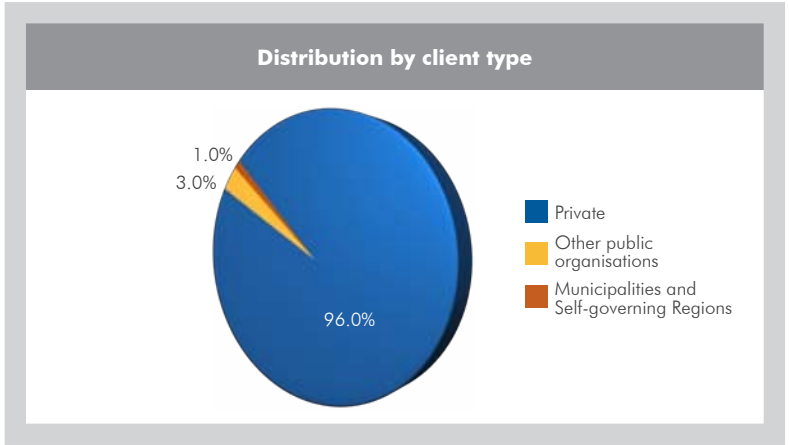
Similarly, operations related to environmental liabilities and decontamination activities for which contracts were awarded and executed in Portugal in 2012, have enabled our subsidiary ECODEAL to surpass the already excellent results achieved in 2011.

In Portugal it is hoped, despite the significant reduction in recurrent flows due to the crisis in the country's industrial business activity, that non-recurring transactions for which bids have already been submitted and which are waiting the awarding of contracts, will once again offer good returns for 2013.

In the United States, the 135 million euro turnover is only 2% below that of the previous year, thereby almost matching 2011 sales despite the tremendous adverse economic effects suffered in the last quarter on the East Coast (FCC Environmental's main business centre) because of Hurricane Sandy.

The permit, authorisation and design phase for the construction and operation of the future used oil regeneration plant for making recycled lubricant bases that FCC Environmental aims to develop in Baltimore, Maryland, is on schedule.

Similarly, it is hoped that the marketing surveys and actions already underway in the Latin American and Persian Gulf areas, transform into the beginning of business activities in the medium term, so that the importance of FCC Ámbito's International business will increase even more in the near future.



fcc versia,s.a.

FCC diversifies its business into different non-environmental services through Versia. FCC Versia S.A. is responsible for the following business activities:

- Logistics
- Urban furniture
- Conservation and Systems
- Sales of cleaning vehicles and speciality vehicles (SVAT)

In 2012, the subsidiary Flightcare was sold, that specialised in airport handling business. This was consistent with FCC Group's policy of divesting certain non-strategic businesses.

Versia has continued its efforts to optimise its production and cost control structures while simultaneously improving its debt ratios.

The consolidated turnover amounts to 570 million euros.

SERVICES

fcc logística

During 2012, the Company once again established itself as one of the leading companies in the logistics sector, renewing its Quality and Environmental System in accordance with ISO Standards 9001 and 14001.

The company has focused its business activity on gaining new clients and enhancing the services and activities it carries out for active clients, and it is worth mentioning the handling operations performed for promotional items in the consumer and pharmaceutical sectors. Storage areas have also been reorganised and have been grouped into multi-client/single sector warehouses.

As a member of the Logistics and Transport Business Organisation (UNO), the Company helps to transmit the values of trust, integrity and transparency. Consequently, it has renewed its Seal of Excellence as evidence of its compliance with the industry's Code of Best Practices.

CEMUSA

CEMUSA specialises in the design, manufacture, installation and maintenance of different types of street furniture and in the marketing of its advertising space. With over 26 years of professional experience, it is the leading Spanish company in the industry and one of the major outdoor advertising groups internationally. CEMUSA offers its services to over 160 municipalities in Europe and America, and cities like New York, Madrid, Rio de Janeiro, Barcelona, Boston, Lisbon, Milan and Brasilia are the best showcases for its designs, which are the results of collaboration with world-renowned architects and designers.

The most significant contracts awarded for the year 2012 were:

- **The commercial exploitation of advertising at airports on the Spanish mainland, the Balearic Islands and in Ceuta and Melilla**. This important contract signed with Aena Airports S.A. is for six years with a renewal possibility and involves upgrading the environment specific to each airport, improving the services offered to passengers and modernising advertising and communication activities in privileged spaces that offer high added value for advertisers.
- **Management of bus stop fixtures in Bilbao**: this is a continuation of the business that Cemusa has been managing successfully since 1988.

The commitment to transform existing cities into smart cities was reflected in CEMUSA's participation in the Smart Cities World Congress held in Barcelona in November, where several solutions developed by CEMUSA for the cities of the future were presented.

SERVICES

Conservación y Sistemas

Conservación y Sistemas is a company that specialises in the maintenance and upkeep of urban infrastructure and the management of ancillary services for buildings and public facilities. Some of the major works carried out are:

- Road network: upkeep of road surfaces, municipal public spaces and the execution of various urban development and pipeline works.
  - Works related to the refurbishment and rehabilitation of urban spaces.
  - Upkeep of road surfaces in Madrid.
  - Maintenance of state schools in the district of Chamberí (Madrid).
- Urban services: the upkeep and maintenance of service tunnels, sewerage and irrigation systems and the execution of various sanitation works.
  - Upkeep of sanitation networks in the city of Madrid and its outlying areas.
  - Cleaning the bus lane separators in Madrid.
  - Upkeep and maintenance of storm water tanks for Canal de Isabel II in Madrid.
- Water distribution networks: urgent actions in water distribution networks and the execution of various works to increase water supply and/or distribution systems for Canal de Isabel II.

SVAT
SISTEMAS Y VEHICULOS DE ALTA TECNOLOGIA, S.A.

Sistemas y Vehículos de Alta Tecnología (SVAT) markets high-tech equipment and vehicles to be used for urban sanitation, cleaning of coastal waters and beaches, and industrial cleaning.

The extraordinary weakness of the municipal market has caused the demand for urban sanitation vehicles to plummet. The road sweeper market has fallen 42% over the previous year and the number of machines registered in 2012 only represented 29% of those registered in 2007.

Despite this difficult situation, SVAT has made significant deliveries of street cleaning machines in Palma de Mallorca, Seville, Barcelona, Oviedo, Melilla, Xátiva (Valencia) and Calviá (Mallorca).

In addition, shoreline cleanup vessels were in service during the summer on the coasts of Minorca and Valencia.

CONSTRUCTION

CONSTRUCTION

49 CURRENT SCENARIO
50 THE CONSTRUCTION INDUSTRY
50 PUBLIC TENDERS
51 DISTRIBUTION BY GOVERNMENTAL INSTITUTIONS IN 2012
51 THE LABOUR MARKET
51 FORECASTS FOR 2013
53 FCC'S BUSINESS
54 MOTORWAYS, HIGHWAYS AND ROADS
55 AIRPORT PROJECTS
55 HYDRAULIC WORKS
55 MARITIME WORKS
56 RAILWAY INFRASTRUCTURE
57 HOUSING ESTATES AND PARKING AREAS
57 HOUSING
58 NON-RESIDENTIAL CONSTRUCTION
61 FCC ACTIVIDADES DE CONSTRUCCIÓN INDUSTRIAL, S.A.
63 FCC SERVICIOS INDUSTRIALES Y ENERGÉTICOS, S.A
65 MEGAPLAS
66 PREFABRICADOS DELTA, S.A.
68 INFRASTRUCTURE CONCESSIONS
71 INFRASTRUCTURE MAINTENANCE
73 PROSER
75 GLOBALVIA INFRAESTRUCTURAS
80 TECHNOLOGICAL DEVELOPMENT
82 BBR PTE
82 MANAGEMENT SYSTEMS
84 MACHINERY. PROJECTS AND UNIQUE WORKS
88 CONSTRUCTION WORK SUPPORT O SITE SUPPORT

ECONOMIC SITUATION

Current scenario

IMF (International Monetary Fund) forecasts on the **global economy** for **2013** indicate a **growth rate of 3.5%**, which is a slight acceleration over the growth rate of 3.2% in 2012. In the first quarter of 2013, uncertainty and sovereign debt problems – especially in Western European countries – have decreased due to the measures and the support of the ECB (European Central Bank).

The **growth forecast for the eurozone** is less than 0.2% for the entire year, and negative in some countries. The measures undertaken throughout 2012 by Member States to correct their high public deficits will continue throughout 2013, creating a short-term slowdown effect in some economies that will hold back activity and therefore overall growth in 2013. Underlying geopolitical tensions in North Korea, the Middle East and Venezuela may affect the global economic, social and political future.

Karlsruhe Thermal Power Station (Germany)

Firm in its goal of reducing the public deficit, last year **Spain's** deficit stood at 6.7% of GDP, slightly above the 6.3% it had committed to with the EU.

The **IMF** forecasts a **1.3% fall in GDP for this year**; the Spanish government estimates it will be approximately 1.0%, and the Bank of Spain that it will be between -1.0% and -1.5%.

With a view to beginning a period of economic recovery, the measures that have already been taken in terms of fiscal and monetary policies leave even less room for manoeuvre and they limit options.

The government has set **a public deficit** target of **4.5% of GDP** for **2013**. These measures, along with structural reforms, form the line drawn by the government for a return to economic growth, job creation and restoring confidence.

The slower and delayed recovery forecast for the Spanish economy compared to those of other European countries is due to the yet-unsolved problem of high private sector debt, its dependence on external financing and the high unemployment rate.

Greater dynamism in Europe will allow the foreign sector to offset the drop in domestic demand. Some indicators, such as a positive trade balance linked to exports and a growth in productivity, are the first signs of an economic turnaround in Spain.

The Spanish economy has the potential to return to the path of growth in business activity and productivity because:

- Spain is one of the major European markets both in terms of per capita GDP and size.
- It has leading companies in key sectors that are well-diversified in high-growth markets.
- It has a strong infrastructure network.

Meanwhile, the construction industry is suffering more setbacks after a long crisis that has lasted more than six years.

This situation affects the residential segment, where demand is stagnant due to the lack of financing, and is especially affecting civil works, where the budgetary adjustment has been significant in recent years.

CONSTRUCTION

Panama Canal

The construction sector, which is represented by an excessive number of companies, has been forced to restructure due to the current situation. The reduction in competitors in the domestic market due to the disappearance of small and medium construction companies (134,000 over the last three years), gradual internationalisation, adjustments to employee levels and strict cost control, have enabled larger companies listed on the stock market to offset the decline in domestic activity and maintain their portfolios.

The construction industry

The construction industry faces its sixth consecutive year of declining production affecting the four traditional subsectors (residential, non-residential, refurbishment and civil works), with a total production of 113.507 million euros and a negative variation of 11.5% in real terms compared to 2011, (-5.2% in construction and -25.0% in civil works).

It is estimated that less investment in construction in 2012 reduced the growth of the Spanish economy by 1.6 per cent, compared with 1.4 per cent for the previous year.

In 2012, the apparent consumption of cement, a classic indicator of the situation of the construction business, recorded a dramatic decrease of 34% compared to that of 2011. With a consumption of 13.5 million tonnes compared to 20.4 million tonnes in 2011, over the last five years it has suffered an overall decline close to 76%. Historically speaking, this consumption of cement is comparable to the volume recorded in 1967.

In 2012, construction investment (CGV) as a percentage of the GDP of the Spanish economy was 11.8%, which is a decrease of 1.8 percentage points compared to 2011. The last three years show a steady decline: from 15.5% in 2010 and 13.6% in 2011, to 11.8% last year.

Public tenders

In 2012, **public tenders fell by 46%** in nominal terms: declines have been recorded at all governmental levels, highlighting the **central government (-59%)** and, to a lesser extent, **regional governments (-38%)** and **local governments (-30%)**. Including all governments, altogether during 2012 **7,377 million** euros were put out to tender, compared to **13,659 million** in **2011**.

- Central government: 2,648 million euros, **-59%** compared to 2011 (6,479 million euros).
- Regional governments: 2,197 million euros, **-38%** compared to 2011 (3,564 million euros).
- Local governments: 2,531 million euros, **-30%** compared to 2011 (3,615 million euros).

CONSTRUCTION

Distribution by governmental institutions in 2012:

- Ministry of Public Works: 1,973 million euros, **-61%** compared to 2011 (5,053 million euros).
- Ministry of Agriculture, Food and Environment: 469 million euros, **-36%** compared to 2011 (736 million euros).
- Other Ministries: 207 million euros, **-70%** compared to 2011 (689 million euros).

By types of work in total for **construction works**, including housing, social facilities and other, put out to tender in 2012 amounted to **2,181 million** which is a **49% decrease** compared to 2011 tenders (4,258 million euros). For **civil works**, the total put out to tender in 2012 amounted to **5,196 million** compared to 9,400 million in 2011, **45% less**.

In 2012, the volume put out to tender through the concession model (the Government considers this model essential to create new infrastructure) amounted to 686 million euros or 0.1% of GDP, and is 86% lower than the amount tendered the previous year. Significant in this section is the role of regional governments (430 million euros), although their volume of tenders is the lowest between the years 2003 to 2012. With regard to public tenders by type of construction work and concession model, road infrastructure continues to play a leading role.

Cadiz Port Container Terminal

The labour market

The **population employed** in construction has undergone **a cumulative drop of 43% over the last five years**, which has entailed **the loss of 1,550,000 jobs**. The current level of employment is similar to that in 1993.

Based on the information issued by the Spanish National Statistics Institute (INE), the Labour Force Survey and OFICEMEN, an **analogy** could be made regarding the years between 1977 and 2012 **between the number of people employed** in thousands of workers **and the apparent consumption of cement** in thousands of tonnes. The resulting graph is significantly similar, and a clear and revealing symptom of the labour market situation. With respect to **employment levels** in the construction industry in absolute terms, we would have to go back to **1995**.

Between 1986 and 2009, job creation in the construction sector accounted for 21% of the total. Over the last five years, 1,550,000 jobs have been lost: in 2009, this was 41% and in 2010, 55%. In 2011, this accounted for 73% of total job losses, slowing to 30% in 2012.

In the last year the evolution of employment levels in the construction industry slowed down in terms of job losses.

Forecasts for 2013

Forecasts for 2013 point to a decline in overall activity similar to that of the previous year: private and government consumption will increase their negative impact (until they amount to -2.3 percentage points), while the negative contribution of **investment in construction** will be reduced (-1.1 points). However, although it will be slightly contained, the positive contribution of the foreign trade balance linked to exports will remain relevant (+2.0 percentage points).

In terms of **investment in construction by segment**, the trend marks a gradual moderation of the decline in the industry. Nevertheless, the outlook is for investment in construction to end the year with year on year rates close to -7%.

CONSTRUCTION

Regarding the **overall activity of the construction sector**, this will fall between 9% and 11% in 2013 compared to 2012's activity, and will be less than -4% for construction and -21% for civil engineering projects.

Investments for the two main ministries making investments:

Ministry of Public Works

The 2013 budgets for the Public Works group amount to **18,405 million** euros, 8.45% lower than in 2012 (2,104 million euros). The Public Works group total investments for 2013 amount to **10,161 million euros** and are distributed as follows:

- 4,705 M€ for railways
- 2,963 M€ for roads
- 847 M€ for airports and air safety
- 839 M€ for port policies and maritime safety
- 758 M€ for housing and land activities
- 49 M€ for other investments

Ministry of Agriculture, Food and Environment

The **Ministry of Agriculture, Food and Environment's** consolidated budget for 2013 amounts to **9,489.4 million euros**, a reduction of 9.7% (1,023 million euros less) with respect to the 2012 accounts. This adjustment, which is average with regard to the budgets of the various ministries, will affect almost all account items except forest fire related measures, which has experienced a 23 per cent increase.

The construction industry is an economic and strategic driving force: returns

Infrastructure investment is a variable capital in the economic recovery process and plays a dual role: As a stabiliser due to its effect on business and employment in the short term, and in terms of productivity and growth in the medium term.

Creating infrastructure in a country generates wealth and progress, improves the quality of life of its citizens and makes the country more competitive. It also has a large knock-on effect, since there more than 20 sub-sectors directly linked to the construction industry.

According to estimates by SEOPAN (Construction Industry Employers' Association), **for every million euros invested in infrastructure**:

- **61% of investment reverts to the state itself.** Twenty-one per cent of this is from indirect tax collection (VAT), and 40% comes from revenue increases due to induced production: (5% from income tax, 11% from social security, 20% from unemployment benefits, 3% from Corporate Income tax, 1% from net taxes on intermediate consumption).
- **Eighteen jobs are created** (12 direct and 6 indirect).
- These 18 unemployed people claiming unemployment benefit would cost the state 360,000 euros which could be used productively, creating business activity

If this million euros were invested exclusively in housing, then:

- **46% per cent will revert back to the state itself**
- **19 jobs would be created** (13 direct and 6 indirect).

Internationalisation

The great geographical diversification of Spanish construction companies is the result of the domestic situation. The strong adjustment measures undertaken in Spain have forced companies (which possess the potential created during the growth cycle of the recent past) to seek out new markets and adapt themselves in order to work abroad and offset the drop in business. The need for infrastructure in developing countries has opened up new opportunities and new challenges.

Today, large Spanish construction companies are now leaders in markets that were unprecedented until less than a decade ago and their order-books demonstrate an increasingly significant share of work abroad, where they compete on equal terms with companies from other countries.

Construction is the only industry in Spain which has several genuinely multinational companies that successfully compete in international tenders. The internationalisation of these largest construction companies is a fact, and it has allowed them to weather the sharp drop in domestic business with their business abroad.

