

WSP

WSP Environment & Energy (WSP) is a top-five global environmental consultancy firm specialising in climate change, sustainability, environmental and energy issues. It works on both the strategic planning of new, sustainable developments and the retrofitting of existing buildings to make them greener.

WSP keeps clients ahead of the curve on crucial business risks and forthcoming legislation, such as the UK Carbon Reduction Commitment. In one case alone, WSP identified energy savings that secured a return on investment in excess of 40% year-on-year. To achieve these returns WSP has developed a dedicated Energy Bureau tool that works alongside property owners to monitor and evaluate their energy consumption and then minimise usage, thereby cutting emissions and costs, and helping to meet legislation. As part of the development process, the team at WSP Environment & Energy has specific expertise in providing advice to minimise emissions and to maximise the use of renewables. Its recent work has included the carbon-neutral Graylingwell development, which includes the UK's largest domestic PV installation.

WSP Environment & Energy makes REurope's Green ranking this year after enjoying an extraordinary 2009 in a difficult economic climate. WSP was awarded the 2009 Green Property Adviser of the Year award, the 2009 Big Tick for Climate Change and, most recently, the 2010 Environmental Adviser of the Year award. The awards collectively pay tribute to WSP's work with clients in embedding sustainability throughout their organisations in 2009. This has included projects such as the net-zero carbon development,

Graylingwell; the carbon accreditation scheme for Airport Council International in Europe; working on the climate change adaptation plan for the City of Johannesburg; being a top five finalist in Finland's 'Low2No' carbon competition for setting new standards in sustainable buildings and urban systems planning; being named the UK Green Building Council's partner in delivering a Sustainability Leadership Programme; being involved in the proposed 'SuperGreen' power station in the UK; and designing the sustainability strategy for the new Stockholm arena. WSP also launched an innovative Personal Carbon Tracking Scheme across its global business, to which over 650 staff have already signed up. WSP is the first company in the world to offer a voluntary personal carbon tracking scheme to its staff.

SAINT-GOBAIN ISOVER

Saint-Gobain Isover is responsible for insulating one home in three in Europe, and one in five in the US. The firm studies and advises on solutions for green building through its specialist know-how. Its research shows that in Europe, buildings are responsible for around 30% of emissions and 40% of the total consumption of energy; an even more telling statistic lies in the fact that two thirds of Europe's property energy consumption is due to heating alone. Saint-Gobain Isover provides eco-compatible fibre-glass to the industry, created from at least 80% recycled glass, also reducing water usage and waste creation in the production process. Benoît Carpentier, CEO of Saint-Gobain Insulation, tells REurope about the challenges ahead: "The real estate sector has to recognise its impact on climate change and try and limit its use of fossil fuels in the generation of energy. To tackle this issue, we need to change the way buildings are designed and embark on the refurbishment of the existing stock to reduce their impact on the environment. Isover accepts the challenge and offers its support to the green building industry."

THE CITY OF BARCELONA

Catalonia is one of the most dynamic regions of Europe. Together with its capital city, Barcelona, it represents a major innovation hub, providing opportunities for business in the areas of technology, research and development and design and creativity.

The Generalitat de Catalunya and the City of Barcelona have joined forces to promote, enable and deliver a pioneering regeneration programme which sets new standards in economic, social and environmental sustainability: the Barcelona Economic Triangle (BET). The three project clusters that make up the Barcelona Economic Triangle provide the potential for many million sq m of offices, scientific research facilities, housing and public space. One of these is 22@Barcelona, a vast urban regeneration project covering the equivalent of 115 blocks in Barcelona city centre, which has been running since 2001. To date, over 1,500 companies have located in the area, creating over 40,000 jobs in the five key sectors of IT and communications, media, medical technology, energy and design.

The Vallès Area also includes a number of key projects such as Parc de l'Alba (520,000 sq m). This is an international knowledge hub demonstrating exceptional standards of environmental sustainability, and home to one of Europe's only third-generation synchrotrons.



The campus of the prestigious Universitat Autònoma de Barcelona is also located here, alongside dedicated science, technology and business parks hosting more than 10,000 companies; with the first facilities opening in 2010, Parc de l'Alba will provide the scientific community with advanced research and development labs. It will also comprise 450,000 sq m of residential (including 40% social housing) and 106,000 sq m of retail space, as well as 160 hectares of green zones and 80 hectares of streets, squares and public facilities. Parc de l'Alba has the strictest energy conservation regulations in Spain, with specified energy consumption and CO₂ emissions at 30% below those laid out by current state law. These measures are designed to be cost-effective, so that developers recoup costs in a short time and benefit from savings on energy bills.

