

Picture of the month



Barcelona's Ciudad de la Justicia complex.

Current events

- ▶ Ministry starts boring the northern Vigo access tunnels on the high-speed Atlantic Corridor
- ▶ National architecture, development and housing quality awards given
- ▶ Civil engineering awards given to the class of 2007-2008

ALPINE

- ▶ ALPINE acquires Beton und Monierbau GMBH
- ▶ Rehabilitation of Hala Ludowa Hall
- ▶ ALPINE with art: Erwin Kastner

Subsidiaries

- ▶ Prefabricados delta earns product certification for fibreglass-reinforced polyester pipe

Contract awards

- ▶ FCC secures a 251-million-euro contract to build a section of high-speed railway to Almería
- ▶ AENA gives FCC the contract to enlarge Gran Canaria Airport's Terminal Building
- ▶ FCC takes home the contract for the road between La Aldea and El Risco, Gran Canaria

Other contract awards

- ▶ Los Almendros housing development in Torrejón de Ardoz.
- ▶ 159 homes at Colinas Golf Residencial in Orihuela, Alicante.
- ▶ 94 homes in Las Tablas, Madrid.
- ▶ 350 homes under the "Alamillos Oeste" partial plan in Algeciras, Cádiz.
- ▶ Office building in Barcelona for Foment de Ciutat Vella, for 8.6 million euro.
- ▶ Development in Ribadeo Industrial Business Park in Ribadeo, Lugo, for SEPES, for 5 million euro.

▶ MATINSA:

-Has extended 11.2 million euro's worth of sundry contracts with the Ministry of Development's Directorate-General of Roads, for road upkeep and operation in the provinces of Badajoz, Huelva and Cáceres, for another two years, and has extended 3.2 million euro's worth of contracts with the Guipúzcoa Council for another six months.

-Has extended 2 million euro's worth of contracts with the Directorate-General of Water for dam operation, maintenance and upkeep in the provinces of Alicante, Cuenca and Valencia.

Finished projects

- ▶ The Ciudad de la Justicia complex in Barcelona.
- ▶ 93 homes in Santa Eulalia.



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page



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CSR

- ▶ Corporate responsibility managers from the construction and services sector hold their first meeting
- ▶ FCC among the world's most-sustainable companies
- ▶ Gender equality at FCC selected as an example by the United Nations Global Compact
- ▶ FCC Construcción and Bovis Lend Lease sign an occupational risk prevention agreement

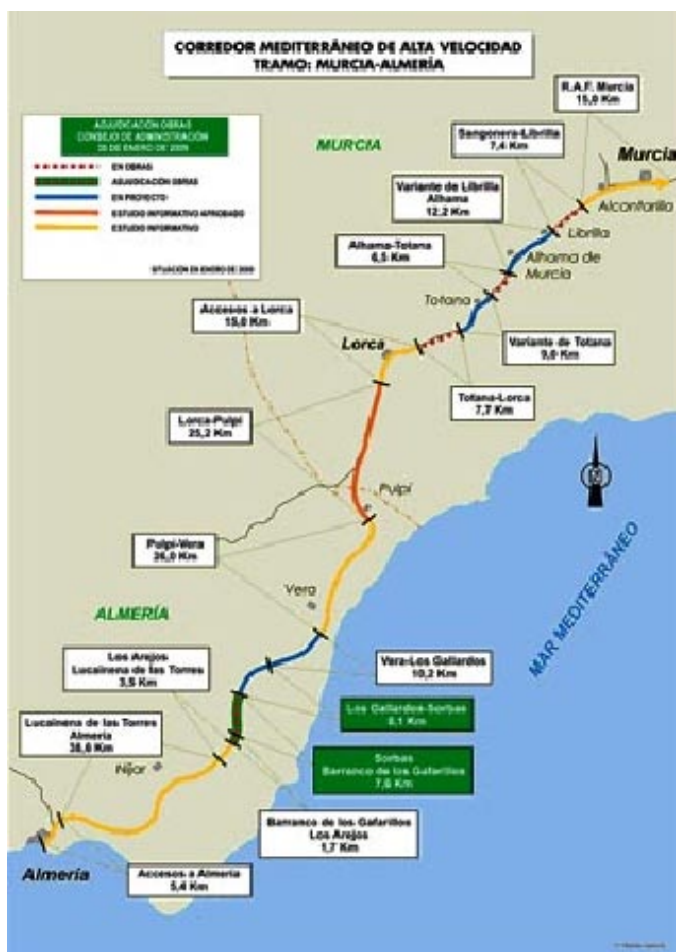
Events

- ▶ Biomethane production plant opened in Las Dehesas, Madrid
- ▶ Inauguration of Toledo Funeral Service
- ▶ Cornerstone laid for the new L'Alacantí Sur purifying plant

Contributions

- ▶ FCC contributes to workshops on making the construction business sustainable. Recycling in construction

FCC secures a 251-million-euro contract to build a section of high-speed railway to Almería



Map of the Murcia/Almería high-speed line.

Administrador de Infraestructuras Ferroviarias (Adif) has awarded the contract for the construction of the Sorbas/Barranco de los Gafarillos section of the Murcia/Almería line of the High-Speed Mediterranean Corridor to FCC in a joint venture with SANDO. The contract is worth 251.3 million euro.

The project, which has got a 48-month completion period, will involve the construction of a 7.6-kilometre-long section starting next to the town of La Herrería and ending just before crossing Barranco de los Gafarillos, a ravine, in the province of Almería.