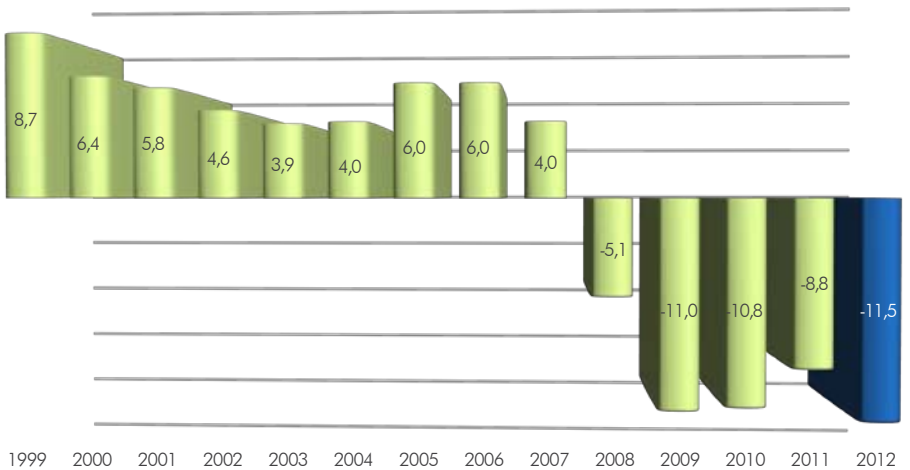
CONSTRUCTION

FCC's business

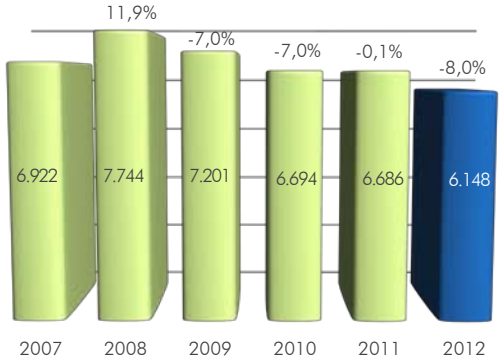
All FCC's construction business is performed by the company FCC Construcción, S.A. which recorded a turnover of 6,148.4 million euros in 2012, 8% less than in the previous year. Of the total turnover, 68.3% was generated outside Spain. Construction remains the area with the greatest quantitative weight in the Group's overall turnover, with 55.1%.

During 2012, FCC Construcción was awarded contracts totalling 4,212.5 million euros and had an order-book of works pending estimated at 8,595.2 million euros. Foreign contracts represent 57.2% of the order-book.

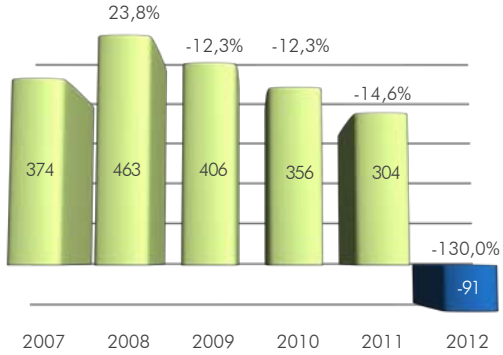
Annual growth rates in construction activity
In constant terms (Source: Seopan)



Turnover
Millions of euro



Gross operating profit (EBITDA)
Millions of euro



CONSTRUCTION

Construcción

MOTORWAYS, HIGHWAYS AND ROADS

This is the most active subsector of civil engineering and generates the greatest production and orders.

The most significant contracts awarded during the past year are listed below:

- **Design and construction of the Gerald Desmond Bridge in Los Angeles (USA).** More than 15% of the country's port traffic passes through the Gerald Desmond Bridge, built in the 60s, and the bridge connects the Port of Long Beach to the city centre and nearby communities. The current project consists of the design and construction of a new bridge that will improve traffic congestion and safety. The new bridge has a cable-stayed design with a main span of 305 m, located 61 m over the Back Channel of the Long Beach port, and two 152 m long end spans. The bridge will have three lanes in each direction, emergency lanes on both sides for increased security and a bike lane.
- **Inter-American Northern Highway in Costa Rica. National Route 1. Cañas-Liberia section.** The project is part of the widening works for the section of the road, Cañas-Liberia, in Guanacaste, currently being carried out by FCC and considered to be of strategic importance to complete the Mesoamerican corridor. It will encourage tourism in Guanacaste and increase the country's competitiveness in the transport of goods. The works consist of widening 50.6 km of this road into four lanes, two in each direction.
- **Reconstruction of six significantly damaged bridges** in the Mexican state of Veracruz. These contracts are to restore the following bridges: Hueyapan, Catemaco, and two in Tuxpan and Pueblo Viejo. The works, which have different timelines, include the structural reconstruction of each bridge, generally with pre-cast girders, as well as a series of associated work.
- **Rehabilitation of the "La Dalia-connection La Mora" road which is 10.68 km long (Nicaragua).**
- **New by-pass in the Polish city of Szczuczyn.** The project has a total length of 8 km and is located in northwest Poland, between Bialystok and Olsztyn.
- **Access road to the coast for the Copper Mine Project in Panama.** The works are located in the grounds of the copper mine located 120 km west of Panama City and 20 km from the Caribbean coast. The works consist of the construction of a 6.6 km long access road connecting the mine area to the facilities located on the coast.
- **Repairing Cuesta Las Chilcas, Route 5, in Chile.** FCC Construcción will construct the motorway section of the "Improvement of the Cuesta Las Chilcas. Route 5. Section: Santiago - Los Vilos" for Globalvia, the Aconcagua Motorway concession holder. The work to be performed is along 4.7 km, to improve the road's cross-section so that it will have three ascending lanes and two descending lanes separated by a barrier or guardrail in the middle, reducing gradients to 7% and increasing the radii of the route.
- **Construction of eight bridges on the Inter-American Northern Highway in Costa Rica.** This project is particularly symbolic because it is part of the extension works on the Cañas-Liberia national road in Guanacaste (in the northwest of the country and around 280 kilometres from San José); FCC is currently doing the construction work.

Infographic: Gerald Desmond Bridge, Los Angeles (USA)

CONSTRUCTION

AIRPORT PROJECTS

- **Modernisation of Riga airport (Latvia)**. The contract was awarded to Alpine Construction and the project consists of improving Riga airport in order to increase capacity and improve air safety standards. The renovation works for the airport consist of the reconstruction of the runways surfaces and the reinforcement of hard shoulders.
- **Construction of the new control tower and airport management centre at the El Dorado Airport (Colombia),** located 15 km west of Bogota's city centre. The new control tower will be 80 m high and will ensure the future expansion of the airport and it will become an icon for Bogotá. The new building and its management centre, with a surface area of 16,300 m2, will allow air traffic to increase and airport operations to grow.
- **Construction of the technical block and the control tower at Oran Airport (Algeria)**. The contract includes the construction of a rectangular 47 metre high control tower and a building of the same shape with access to the tower.
- **Construction of the technical block and the control tower at Constantine Airport (Algeria)**. This includes the construction of a 46 metre high circular control tower and a rectangular building with access to the tower.

HYDRAULIC WORKS

The most relevant contracts awarded in the past year were:

- **The replacement of electromechanical equipment and pipes for the second to fourth elevations to ensure the management and quality of the water stored in the El Hondo Nature Park, located in the municipality of Crevillente, (Valencia)**. The works will improve the pumping system by replacing or relocating existing equipment and finishing off the piping with 3,350 ml of 1200 and 1400 mm diameter post-stressed concrete pipe with sheet metal sleeves.
- **Supply of irrigation water using reusable water in the municipality of Villaviciosa de Odon, in Madrid**. The project includes laying a 5,789 m raw water intake pipe, using a 300 m diameter iron pipe, between the tertiary section of the waste water treatment plant and building a new 1,000 m3 capacity regulation tank.
- **Bypass intake pipe. Diverting the route in the area of the new hospital in Vila Franca de Xira**. The project involves the construction of a new sewer built with reinforced concrete pipes that will be 945 metres long, 910 metres will be laid in a trench and the remaining 35 metres on an aqueduct.

Construction of the Pacific Ocean access channel to the Panama Canal

- **Work on the new compartment for the rainwater storage infrastructure for the Los Migueles stream in Rivas-Vaciamadrid (Madrid)**. The work consists of expanding the existing tank by attaching an expansion tank with a capacity of 18,750 m3.

MARITIME WORKS

The most significant contracts awarded were:

- **Expansion of the Açu Superport, located around 315 km north of Rio de Janeiro (Brazil)**. The project consists of the construction of the TX-1 terminal of the Brazilian port of Açu located in the municipality of São João Barra (northeast Brazil), an area that produces 85% of the country's oil and gas. The works involve the construction of a 2,438 linear metre caisson dock by manufacturing and submerging 49 reinforced concrete caissons, and the construction of a 600 metre sloping breakwater.

CONSTRUCTION

- **A building for the Port Adriano slipway and the rehabilitation of the Harbourmaster building in Calvia (Baleares).** The contract awarded consists of the construction of two workshop buildings in the industrial area of the new slipway at the Port Adriano marina.
- **Expansion of the Santa Catalina cruise ship pier (east and west), in the Las Palmas Port in Gran Canaria.** The expansion of both sides will be done with reinforced concrete caissons, on the east side with two caissons measuring 22.4 metres long, 10.60 metres wide and 12.50 metres deep and five caissons measuring 31.90 metres long, 8.25 metres wide and 14 metres deep on the west side.
- **Upgrade of the surrounding area, marina facilities and building on the old dock in Palma de Mallorca.** This project is aimed at upgrading an area set in the old dock in Palma de Mallorca which has a land surface area of 3,435 m2 and a water surface area of 11,518 m2. In addition, a building with a basement, ground floor and first floor with a built surface area of 1,708 m2 will be constructed.

Athens Metro. Peristeri Station

RAILWAY INFRASTRUCTURE

This remains one of the most dynamic sectors thanks to the plans for the expansion of the high-speed rail network and the construction of new metro lines.

The most significant contracts awarded during the past year were:

- **Rehabilitation of the Brasov-Simeria (Romania) railway line** to upgrade it to a speed of 160 km/h on the Atel-Micasasa section. The section to be built is 29.6 km long, of which 10 km are to be newly built. This includes the refurbishment of two stations and three unstaffed stations. In terms of the structure, it should be noted that there are 14 bridges to be worked on. The superstructure is the construction works par excellence; the current track will be removed and rebuilt.
- **Construction of the North-Northwest Corridor High Speed rail bed platform. Madrid-Galicia High Speed railway line. Section: Left track, Vilariño-Campobecerros.** The works include the construction of a total of 9,026 metres of rail bed. The most significant element of the works is the construction of the 6,780 metre long left tunnel tube in Bolaños. The tunnel will be built with a single shield TBM and an excavation diameter of 9.77 metres.
- **Construction of Girona Station, Phase I, on the Madrid-Zaragoza-Barcelona-French border high-speed railway line.** The contract awarded consists of the construction of a satellite building with 1,527 m2 of built surface area, for accesses to the above-ground high-speed platforms. It also includes the interior finish and the provision of facilities for the different underground spaces. The project includes access from the current station to the new building.
- **Additional Project No. 2 of the Barcelona metro line 9, 1R section: Airport-Logistics Park, and complementary works.** The works include the construction of the works that will complete all the sections in which construction has been done along section 1 of L9.
- **The reconstruction of tracks and infrastructure on the E-59 railway line, Czempin-Poznan (Poland) section.** The project is strategic for the country and entails the construction of the works to modernise the E59 railway line along the Czempiń-Poznań section.
- **Rehabilitation of the Madrid railway viaduct in Redondela, Pontevedra.** The viaduct, which began operating in 1879 and has been listed as an official Cultural Interest Site, is 256 metres long and consists of two sections of granite ashlar access vaults and a central section with five metal lattice spans that support the platform and are supported by stone pillars.

CONSTRUCTION

HOUSING ESTATES AND PARKING AREAS

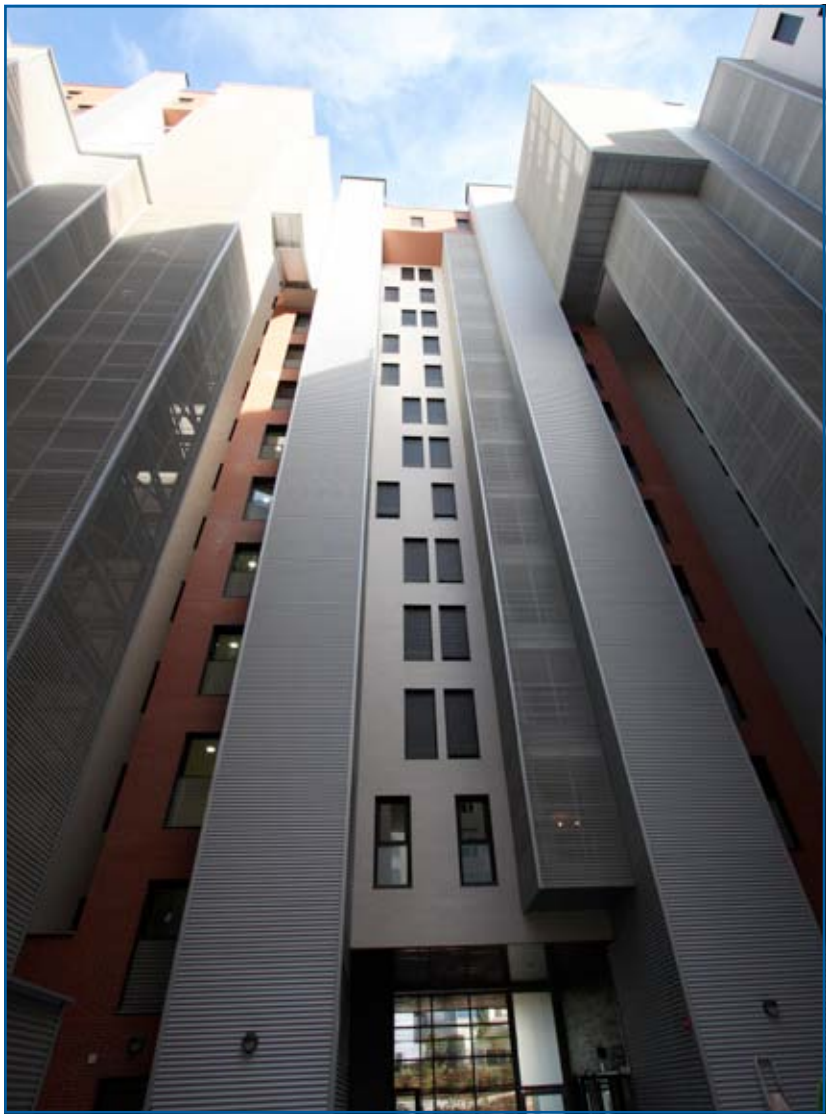
The most significant contracts awarded were:

- **Construction of the infrastructure (Phase 2 - Package 5) for the development of the Barzán Military Camp in Al Wajba, 15 km from Doha (Qatar).** The project consists of the construction of 13 km of streets with 1+1 lanes which will occupy a corridor width of 12 m to 24 m in the urban development of a part of the military base located near the Doha-Dukhan Motorway in the city of Al Wajba.
- **Urban development of the facility centre for Canal Isabel II in the DWTP in Majadahonda.** Works related to the sewage system, paving, lighting, fencing and landscaping will be executed on the 111,860 m2 plot of land.
- **Additional urban development in the La Remonta area in Hospitalet (Barcelona), Phase 1.** The works are being carried out on a surface area of 9.9 hectares of unconsolidated urban land, and consist of providing water supply, sanitation, irrigation, natural gas, electricity, lighting, telecommunications and traffic light grids, and roads, landscaping and street furniture.
- **Upgrade and remodelling of the Phase III dumping area in the Pinto landfill (Madrid).** With this expansion, the landfill will have a dumping area of 2,421,388 m3.
- **Urban development infrastructure on the intersection of Denia and adjacent streets in the Ruzafa neighbourhood in Valencia.** The actions include improving existing grids and networks, as well as new pipes for irrigation, water supply, lighting and municipal reserve and technical services centres. Pavements, bike lanes and roadways will be renovated and the area will be provided with street furniture and landscaping.
- **Clean-up, extension and refurbishment of the Bogotá River (Colombia),** so it can be recovered as a public space; section I, Alicachin Sector. This contract covers the expansion of the river's course along the 40 km that run closest to the capital to the west. It is aimed at improving water quality, flood prevention and the recovery of the river as a multifunctional and recreational area.

HOUSING

The most significant contracts awarded were:

- **316 homes in El Cañaveral (Madrid).** The works consist of two basements, a ground floor and six floors of homes and a penthouse with a built surface area of 59,871 m2.
- **Construction of the "Mairena" residential** complex on Plot 3 of the Ausu-06 Sector in Mairena del Aljarefe, Seville. This residential complex consists of 105 homes, basement



Homes in Móstoles (Madrid)

CONSTRUCTION

car parks and storage units with a total built surface area of 16,991 m2.

- **Construction of 103 homes, retail premises and underground car park in Sant Joan Despi (Barcelona).** The works consist of two basement floors, a ground floor and twelve floors of flats, with a built surface area 18,708 m2.
- **48 homes in Ciempozuelos (Madrid).** The works consist of two identical blocks with 24 homes in each consisting of a basement, ground floor and three floors of flats, and a built surface area of 6,454 m2.
- **50 homes, storage units and garage in Tres Cantos (Madrid).** The building has two basements, a ground floor and seven floors of homes, for a built surface area of 8,769 m2.
- **Construction of 74 price-limited subsidised homes, with garage, storage units and retail premises on plot 147 in Valdebebas Park in Madrid.** Located in a single building with two basements and five above-ground floors, with a built surface area of 16,737 m2.