The park is equipped with a simultaneous power, heating and cooling system. By producing three types of energy at the same time, this pioneering system – some elements of which represent the first of their kind in Europe – will reduce carbon emissions from production by 35%. The system will incorporate two renewable energy facilities: a biomass gasification plant and a solar air-conditioning plant.



Chris Stubbs, WSP Director

EURASIA COUNTRY FORMAT

Russia hasn't always been at the forefront of the green movement, but that's changing now thanks to the example of a few great companies promoting sustainability. Green Giant Eurasia Country Format, a developer of urban schemes and resorts, is one of the chief exponents of the sustainable movement in Russia. It was the general sponsor of the Russian Green Building Council for the Investment Forum ProEstate 2009, and also sponsored the round-table conference "Ecodevelopment is the goal and instrument of sustainable development of the Russian regions" which took place during the All-Russian Forum Strategic Planning in the Regions and Cities of Russia. Eurasia Country Format also works with the website <http://ecorussia.info> uniting architects, engineers and developers' efforts in the sustainable development field.

"The most important thing is that we've done a good deal of groundwork, and now have the plans in place concerning our further project development," Chief Executive Andrey Osipov tells REurope Magazine. Osipev also introduces Eurasia Country Format's most exciting new initiative.

"DancingGreen will be the first Russian multifunctional all-year round resort using the format of 'short break vacations for city dwellers'. It's based on sustainable development principles - the ecological aspects have been taken into consideration at each planning stage. The uniqueness of this park consists in the harmonic integration of all the objects into the natural landscape and the unity of the internal and surrounding areas. It has to produce an impression of immersion into nature while maintaining a high level of comfort and respect for the environment."

Osipov goes on: "The year 2009 brought lots of changes and challenges. Throughout the year the company developed DancingGreen concept and began the next planning stages. Everyone dealt with economic shocks after October 2008. On

the one hand they didn't allow us to go ahead as far as we planned. On the other hand this delay gave us the time to research certain issues deeper. It mostly concerned the 'green' aspects. We ascertained the value of the idea and concept of comfortable recreation in harmony with the nature. We continued working on them. From the very beginning we planned to create the Nature Centre in DancingGreen which was considered as the main entertainment element of the resort reflecting the mission and meaning of our project. At this moment we also realised that the Nature Centre isn't just a building for natural educational and entertainment programmes, but concerns the whole territory of the park. It has to be implemented as the complex of buildings distracted around the whole resort space which are functionally intertwined around the Nature Centre hub and its forest, river and meadow satellites.

Certain steps have been made in the planning as well. We elaborated some alternative engineering schemes aimed at implementing the DancingGreen concept. Among them we have chosen the one corresponding to our environment-friendly vision, the principles of practicality and the ones of natural resource use. For instance, at the planning stage we worked a lot on the "passive house" concept. Finally, the greatest attention has also been paid to water resources management. The appearance and vital functions of our artificial recreational reservoir replicating a natural lake not only provide our guests with the variety of different activities, but also protects the territory from filling with the abundant runoff water. Moreover, the reservoir helps saving natural resources, because it preserves drinking-water. It isn't running - its quality is maintained by wetlands, aeration and biofilter systems. The water overflow that we deal with in certain seasons has to be bled to Oka River, but it will be even cleaner than the river bed due to the system of the quality maintenance described above."



All new residential buildings will be fitted with solar panels to produce at least 60% of the hot water used, and buildings have been designed to use 50% less water than the average, with features including low-flow taps; grey water for toilet tanks in housing units; use of non-drinkable ground water to irrigate public spaces; and a rainwater collection system. The existing railway station is also being refurbished to create a modern national transport interchange. New rail services and bus routes are planned, to minimise the unnecessary use of cars. The development also provides for an extensive network of cycle lanes and paths for walking.

The third main project cluster in the BET is the Llobregat River Delta, whose principal initiative, Delta BCN, will cover some 245,000 sq m. Located near Barcelona's El Prat international airport, this important economic regeneration project is focused on providing services to the aerospace and motor industries.

These projects are being delivered through innovative partnerships between the public and the private sectors, with the Generalitat de Catalunya and the City of Barcelona providing land, public finance, infrastructure, co-ordination and marketing for projects.

Together, the three economic clusters will cement Catalunya's position as the Mediterranean region of innovation and provide a sustainable future for businesses and people living in the region.

RAVANO GREEN POWER

Ravano Green Power may only have been established in 2006, but it's one of those company's which has managed to make a rapid,

positive impact on its environment - in a good way. The sustainable energy specialist makes it on to this year's Green Giants' ranking after its impact in 2007 and 2008 on the Italian photovoltaic market as a System Integrator for the planning and installation of photovoltaic turnkey solutions for business, individuals, associations and investors. The company was born out of two decades of experience of the Ravano Group, an electrical-plant constructor who saw a gap in the market to go green, and hasn't looked back since.

