



Skanska pioneers the use of many innovative technologies, particularly in the area of energy efficiency. The use of Energy Piles™ and Energy Wall™ combine the latest foundation and geothermal technology to provide an innovative source of renewable energy. They can help reduce the carbon emissions related to heating and cooling of a building by up to 30 percent.

# Sustainable development



64 Blå Jungfrun. Harnessing heat from people and household appliances

The Skanska Journey to Deep Green™ has begun. It will redefine construction and development, providing new opportunities for a more sustainable future.



64 The Skanska Journey to Deep Green™



64 Exceeding norms in Poland

## Meeting and exceeding expectations

Skanska constructs buildings and infrastructure projects that meet or surpass the requirements of many voluntary national and international environmental labeling and management systems, among them:

- EU GreenBuilding – Europe
  - All new projects by Skanska’s Commercial Development Nordic and Commercial Development Europe business units will meet this target.
  - Today Skanska Commercial Development Nordic is a registered EU GreenBuilding Corporate Partner.
- Leadership in Energy and Environmental Design (LEED) – Global
  - As a minimum, all new commercial properties in the Nordic countries, Central Europe and the United States developed for Skanska’s own account will meet the standards for LEED Gold certification.
- Building Research Establishment Environmental Assessment Method (BREEAM) – United Kingdom
- Civil Engineering Environmental Quality Assessment Tool (CEEQUAL) – United Kingdom
- ISO 14001 Environmental Management System – Global
  - In 2000, Skanska was the first construction company to become globally ISO 14001-certified.
- Swan label – Nordic countries

# Taking the lead in sustainability

Skanska is helping to build a Deep Green Society – a place where projects have a near-zero environmental impact.



## Solar makes financial sense

Over 1,600 solar panels have been installed at Skanska Koch's headquarters in Carteret, New Jersey, U.S.A. Capable of generating 426kW of electricity, the array will not only provide 85 percent of the building's electricity needs, but also generates up to USD 25,000 of revenue every month. This is the first installation of its kind at a Skanska office. Payback is expected in less than five years.

Skanska is regarded by many clients, independent rating agencies and industry experts as a leading practitioner of sustainable development. This is confirmed by the 2010 Carbon Disclosure Project's Nordic 200 report, where Skanska is the top construction company in the region and is ranked number nine overall. Skanska is the only construction company in the top 20 listing. In the U.K., the *Sunday Times* newspaper also recognized Skanska's efforts in its annual Best Green Companies list. Skanska UK was overall winner of the category "large company with high environmental impact," and the top contractor in the Green List, as well as winning the category for best corporate environmental strategy. In November, Skanska USA Building was presented with the US Green Building Council's Leadership Award for the private sector. The Award recognizes outstanding individuals and organizations that signify vision, leadership and commitment to the evolution of green building design and construction. Further recognition of leadership was confirmed with the appointment of a Skanska USA Building employee as the new Chairperson of the US Green Building Council.

## Measurement where appropriate

This Sustainability Review highlights what has been accomplished environmentally and socially in 2010. It also looks forward to work that must be done in the future.

This review does not follow convention, given the business model of project-based companies. For example there is no third-party verification because no credible approach exists for a project-based business such as Skanska's. What Skanska does is driven by customer demands. As a consequence, many so-called standard reporting practices are inadequate because they tend to be based on a model for manufacturing industries – not project-based construction where, in effect, almost every project is a one-off. Therefore, only Key Performance Indicators (KPIs) that take into account the nature of Skanska's business model, are reported here.

## Challenges and opportunities

The primary sustainability challenges for Skanska are safety and business ethics, highlighted in the first part of this review. The second part focuses on the largest business opportunity for Skanska in the field of sustainable development – Green Business. This moved forward significantly during 2010 under the title Journey to Deep Green™ and is communicated and measured using a new tool, the Skanska Color Palette™.