Hoch Zwei building (Austria)

- **Construction of 24 price-limited subsidised homes, garage, storage units and retail premises on plot 146-B in Valdebebas Park in Madrid.**
- **30 homes in a block in Valdebebas (Madrid).** This building is in a closed-off courtyard area and has two basement floors, a ground floor, three standard floors and a penthouse, with a built surface area of 7,967 m2.
- **58 homes in Montecarmelo (Madrid).** This is 58 homes construction project with two basement floors, a ground floor, four standard floors and a penthouse with a built surface area of 16,751 m2.
- **42 homes in Montecarmelo on plot RC-5ª of the AR Nuevo Tres Cantos in Madrid.** The residential complex consists of two blocks of homes with a garage, retail premises and swimming pool and a built surface area of 11,189 m2.
- **Construction of 34 single-family homes on the RU 6 plot in Nuevo Tres Cantos (Madrid).** The houses are divided into four residential complexes, with retail premises, communal areas and swimming pool, with a built surface area of 10,500 m2 and 6,000 m2 of communal areas.
- **Construction of 38 homes on Calle Tomás Paredes, No 1 in Vigo.** The works consist of three basement floors, a ground floor, nine floors of homes and a penthouse, with a total built surface area of 7,368 m2.

NON-RESIDENTIAL CONSTRUCTION

This chapter includes buildings intended for administrative, educational, health, cultural, sport, commercial, hotel and industrial use.

- Administration and office centres
  - **Rehabilitation of the roof and various damaged areas in the Civil Guard barracks in Palma de Mallorca.** The work consists of the removal and subsequent repair of the current roof, reinforcement of pillars and reinforced concrete ribs with carbon fibre strips and the interior renovation of the premises including facilities.
  - **Upgrade of the interior, façade and roof enclosure for an integrated services centre in Alicante.** This is to carry out the interior finishing work, the façade, the roof and the facilities on an already finished structure. All the work is being done above-ground in a building with three basement floors, a ground floor, mezzanine and nine high-rise stories, with a built surface area of 5,040 m2.

CONSTRUCTION

- **Construction of an administrative building in Penafiel (Portugal).** This is an office building with a basement and a ground floor and a built surface area of 1,811 m2.

- Schools
  - **Construction of a building for a kindergarten and primary school on Calle Bravo Murillo in Madrid.** The building has three basement floors, a ground floor and three more floors plus a penthouse. It also has a swimming pool and gym.
  - **Construction works of a new kindergarten and primary school in Oroso (La Coruña).** The school has a built surface area of 4,537 m2.
  - **Phase three of the university building with technological areas in the Cartuja Park in Seville.** The third phase mainly involves enclosing the building envelope, with flat inverted roofs and a façade built using sandwich panels on subframes.

Burgos Auditorium

  - **Extension of Orvalle School in Las Rozas (Madrid).** The works consist of building a gym, an auditorium and classrooms in a building with a basement and two above-ground floors and a built surface area of 1,245 m2.
  - **Replacement of the Emilio Canalejo Olmeda Secondary School in Montilla (Córdoba).** This involves the construction of a new secondary and upper secondary school, vocational training workshops and a gym, with a total built surface area of 10,123 m2.

- Medical and healthcare centres
  - **Assisted residence for Alzheimer patients in Paracuellos del Jarama (Madrid).** This is a building with a basement, below floor level, ground floor and first floor, with a total of 46 double and 60 single rooms, a second floor for facilities and a roof. It has 12,218 m2.

- Cultural, sport and leisure centres
  - **Construction works to upgrade, refurbish and separate the ground and first floors of the North End of the Carranza Stadium in Cádiz.** The project consists of restructuring existing offices to adapt them to a new use.
  - **Hotel in Es Pujol (Formentera).** The work consists of earthworks, foundation footings and 4,489 m2 of reticular structure, distributed in basement, ground, first and second floors.
  - **Construction of the First Division Real Madrid team's residence.** This is the construction a residential building attached to an existing building, with a basement, ground, first and second floors. The building has a swimming pool, common/social area and reception area on the ground floor. There are 50 single rooms and 8 double rooms on the first and second floors. The new residential building has a built surface area of 8,704 m2.
  - **Refurbishment, conservation and upgrade of the El Pinar Hotel in Torremolinos, Málaga.** The works consist of refurbishing 85 rooms and public areas, and the creation of a new reception, café/bar, spa and a new access to the car park/garage.

CONSTRUCTION

Bratislava Towers, Slovakia

- Shopping centres, trade shows and conferences.
  - **Supermarket and outside car park at Avenida del Sol/ Passeig de la Infanta, in Sant Joan Despi, Barcelona.**

- Industrial centres
  - **Construction of a building in Sant Just Desvern (Barcelona).** The building is attached to an existing building as an extension and consists of two basements, a ground and first floor with high ceilings to cater for large-sized machinery.
  - **Warehouse for technical vehicle inspection (MOT) in Tres Cantos (Madrid).** This involved the construction of 40 x 35 m warehouse and a 316 m2 mezzanine.
  - **Construction of a multi-client logistics warehouse on plot L5 in the logistics area of Córdoba.** The warehouse, which is to be used for storage and distribution, is located on a 8,300 m2 plot and will have a built surface area of 8,511 m2, with 3,243 m2 of outdoor unloading, loading and manoeuvring areas.
  - **Construction of a storage warehouse in Terrassa (Barcelona).** The works consist of building a standard pallet storage warehouse and a mezzanine area for offices along with urban infrastructure works for lorry access and a car park.

- Renovation and maintenance
  - **Comprehensive renovation of the building located in Madrid, at Calle Eduardo Dato, 18 for homes and offices.** This involved rehabilitating a protected building with four floors and an attic, with a built surface area of 4,809 m2.
  - **Rehabilitation and consolidation of the Castle of San Juan, in Calasparra (Murcia).** The works consist of restoring and raising the current walls and attaching a stairway/walkway to them; all the cleaning and selection of remains will be carried out under the supervision of the archaeological team.

CONSTRUCTION

FCC Industrial

FCC Industrial is the brand name under which FCC Group intends to pursue its growth strategy based on diversification and internationalisation. Thanks to this, FCC will strengthen its position in the industrial and energy sectors, areas that continue to receive a major boost from all public and private sectors.

Several FCC Construcción industrial companies, all of which have a long history, operate under the umbrella of FCC Industrial, which was launched in November 2010.

Parallel to the launch of the new brand name, there was a merger by absorption of the companies DENEO, ELCEN, EURMAN and GEINSA by the electrical installations company Electrical Specialties, S.A. This merger was carried out with the aim of taking advantage of the synergies of the various companies involved in the merger in order to strengthen and unify the image of the resulting company and to create new business opportunities.

One consequence of this merger has the name change of Electrical Specialties S.A.,it has been renamed "FCC Servicios Industriales y Energéticos, S.A.", which is a good description of the new lines of business to be promoted.

Other companies have subsequently joined this integration process with the aim of positioning themselves more strategically in the market. This is the case of Auxiliar Pipelines and ISO, which have been operating together under the name FCC Actividades de Construcción Industrial, S.A. since early 2012.

FCC Actividades de Construcción Industrial, S.A.

During 2012 the organisation and structure was consolidated of the Industrial Group, resulting from the integration of FCC Construcción's various subsidiaries in the industrial and energy sector. **FCC Construction Activities Industrial, S.A.** is currently positioned as one of the major players in the industrial and energy-related plant construction market with regard to contracts in the form of several lots, as well as EPC, or turnkey contracts, presenting complex bids of a far greater scope than just the civil works. To do this, it has developed a specific information system, aimed at reaching collaborative agreements with the most appropriate technologists for each case. This, in turn, allows the Company to submit the technically and economically most competitive technical proposal for each particular project, not only from the point of view of construction quality, but also in terms of the design suitability and equipment installed and, therefore, of the plant's overall economic performance.

Palma del Río Solar Thermal Plant, Córdoba

CONSTRUCTION

Significant milestones within FCC INDUSTRIAL'S internationalisation strategy include the submission of various plant construction bids with very diverse characteristics in many countries worldwide. The Company began to be awarded contracts in 2013, including one for the construction of three gas storage areas in the port of El Callao in Peru, which also includes the construction of a large multi-line gas pipeline in addition to the construction of gas storage areas.

Among **last year's projects and awarded contracts** are:

- Rebuilding of the Windsor Building in Madrid.
- Design, equipment purchase and construction of the solar thermal power generation plant in Palma del Río, Córdoba.
- Construction of 180 homes in Leganés, Madrid.
- Theatre and shopping centre in Coslada, Madrid.
- Library in Coslada, Madrid.
- Design, equipment purchase and construction of two 150,000 m3 liquefied natural gas storage tanks in the El Musel port, Gijón.
- Upgrade of retail premises for use as a gym in Calle Capitán Haya, Madrid.
- Section 1 of the pipeline in Yela, Guadalajara.
- Musel – Oviedo gas pipeline, Asturias.
- Design, equipment purchase and construction of the solar thermal power generation plant in Villena, Alicante.

Technological development

As part of the effort to keep ourselves at the cutting edge of the construction process we assist our customers to obtain GTT licences to build LNG storage tanks with membrane technology.

After the construction of seven LNG storage tanks with the dual-tank "Full Containment" technology, with which we began the construction over twelve years ago for this type of tank, the progress made in the construction engineering of these tanks with membrane technology has converted this technology into a very competitive alternative for this type of work. Consequently, in 2012, actions were started and completed aimed at ensuring that FCC ACI, SA, would be granted the licence to use this technology by GTT, a world leader in this technology. This licence enables our company to compete on favourable terms in contract bids for this type of construction project.

FCC Servicios Industriales y Energéticos, S.A

During 2012 we consolidated the organisation and structure of the Industrial Group resulting from the integration of FCC Construcción's various subsidiaries in the industrial and energy sector. FCC Servicios Industriales y Energéticos, S.A. is positioned as one of the leading industrial groups in a highly competitive and increasingly specialised market.

Worthy of note is the integration of technical and operations personnel from the 'Conservación y Sistemas' subsidiary, thus strengthening the Systems Division so it can undertake all types of projects, primarily in the field of ITS (traffic management systems). Also of note was the definitive merger and name change of HERMERIEL, S.A., which has become part of the networks division as FCC SIE (FCC Industrial).

CONSTRUCTION

Included among the significant milestones in FCC INDUSTRIAL's internationalisation strategy is the award of the first contract for works and services in Panama: Electromechanical installations for the Nuevo Hospital Luis "Chicho" Fábrega being built in the province of Veraguas, as well as contracts in Mexico, including: the implementation of ITS (traffic) and tunnel control systems for the Nueva Necaxa - Ávila Camacho section, and the design, development, supply and installation of the monitoring and control of the Catzacoalcos underwater tunnel. In the systems division, of note is the contract signed with Amper to develop the command and control system for the United Arab Emirates' army.

Among last year's projects and awarded contracts are:

Energy Division

- On-site implementation and work for the construction of the Villena solar thermal power generation plant (Alicante).
- Plant start-up and obtaining the maintenance contract for the Guzman solar thermal power generation plant in Palma del Río (Cordoba).
- Installation of a photovoltaic facility connected to the distribution grid in Madrid.

Railway Division

- Maintenance operations for ADIF traction substations.
- Construction and installation works for the electrification of the catenary and overhead contact line for the Vigo - A Coruña section of railway for the high-speed Atlantic Corridor.
- Construction project for remodelling the overhead contact line of the Sagrera-Sant Adriá del Besos section.
- Construction project for the network of platforms reserved for public transport in Castellón, phase I, Avda. del Mar – Cami del Serradal section.

Distribution Network Division

- Construction of the 132 kV Alhorines substation and the 132 kV power transmission line to the Iberdrola substation.
- Design, construction and commissioning of the 66 and 132 kV transmission substation for the Villena solar thermal power generation plant.
- Extension of several contracts for the operation, maintenance and construction of electric distribution facilities throughout the country.

Systems Division

- Implementation of ITS (traffic) and tunnel control systems for the Nueva Necaxa – Avila Camacho road section. (Mexico).
- Design, development, supply and installation of the monitoring and control of the Catzacoalcos underwater tunnel. (Mexico).
- Installation and commissioning of the video, communications and ITS (traffic management) control network in the control centres for the tunnels on the C-25 road in Cataluña.

Madrid Association of Architects

CONSTRUCTION

- Update and improvement of the operational planning subsystem to support the maintenance operations of the Spanish army's peace missions.
- Replicas of the Centauro and Pizarro armoured vehicles controls for the Army.
- Development and implementation of the command and control system for the United Arab Emirates' army.

Maintenance and Energy Efficiency Division

The Maintenance Division is one of the divisions that has undergone development in order to enhance its growth and gain market share. Alliances and agreements have been established with technology companies aimed at submitting bids for maintenance, renovation of facilities and works to improve energy efficiency for all types of public and private entities.

The new contracts and customers include:

- Maintenance services for the low voltage installations in Terminal 2 and outbuildings at Barcelona airport.
- Comprehensive maintenance of the Provincial Offices of the Social Security Treasury headquarters in Córdoba.
- Maintenance and implementation of the energy efficiency and management plan for the "Nuevo Three Cantos" Residents' Association (Madrid).
- Various maintenance and service contracts for AENA: installations for the M-21 tunnels accessing T4 at Barajas Airport, Air Traffic Control Centre in Seville.
- Operation and maintenance of the Guzmán solar thermal power generation plant (50 MW) facilities, in Palma del Río, Córdoba.

Electromechanical Installations Division

- Electromechanical installations for the new "Torre Castellana" (formerly the "Windsor") building, Madrid
- Electromechanical installations for various tunnels on the C-25 (EIX TRANSVERSAL, Vic – Caldes in Cataluña).
- Electromechanical installations for an assisted residence for Alzheimer patients in Paracuellos del Jarama (Madrid).
- Thermomechanical installations for the refurbishment of the APOT building in Campo de las Naciones in Madrid.
- Electromechanical installations for new classroom buildings and extension of "El Porvenir" school in Madrid.
- Electromechanical installations for the Nuevo Hospital Luis "Chicho" Fábrega. Veraguas Province, Republic of Panama.
- Electrical installations for the new underwater tunnel in Coatzacoalcos, Mexico.
- Electrical installations for the outdoor urban development of the "Puerto Venecia" service sector development in Zaragoza.
- Electrical and special installations for the tunnels on the A-8 highway in Muros del Nalón, Asturias.

R+D+i projects

FCC Industrial collaborated throughout 2012 with ADIF on the new "Railway Technology Centre" located in Málaga for R+D+i activities in the railway sector. These activities are aimed at being applied to the future new high-speed (>500 km/h) ring test in Antequera, as well as to other fields within the railway sector. This collaboration will be an opportunity to establish partnerships and agreements with other companies who are industry experts, universities and research centres.

Under the agreement signed by FCC Construcción with ADIF, 60 m2 on the premises of the Technological Centre in Málaga will be available for the development and implementation of these new technologies. Throughout 2012, collaboration agreements were concluded with other companies and government entities, along with FCC Co, to consolidate and complement all these activities.

CORPORATE IMAGE

Megaplas S.A. is the FCC Group company that provides corporate image services for interior and exterior elements at European level. Implementation is done through its two production and management facilities in Madrid and Turin.

The international nature of Megaplas was transformed this year into the implementation of the various corporate image elements at 230 New Holland dealers (the agricultural vehicles branch of Fiat Group) throughout Europe in countries such as Portugal, France, Belgium, Germany, Italy, Poland, Austria, Romania and Denmark.

The Fiat Group remains one of Megaplas's key customers. We are exclusive suppliers for all its brands (Alfa Romeo, Fiat, Lancia, Jeep and Abarth) in Spain, Portugal, France, Belgium, Holland, Italy and Greece, besides being an approved supplier for the sale of their logos worldwide.

Kia Europe has approved Megaplas as the exclusive supplier of their new image, which began to be implemented in late 2012 in its entire network in Spain.

The severe economic crisis that has affected all sectors, especially the automobile industry, has strengthened the idea to diversify the products and services that Megaplas offers its customers, with special focus on inner image elements, ranging from interior and emergency signage to furniture, merchandising, etc.

In 2012, Renault Spain, which has been Megaplas's client for over 40 years, entrusted us not only with the external image for 40 car dealers, but also with two projects that include interior elements: the launch project for the "Ze" electric vehicle and the launch campaign for the "Clio Passion" at over 40 car dealers in the Spanish network.

At the FCC building in Las Tablas, Megaplas implemented all the information and emergency signage throughout the building, including information relating to the car park, and the installation of decorative stickers inside offices and meeting rooms.

Megaplas supplied and installed two large LED-lit corporate signs, twelve metres and eleven metres long respectively, at a height of 105 m for Telefónica in its new building on Diagonal Street in Barcelona.

In the Málaga metro, Megaplas has installed the exterior entrance for the entire line 2 (six stations).

New brand image for Fiat Group dealership

CONSTRUCTION

PREFABRICADOS DELTA, S.A.

The production from Prefabricados Delta factories in 2012 was:

- 3,755 metres of concrete pipe with sheet metal sleeves.
- Over 24 kilometres of glass-fibre reinforced polyester pipe (GRP).
- 111,000 pre-stressed monoblock sleepers of different types.

By industry, the most significant supplies are:

Supplies for hydraulic lines

During 2012, 28,012 m of pipe, 24,257 m of glass-fibre reinforced polyester pipe and 3,755 m of concrete pipes with sheet metal sleeves in its varieties of reinforced and post-stressed, mainly with basically with elastic joints were manufactured and supplied.

Two significant facts should be mentioned: firstly, the supply of pipes and special pieces of reinforced concrete with sheet metal sleeves for the CCGT in Bremen, Germany and, secondly, the supply of glass-fibre reinforced polyester pipe for Portugal.

The most significant works include the following:

- Circulation water pipe for the CCGT in Bremen (Germany). This work has been an important milestone in Prefabricados Delta's history, as it was the first time that concrete pipe with sheet metal sleeves was supplied for Germany.
- Irrigation for the Albatera Irrigation Community. 1,638 m of the 3,207 m of the contracted post-stressed concrete pipe with sheet metal sleeves and an elastic joint with an inside diameter of 1,200 mm were supplied.
- Irrigation improvements for the Páramo Canal. 1,662 m of post-stressed concrete pipe with sheet metal sleeves and elastic joints with an inside diameter of 1,800 mm and design pressures of 6 and 10 atmospheres were supplied.
- Santoña sewerage pipe. 5,870 m of GRP (glass-fibre reinforced polyester) pipe with nominal diameters of 800 and mainly, 1,200 mm, were supplied for nominal pressures of 1 and 10 atmospheres.
- Lliria Irrigators' Community. 7,412 m of GRP pipe with nominal diameters of between 500 and 800 mm and nominal pressures of 6 and 10 atmospheres were contracted, manufactured and supplied.