The route has been designed for an international-gauge double high-speed track and for the possibility of running mixed traffic.

The project covers the necessary activities for building the infrastructure, such as earthworks, drainage works, tunnelling, service replacement and easements, plus the construction of cross connections to ensure the line's back-up connections.

Special features

One of the special features of the Sorbas/Barranco de los Gafarillos section is the 7.5-kilometre-long Sorbas Tunnel, which runs under the Sierra Cabrera-Bédar Site of Community Interest.

This tunnel is made up of two one-way tubes, each having a free cross-section of 52 m². The project calls for 5.9 kilometres of the tubes' length to be bored out, while 1.6 kilometres will be built using conventional methods. The tubes will be connected to one another by cross tunnels every 400 metres.

Murcia/Almería high-speed line

The construction of the Murcia/Almería high-speed line is included in the Railway System of General Interest, and the Ministry of Development's 2005-2020 Strategic Infrastructure and Transport Plan calls for the line to be adapted for use as a high-performance line.

The Murcia/Almería high-speed line is approximately 186.1 kilometres long. Of that length, 103.2 kilometres lie in the province of Almería, and the remaining 82.9 kilometres lie in the Autonomous Community of Murcia.

Joint funding for this project is anticipated to come from the European Regional Development Fund through the 2007-2013 Cohesion Fund-ERDF Operational Programme.

AENA gives FCC the contract to enlarge Gran Canaria Airport's Terminal Building

The cost will be 124.6 million euro and the completion period will be 36 months.



Infographics on the new building's concourse.

AENA has given FCC Construcción the contract to enlarge Gran Canaria Airport's Terminal Building. The contract is worth 124,646,862 euro and the completion period is 36 months.

The objective of this contract is to boost the airport's passenger capacity, improve the quality of the passenger service the airport provides, increase the commercial offer available and give the Terminal Building a more modern, intriguing image. The enlargement will push out to the north, south and west from the current building.

The northward enlargement will make it possible to increase the number of baggage claims on the ground floor to 22, increase the number of check-in counters on the first floor to 122 and increase the amount of office space on the second floor and on the newly created third floor. Part of this enlargement will extend the current façade airwards (east side), and at the northern tip a recessed dock will be built to allow boarding of type-E aircraft (big planes like the Jumbo and Airbus 340) via access bridge. The enlargement will also enable the number of remote boarding gates for inter-island flights to be increased to 40.

The southward enlargement will make room for a new international arrivals and departures area. In addition, the land-side façade of the old terminal building will be shifted westward over the current vehicle access bridge to make more waiting room available at the ground-floor arrival lounge and the first-floor check-in area.

A new elevated street will also be built at the departure area. The roof and façade will be the prolongation of the new departure hall's roof and façade, and part of the current garage will be reinforced for use as a new road and as a bus parking facility at departures.

Also included is the remodelling of the streets leading into and away from the terminal building, the northern entrance road to the apron and development of the local area.

FCC takes home the contract for the road between La Aldea and El Risco, Gran Canaria

The Canary Island Regional Government has awarded the contract to build the road from La Aldea to El Risco on Gran Canaria, worth 83.73 million euro, to a joint venture featuring FCC.

This job is part of the design for the future GC road that will connect Agaete with San Nicolás de Tolentino, and it is included in the Cooperation Agreement on Matters of Roads between the Canary Island Government and the Ministry of Development.

The section from La Aldea to El Risco will be 10 kilometres long. That is 35.48% shorter than the current road. In addition, the extremely rugged route will be smoothed out.

The design calls for seven viaducts, a twin-tube 2,339-metre-long tunnel, two single-tube, two-way, three-lane tunnels (one 518 metres long and the other 604 metres long) and an 87-metre-long cut-and-cover tunnel. The section will also have two junctions, one at El Andén Verde and the other at Güi-Güi, and one intersection at La Aldea.



Infographics, Agaete to La Aldea.

The Ciudad de la Justicia complex in Barcelona



Barcelona's Ciudad de la Justicia complex.

The Ciudad de la Justicia (City of Justice) project in Barcelona arose in response to the need to facilitate the operation of Barcelona's courts. It is built on the land formerly occupied by the Lepanto Barracks, between the city limits of L'Hospitalet de Llobregat and Barcelona.

The Government Council of Catalonia's regional government, the Generalitat, has entrusted the construction, maintenance and operation of buildings D and J in the Ciudad de la Justicia, in the form of a 35-year concession, to Urbicsa, a joint venture created by FCC. Buildings D and J are retail and business buildings featuring a shopping centre on the ground floor and rental offices on the first to tenth floors, plus 1,600 parking places. Also included in the concession is preventive maintenance, corrective maintenance and part replacement for the entire Ciudad de la Justicia complex.

The project, spearheaded by British architect David Chipperfield and the architectural firm b720, requires an investment of over 321 million euro, embodied in 232,369 m² of complex containing eight buildings of different colours, shapes and heights, with a maximum of fourteen floors apiece.

The buildings

- ▶ Building A is designed for the criminal courts. It has got a ground floor, 14 floors above that, a rooftop floor and two basements. Its total area is 33,086.30 m².
- ▶ Building B houses the provincial appellate court. It has got a ground floor, 10 floors above that, a rooftop floor and two basements. Its area is 19,157.37 m².
- ▶ Building C is where the civil courts are. It has got a ground floor, 13 floors above that, a rooftop floor and two basements. Its area is 30,916.60 m².
- ▶ Building D is for rental offices. It has got a ground floor, 11 floors above that, a rooftop floor and three basements. Its area is 15,274.52 m².
- ▶ Building J is also designed for rental offices. It has got a ground floor, nine floors above that, a rooftop floor and two basements. Its area is 8,379 m².
- ▶ Building G is designed for the complex's general services. It has got a ground floor, six floors above that, a rooftop floor and two basements. Its area is 5,947.00 m².
- ▶ Building H houses the courts of L'Hospitalet de Llobregat. It has got a ground floor, seven floors above that, a rooftop floor and two basements. Its area is 10,315.67 m².
- ▶ Building F is designed for the public prosecutor's service and the juvenile courts. It has got a ground floor, 11 floors above that, a rooftop floor and two basements. Its area is 15,552 m².
- ▶ The Atrium Building works as the hub that connects buildings A, B, C and F and the entrance to the judiciary premises. It has got a ground floor, three floors above that, a traffic-bearing rooftop floor and two basements. Its total area is 8,597.40 m².

In its commercial facet, the complex will have some 5,000 m² available to be fitted out as retail spaces to fill the needs that will arise when the Ciudad de la Justicia goes into operation, such as restaurants and coffee shops, pharmacies, agency offices, copy centres, newsstands, florist's shops and so forth. In addition, offices and businesses alike are envisaged as elements that will keep life going in the complex after the courts have closed for the day.

The judicial and complementary activities taking place in the Ciudad de la Justicia will involve about 3,000 employees and daily visits from about 12,000 people. One of the big new features of the complex is that it has three different circuits to accommodate foot traffic: one for judicial staff, one for detainees and one for the general public.

In short, the Ciudad de la Justicia is conceived as a flagship project for the improvement of the administration of justice in the cities of Barcelona and L'Hospitalet de Llobregat. It is the hub where all the units belonging to the same jurisdiction

are concentrated and closeness between the judiciary environment and citizens is enhanced to the maximum.

Because of the complex's geographical location, its fine communications and the future line 9 Metro station, the City of Justice will be one destination that can be reached conveniently, quickly and easily.

Architects: David Chipperfield in association with Fermín Vázquez Estudio b720

Concession holder: Urbicsa

Builder: UTE Ciutat de la Justicia, an FCC/UTE joint venture

Investment: 321 million euro

Team

UTE manager: Fernando García Dávila

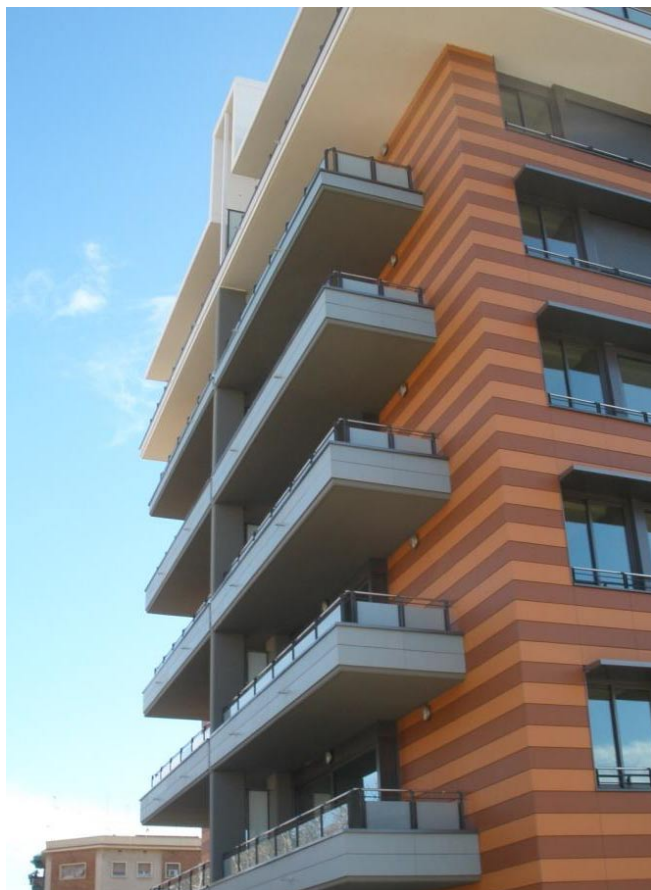
Technical office and economic control: Amadeo Andrés García

Production chief: Jordi Roldán Torres

Quality and environment technician: Rubén Mora Zamora

Office staff: Manel Vizoso Arias

Homes in Santa Eulalia, Barcelona



New homes.

FCC has constructed a new building for URBIS containing 93 homes, retail space and parking facilities in L'Hospitalet de Llobregat, Barcelona.

The building has got a total floor area of 1,316.88 m², and it stands on a 1,743.24-m² lot. It was designed by TDA Arquitectura y Urbanismo 2002, and the designing architects were Eduard Permanyer Pintor and Enric Torrent Figuerola.

The building has got a ground floor, which contains a retail venue and the accesses to the three residents' staircases, six above-ground floors and two basements for parking.