Supply of railroad sleepers

111,660 pre-stressed monoblock sleepers, mainly type AI-04 (standard gauge sleepers), were supplied in 2012.

Water pipeline

CONSTRUCTION

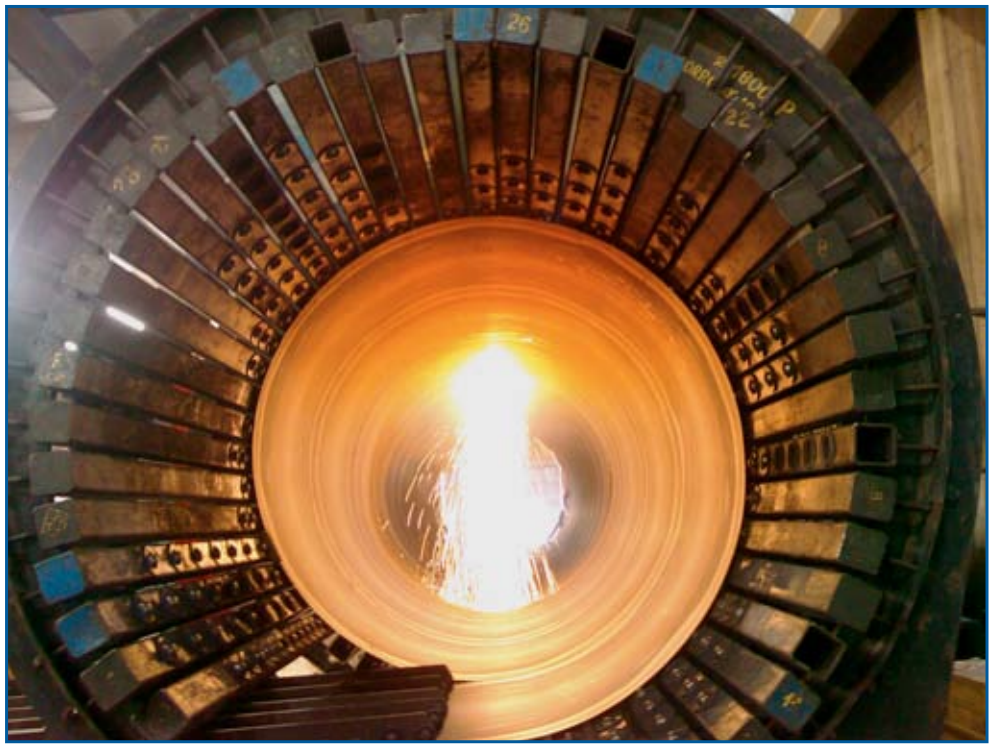
The most significant works were:

- Sleepers for the Palencia - León section of the North-Northwest High-Speed Corridor, Phase I, in total AI-04 34,088 sleepers were supplied.
- The supply of a total of 58,000 international gauge sleepers for the new high-speed rail access to Levante Madrid – Castilla La Mancha – Valencia region,– Murcia region, Almansa – Caudete section.

R+D+i activities

An R+D+i activity was certified in 2012 that consists of developing a new production process for GRP pipes that incorporates a number of changes and innovations that have affected several aspects:

- Firstly, the better use of raw materials, which has allowed the thickness of the tube wall to be reduced while maintaining the same modulus of elasticity, thereby reducing manufacturing costs and improving the product's competitiveness.
- In addition, with an increase in the uniformity of the product produced, permits an extension of the intervals for quality self-checks and, therefore, the associated cost reduction.
- An environmental improvement was also obtained by reducing pipeline rejects by 73% and diesel fuel consumption by 77%.
- Finally, there was an improvement in health and hygiene conditions by substantially reducing the environmental dust generated in manufacturing.



Manufacturing pipes from sheet metal

CONSTRUCTION

INFRASTRUCTURE CONCESSIONS

In line with the current environment, the Concessions Department has carried out its activity in 2012 under the following premises:

- To bid for international projects in solvent and safe markets with medium-term growth perspectives. This goal is in line with the general strategy established by FCC Group.
- To consolidate its presence in countries through the creation of new consortiums and by strengthening relationships established in previous years.
- To bid for contracts with solvent partners (investment funds and public pension funds now in the consortium), making offers that are more consistent and easier to finance.
- In relation to contracts in the order-book with complications due to the macroeconomic environment: negotiations continued in 2012 with the central government aimed at determining the conditions to rebalance some contracts with economic and financial imbalances.
- The remaining contracts in the order-book were optimised and adjusted to achieve this optimisation and prepare them for divestment.

The following are the concession companies in which FCC has holdings along with the most important events in 2012:

FCC Construcción, S.A (Concessions Department)

National:

Murcia tramway (50%)

Construction, maintenance and operation of Murcia tram line 1 (17.76 km and 28 stops) for 40 years. On 28 May 2011, the operation commenced after the completion of the works. The rolling stock was integrated along with the operating, electrification, ticketing and communication systems. Since then, there have been over 6 million visitors, with a monthly demand of over 400,000 travellers. The Murcia tramway received the "International Award for the Best Environmental Initiative of the Year" ('Global Light Rail') in 2011.

Zaragoza tramway (16.62%)

Construction, commissioning, maintenance and operation of Zaragoza tram line I, with 12.8 km, for a period of 35 years. Due to its technology, this new service is considered to be the most modern in Spain. The works for the construction of the second phase of line 1 were carried out in 2012.

Urbicsa (29%)

Construction, maintenance and operation of buildings and facilities in the City of Justice project in Barcelona and L'Hospitalet de Llobregat. The project consists of buildings with areas reserved for use by the Catalan Regional Government (159,878 m2), complementary uses, offices and retail premises (26,628 m2) and a 45,628 m2 car park with a capacity for 1,750 parking spaces. The main activities in the maintenance management in 2012 have focused on the development of information tools to support the service, as well as actions aimed at energy savings, improved comfort and the reorganisation of maintenance services.

Cuenca highway (100%)

Maintenance and operation of the A-3 and A-31 section that runs through the province of Cuenca, for a period of 19 years. The maintenance work has been carried out since the contract was signed. By the end of 2012, about half the works had been completed and the remainder is expected to be completed by 2014. The Concessionaire continues the smooth running of the operation and maintenance of the highway simultaneously with the execution of the works.

Torrejon de Ardoz Hospital (5%).

Total management of Torrejón Hospital for 30 years. This is the second hospital in the Madrid self-governing region in which health services fall within the scope of the agreement, together with the management of non-health services. The hospital will have a surface area of 62,000 m2, 240 beds and will provide services for 133,144 people. FCC holds 66.67% of the construction company. In June 2011, the construction works were completed and the operation of the hospital began in October.

Healthcare Centres in Mallorca (33%).

Construction, maintenance and operation of 5 healthcare centres and 5 basic healthcare units in Palma de Mallorca. The service levels required have been successfully met since operation began, which proves that the management of the work under contract and the resolution of incidents raised have been a success.

Cedinsa Eix Llobregat (27.2%)

Construction and operation by shadow toll of the road between Puig-Reig and Berga, and the conservation and maintenance of the Sant Fruitós Bages - Puig-Reig section, all along the C-16 road (Llobregat Corridor). 2012 is the fifth full year of operation, with an average daily traffic volume of 18,869 vehicles along these sections.

Cedinsa d'Aro (27.2%)

A 33-year shadow toll concession of the 27.7 km of the Maçanet Platja d'Aro highway, consisting of the design, construction and operation of the section of the C-35 between Vidreres and Alou and operation of the Maçanet – Vidreres section of the C-35, Alou-Santa Cristina d'Aro section of the C-65 and the Santa Cristina d'Aro – Platja d'Aro section of the C-31. 2012 was the fourth full year of operation, reaching an average daily traffic volume of 24,267 vehicles.

Cedinsa Ter (27.2%)

Shadow toll highway concession of the 48.6 km Centellles – Vic – Ripoll section, of which 25.2 km are new roadway, between the towns of Centelles and Ripoll. The concession period is 33 years with a construction period of 3 years and 30 years of operation. On 30 July 2011, the 3B section (the C-17 main road section, between Sora and Ripoll) was inaugurated and fully opened to traffic.

Cedinsa Eix Transversal (27.2%)

A 33-year shadow toll concession of the 150 km of the Transversal Corridor highway. The contract consists of the definition of the design and the construction and operation of the Cervera - Caldes de Malavella (C-25) section. The concession is expected to be fully serviceable in early 2013.

Torrejón de Ardoz Hospital

CONSTRUCTION

Barcelona Metro Line 9 (49%).

Construction, maintenance and conservation of 13 stations on section I of Barcelona Metro Line 9, for 32 years. FCC has a 33% holding in the construction joint venture, and the rest will be newly contracted.

The Company completed the construction phase in 2012 and operations have begun in all the stations of this public works concession.

World Trade Centre Barcelona, S.A. (16.52%)

A 50-year concession to manage the World Trade Centre buildings in the Port of Barcelona. The Port has a 36,000 m2 area of office and retail space, 6,000 m2 of conference and meeting rooms and a 280 bed hotel.

Parc Tecnologic World Trade Center Cornellà, S.A. (12.5 %)

Construction of a facility consisting of seven office buildings, a shopping area and a 27 storey apartment hotel. The first phase works have been completed. These consist of three buildings with a built surface area of 37,500 m2, an underground car park for 500 cars and a 10,000 m2 landscaped square.

Tramvia Metropolità S.A. (18.08%)

The construction and 25-year operation of the 15.1 km transport infrastructure linking south Barcelona with towns in Baix Llobregat. It has been in service since 2004.

Tramvia Metropolità del Besòs,S.A. (19.3%)

Construction and operation and maintenance for 27 years of the 14 km long tramway that connects the Olympic Village in Barcelona with Sant Adrià del Besòs and Badalona.

Málaga Metro, (24.50%)

Construction and operation of lines 1 and 2 of the Málaga Metro. The track length is 16.5 km, of which 71% are underground with 19 stations along the route.

Ibiza-San Antonio highway (50%).

Construction and shadow-toll operation of the widening of the Ibiza-San Antonio road. A unique feature is the burial of 1.3 km of the highway in the San Rafael area. The road is 14 km long and the concession is for 25 years. The average daily traffic volume in 2012 was 30,894 vehicles.

International

New Acute Hospital for the South West (Northern Ireland).

Construction, maintenance and operation (non-healthcare services) of the Enniskillen Hospital in Northern Ireland for a period of 33 years. The new hospital will have 315 beds and is the first of its kind developed under the PFI (Private Finance Initiative) modality in Northern Ireland. This hospital, already in operation, has been developed through a public/private partnership and is considered an icon for hospitals in Europe with single rooms and sustainable energy generation.

Underwater Tunnel in Coatzacoalcos (Mexico).

Construction, finance, maintenance and toll operation of the underwater tunnel in Coatzacoalcos in the state of Veracruz (Mexico) which connects the city of Coatzacoalcos with the Allende conurbation. The tunnel is 2,200 m long, of which 1,200 are underwater. The concession is for 37 years. The works began in 2007 and operation is expected to begin in late 2013.

Matinsa
MANTENIMIENTO DE INFRAESTRUCTURAS, S.A.

Other subsidiaries and holding companies

INFRASTRUCTURE MAINTENANCE

FCC Group, through its subsidiary, Mantenimiento de Infraestructuras, S.A. (MATINSA) is active in the sector in the following business areas:

Highways and roads

Maintenance of over 1,550 km of highways and 2,360 km of roads on the conventional road network belonging to various public administration bodies and concessionaires is performed.

These include the access to Madrid via the A-6 highway from Villalba, including the bus-HOV section, which is a pioneer in Europe as a model of transport infrastructure reserved for high-occupancy transport with a reversible lane.

In addition, Matinsa provides conservation services for ring roads in Barcelona, the Ronda de Dalt and the Ronda Litoral, and participates in the maintenance of the Asturian "Y". All these roadways handle traffic of over 100,000 vehicles/day.

New maintenance contracts in the provinces of Asturias, Barcelona, Badajoz, Cáceres and Madrid were secured in 2012.

Hydraulic infrastructure maintenance.

Matinsa operates and provides maintenance for the Automatic Hydrological Information System (SAID) of the Júcar Water Basin Authority which monitors the operation of the basin with 217 instrumented control points.

Installing safety fences on highways

This subsidiary also maintains and operates several Júcar River Basin channels, totalling 160.2 km of channels that supply water to Valencia, Sagunto and its metropolitan area and cover the needs of 28,000 irrigable hectares.

This year the Tajo Hydrographical Confederation has awarded the conservation and maintenance operations of the channels in the irrigable area of the Arrago river, that provide water for around 9,000 hectares of irrigation.

Tramway maintenance

Maintenance of infrastructure, systems, civil works and materials for the following tramways:

- Zaragoza, with a 7 km line in operation.
- Murcia, with a 17 km long line.

CONSTRUCTION

Forest fire prevention and extinction

Matinsa performs the following services:

- Continuously since 1998, the Company provides fire brigade service for the eastern zone of the Self-governing region of Madrid, with a total of 234 workers, 8 heavy forest fire engines, 15 light engines, 2 high mobility vehicles (VAMTAC), 1 twin-engine helicopter and 14 forester engineers.
- Prevention and extinction of forest fires with heavy machinery for the Self-governing region of Madrid, under the INFOMA plan.
- Fire extinguishing devices in the Casa de Campo in Madrid.
- A contract for fire prevention-related work in the north area conventional network was also awarded for 2012-2013.

Environmental restoration

The company carries out works related to environmental restoration and the recovery of damaged areas, such as the restoration of dune systems and their conservation and maintenance.

Crushing and clearing works

Significant contracts awarded this year include:

- Environmental recovery of the River Andarax Delta, Phase I, in the municipality of Almería.
- Conditioning and channelling of the channel canyon, Vélez-Rubio (Almeria).

Maintenance and conservation of natural areas, gardening and landscaping

Contracts awarded this year include:

- Maintenance and conservation services for indoor and outdoor gardens and green areas at the University of Salamanca's centres and facilities.
- Recovery and maintenance of the municipal golf course in Sotoverde, Valladolid.
- Extension of the conservation and maintenance services for earthen areas, pavements and civil works elements in the 'Casa de Campo' park, Madrid.

Forestry works

Significant forestry works include the reforestation and silvicultural improvement of forests in the communities of Madrid, Andalucía and Valencia, for various governmental authorities.

This year's awarded contracts include:

- Forestry works in the IX Region of the Madrid self-governing region.
- Conditioning of traditional livestock paths and tracks in the Peñalara nature park, Madrid.

R+D+i projects

Matinsa participates in the following R+D+i projects:

- Fénix ICT Project, to develop and establish of a forest fire prevention and extinction system.
- Puentes Project, for the design of real-time condition survey systems for structures in service using wireless sensors

PROSER
PROYECTOS Y SERVICIOS, S.A.

Proyectos y Servicios, S.A. (Proser) carries out engineering studies and project planning. The contracts awarded during the year include:

Highways and roads

- Tender project for the Paso Ancho Ring Road Exchange in San José, Costa Rica, National Route 39. This consists of the construction of a 410 m long underpass that allows the ring road to cross under the roundabout connection with Road No. 213.
- Tender project for three interchanges (Cañas, Bagaces and Liberia) on the Inter-American North Highway, National Route 1 in Costa Rica. This consists of the construction of three interchanges (link roads) from the main road that connects to the access roads leading to the aforementioned locations.
- Catalogue of municipal roads in Sant Cugat Sesgarrigues; Catalogue of municipal roads in Olèrdola and Catalogue of municipal roads in Lluçà, Cataluña. The purpose of road catalogues is to prepare an inventory of a number of elements such as location, horizontal alignment, longitudinal alignment, cross section changes and changes in pavement type. The condition of the road is determined and the results include a technical sheet for each road along with a location map and photographic report. A report that lists and summarises the roads in the inventory and the main features is also attached.
- Improvement of the bridge over the River Llobregat on the C-16z, KP 93+690. This consists of improving pedestrian routes so that there are no discontinuities and they meet accessibility standards as well as improve the current state of the bridge containment system, its drainage and deck joints.
- Improvement of the bridge over the River Llobregat to the C-16z road, KP 93+745. This consists of upgrading the existing structure which currently has major defects and turn it into a space for public use as a pedestrian crossing over the River Llobregat.
- Detailed design of the new access to the Aguas Teñidas Mines. Huelva. As part of the project to extend the Aguas Teñidas Mine's mineral treatment plant in Almonaster la Real, Huelva, a new access to the facilities from the north was designed that allows light vehicles to enter and exit the new facilities and parking areas directly.

National and metropolitan railways

- Survey Report for the New Baricentro Intermodal Transfer Facility in the area of Cerdanyola del Valles and Barberá del Vallés (Barcelona). The contract is part of the actions included in the Commuter Train Railway Infrastructure Plan for Barcelona 2008-2015. The purpose of the contract is to analyse possible alternatives for the construction of an intermodal transfer facility for the three commuter rail lines R-4, R-7 and R-8 in Rodalies at the border area of the municipalities of Cerdanyola del Vallés and Barberá del Valles.

Hydraulic works

- Detailed design of the works for the Segarra-Garrigues irrigation distribution network. Sector 6. Verdú municipaity. Secondary transformation networks for the C and D belts in sector 6. The purpose of these projects is to layout and design the secondary and tertiary networks for the right bank of the canal in sector 6 in the Verdú municipality,

Placement of modular reinforced concrete structures

CONSTRUCTION

Lérida, as well as the hydraulic infrastructure and equipment that make up the entire irrigation system.