Team

Department head: Félix Catalán

Construction manager: Albert Miret

Site technician: Ana Cucurull

Foreman: Andrés Perez

Office staff: Natalia Solano

Quality technician: Viktor Mihhedko

Facility technician: Carlos Carreño

ALPINE acquires Beton und Monierbau GMBH

The Innsbruck-based company is an international tunnel-building specialist

Salzburg

The ALPINE Group has acquired Beton und Monierbau GMBH, a company with head offices in Innsbruck, from Deilmann-Haniel International Mining and Tunneling GMBH, which works mainly in tunnel excavation and drilling. With operations in Austria, Germany, England and Sweden, Beton und Monierbau GMBH is an underground construction specialist. It has a workforce of 260 employees and its turnover in 2008 was 103 million euro. This acquisition will strengthen ALPINE's underground construction capacity.

Leaders in underground construction

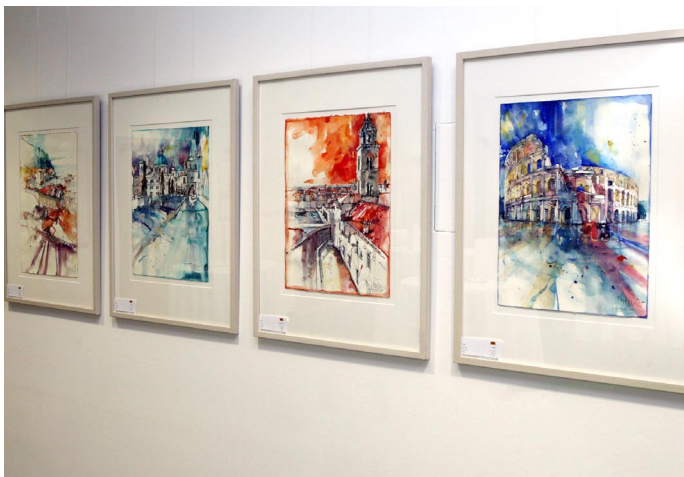
Innsbruck's Beton und Monierbau GMBH has worked in every field of underground construction since 1964, including railway and road tunnels, as well as water and power management systems. The projects the company is currently involved in include the Aicha-Mauls, the lead-in tunnel to Brenner Base Tunnel, Achrain Tunnel, a number of railway tunnels in Germany, England, Sweden and the United States and the enlargement of underground railway stations in Great Britain. As an expert in underground construction, Beton und Monierbau GMBH also offers tunnel construction consultancy

services for projects in the United States, Russia, Kazakhstan and Great Britain, sharing its know-how and its expertise.

ALPINE's tunnel-building expertise

ALPINE, in collaboration with its new subsidiary, Beton und Monierbau GmbH, is in charge of building the second tube of the Pfänder Tunnel, which has been under construction since last year. ALPINE's team will be installing 6.5 kilometres of the western tube with a TBM (tunnel-boring machine). This mechanical method, successfully used in Switzerland for many years, will be used for the first time in Austria to enlarge a road tunnel. Many other projects in Austria are under way, including Katschberg Tunnel, Lainz Tunnel and Tradenberg Tunnel. Work was recently wound up on Lainberg Tunnel. ALPINE's vast experience in tunnel construction is the key to the company's success in Austria and the rest of the world. ALPINE has been participating in the construction of the Gotthard Base Tunnel in Switzerland since 2001. In addition, it is currently involved in building New Delhi's new underground railway system and the pipes for the Tapovan power plant. It is also engaged in other projects, building power plants in Bulgaria and Turkey and an underground railway project in Singapore. ALPINE has reached China as well, where it is building a water supply system.

ALPINE with art: Erwin Kastner's "Perspectives"



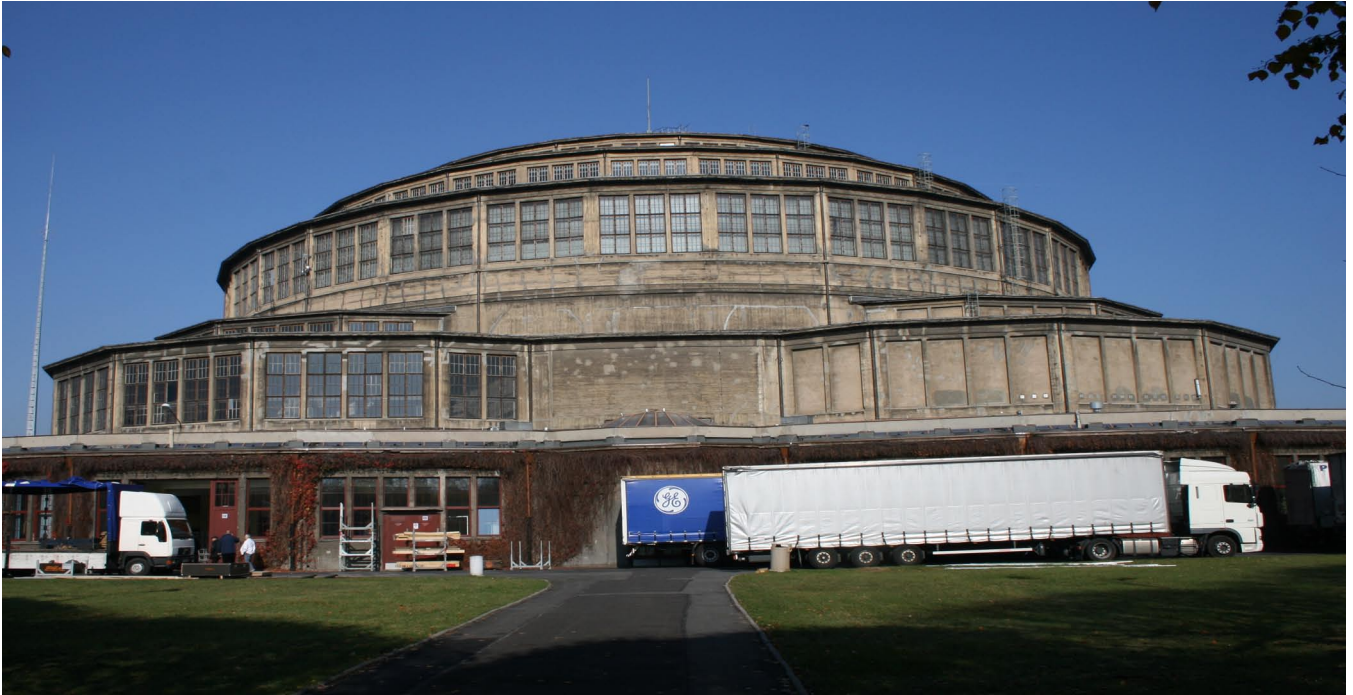
The artist's work.

ALPINE's Vienna headquarters are hosting, as usual every year, new exhibit entitled "Perspectives", a show of the work of artist Erwin Kastner, an exponent of spontaneous realism. His paintings are inspired by day-to-day life, but from a viewpoint that captures the omnipresence that appears to be concealed. They are characterised by bright colours and surprising design.

Peter Preindl, managing director of ALPINE Bau GmbH, said that the objective of these exhibits was to give an artistic touch to the daily routine of the construction business and at the same time to make this platform available to important artists of today.

ALPINE rehabilitates Hala Ludowa Hall in Poland

World Heritage Site.



Outside view of the building.

The historic people's hall built in Wroclaw in 1913 is going to be enlarged and converted into a modern event centre. The contract is worth 5.8 million euro.

ALPINE was awarded the contract to rehabilitate UNESCO World Heritage Site Hala Ludowa Hall, the "People's Hall", in Wroclaw, Poland, in a 14-month completion period for 5.8 million euro.

The rehabilitation of this landmark building visited by Pope John Paul II will be planned in such a way as to maintain the building's historic value.

made of reinforced concrete, with an innovative design full of light and harmony that emanates from an enormous central cupola 65 metres in diameter and 42 metres tall.

The reconstruction agenda goes from the roof insulation to the rehabilitation of the concrete and the windows. The hall will be used for film shoots, conferences and other events, such as musical, sporting and theatrical events.

Hala Ludowa Hall

Also known as Centennial Centre, the building was named Hala Ludowa Hall after World War II. It was the location of the 1948 World Congress of Intellectuals for Peace. With 6,000 seats and able to accommodate 20,000, the hall is an admirable, pioneering piece of twentieth-century architecture. The building was one of the first public buildings to be



Indoors.

Prefabricados Delta earns product certification for fibreglass-reinforced polyester pipe



Pipeline of polyester reinforced with fibre glass.

Prefabricados Delta has earned AENOR product certificate number 001/004754 (mark N) for fibreglass-reinforced polyester (FRP) pipe manufactured using the continuous mandrel system.

Prefabricados Delta started making fibreglass-reinforced polyester pipe in mid-2004 at its factory in Humanes, Madrid, with one manufacturing line. That same year the company had the scope of its ISO 9001 ER-0221/1994 registration certificate expanded to include this product. From then until now, Prefabricados Delta has made over 375 kilometres of pipe, earning a turnover of close to 40 million euro. Since mid-2007 it has had a second manufacturing line.

AENOR's N mark is a mark denoting compliance with standards. It guarantees that the marked products have undergone the evaluations and controls established in certification systems and that AENOR is confident that the products comply with the proper standards. It is a firmly established mark of quality and is highly identified or associated with quality parameters, so it gives consumers a great deal of confidence in the product's compliance with standards.

Biomethane production plant opened in Las Dehesas, Madrid

Valdemingómez turns citizens' rubbish into energy.



Aerial view of the plant.

The Valdemingómez Biomethane Production Complex, built by FCC Construcción in a joint venture with FCCSA, was officially opened by Madrid Mayor Alberto Ruiz-Gallardón and Councilwoman for the Environment Ana Botella. The investment made in these facilities for receiving, storing, manipulating and digesting urban waste comes to 41.6 million euro. The plant will treat urban waste and use it to produce energy.

The plant, the most advanced, modern plant of its kind in all of Europe, stands on a 32,000-m² lot in Madrid's Valdemingómez Technological Park complex. It has a capacity of 218,000 tonnes of waste per year in its pre-treatment line and 161,000 tonnes of waste per year in its digesters, yielding 20,447,000 Nm³ of biogas each year.

There are three main treatment areas at the facilities:

- ▶ The pre-treatment area, where urban waste is manipulated before it enters the digestion process.
- ▶ The biomethane production area, where the organic fraction of the waste undergoes mesophilic (40 °C) anaerobic fermentation, producing biogas. This fermentation takes place in five digesters able to hold 3,600 m³ apiece. These digesters are concrete silos 16 metres in diameter and 23 metres tall.
- ▶ The process water purification area, which has a treatment capacity of 192 m³/day. Purification consists of pre-treatment, aerobic digestion of activated sludge, sludge treatment, ultrafiltration and reverse osmosis.

The utmost care was devoted to environmental friendliness in the plant's design. A system for deodorising the buildings has been built right in, to prevent any atmospheric emissions.