- Detailed design for the channelling and restoration of the Herreritos Ravine in Aguas Teñidas. Huelva. This consists of the construction of new channelling for the Herreritos Ravine that is 1,310 m long.
- Review of technical documentation available for the 100 MW hydroelectric power plant on the River Bio Bio in the region of Bio Bio (Chile) project. Analysis of previous documentation (environmental, hydraulic, hydrological, geotechnical, etc.) in order to assess the feasibility of the hydroelectric plant and the potential risks and opportunities.
- Design for the wind power supply for self-use at the Almudévar Reservoir pumping station, in the Upper Aragon Irrigation area. Definition of the works required for the installation of a wind farm that enables enough energy to be generated to offset the energy deficit generated during the operation of the Almudévar Reservoir.
- Behavioural study and drafting of the annual report of the Terradets, Llause and Baserca Dams. Analysis of the current condition of the three dams, a study of their behaviour and hydrological events.
- Tender project for the Water Treatment Plant in Barrialito, Venezuela. Tender project for a new water treatment plant in Venezuela with a flow rate of 4,000 l/s.

Urban development

- Detailed design of the urban development, roads and buried utility services for the expansion of the mineral processing plant in Aguas Tenidas. Huelva. This urban development project defines both the location and the characteristics of the new roads designed as part of the mineral treatment plant project in Aguas Teñidas in Almonaster la Real, Huelva, as well as the buried utility installations.

R+D+i

PROSER's R+D+i Department has carried out a series of activities in 2012 aimed at, firstly, consolidation within the corporate structure of the projects carried out in previous years (INNOPROSER, PLATFORM 2.0, etc.) and, secondly, the development of new research projects.

These new projects include those known as "Tools for defining tunnel types" and "Tools for company carpooling management" and are being carried out in collaboration with FCC SIE.

River channelling

In addition, PROSER is leading the "Accessible City" Project, which focuses on the Feder-Innterconecta call for tenders. This project has several participants, both private companies and public authorities, and support from a number of organisations, among which is the Málaga City Council, AENA and ADIF.

Lastly, PROSER actively participates in the Smart Cities Committee which is being held within FCC Construcción.

CONSTRUCTION

The 2012 milestone for Globalvia Group was the incorporation of the pension funds, OPTrust (Canada) and PGGM (Netherlands), as Globalvia investors through an issue of convertible debt securities amounting to 750 million euros, committing initial contributions of up to 400 million (200 million euros from each investor in accordance with the contract signed on 27 October 2011 and whose initial outlay took place on 2 February 2012 amounting to 250 million euros (150 million euros from PGGM and 100 million euros from OPTrust).

These new financial resources support Globalvia's strategy to create value through the implementation of new investments and increasing the current portfolio with the acquisition of new "brownfield" assets in roads and the railway sector as well as in the development of selected "greenfield" projects.

Globalvia continues to consolidate its leading position worldwide in transport infrastructure management. According to the 2012 ranking by the prestigious Public Works Financing, Globalvia continues to rank second in the number of concessions for the fourth consecutive year.

During this year, Globalvia also consolidated its portfolio in the Latin American market with the acquisition of the Costa Rican company "Infrastructuras SDC Rica S.A.", owner of 17% of the shares of the company Autopistas del Sol, S.A., the San José-Caldera motorway concession holder. With this operation, Globalvia now controls 65% of the shares in the concessionaire.

San José-Caldera – Costa Rica (48%):

Construction and operation of the San José-Caldera toll motorway, which links the capital to the peripheral areas of the coast. The motorway is 76.8 km long, and the concession, which begun in 2012, lasts for 25 years. At present the toll motorway has an average daily traffic volume of 41,283 vehicles.

In 2012 in the Spanish market, Globalvia acquired 33.33% of the shares in Ruta de los Pantanos, S.A. owned by Desarrollo de Concessiones Viarias Uno, S.L. now Globalvia controls 100% of the company.

Ruta de los Pantanos (100%):

Construction and management and maintenance services for 25 years of the 21.8 km long duplication of the width of the M-511 and M-501 roads between the M-40 and M-522 in the Madrid self-governing region. The concession has been in operation since 2002 and in 2012 had an average daily traffic volume of 36,751 vehicles.

M-45 Madrid

CONSTRUCTION

Concessions added to Globalvia's business as of 31 December 2012:

Itata Motorway (100%).
Construction and 13 years of operation of the Concepción-Chillán toll motorway that has a total length of 98 km. The average daily traffic volume in 2012 was 4,570 vehicles.

Aconcagua Motorway (100%).
Construction and toll-road operation of the Route 5 Santiago-Los Vilos stretch of motorway that has a total length of 218 km; the concession is for 30 years. It consists of three main toll stations that are operated bidirectionally. The average daily traffic volume in 2012 was 14,667 vehicles.

Trasmontana Motorway (50%).
The company is holder of the construction and operation services for the mixed toll motorway between Vilareal and Braganza, Portugal with a total length of 194 km and for a 30 year period. It is currently in the design and construction stage.

Coatzacoalcos Tunnel, Mexico

Galician Central Motorway, (61.39%).
Construction and operation of the Santiago de Compostela - Alto de Santo Domingo toll motorway for a period of 75 years. The road is 56.8 km long. It began operating in 2005. The average daily traffic volume in 2012 was 4,967 vehicles.

Sóller Tunnel, (89.23%).
Construction and operation as the Sóller toll tunnel crossing the Alfabia mountain range in the Palma de Mallorca to Sóller corridor. The road is 3.1 km long and the concession is for 33 years. The tunnel has been in operation since 1989 and had an average daily traffic volume of 7,550 vehicles in 2012.

Multipurpose Terminal in Castellón, (78.68%).
Construction and operation of a 9.5 hectare terminal in the Port of Castellón for handling containers and general cargo. It has been in operation since 2006. A total of 90,300 container movements took place in 2012.

Costa Cálida Motorway, (35.75%).
Construction and operation of the Cartagena – Vera toll motorway for a period of 36 years. The toll road is 98 km long, and 16 km of toll free road for internal ring road traffic in Cartegena have been added. The average daily traffic volume in 2012 was 1,625 vehicles.

Barajas Metro, (100%)
Project development, construction and operation of the Barajas-New Terminal Building T-4 metropolitan metro section of line 8. The track length is 2.5 km and the concession lasts for 20 years. It has been in service since 2007. In 2012, 2,082,146 passengers used the line.

M-404, (100%).
Design, construction, maintenance and operation of 27 km of the M-404 between M-407 and M-506 as a shadow toll highway. The concession contract was awarded in December 2007 and is currently on hold.

Castellón Airport, (47%).
Construction and operation of Castellón Airport for 50 years. The future airport will be between Benlloch and Villanueva de Alcolea, a privileged setting located within 50 miles of any point in the province.

CONSTRUCTION

Phunciona Gestión Hospitalaria, S.A. (Hospital del Sureste), (66.66%)

Construction and comprehensive maintenance management: The hospital had 110 inpatient beds in 2007, which can be extended to 148 in 2017, and an estimated surface area of 37,000 m. It has been in operation since 2007.

Scutvias, Autoestradas da Beira Interior, (22.22%).

Construction and operation as a shadow toll highway of the stretch between Abrantes and Guarda. The road is 198 km long, of which 95 km belong to an existing road and 103 km are newly built. The concession runs for 30 years and includes the operation of three petrol stations. In operation since 2005, the average daily traffic volume in 2012 was 6,197 vehicles.

Hospital in Enniskillen

M-407, (50%)

Design, construction, maintenance and operation of 11.6 km of the M-407 between the M-404 and M-506 as a shadow toll highway. The concession was awarded in August 2005 and it has been in operation since 2007. In 2012 it had an average daily traffic volume of 29,496 vehicles.

Concesiones de Madrid, (100%)

Administrative concession section of the Madrid ring road, the M-45, between the O'Donnell intersection and the N II which is 14.1 km long. The period is for 25 years under the shadow toll system. The concession has been in operation since 2002 and in 2012 it had an average daily traffic volume of 74,663 vehicles.

Túnel d´Envalira, (80%)

Design, construction and operation of the toll Túnel d'Envalira that links the winter resort of Grau Roig with Pas de la Casa, and serves as the route between Andorra and France on the Barcelona – Toulouse corridor. The tunnel is 3.2 km long and the concession is for 50 years. The tunnel has been in operation since 1998 and had an average daily traffic volume of 1,537 vehicles in 2012.

Tranvía de Parla, (75%)

The company was awarded the 40-year contract for the construction, supply of rolling stock, running, operation and maintenance of the 8.5 km of double tramway track in Parla (Madrid). This concession was awarded in 2005 and began operating in June 2007, with an annual traffic of 4,573,029 passengers in 2012.

Transportes Ferroviarios de Madrid, (49.37%)

Extension of line 9 of the Madrid Metro between Vicálvaro and Arganda which has a total length of 20 km and three intermediate stations. It was used by 6,161,140 passengers in 2012.

Ruta de los Pantanos, (100%)

Construction, management and maintenance for 25 years of the 21.8 km long duplication of the width of the M-511 and M-501 roads between the M-40 and M-522 in the Madrid self-governing region. The concession has been in operation since 2002 and in 2012 had an average daily traffic volume of 36,751 vehicles.

CONSTRUCTION

M-50 Dublín

San José Caldera Highway, Costa Rica

M-50 Dublin, (45%)

Construction and operation of the M-50 motorway for 35 years in Dublin. This is the city's main ring road. The project consists of widening 24 km of motorway and operating and maintaining it along with another 19.3 km. This was executed on an availability payment basis that began operation in September 2010.

Nuevo Necaxa-Tihuatlán (50%)

Design, construction and operation of the 85 km Nueva Necaxa-Tuhuatlán motorway located between the state of Veracruz and the state of Puebla and which is part of the main intersection road linking Mexico City and Veracruz. This highway is divided into two sections:

- TC1 Nuevo Necaxa-Avila Camacho, 36.6 km long, 4 lanes, for construction and operation on an availability payment basis.
- TC2 Ávila Camacho - Tihuatlán, 48.1 km long, 2 lanes, for operation under a user toll scheme. It opened in 2012.

Autovía del Camino, (9.1%)

Construction and operation of the Pamplona-Logroño highway under the shadow toll system. It is 70.25 km long in total and has been operating since late 2004. The average daily traffic volume in 2012 was 11,340 vehicles.

Port Torredembarra, (24.08%)

Construction, operation and maintenance of a marina in the city of Torredembarra in Tarragona with a capacity of 714 berths, plus retail space and ships' stores. Currently in operation.

Santiago de Chile Airport, (14.78%)

Construction and operation of the Arturo Merino Benítez International Airport in Santiago de Chile. The second runway entered into service in September 2005, built by the Ministry of Public Works and allows the airport to operate better.

CONSTRUCTION

Infographic: Wales Racing Circuit

Autopista San José – Caldera, (65%)

Construction and operation of the San José - Caldera toll motorway in Costa Rica that connects the capital with one of the Pacific's major ports. The road is 76.8 km long and the concession is for 25 years. The average daily traffic volume in 2012 was 41,283 vehicles.

Hospital de Son Dureta, (33%)

Construction and operation of the new benchmark hospital in the Balearic Islands. The hospital has a surface area of 193,088 m2 and 987 beds, and will serve over a million people. The concession runs for 30 years. It opened to the public in 2010.

N6 Galway - Ballinasloe, (45%)

Construction and operation of the N6 Galway – Ballinasloe motorway along the east-west strategic corridor from Galway to Dublin. It consists of a 56 km toll motorway between Galway and Ballinasloe, a 7 km link to the Loughrea bypass (single carriageway) and approximately 32 km of access roads. The concession is for 30 years. It began operation in December 2009. The average daily traffic volume was 9,060 vehicles in 2012.

R-2 Autopista del Henares, (10%)

Construction and operation of the R2 toll motorway which runs for 62 km between the M-40 and Guadalajara. It consists of two sections. The inner section, from the M-40 to the M-50, is an alternative to avoid traffic jams on the A-1 at S.S. de los Reyes and Alcobendas. The outer section is an alternative to the heavy traffic on the A2 between Guadalajara and the M-50. The duration of the concession is 24 years. The daily average traffic intensity during the past year was 5,928 vehicles.

Circunvalación de Alicante, (25%)

Construction and operation of the Alicante ring road that is 28.5 km long and the concession lasts for 36 years. The concession has been in operation since 2007 and last year had an average daily traffic volume of 5,710 vehicles.

Metro Ligero de Sanchinarro, (42.5%)

Operation and maintenance of Pinar de Chamartín-Sanchinarro-Las Tablas line which is 5.4 km long and connects Madrid metro lines 1 and 4. This line has been in operation since May 2007 and the concession period is 30 years. In 2012, 4,736,987 travellers used the light rail.

CONSTRUCTION

The Austrian subsidiary **Alpine** has holdings in the following concession:

- Design, finance, construction and operation of the first section of the A5 motorway in Austria for 30 years. This is the first toll motorway concession in the country and is 51 km long. It includes the construction the first section of the A5 from Vienna towards the Czech Republic between the towns of Eibesbrunn and Schrick, and the extension of the northeast ring road in Vienna, which will be the starting point for the S1 and S2 express roads. The first phase became operational in November 2009, and Phase 2 began operations in February 2010.

TECHNOLOGICAL DEVELOPMENT

FCC Construcción promotes an active policy for technological development and innovation which is constantly applied to its works, as part of their firm commitment to sustainability and to contribute to the quality of life of society as a competitive factor.

R+D+i activities

The company participates in the technological elements of the most unique construction projects, developing its own R+D+i projects aimed at improving building processes which, combined with the impetus from the machinery and auxiliary means at its disposal, allow it to offer its customers a range of technical solutions that are an important means of differentiation in the entire industry.

In this regard worthy of mention is FCC Construcción active participation in many European and national R+D+i organisations such as:

- European Construction Technology Platform (ECTP) within the High Level Group (HLG) 2011-2012 and prolonging its permanence for the 2013-2014 HLG.
- The E2BA Association (Energy Efficient Buildings Association), that participates in the Steering Committee and the Ad-hoc Industrial Advisory Group (AIAG). Several workshops have been held and it has cooperated in the AIAG (Ad-hoc Industrial Advisory Group) meetings to address the impact of the E2BA as well as for the development of European aid issues of the E2B 2013 PPP and for the development of the roadmap for the Horizon 2020 programme (2013-2020, 8th Framework Programme).
- In the ReFINE (Research for Future Infrastructure Networks in Europe) Initiative, where we completed the work on the Strategic Research Agenda (SRA) as co-leaders of Priority 3 "Greening Infrastructure". We have also participated in the Joint Task Force for Transport Infrastructure. The aim of the initiative is to ensure that the European Commission considers financing R+D+i in transport infrastructure as a specific objective.
- In ENCORD (European Network of Construction Companies for Research and Development), we have actively participated in the Board and working groups on CO2 Emissions Control and Health and Safety in coordination with the Quality and Training Department and other Company organisations.

- FCC Construcción holds the Chair of the SEOPAN R+D+i Committee from July 2012.
- The Company participates in the Internationalisation Committee of the R+D+i Committee of the Spanish Confederation of Business Organisations (CEOE), and in the Commission.
- FCC Construcción is a member of AENOR's ADVISORY BOARD FOR THE CERTIFICATION OF CONSTRUCTION COMPANIES. The purpose of this working group is to develop the Handbook to interpret the requirements of the UNE 166002 standard in the construction sector.
- It has also participated in the Spanish Construction Technology Platform (PTEC) as a member of the PTEC Foundation Board of Trustees, in the Standing Committee and in its strategies. FCC has participated in the Strategy Committee and in the current reorganisation now taking place in PTEC.

These organisations share the goal of shaping the important role of industry as a driving force for research, development and technological innovation in the area of construction.

In December 2011, a cooperation agreement was signed between FCC Construcción and the Railway Infrastructure Administrator (ADIF) for the development of research, technological development and innovation. Subsequently, a FCC CO office was installed in ADIF's Railway Technology Centre located in the Andalucia Technological Park in Malaga.

Work continues on projects where the interest of public administrations has materialised. It must be noted that the SR (Sustainable Rehabilitation) works in collaboration with the following public administration bodies: the Malaga Municipal Housing Institute and that of the Córdoba City Council (Córdoba Municipal Housing - VIMCORSA), allowing both organisations to use buildings for the theoretical study of the project. In 2012 activities began on two prototypes, a single family home and a high-rise building.

The IISIS Project (Integrated Research on Sustainable Islands, the INNPRONTA 2011 tender) is currently underway. FCC Construcción and different Company organisations are participating: FCC S.A. (FCC Medio Ambiente and FCC Energía), AQUALIA and Cementos Portland Valderrivas. FCC Group has two-thirds of the project budget.

Collaboration continues with Cementos Portland Valderrivas on the implementation of R+D+i projects, on the preparation of new R+D+i proposals and on the Project Certification Process together with Cementos Portland Valderrivas and FCC Ámbito. Work is also being done with FCC Servicios Industriales y Energéticos on drafting proposals in the areas of railways and ICTs and on other topics with Matinsa and PROSER.

There is active involvement in the Smart Cities Working Group along with FCC Servicios Industriales y Energéticos (FCC SIE), Matinsa, PROSER and FCC Construcción-Concesiones.

Regarding R+D+i, during 2012 we finished projects started in previous years, such as the "Depósitos" project, the design of a storage system for modified bitumen from disused tyres for plants making hot mix asphalt; Bridge damage: low cost dynamic tests for the maintenance of bridges subject to uncontrolled environmental loads, using wireless sensors; Explosives: research on the conditions for the design and construction of parking structures for transport terminals under the risk of terrorist attack. The following projects have been continued: CEMESFERAS, research and development of vitreous spherical micro particles with cementing properties with Cementos Portland Valderrivas; RS, sustainable rehabilitation of buildings; VITRASO, diagnosis and prediction of noise transmission paths in buildings; ECORASA, comprehensive use of waste from construction and demolition as backfilling material for sewer ditches; NANOMICRO, nanomicrocements and their application in concrete wind towers; NEWCRETE, concrete with a high percentage of recycled aggregates for structural applications; IISIS, integrated research on sustainable islands, in collaboration with several FCC Group companies; PRECOIL, new collective smart prevention systems in dynamic linear infrastructure environments; SPIA, based on new highly visible signal display systems and an independent personal lighting system.