For the first time in Spain, the biogas generated by rubbish can be put to good use and distributed through the regular natural gas system. When the new biomethane production complex hits maximum output, in addition to avoiding the equivalent of 300,000 tonnes of CO² emissions into the atmosphere, the complex will be able to receive up to 369,000 tonnes of organic matter, 60 % of the organic waste generated by Madrid's homes, and convert that rubbish into 34 million cubic metres of biogas, which can be used to produce electricity right there at Valdemingómez or else can be put through an impurity-removal process and then be piped into ENAGAS's general gas system.

As the mayor said, the equivalent to 18.7 million cubic metres of natural gas would be obtained, enough fuel to power 405 city buses, close to 25 % of Madrid's entire fleet. Or if all that gas were transformed into electricity, it would be enough, for example, to cover the needs of 20,500 homes or 4 % of the city's entire industrial needs.

This biomethane production plant helps Madrid comply with the European Union's energy strategy, whose goal for 2020 is to reduce by 20 % both CO² emissions and energy consumption and to increase by 20 % the production of renewable energy.



Alberto Ruiz Gallardón and Ana Botella visit.

Inauguration of Toledo Funeral Service

Fourteen rooms, 70 parking places and a chapel seating 400.



Panoramic view of the funeral service building.

The Toledo Funeral Service built by FCC Construcción was opened in a ceremony attended by the city's mayor, Emiliano García Page, the president of the Provincial Council, José Manuel Tofiño, the councilman for Health and Social Welfare, Fernando Lamata, and the regional government's deputy in Toledo, Fernando Mora. Lamata stressed the architectural beauty of the building and its functional qualities, important points for such a sensitive service.

The funeral service building, which has required an investment of seven million euro. This building improves the funeral services of the city.

Description of the building

The building is actually a set of four new two- and three-storey buildings joined together, on a 6,390-m² lot next to Toledo Cemetery.

It is mostly rectangular as seen from the air, approximately 134 metres long and 27 metres wide. The building and rooms are entered through a ground-floor gallery that has a glass wall looking out onto the city.

The ground floor contains 14 viewing rooms with inner courtyards graced with silk-screened windows. When a larger space is required, one wall can be drawn back by a

motor, joining two rooms into one. The basement contains storerooms, employee parking and a coffee shop.

The first floor protrudes over the main entrance, forming a porch. This 540-square-metre floor contains offices and administration facilities.

At the opposite end from the entrance is the non-denominational chapel, standing next to a 100-square-metre, 7.5-metre wide, 8.90-metre-tall sheet of water lit from within to make a great sawtooth-shaped skylight.

There is visitor parking available, and there are roads right around the building to the coffee shop and chapel. The accesses to the building are landscaped.

Owner: U.T.E.TANATORIOS TOLEDO (José María Sanromán y Nueva Funeraria Toledo)

Contract award date: 13 December 2005

Team

Department head: Juan Antonio del Saz Cordero

Construction manager: Andrés Romero Rodríguez

Production chief: María José Rodrigo Gómez

Office staff: Gema Casasola García-Tenorio

Foreman: Miguel Crespo Ramírez

Cornerstone laid for the new L'Alacantí Sur purifying plant

It will have a treatment capacity of 30,000 m³ per day and will create a thousand jobs.



L'Alacantí Sur.

Valencian President Francisco Camps laid the cornerstone of the new L'Alacantí Sur purifying plant yesterday. The job, which will be done by FCC Construcción in a joint venture, carries a price tag of 39.6 million euro.

The purification plant will stand next to the northern slope of the Sierra de Foncalent, at a site known as El Garrofer, in Alicante. It will provide end-to-end sanitation, purification and reuse, taking in wastewater from San Vicente de Raspeig, the industrial park of Pla de la Vallonga and the new housing development of Rabassa, by intercepting their current wastewater mains.

This water will be piped to the Barranco de las Ovejas pumping station and pumped from there to the wastewater purification plant. The plant can treat 30,000 m³ of wastewater per day.

The plant will have renewable energy generation systems, a small solar power farm and a waterfall, which will cover 40% of the plant's electricity needs and prevent the emission of 1,140 tonnes of CO₂ into the atmosphere.



Francisco Camps places the first stone.

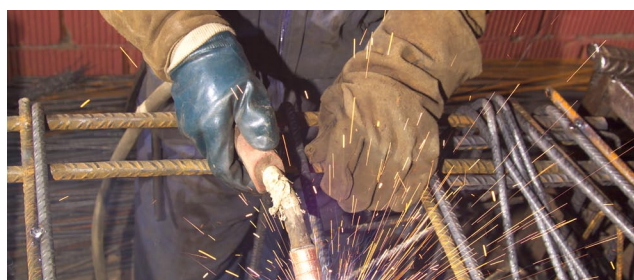
FCC Construcción and Bovis Lend Lease sign an occupational risk prevention agreement

FCC Construcción and project management specialist company Bovis Lend Lease have reached an agreement to cooperate in occupational risk prevention.

This agreement was signed by FCC Construcción General Manager Francisco José García and Bovis Lend Lease, S.A., General Manager Alberto de Frutos. It is the first step in a cooperative relationship whose vision is to guarantee that all progress made in occupational risk prevention, lessons learned and best practices generated individually will be shared and implemented jointly.

This agreement seeks ongoing improvement and better understanding between the two companies, so as to generate added value for clients through projects that represent excellence

in health and safety and occupational risk prevention, thus guaranteeing higher productivity during the works execution phase (reduction of days of work lost due to occupational accidents, enhanced production through the use of faster, safer methods and so on) and lower direct and indirect costs through the reduction of accident indices (more-economical insurance premiums, reduction of third-party compensation payments, reduction of fines and so on).



Second CSR Workshop at Torre Picasso, organised by FCC

Corporate responsibility managers from the construction and services sector hold their first meeting.



First part of the workshop. From left to right: Felipe Bernabé, Baldomero Falcones and Javier López Galiacho.

On the 30th January FCC hosted its Second Corporate Responsibility Workshop at Torre Picasso, with two objectives: to establish firmly the Group's commitment to build an ethics-based culture and foster that commitment among management, and to bring together for the first time CSR professionals from the construction and services sector.

FCC Chairman and Managing Director Baldomero Falcones gave the welcoming address, where he talked about the Group's progress in its socially responsible commitments.

Afterwards Felipe Bernabé García, the group's general secretary, stressed the importance of communicating our vision, mission, values and recently approved code of ethics to all persons concerned.

The second part of the workshop was moderated brilliantly by José Luis Blasco, managing partner at KPMG, with the presence

of the sector's corporate responsibility managers: Juan Cardona, head of Corporate Reputation and Responsibility at Ferrovial; Juan Carlos Fernández, head of the Corporate Responsibility Area at Sacyr Vallehermoso; Juan Ramón Silva, general manager of the Corporate Responsibility and Corporate Image Area at Acciona; Manuel Villén, director of Innovation and Development for the OHL Group; and Javier López-Galiacho, manager of Corporate Responsibility at FCC. In this portion of the workshop, participants reflected upon the corporate responsibility problems they saw in the sector and shared their musings with the group.

During the discussion, they agreed that their main commitment is to the safety and health of their companies' professionals. The participants discussed the challenges of internationalisation and business responsibility management in different environments, innovation, the need to reduce greenhouse gas emissions, business's contribution to local development and business's commitment to the community. They also sketched out the need for an ongoing sector-specific forum on CSR issues.

The encounter ended with an expert's tour of Torre Picasso guided by Per Gestora, the FCC Group company that provides sustainable management for this landmark building in Madrid.



Second part of the workshop. From left to right: Juan Carlos Fernández, Juan Ramón Silva, Javier López Galiacho, Manuel Villén, Juan Cardona and José Luis Blasco.

FCC among the world's most-sustainable companies

According to the 2009 Sustainability Yearbook put out by PricewaterhouseCoopers (PwC) and Sustainable Asset Management (SAM) and presented at a time scheduled to coincide with the meeting of the world economic forum held each year in the Swiss city of Davos, FCC stands among the most-sustainable companies in the world.

The study, which PricewaterhouseCoopers and SAM have been doing since 1999, has the objective of identifying those companies that stand out for their capacity to manage sustainability and at the same time to represent an attractive investment opportunity.

Gender equality at FCC selected as an example by the United Nations Global Compact

Iniciativas de Global Compact: Women and Water Mandate



Women and the UN Global Compact: El próximo 8 de marzo Naciones Unidas celebra el Día Internacional de la Mujer Trabajadora y para conmemorarlo organiza en la sede de la ONU en Nueva York una cumbre sobre la igualdad de género con expertos en la materia. El Pacto Mundial está coordinando la publicación de un libro en el que se recogerán las buenas prácticas de firmantes a nivel internacional y que será presentado durante la cumbre. Varias entidades españolas ya han enviado sus contribuciones a través de la Red Española, algunas de las cuales publicamos en este boletín.

Print web page, selecting only the part on women and best practices.

On 8 March the United Nations celebrates International Women's Day, and to commemorate the occasion it is organising a summit on gender equality with experts on the subject at UN headquarters in New York. The Global Compact is coordinating the publication of a book containing the best practices of international signatories. The book will be presented at the summit.

FCC has already sent in its contribution, "Best Practices in Gender Equality and Promotion of Women", which has been posted on the Spanish Global Compact network's website: <http://www.pactomundial.org>

Ministry starts boring the northern Vigo access tunnels on the High-Speed Atlantic Corridor

The new route tunnels between Das Maceiras and Vigo-Urzaiz station, eliminating problems up top in the city of Vigo.



Boring the north Vigo access tunnels.

On 11 February the Ministry of Development started boring the northern Vigo access tunnels on the High-Speed Atlantic Corridor, in a ceremony attended by Spain's First Deputy Prime Minister María Teresa Fernández de la Vega. The tunnel-boring machine dubbed A Miñooca was put in charge of starting the excavation.

This particular job, which belongs to the Vigo/Pontevedra section, Vigo/Das Maceiras subsection and is being built by FCC Construcción, forms part of the Galician High-Speed Atlantic Corridor that stretches from Ferrol to the Portuguese border, going through A Coruña, Santiago de Compostela, Vilagarcía de Arousa, Pontevedra and Vigo. It is also part of the High-Performance System defined in the 2005-2020 Strategic Plan on Infrastructure and Transport, or PEIT, approved by the national government on 15 July 2005.

Vigo access tunnel

The new tunnel starts at the future Vigo-Urzaiz station, which will eventually lie 15 metres below the site of the old station. It ends in Das Maceiras Valley, where it links up with the sections of the Atlantic Corridor that are under construction.

The tunnel will be 8,266 metres long in all, and it has been designed to have two separate tubes separated by 30 metres at their axial centres. The route as seen from above is practically

a straight line, except for the two ends, which curve. The earth coverage on top of the tunnel is generally 200 metres thick, although in the A Madroa area it reaches a maximum of 355 metres. The cross-section is circular, with a free inner diameter of 8.50 metres, and the two tubes are connected to one another by cross galleries every 400 metres.