Work is also being done on three European projects: CETIEB, monitoring of air in retrofitted buildings for energy efficiency, the initial meeting was organised in Madrid by FCC Construcción; BUILDSMART, energy efficient solutions ready for the market; and SMARTBLIND, the objective of the project is to develop an active film for smart windows using an inkjet method. Application to a building envelope component: autonomous smart device, etc.

New projects were launched nationally in 2012 such as MERLIN, to develop better local infrastructure rehabilitation; SEA MIRENP, ecoefficient by-products suitable for the market through the integration of recycled materials in port environments; CEMESMER, new generation cements intended for the stabilisation and solidification of mercury in water, soil and industrial waste; APANTALLA, to develop new nanostructured materials with improved properties for shielding against electromagnetic radiation; SETH, a

CONSTRUCTION

comprehensive structural monitoring system for buildings based on holistic technologies; and BOVETRANS, to develop a system of light transition vaults in road tunnels that will take advantage of sunlight.

In addition, the certification process for the R+D+i processes carried out in the works was continued.

BBR PTE

Throughout 2012, our post-stressing and special techniques company BBR PTE continued its efforts to develop and implement the following construction elements and processes:

1- BBR HiAm CONA cables. The installation of the cables on the bridge over the River Danube in Bulgaria and on the Viaduct over the River Corgo in Portugal completed in 2012. These bridges had cutting-edge cables installed that had been developed in accordance with the most demanding international recommendations.

2- Bridge thrust system using heavy lifting jacks. BBR PTE has launched two metal structures for the construction of two viaducts that form part of the Eix Transversal highway: Sot del Pla de Perer (176 m long with a 2.49% gradient) and Sot de L'Ullastre (220 m long with a 3.20% gradient). Each viaduct has been launched in two stages to the middle of the main span: one launch with an upward pitch and another with a downward pitch. Once the two launches had been executed, the structures were welded into one single structure. The maximum weight for the launch was 600 tonnes. Altogether, BBR PTE has carried out four launches to build the two viaducts, using four 850 kN Heavy Lifting jacks. The pile support system was done using Teflon-coated temporary supports and transverse guiding done with a roller jack system. All the thrusts were performed using pulling and retaining jacks.

3- System for replacing pre-cast segments in bridges. BBR PTE has collaborated in the construction of the Romeral viaduct on the Taramay-Lobres section of the A7, which was built with self-supporting formwork and pre-cast concrete segments using the progressive cantilever method. The 570 metres long has seven spans: 55 m + 5 x 92 m + 55 m. Equipment with a hoisting capacity of 4 x 1700 tonnes was used for lifting movements, lowering, cant changes, gradient change and turns with pinpoint accuracy. This machine has load cells which record the load at all times on the supports, as well as displacement sensors. The control equipment is governed by a PLC from a touchscreen and has overload alarm and timing alarms.

MANAGEMENT SYSTEMS

In FCC Construcción's international expansion phase, its Management and Sustainability System has been adapted in order to be able to reliably guarantee its implementation in all business areas. Thus, processes, procedures, IT applications, formats and records are gradually being updated to meet these new needs arising as the result of international projects. Our priority continues to be ensure customer satisfaction beyond their expectations with the commitment to fulfilling our characteristic quality assurance requirements.

Part of our commitment to customers is within Information Security. FCC Construcción, the only nationally operating Spanish construction company that is certified by AENOR for the ISO 27001 Information Security Management System, and continues to introduce new indicators to measure the suitability of the countermeasures established from the point of view of security. The aim of this is to keep any possible threats to our information assets under control, and to protect our clients' assets.

CONSTRUCTION

Hotel Porta Fira (Barcelona)

Risk management

Promoted by senior management, the management of risks and opportunities was systematically consolidated this year at FCC Construcción. The adoption of procedures based on risk management makes it possible to identify opportunities that are not visible a priori, and threats should be transformed into opportunities, and possible full or partial losses should be avoided, thus strengthening our business strategy and differentiating ourselves from competitors.

Based on a reliable and internationally recognised methodology, the detection and assessment of risks, and their subsequent control, are an ongoing review process, applicable to all phases of each project. In terms of winning contracts, it facilitates entry into new markets with very demanding customers, and thus reinforces the objective of the company in its international development, as it is firmly committed to a global future.

Environment

FCC Construcción considers that, within a culture of responsibility, the achievements attained and the processes developed must form a standard of behaviour and some of the cultural heritage in the construction sector worldwide, and so it participates and leads many national technical committees (it is chair of the AEN/CTN 198/SC2 "Sustainability in infrastructure"), and international committees, such as the CEN-TC 165 Wastewater Engineering, the CEN/TC 350 "Sustainability of construction works", the ISO/TC 59/SC 17 "Building construction/ sustainability in building construction", where it leads the Committee on Sustainability in Civil Works (WG5), and ISO/TC 207 "Environmental Management", among others. In addition, it has an active presence in the Technical Associations that are most relevant to its business (Scientific/Technical Association of Structural Concrete, Technical Association of Ports and Coasts-PIANC, Committees on Large Dams, chairing the Technical Committee, "Engineering Activities in Planning" for SPANCOLD and being the Spanish representative at ICOLD internationally, etc.).

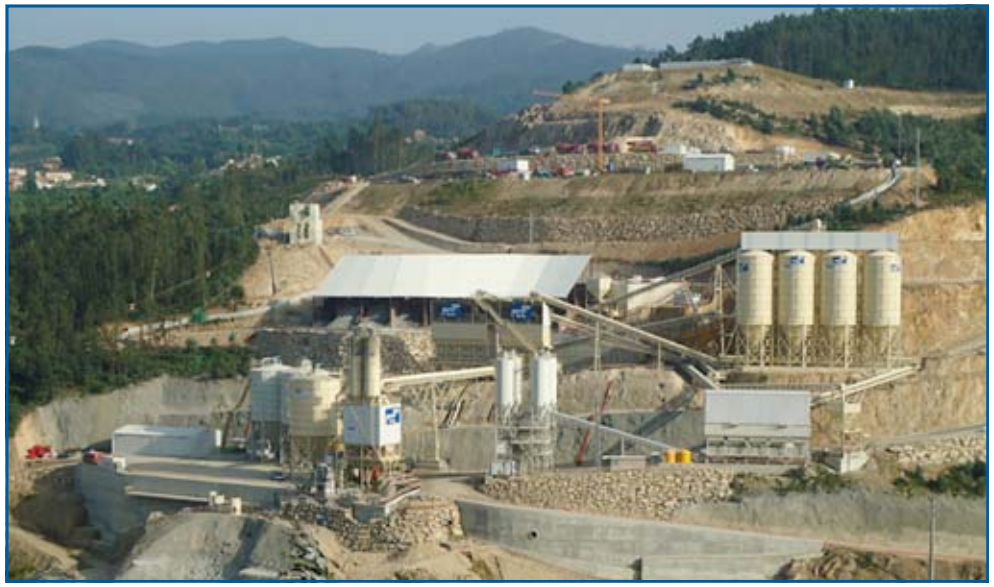
Anticipating future challenges and being aware that the knowledge and assessment of the current state of our organisation with regard to its carbon footprint, is the first step to making the right and environmentally-friendly decisions. Since 2010 FCC Construcción has been developing a greenhouse gas measurement protocol in accordance with ISO 14064 internationally consolidated guidelines, the GHG Protocol and CO2 measurement protocol in construction. Computer applications for management and planning have been adapted to record and quantify the activity data of each emission source identified, to integrate the data, and create reports with the emissions inventory which can be verified by an accredited greenhouse gas entity.

CONSTRUCTION

MACHINERY. PROJECTS AND UNIQUE WORKS

Hydraulic works

Machines and facilities at hydraulic works.



Concrete production plant. Ribeiradio-Hermida dam. Portugal

A need to cool the concrete has been identified for the Ribeiradio and Ermida (Portugal) hydroelectric plant. To do this, FCC has provided a 60 tonne/day ice chip manufacturing plant with a 70 tonne storage silo at the Ribeiradio Dam to supply the main concrete plant (of 250 m3/h) at the site in order to be able to lay the concrete at a temperature under 20°C.

In turn, slope trimming and coating work for the second phase of the Lower Payuelos Canal (León) has begun. FCC has provided Heicons canal equipment, consisting of a face cutter, lining machine and an auxiliary working bridge for curing the concrete. The works require lining over 24 km of canal and this is being done in two campaigns. This equipment's production system is not comparable to other conventional, excavation and lining equipment. It is also very precise, which optimises the amount of concrete needed to execute the canal.

Maritime works

Machinery for maritime works

For the construction work to enlarge the Santa Catalina cruise ship wharf in the Port of Las Palmas, the Mar de Teide floating dock was used to execute seven concrete caissons, five are 31.90 m long, 8.25 m wide and 13.50 m high, and two are 22.40 m long, 10.60 m wide and 12.50 m high. The total volume of concrete used in the caissons was 5,784 m3.

Mar del Teide floating dyke

Mar de Enol floating dyke. New Container Terminal in Cádiz

In order to improve security in the Port of Cadiz as well as its image for passengers, as part of the commitment for Cadiz to be a Cruise Base Port, Phase I of Cadiz's New Container Terminal Project was carried out. These works included dredging, demolition of existing coastal defence works, pouring of fill and execution of caissons. Demolition of part of the defence works was carried out from the Mar del Enol floating dock, on which a heavy duty crane was installed to remove the material of the defence works. The caissons were made using the Mar del Aneto floating dock, twelve units 45.30 m long, 19.35 m wide and 20.50 high, one 42.75 m long, 19.35 m wide and 20.50 long, and one 44.65 m long, 19.35 m wide and 20.50 m high were made, using a total volume of 50,411 m3 of concrete.

Viaducts and unique structures

Viaduct construction machinery

After executing the access ways for the Danube Viaduct using launching formwork for the segments, 646 m of the lateral cantilevers for the deck were executed using cantilever trolleys: a main trolley that executed an asymmetrical lateral cantilever (6.35/7.40 m long) in 8.6 m sections (sections varied between 4.3 and 9.1 m) and a second set of auxiliary trolleys (with the same section length as the cantilever trolley) that, in turn, asymmetrically increased the width of the deck by a further 2.99/3.71 m until reaching the final deck width (31.35 m).

The El Romeral Viaduct is part of the A-7 Mediterranean Motorway construction project, on the section Almuñécar-Salobreña and the connection to the A-44. This 573 m long and 10.9 m wide (without lateral cantilevers) viaduct with 92 m spans was executed using precast

Corgo Viaduct, Portugal

CONSTRUCTION

segments and PN 45.90/100 launching formwork for the segments. The segments were precast on site using matchcast segments. Six pile heads and 261 span segments were cast.

The new bridge over the River Duero, included as part of the works for the new access to Zamora, was executed using successive cantilevers with two pairs of travelling trolleys (WITO trolleys) for concreting in situ. The length of roadway executed with the trolleys is 267 m. The trolleys were assembled in the following order: an initial pair at pile 3 (piles are "zero" segments approximately 12 m long) that form the first T; a second pair at pile 4 that forms the second T, and a third and fourth located at piles 2 and 5 with separate trolleys from the pile 3 trolleys, forming two half-Ts. The typical sections executed were approximately 4.8 m long and the entire deck was 14.40 m wide.

The Do Corgo Viaduct, in Vila Real (Portugal) is part of the A4/ IP4 Motorway. To build it, the NRS LG 75/70 overhead formwork was adapted, designed for launching segments, to work as an MSS (movable scaffolding system, a self-advancing formwork for concreting spans in situ) for spans of 60 m. This viaduct's most technically difficult access way was built using formwork due to the curve of the structure. Altogether, sixteen spans were completed for a deck that is 918 m long and 15.3 m wide.

Underground works

Machinery for underground works.

In Spain, the tunnels in Sorbas (made with a double-shield TBM together with drilling and blasting methods) for the Mediterranean Corridor of the AVE high speed railway where it crosses through Almeria were successfully finished.

In addition, the construction work on the AVE high-speed railway to Galicia has begun where it goes through Orense. Two tunnel openings have been executed, although excavation using with TBMs is not expected to begin until the summer of 2013.

Excavation works have finished on the Vacariza-Rialiño section of the high-speed railway tunnels between La Coruña and Vigo, the Vic-Caldés transversal arterial road in Girona, the high-speed railway tunnels between Bergara and Antzuola in the Basque Country, and the tunnel in Taramay on the Almuñecar-Salobreña section corresponding to the link road from the A-7 highway to the A-44 in Granada.

Some of the most significant international projects implemented in 2012 include the tunnels executed with an EPB TBM for Line 1 of the Panama Subway and the extension of the Subway in Toronto, Canada. FCC teams equipment are working on the excavation of the galleries between tunnels and a section of conventional tunnel as part of the construction work to extend the Toronto Subway.

Toronto Subway, Canada

Road and concrete works

Machinery for manufacturing and spreading soil-cement and asphalt agglomerate

The work for manufacturing and spreading the soil-cement for the VA-30 Highway (the Valladolid eastern ring road), for the section between the Duero Highway (VA-11) and the Castilla Highway (A-62), which is 13.04 km long, has been completed. Altogether, 64,118 tonnes were manufactured and spread.

The work for manufacturing and spreading the soil-cement and asphalt agglomerate for the SE-40 Highway in Alcalá de Guadaira (Seville), for the section between the A-92 junction (Málaga Road) and the junction with the A-376 (Utrera Road) has finished. A total of 17,653 tonnes of soil-cement and 54,163 of agglomerate have been manufactured and spread. This work had the particular feature of having to spread the material on four, 3.5 m wide lanes, a 2.5 m outer shoulder and a 1 m inner shoulder (amounting to a total width of 17.5 m), in one of the sections. This was done using three pavers working side-by-side. In addition, to spread the asphalt agglomerate, two mobile agglomerate-transfer silos for spreaders (one from FCC Construcción and the other from Servià Cantó) were used to supply the three above-mentioned spreaders.

Among the most significant international works being executed in 2012, the work begun in 2011 on the execution and extension of the A4/IP4 Motorway (Portugal) has continued. Altogether 205,955 and 202,496 tonnes, respectively, have been manufactured and spread in two plants set up in Mirandela and Bragança.

In Romania, the works begun in 2011 on the manufacture and spreading of asphalt on the Constanta By-Pass (166,649 t) and on the 6R10 Dej-Baiamare (191,793 t) have continued.

In Mexico, the work on manufacturing and spreading asphalt on the Ávila Camacho – Tihuatlán Road have finished (147,097 t).

Machinery for spreading and compacting hydraulic concrete.

The works to lay the flooring of the west tunnel of the "Impermeabilización Túneles de Pajares Norte" (Batch 4) Joint Venture (UTE), from KP 24+941 to KP 34+037 (9,096 lm) (6,366 m³ of concrete) and the works for Batch 1, from KP 19+520 to KP 20 097 (144.25 lm) (616 m³ of concrete), in the same tunnel, have begun. To perform this work, it has been necessary to acquire a new set of four swivel adapters and four new crawler tracks for the WirtgenSP-500 slipform paver. The machine has moved through the segments already laid in the tunnel at an angle of 45°, thanks to changes made in the swivel adapters and the crawler tracks, when the manufacturer only guaranteed a maximum inclination of 35º. It was also necessary to build a special formwork so that the tunnel floor could have the correct geometry.

Road works

CONSTRUCTION

CONSTRUCTION WORK SUPPORT O SITE SUPPORT

Technical support is still given to many of the construction activities, especially to International construction projects, and a specific support office based in Panama has been created for the Americas.

Among the most important construction works in which the Company has contributed are:

The Vidin Bridge on the Danube between Bulgaria and Romania

The construction of the cable-stayed bridge over the navigable channel of the Danube has finished. In this section, the cable-stayed bridge consists of three 180 m long extradosed spans, and this is the first time that FCC Construcción has used the pre-cast concrete section construction technique for this type of bridge.

The bridge will improve road and rail traffic between Bulgaria and Romania through the Pan-European Transport Corridor IV, which will connect Istanbul to Central Europe.

Vidin-Calafat Bridge (Bulgaria-Romania)

Viaduct over the River Almonte on the Madrid-Caceres-Lisbon high-speed railway line

The construction of the River Almonte viaduct over the Alcántara reservoir continues. This viaduct, which is 996 m long, crosses over the Alcántara reservoir on a 384m concrete arch on which the viaduct is being built. Once it is finished, it will be the concrete arch bridge for trains with the longest span in the world.

The construction is being done using cable-stayed advancing cantilever construction with temporary braces. This cantilever will have twice the span of any other built in Spain using this procedure.

The viaduct design is unique as the springing sections of the bridge are made up of two piers spaced 16 m apart, which increases the complexity of construction.

Romeral Viaduct on the A-7 motorway in Salobreña

The construction of the Romeral viaduct, which is 568 m long and has a deck width of 30 m, on the Almuñecar-Salobreña section of the A-7 has been completed. It was built using pre-cast concrete sections with advancing cantilever construction and 92 m spans. This is a new record for this construction system used by FCC.

The viaduct is located in an area of strong seismic activity and therefore a buffer system using high neoprene bearing pads to reduce the seismic forces has been designed.

Hospital Complex in Panama

The construction of a hospital complex in Panama City has begun. It is located on a 31.9 hectare plot located on the west side of the city, between the Via Centenario and the Northern Corridor.

The complex is made up of 17 buildings with a total built area of 219,465 m2 of which there are 29,930 m2 for parking and 9,768 m2 for facilities and the industrial building.

The foundation planned has concrete footings, a structure made up of pillars and reinforced concrete walls, and pre-stressed concrete slabs. The façade will be made of concrete blocks covered with mortar and finished with latex paint, except the industrial building, which will have a Deployé metal coating, and the buildings for paediatric and outpatient consultation rooms and the surgical unit, which will have pre-cast concrete

slats. They will have non-trafficable flat roofs with self-protected sheeting. The interior partitions will be made of concrete block.

The hospital will be equipped with 49 operating rooms and 1,709 beds.

The installations planned are standard for these types of buildings: plumbing and sewerage, solar thermal energy, electricity, hearing and cooling, steam, ventilation, pneumatic transport of samples and documents, medical gases, fire protection, telecommunications and security.

The work will be completed with a complete urban development of the plot.

Gerald Desmond Bridge in Los Angeles

The work to replace the current Gerald Desmond Bridge, built in 1968 over the Back Channel of the Port of Long Beach, has begun.

Cable-stayed bridge: this has a main span that is 305 m long and located 62 m over the Back Channel, and two 153 m balancing spans. The bridge is designed with two towers consisting of 157 m high vertical masts. From each mast emerge two sets of ten cables on each side that go from its head to the edge of the deck. Each tower will have a foundation of 12, 2.5 m diameter piles. The deck has a roadway width of 46 m and consists of longitudinal metal girders at its ends that support transverse metal girders. The horizontal connection between the cable-stayed bridge and the access viaducts has been designed with buffers that reduce seismic effects. A pre-cast reinforced concrete slab will be placed on this metal structure.

Access viaducts: the access viaduct from the west is 950 m long; the eastern viaduct is 925 m long and they consist of spans of between 40 and 70 m with sections made of different types of box girders. Most of the spans will be built with self-supporting formwork (MSS) and the remaining spans with tube structure formwork to the ground.

Junctions: west of the bridge is the horseshoe-shaped "Terminal Island East" interchange, which connected Ocean Boulevard to the port's pier. This has been replaced by an underpass and an at-grade interchange. To the east, the interchange that connects Ocean Boulevard to Highway 710, Pico Avenue and piers E and D will be remodelled.

Panama Metro

Line 1 of the Panama Metro is being built, which initially includes 12 stations and one planned for the future.

The route covers 13.7 km, of which about 8 km run underground and 6 km above street-level on a viaduct.

The underground route will be done with two EPB TBMs.

There are 7 underground stations planned for the construction project. The stations will be built with reinforced concrete retaining walls using hydromills with support from a clamshell. As a reference, we can mention retaining walls around 25 m high and 1 m thick. The water table, in general, is high.

The overhead section will be built using an above-street-level viaduct constructed using pre-cast girders.

CEMENT

CEMENT

91 THE CEMENT INDUSTRY

92 GROUP PERFORMANCE

94 INVESTMENT IN PRODUCTION FACILITIES

94 ENVIRONMENT AND SUSTAINABILITY, ENERGY AND MATERIAL RECOVERY, R&D AND INNOVATION, AND KNOWLEDGE MANAGEMENT

97 HUMAN RESOURCES, WORKPLACE HEALTH AND SAFETY, AND INFORMATION SYSTEMS

98 SHARE PERFORMANCE

99 RESULTS

CEMENTOS PORTLAND VALDERRIVAS

Cementos Portland Valderrivas, S.A.

Fomento de Construcciones y Contratas owned 69.79% of Cementos Portland Valderrivas, S.A. at 2012 year-end.

THE CEMENT INDUSTRY

Spain

According to data from the Spanish Cement Association (Oficemen), cement consumption in Spain amounted to 13.5 million tonnes in 2012, i.e. a decline of 34% (6.9 million tonnes) compared with 2011. The ongoing decline in demand started five years ago at the end of 2007, when the crisis in Spain and the industry commenced. In five years, apparent consumption in Spain has fallen by 75.9%, i.e. 42.5 million tonnes, with respect to the record high of 2007.

Spain imported only 500,000 tonnes of cement and clinker in 2012, i.e. half of the amount imported in 2011. That figure represents a reduction of 96.2%, or 13.4 million tonnes, compared with 2007.

In view of this situation, Spanish manufacturers have continued to expand their presence in international markets with a view to partially offsetting the lack of domestic demand. As a result, exports of cement and clinker have expanded by 444.5% in the last five years, from 1.1 million tonnes in 2007 to 5.9 million tonnes in 2012 (i.e. 49.7%, or 2 million tonnes, more than in 2011).

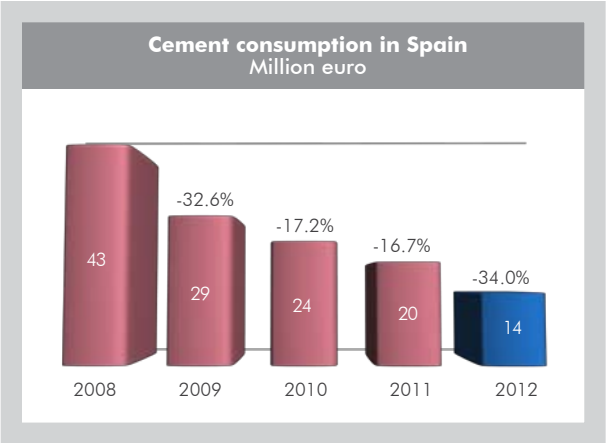
According to the US Geological Survey, an agency of the Department of the Interior, cement consumption in the US amounted to 79.1 million tonnes in 2012, i.e. a year-on-year increase of 7.8%, reflecting a change in the trend in demand, which declined from 2006 to 2010. US demand picked up slightly in 2011, by 3.1%, when consumption amounted to 73.4 million tonnes.

US, Tunisia and UK

Cement and clinker imports increased by 8.3%, from 6.4 million tonnes in 2011 to 6.9 million in 2012; exports expanded by 27.7% to 1.8 million tonnes, compared form 1.4 million the previous year.

In Tunisia, cement consumption amounted to 7.5 million tonnes in 2012, compared with 6.6 million tonnes in 2011 (+12.3%), according to the National Chamber for Cement Producers in Tunisia.

Cement and clinker imports totalled 110,000 tonnes in 2012, compared with 58,000 tonnes in 2011. Exports fell by just 5.0%, from 266,000 tonnes in 2011 to 253,000 tonnes in 2012.



CEMENT

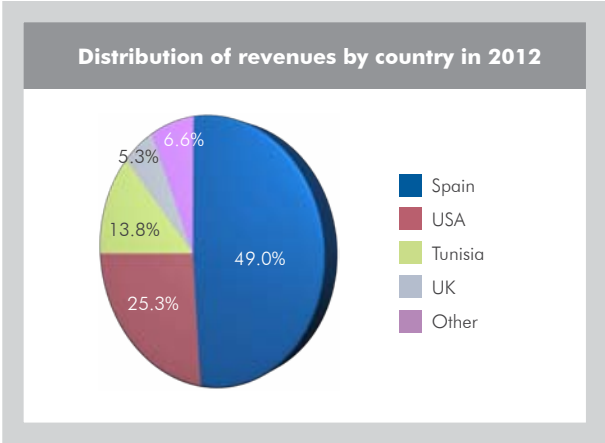
Cement consumption in the UK declined by close to 7% year-on-year in 2012, to slightly below the 2010 level; this decline is attributable to the completion of infrastructure construction for the London 2012 Olympic Games and to the delay in recovery of the UK economy.

GROUP PERFORMANCE

Cement

Sales of Cementos Portland Valderrivas cement and clinker in 2012 were once again affected by the negative performance of the construction and cement and cement derivatives industry in Spain. Sales totalled 8,130,734 tonnes, representing a year-on-year decline of 7.3%, i.e. 636,299 tonnes.

In Spain, Group sales fell by 19.8% year-on-year in 2012, to 4,555,165 tonnes, of which 3,170,182 tonnes were domestic sales and 1,384,983 were exports (30.4% of the total), the latter partially offsetting the decline in domestic demand.



The following plants in Spain were operational in the zones where the Group is active: Madrid (El Alto), Sevilla (Alcalá de Guadaíra), Palencia (Hontoria), and Navarra (Olazagutía), which belong to Cementos Portland Valderrivas, S.A.; Barcelona (Monjos and Vallcarca), owned by Corporación Uniland, S.A.; Cantabria (Mataporquera), owned by Cementos Alfa, S.A.; and Bilbao (Lemona), owned by Cementos Lemona, S.A.

Spain accounted for 56% of Group sales in 2012. Tunisia, where 1,790,442 tonnes were sold (up 33.3% compared with 2011), accounted for 22%, the US (1,486,172 tonnes, up 9.6% compared with 2011) for 18.3%, and the UK for 3.7% of total sales.

That production came from the Enfidha plant in Tunisia and the Maine (Thomaston), Pennsylvania (Bath), and South Carolina (Harleyville) plants in the US.

Readymix concrete

Cementos Portland Valderrivas Group sold a total of 2,129,357 cubic metres of readymix concrete in 2012, a decline of 37.1% year-on-year. Readymix concrete and dry mortar are the Group areas most affected by the crisis in the industry.

Of total Group sales of concrete, 1,916,571 cubic metres were sold in Spain, compared with 3,167,939 cubic metres in 2011, representing a decline of 39.5% year-on-year. Spain accounted for 90% of the total, where 86 of the Group's 100 ready mix concrete plants are located.

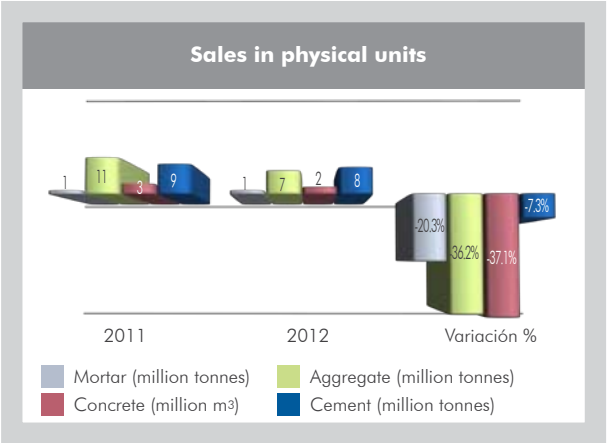
Sales in Tunisia increased by 4.7% year-on-year, to 159,927 cubic metres, although that country accounted for just 7.5% of total concrete sales. Sales in the US fell by 16.3% in 2012, to 52,859 cubic metres.

The Group currently has 86 operational readymix concrete plants in Spain, 10 in the US, and 4 in Tunisia, i.e. 100 facilities in total.

Aggregate

Group sales of aggregate totalled 6,886,103 tonnes in 2012, compared with 10,797,558 tonnes in 2011, i.e. a decline of 36.2% (3,911,455 tonnes in absolute terms).

The Group's aggregate business has the same footprint as the readymix business, i.e. the aforementioned 11 regions of Spain.



Of the total, 6,687,052 tonnes were sold in Spain in 2012, a decline of 36.6% with respect to 2011 (10,541,673 tonnes). In the US, sales totalled 199,051 tonnes, i.e. 22.2% less than in 2011.

The Group currently has 37 aggregate extraction and processing plants: 34 in Spain, 2 in the US and 1 in Tunisia.

Dry mortar

Group sales of dry mortar totalled 664,087 tonnes in 2012, down 20.3% with respect to 2011 (833,528 tonnes).

Sales in Spain accounted for practically all of that amount: 656,993 tonnes, a year-on-year decrease of 20.7%. Sales in the UK reached 7,094 tonnes in 2012, twice the 2011 figure.

The Group has 18 dry mortar plants, all of them in Spain.

CEMENT

Transportation

The Group's transportation activity, undertaken through companies Atracemsa and Natrasa, was also affected by the crisis, declining from 1,172,663 tonnes in 2011 to 944,980 tonnes in 2012, i.e. a decline of 19.4%.

Atracemsa transported 73.3% of the total, i.e. 683,312 tonnes, a reduction of 18.7% with respect to 2011 (840,658 tonnes). Natrasa transported 27.7% of the total, i.e. 261,668 tonnes, 21.2% less than 2011 (332,005 tonnes).

INVESTMENT IN PRODUCTION FACILITIES

Investments in property, plant and equipment in 2012 amounted to 14.4 million euro and were limited to the costs that were strictly necessary for maintaining strategic assets, such as large spares, and aspects related to the environment and safety. In line with systems standardisation plan in place at the Group's various companies, it continued to advance in implementing SAP in the east and northern zones (Uniland and Mataporquera).

The use of alternative fuels remains a Group priority. In 2012, the company continued to execute projects for which capital expenditure had been approved in previous years, including the facility for receiving and dispensing precharred alternative fuels at the El Alto plant, in Morata de Tajuña (Madrid), on which construction commenced in February and was completed in December.

The Group's plants in Spain had a thermal substitution rate of 4.5% in 2009; however, as a result of capital expenditure, seven of its plants are now suitably equipped for this purpose, and the average rate was 20% in 2012. This rate is especially noteworthy since it was achieved in an adverse situation.

The use of waste for energy will remain a priority in the coming years, the final goal being for alternative fuels to play a large role in reducing costs and, therefore, in increasing EBITDA.

Challenges for the years ahead include completing adaptation of the Monjos facility to use alternative fuels, the hangar for storing refuse-derived fuels, and building main burner and tower facilities in Olazagutía and Alcalá.

ENVIRONMENT AND SUSTAINABILITY, ENERGY AND MATERIAL RECOVERY, R&D AND INNOVATION, AND KNOWLEDGE MANAGEMENT

In 2012, the company maintained its ISO 14001 certifications at all facilities in the cement, concrete, aggregate and mortar activities. The eight Spanish cement plants apply the EU Eco-Management and Audit Scheme (EMAS), and environmental information is available on the Group website.

In 2012, CPV joined forces with the FCC Group to develop the "Strategy to Fight Climate Change", through which the companies aim to position themselves as providers of

solutions to mitigate and adapt to climate change, by providing low carbon services in order to transition to a society that is better adapted to the new conditions and decrease vulnerability to the impacts of climate change.

The energy-from-waste (EfW) policy in place at 6 plants in Spain was extended in 2012 to include the Alcalá de Gaudaíra plant, which now uses biomass. In total, nine of the twelve plants use EfW technology; only Enfidha (Tunisia), Thomaston (USA) and Olazagutía (Spain) are not yet fitted to burn waste.

The results in 2012 were satisfactory: the alternative fuel usage rate increased by 7 percentage points compared with 2011, giving a thermal substitution rate of 20.2% in Spain. This increase is due in particular to raising the substitution rate at the Hontoria, Lemona, Mataporquera and Vallcarca plants, and notable progress at the Monjos and El Alto plants, where the rate reached 24.3% and 12.9%, respectively.

This was achieved by adapting the facilities to alternative fuels and modifying the related administrative permits (Integrated Environmental Authorisation).

As a result of this process, the Group received approval by the Navarra regional government for the supra-municipal project entitled "Use of alternative fuels in the Olazagutía cement plant", providing planning and environmental approval for the facilities needed to receive, store and dispense non-hazardous waste at the plant.

This notable progress in energy recovery from biomass waste has reduced CO2 emissions by 180,000 tonnes, and allowed the company to save over 5.5 million euro in comparison with the cost of burning coke alone.

The drive for sustainability is also supported by reuse of materials, since waste materials are used in drymix formulation. The replacement rate, expressed in tonnes of alternative raw materials per tonne of clinker, reached 4.8%, representing savings of 1.6 million euro for the Group.

Cementos Portland Valderrivas Group advanced notably in 2012 towards becoming a leader in innovation in comparison with its direct competitors. After strengthening its commitment to R&D and innovation in 2011, the Group began to see results in 2012, with five new research projects approved, greater involvement by staff in all of the projects under way, the development of three new products for well-defined niche markets, which are already in use in several applications in Spain, and a successful first international experience, in Poland, which underlined the major advantages of new products already available for sale.

The company is convinced that it is on the right track and that the ongoing changes in corporate culture will be successful. To this end, the company rolled out the 2012-2015 Master Plan for Innovation. More than 100 people throughout the organisation have been involved since 2011 in the first phase of the project, "Driving Innovation" (23 projects structured in 6 lines of work). The second phase was implemented in 2012, deepening the work under way and producing over 60 deliverables. That phase culminated with the roll out of two pilot projects: open innovation, which seeks to raise awareness about the Group among key opinion leaders, the goal being to open new market niches; and to enhance international marketing and sale of technology.

The third phase of the project, to be implemented in 2013, calls for gradual implementation of the Master Plan, in which actions related to innovation and human resources (organisation, resources, professional profiles and innovativeness) play a key role.

The various phases of the innovation process advanced in 2012, with the following notable experiences:

- Research projects: Five of the seventeen projects under way were approved in 2012 (MAVIT, CEMESMER, HORMALVID, MERLÍN and BALLAST), three of which are headed by Valderrivas, one by Uniland Cementera and the other by an external partner company. These projects have applied for government aid: the first was for funding under INNTERCONECTA, in Andalusia, and the other four under INNPACTO 2012, supported by the Spanish Centre for the Development of Industrial Technology (CDTI) and the Ministry of Economy and Competitiveness.

The new projects had a budget of more than 5.0 million euro and received subsidies amounting to almost 3.5 million euro through a combination of non-refundable aid and soft loans. These newly-approved projects involve close 70 of the more than 150 employees in this area.

CEMENT

Since 2010, the Group has obtained subsidies amounting to almost 14.0 million euro for the next three years, of which 18% are non-refundable. Including total tax deductions for R&D and innovation and aid received for other innovative investment projects executed in the plants, the total obtained in the last two years is 24.0 million euro.

New product development focuses on the following main objectives: reducing greenhouse gas emissions, improving energy efficiency, sparing natural resources, soil decontamination and stabilisation, and improving living standards. These are also in line with the Group's commitment to sustainable development through a focus on its triple bottom line: economic, social and environmental.

To this end, the Group has two world-class laboratories and a mobile lab to provide on-site technical assistance for major projects.

In 2012, TP3 microcement, fast-setting concrete (resulting from a now completed research project) and CEM II/B-V 52.5 R ULTRAVAL were produced.