Construction work will employ two double-shielded TBMs, which are perfect for the type of terrain involved and will leave no trace of the tunnel on the surface.

TBMs

Two TBMs, A Miñooca and A Lebre, have been set up in Das Maceiras Valley, where the construction of the two tunnels will begin.

These machines, identical in specifications to the TBMs used on the Guadarrama Tunnels, are the first of their kind to be used in Galicia. They are double-shielded, making them perfect for the type of terrain involved and for leaving no trace of the tunnel on the surface, and they can reach a peak performance of about 500 metres per month. Average performance is expected to be around 350 metres per month, however, as there are scheduled shutdowns for maintenance.

The TBMs' main specifications are as follows:

	Right Tube	Left Tube
TBM model	Herrenknecht	Wirth
TBM's name	A Lebre	A Miñooca
Definitive tunnel diameter	8,50 m	8,50 m

The tunnel will be bored and immediately clad with precast pieces of reinforced concrete called segments. Seven different segments are assembled to form a ring. The segments are 32 centimetres thick. Although the first segments have been brought in from outside, the rest will be cast at a plant built for that very purpose right next to the tunnel mouth.

The solution

The newly begun work implements the solution given in a document entitled, "Complementary Informative Study on the Northern Access to Vigo on the Galician High-Speed Atlantic

Corridor". This study was approved by the Ministry of Development on 27 January last, and it modifies the route first approved between Vigo and Das Maceiras by the Decision of 29 March 2006 of the Secretariat of State for Infrastructure and Planning for the entire Vigo/Pontevedra section.

During the implementation of the construction designs contained in the initial informative study, a number of technical problems arose, and further problems were found in integrating the new infrastructure into the urban environment. These problems led to the definition of a new route, which will now run completely underground between Das Maceiras and Vigo-Urzáiz station, totally eliminating all traces of the corridor above ground in the city of Vigo.

With the approved modification, the total length of the route is shorter than initially planned, and between the shorter length and the avoidance of any above-ground construction, important environmental improvements have been achieved.

National Architecture, Development and Housing Quality Awards given

Homes on calle Londres, by architects Jaume Coll and Judith Leclerc, receive the National Housing Quality Award in the public development category.



Housing façade.

At the National Architecture, Development and Housing Quality Awards, Housing Minister Beatriz Corredor gave the Award for Housing Quality in a Public Development for 2006 to architects Jaume Coll and Judith Leclerc for their design of housing on calle Londres and calle Villarroel in Barcelona, built by FCC.

The design called for the construction of 45 homes for young people, with a nursery school and primary school, childcare centre, parking for 410 vehicles and recovery of the block's central courtyard. The site was calle Londres and calle Villarroel in Barcelona, and the developer was Proeixample.

In the previous year's awards, the award in the public development category went to a block of flats in Barrio de San Jerónimo, Seville, developed by Empresa Municipal de la Vivienda de Sevilla (Emvisesa), designed by architects Francisco Javier Terrados Cepeda and Fernando Suárez Corchete and also built by FCC.

The National Housing Quality Award is a means of stimulating architectural quality in public and private residential developments, in buildings and in groups, including the associated urban spaces.

FCC Construcción has awards for the best three students in the School of Engineers' Class of 2007-2008



José Mayor delivering the prize to Rubén Díez.

The diploma ceremony for the top three students in the class of 2007-2008 at the Madrid Polytechnic University Civil Engineering School took place on 2 February last at the school auditorium.

The FCC Construcción awards date back to 1993 and are for the top three students in each class. This year's awards were given by José Mayor Oreja, chairman of FCC Construcción, to Rubén Díez Lorenzo, number one in the class, Teresa Sanchiz Chapa, number two, and Daniel Pérez Gutiérrez, number three. The award carries with it a sum of money for each student to help further his or her academic career.

The ceremony was attended by major figures including Fernando Palau, secretary of state for Transport; Esperanza Aguirre, president of the Community of Madrid; Javier Uceda, rector of Madrid Polytechnic University; and Juan Santamera, director of the Advanced School of Civil Engineering.

FCC contributes to workshops on making the construction business sustainable. Recycling in construction.

The Architectural Construction and Earth Engineering Department of Valladolid University has organised a set of technical continuing-education workshops on making the construction business sustainable and recycling in construction. These workshops will be held in Valladolid from 9 to 12 March.

FCC Construcción is participating in the initiative together with other companies from the sector. Its contribution consists in presenting various techniques for achieving good environmental management at construction sites and the recycling of construction materials.

These workshops, the seventh of their kind now, are eminently practical in nature. At these events experts with different points of view are brought together to tell the audience about their on-site experiences. In addition, the programme this year is especially important for technical personnel, who now have to deal with the issue of compliance with Royal Decree 105/2008 of 1 February regulating the production and management of construction and demolition residue, which makes it mandatory to plan the treatment of such residue as early as at the design stage.

Jornadas de Perfeccionamiento Técnico:

DESARROLLO SOSTENIBLE DE LA ACTIVIDAD CONSTRUCTORA. RECICLADOS EN LA CONSTRUCCIÓN



Valladolid, 9, 10, 11 y 12 de marzo de 2.009

Organiza: Departamento de Construcciones Arquitectónicas

Colaboran:



Front page of the brochure.