Moreover, various applications with the Ultraval cement family, developed previously, were studied with a view to identifying their advantages and continuing the optimisation process. They include:

- Gunite in the Vergara tunnel (FCC).
- Testing on various sections of the Galicia high-speed railway line with other construction companies (OHL, Acciona)
- Precast concrete production: railway ties (RAIL.ONE), wind power towers (INNEO)
- Testing of a concrete pouring on a runway at El Prat Airport (AENA).

- Domestic and international sales

With increasing knowledge about the competitive advantages of our products tested in pilot experiments, such as faster setting times, greater strength, and mechanical performance that develops very quickly and also in extreme weather conditions, the target opinion leaders and customers have been identified, opening up new market niches in specific situations which had not been considered previously.

The pilot innovation project played a key role, identifying major construction projects being planned worldwide and various groups of opinion leaders to contact in order to present the Group and its new products to them.

This strategy was sustained by parent company FCC, whose support made it possible to perform the aforementioned tests. Marketing is facilitated by the new products' excellent properties, which can create added value for customers, and their test performance. Another strong point was the personalised technical assistance provided throughout the construction projects, working directly with client engineers.

However, the biggest success of 2012 was the first experience marketing products in Poland, where Ultraval cement, used to produce concrete for wind turbine towers, provided exceptional performance in record time, enabling the construction company to complete the project far ahead of schedule and arousing considerable interest among manufacturers and users from several countries, who visited the site to see the results; there are evident business opportunities in this line.

- Sale of technology: the sale of technology is the ultimate goal of the R&D and innovation area, once all the preceding phases have been completed. This activity, which commenced in 2011 with the creation of technology packages comprising new products and the related market surveys, continued in 2012 with the development of action plans and sale dossiers, together with the strategy for marketing and selling the products and their technology.

Intellectual property is a key factor from the outset, and significant efforts are made to protect proprietary technology; five patent applications have been filed to date.

Participation in all the aforementioned initiatives provided significant indirect benefits, such as strengthening the Group's image, enabling it to internationalise, synergies established with a large number of opinion leaders and companies, technology centres, universities and government bodies, positioning the Cementos Portland Valderrivas Group as an industry leader in R&D + innovation in the development and application of cementitious materials.

HUMAN RESOURCES, WORKPLACE HEALTH AND SAFETY, AND INFORMATION SYSTEMS

As in previous years, the Group continued to adapt its organisation and human resources to the situation of the markets in which it operates. In 2012, it reduced the workforce by 627 employees (553 in Spain, 70 in the US, 2 in Tunisia and 2 in the UK), with the result that it ended the year with 2,479 employees.

During 2012, the Human Resources department worked with the other central departments and the business divisions to analyse headcounts and costs in order to draw up the New Val 2012 Business Plan, resulting in the production of the explanatory reports required to negotiate the lay-off plans in the cement, head office, aggregate, concrete, mortar and transport areas. The lay-off plans, which were executed on time and within budget, enabled the Group to restructure production capacity and adapt it to the ongoing market shrinkage.

As part of that process, the Group negotiated geographical and functional mobility as well as flexible work hours and days, which will enhance organisational efficiency and costs. The following agreements were reached in 2012 in the context of collective bargaining:

- Agreement with the Works Committee and Unions at the El Alto plant to amend the collective agreement, enabling the plant's costs to be adjusted to the production situation in 2012.
- Agreement with the Works Committee and Unions at the Olazagutía plant during negotiation of the collective agreement, enabling the plant's costs to be adjusted to the production situation. The agreement led to a 5% reduction in overall wage costs under the collective agreement in 2012. For the first time in the Group, wage revisions established in a collective agreement were made dependent on a factory attaining its sales targets and, more importantly, on attaining Group-wide targets defined by the Chairman: 200 million euro in EBITDA.

Negotiation of the collective agreement at the Hontoria plant concluded in April, providing a 7.9% reduction in overall wage costs over the three years covered by the agreement.

CEMENT

This agreement, like that reached in Olazagutía, ties pay rises to attainment of the factory's objectives and those of the Group. The agreement also provides that 80 hours per year may be worked in flexible time frames.

An agreement was reached with the workers' representatives in the concrete, mortar, aggregate and transport areas to freeze wages in 2012 at all the Group's workplaces in Spain in those business areas.

The headcount of all production plants in the US was reduced under the New Giant Plan, and a collective agreement was reached with the USW at the Harleyville plant. At the Keystone plant, part-time staff were included under the benefit plan for 2013 and all outstanding labour disputes were settled. Moreover, an agreement was negotiated with the union to outsource cleaning services until the requirements of the MSHA (Mine, Safety and Health Administration) are attained.

Despite the political instability in Tunisia, the factory continued to produce in 2012, although there are ongoing demands to hire subcontractors' staff directly and to improve wages and benefits.

SHARE PERFORMANCE

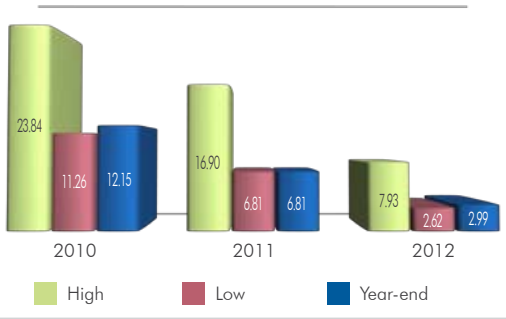
In 2012, the Madrid Stock Exchange General Index (IGBM) fluctuated between 896.33, its high point in the year, reached on 8 February, and 602.56, its low point, reached on 24 July. The index ended the year at 824.70.

The Basic Materials, Industry and Construction index, which includes Cementos Portland Valderrivas, performed similarly. That index peaked at 1,030.42 on 6 February, dipped to a low of 689.77 on 25 July, and ended the year at 910.28.

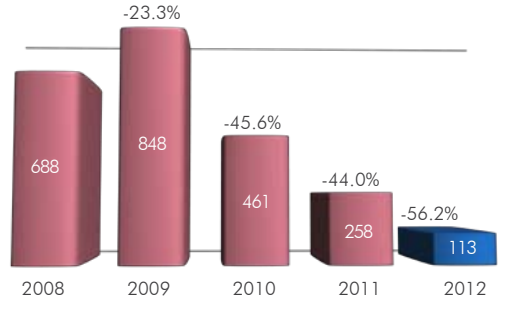
The company's shares were traded in all 255 sessions of the Electronic Market; a total of 4,165,060 shares changed hands, equivalent to 11% of the company's capital. Market capitalisation at 31 December amounted to 113.4 million euro.

The share price peaked at 7.93 euro on 2 February and reached its lowest point, 2.62 euro, on 5 December. The average share price in the year was 4.89 euro, and the share ended the year at 2.99 euro on 31 December.

Share price: high, low and year-end



Market capitalisation
Million euro



RESULTS

The Group's results in 2012 were affected by two fundamental factors: debt refinancing and the implementation of the New Val plan.

In July 2012, the Group's debt was refinanced to tailor the repayment schedule to the industry circumstances and prospects (four years, with the possibility of an extension to five years, for the debt associated with Spain, and six years for that relating to operations in the US).

The agreement comprises three parts: separate refinancing of the debt of Giant Cement Holding, Inc., collateralised by that company's assets; refinancing of the remaining bank debt; and a contribution of capital or subordinated debt amounting to 100 million euro before 31 December 2012, guaranteed by the Group's majority shareholder, to be used to pay down bank debt.

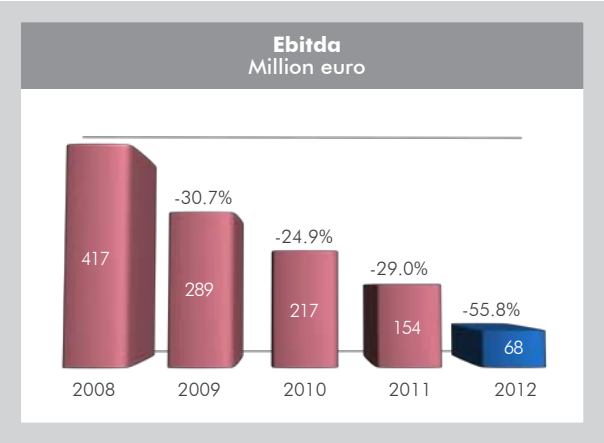
As a result of this transaction, the controlling shareholder, FCC, S.A., undertook to contribute 35 million euro during the year, with the possibility of expanding that amount to 100 million euro before 31 December, in the form of a capital increase for that amount; it also undertook to subscribe for any amount not taken up by the market.

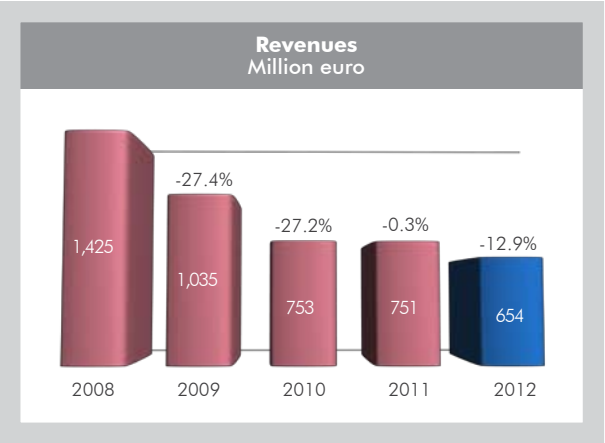
Stock market conditions in December made the equity issue inadvisable, and it was postponed. In the early days of January 2013, FCC, S.A. provided 65 million euro in the form of another subordinated loan, thereby fulfilling the commitment it had acquired under the finance agreement.

At 31 December 2012, the Group's net debt stood at 1,320 million euro. The variation of 35.4 million euro with respect to 2011 year-end includes 41 million euro in cash outflows for the workforce restructuring.

After Giant's debt was refinanced, this subsidiary was reclassified as a continuing operation (since July 2011, it had been classified as available for sale and, consequently, as a discontinued operation). As a result, the subsidiary was again consolidated in the income statement and the related line items were reclassified in the balance sheet. Accordingly, the results and cash flow generated in 2011 were restated for comparison with 2012.

The New Val Plan was also implemented. The Plan includes notably the agreements to downsize the Group's production capacity in line with the sharp decline in the market for cement and other construction materials in Spain.





CEMENT

The Cementos Portland Valderrivas Group's 2012 results were affected once again by the adverse trends in the Spanish construction and cement industry, although performance was more favourable in the US and Tunisia.

As a result of falling sales volumes and prices in 2012, revenues amounted to 653.7 million euro, a 12.9% decline with respect to 2011. As a result of growth in the US and Tunisia, the international area accounted for 51% of total revenues (333.6 million euro).

EBITDA fell by 54.7% to 69.8 million euro (from 154.1 million euro in 2011) as growth in other countries partly offset the decline in domestic demand.

Attributable losses amounted to 147.1 million euro in 2012, including 105.6 million euro in non-recurring items as detailed below:

- 46.9 million euro in non-recurring restructuring expenses in Spain.
- 30.7 million euro in asset writedowns.
- 13.3 million euro in depreciation at Giant corresponding to the second half of 2011, as a result of reclassifying this division as a continuing operation.
- 10.7 million euro due to cancellation of interest rate hedges after financing the debt.
- 4.0 million euro due to inventory adjustments in Spain and the US.

Capital expenditure, amounting to 14.4 million euro, was confined to new energy-from-waste facilities and the investments that were strictly necessary to keep the production plants operational.

Total Group assets amounted to 2,913.6 million euro, a decline of 11.6% year-on-year, due to the lower depreciation and the sale of non-strategic assets.

FCC ENERGÍA

FCC Energía has been boosting the Group's investments in electricity generation from renewable sources since 2008. Power generation from renewable sources is being consolidated worldwide, in spite of the fact that the current situation is not too favourable. Various organisations, such as the OECD, the IEA and the UN, believe that renewable technologies are helping to reduce greenhouse gas emissions. In Spain, electricity generation from renewable sources helps to reduce dependence on foreign energy and, thus, to improve the balance of payments. By generating electricity in this fashion, in 2012 FCC prevented the emission of 347,000 tonnes of CO2 and produced the electricity needed to supply 200,000 homes.

ENERGY

The energy produced by wind, solar thermal and photovoltaic power generation amounted to 903,288 MWh, an increase of 16%.

During 2012, the Spanish Government took decisions that impaired the value of the assets when it amended the payment proposed in the initial regulation and created a tax on electricity generation that cannot be recovered in its price.

Wind power activities

FCC Energía operates fourteen wind farms in Spain, with an installed capacity of 422 MW. In 2012, wind power production amounted to 851,300 MWh, a 14% increase compared to the previous year.

Photovoltaic activities

FCC Energía owns two 10 MW photovoltaic facilities in Cordoba. These facilities have been in operation and uploading energy to the grid since September 2008. In 2012, production was 34,237 MWh.

Solar thermal activities

The construction of a 50 MW solar thermal power generation plant in Guzman, Palma del Río (Córdoba) began in 2010. In 2011, FCC was joined by the Japanese company Mitsui, which acquired 30% of the project. The contract to build the plant ended in July 2012 and it has been connected to the grid and operating commercially since 1 August 2012.

FCC Energía acquired 67% of the company Enerstar Villena in June 2009. This company plans to build and operate a 50 MW capacity solar thermal power generation plant in the municipality of Villena (Alicante). FCC Energía acquired the remaining 33% in 2011.

The permits required to begin work on the site were obtained in August 2011, and by the end of the year the earthworks needed to begin construction of the facility had been completed. This facility is expected to be uploading power to the grid by December 2013.

Potential for developing wind energy

In 2010, FCC Energía was awarded the contract for wind power capacity in the regions of Galicia and Cataluña.

Galicia

The contract for 48 MW was awarded for the municipalities of Laracha and Pico Cedeira to the company Sigenera, S.L., in which FCC Energía has a 50% interest. The other group with holdings in this company is Inveravante, which owns the other 50%. This facility will consist of 16 wind turbines, each capable of generating 3 MW. In 2011 the project preparation started and applications for permits and authorisations were submitted, and the development of the agreed industrial plan has begun.

Preparation of the project designs continued throughout 2012 pending further decisions by the Galicia Regional Government.

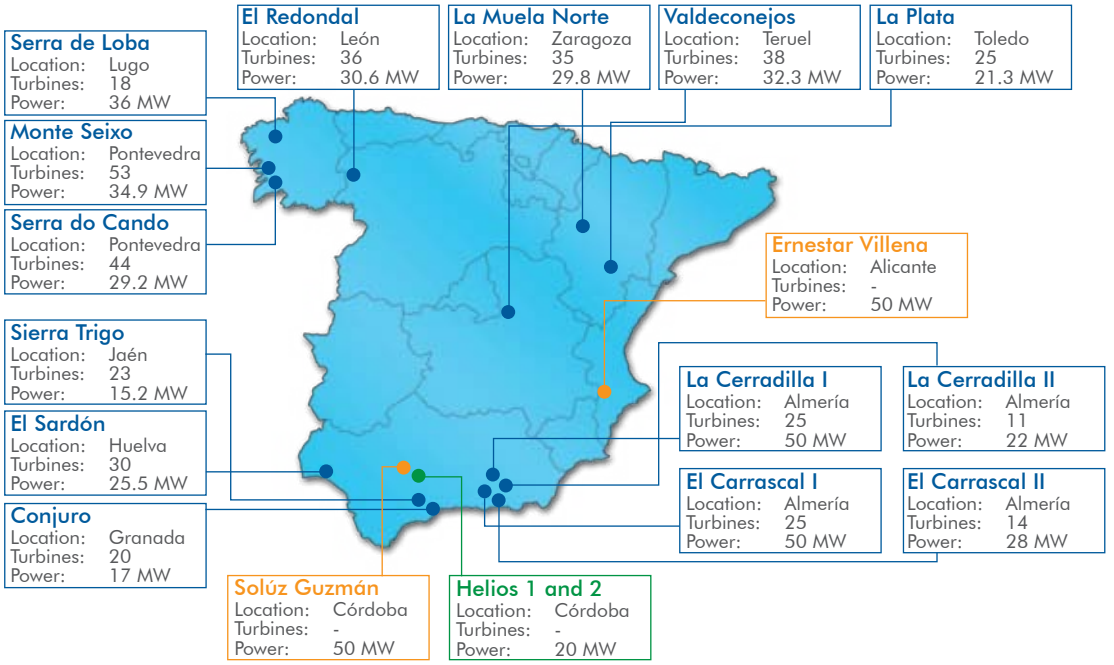
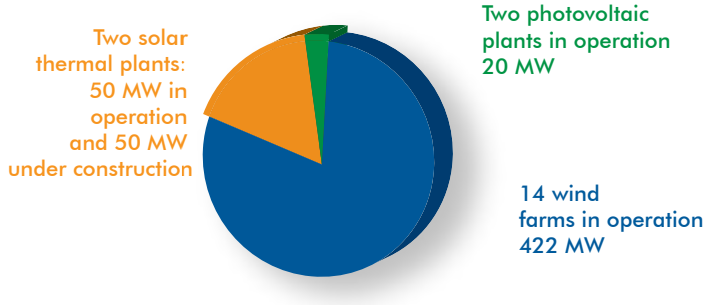
Cataluña

With 98 MW awarded in the contract, three projects are being implemented: in the ZDPVIII (Priority Development Zone VIII), Anoia and Segarra. This contract was awarded to FCC Energía Catalunya, S.L., in which Deenma holds a 20% share. The preparatory work for the project was carried out in 2011. An appeal filed against the Catalonia regional government's call for tender has not changed the commitment to the project, now awaiting a definitive installation.

Innovation and technological development

FCC Energía is particularly interested in developing innovative solutions in the field of energy. Along with other Group departments, it is working on projects for electric mobility, energy efficiency and savings, renewable energy generation and R+D+i projects to generate and store energy, as well as for sustainable construction.

Energy efficiency

Throughout the year, work has been carried out in coordination with other Group departments aimed at developing energy efficiency-related activities in municipalities and industries. This activity should enable FCC to expand its citizen services activities to the field of energy as a complement to its environmental services.

Breakdown of Assets by Geographical Area