Last year was another challenging year for sustainability from a global perspective. In times of economic uncertainty, it is always easy to focus on short-term

gains and dismiss the importance of the longer-term benefits of sustainability. Skanska has maintained its commitment to improvement. When economic times are tough, and the focus is on cost-cutting, the business case for Skanska's sustainability agenda become stronger, for example improved energy efficiency, water use and waste management.

Improving safety standards, particularly in Central Europe, has also been prioritized. The regions in which Skanska operates are at different stages of development, both in behavioral patterns and in regulatory standards. Efforts continue to introduce global standards of best practice.

## Ethics

As a founding member of the World Economic Forum's Partnering Against Corruption Initiative (PACI) Skanska has, for many years, been committed to eradicating corruption in the construction industry. Skanska AB's General Counsel is a member of the working group appointed by the Swedish government to propose changes to Swedish criminal law on bribery, including a proposal for a code on gifts and benefits.

## Leading change throughout the industry

Skanska continues to play an active role in improving working conditions, equality and safety, not only within its own business units but across the wider construction industry. The company is a signatory to the United Nations Global Compact act and its business leadership forum, Caring for Climate. Skanska is also a member of the UN Global Compact Nordic Network.

## Ethics Committee

During the year, the Skanska Group established a Corporate Ethics Committee and mandated that every Skanska home market have its own ethics committee. In addition, an Ethics Expert Group consisting of Skanska employees was established under the sponsorship of a member of the Senior Executive Team (SET). The Ethics Expert Group meets twice a year to share best practices and agree on focus areas for further improvement. The Corporate Ethics Committee was established to debate best practices and review any issues highlighted through the corporate whistle-blowing system that operates worldwide.

Open and transparent dialogue is encouraged throughout Skanska and, in a majority of cases, important issues can be resolved in this way. Where this is not possible, for reasons of confidentiality, the fully independent whistle-blowing process is in place to ensure that any ethical dilemma can be resolved satisfactorily.

# Safety starts with planning

Skanska believes that any accident, of any kind, is one too many and that all accidents are avoidable. Analyzing and understanding why accidents happen, managing risk and providing education and training are vital factors in improving safety performance. To do this, Skanska works to be a learning, reporting, fair and just organization.

## Performance

Improving its safety performance remains a key focus for Skanska. The ultimate goal of zero accidents is supported by a series of annual milestones. The 2008–2010 Business Plan set a target Lost Time Accident Rate\* (LTAR) of 4.0 by the end of 2010. The actual LTAR in 2010 was 3.6, improving on the 2009 achievement of 3.8. Skanska regrets to announce that nine work-related fatalities occurred at the company's sites during 2010: five subcontractors, three employees and one member of the public. This loss of life is unacceptable and Skanska will make whatever changes are necessary to prevent these in the future.

The business plan for 2011–2015 sets a new Skanska milestone LTAR of 1.0 for the end of 2015, which will move Skanska closer to its ultimate goal of zero accidents. This plan includes a global strategy covering five key areas, including safety competency and knowledge, the selection and management of subcontractors and embedding safety in efficient production methods.

As part of its continuous improvement program, during 2010 Skanska developed eight new Global Safety Standards to complement the four already in use. Ensuring that these safety standards are fully operational in all businesses is a key step to providing a safer workplace.

## Leadership

During 2010 a Global Safety Leadership Team was established. It consists of senior managers and safety specialists from across Skanska's business units including the President and CEO of Skanska. The aim is to ensure that all obstacles to achieving the global safety goal of zero accidents are identified and overcome. As part of our focus on introducing and monitoring leading indicators, Executive Site Safety Visits (ESSV) were introduced in 2008 and have continued to be a success during 2010. These were extended during 2010 to include a wider range of company personnel. A total of 4,751 ESSVs were completed during 2010, compared to a target of 3,013. Each business unit also measured a larger number of safety leading indicators. In this way, Skanska is monitoring and measuring the actions that eliminate accidents before they happen.

## Sharing knowledge

Skanska recognizes that some business units have a more mature knowledge base of safety procedures and techniques than others and benefit from having highly developed training and regulatory frameworks. To enable other business units to reach the same level of safety performance, Skanska seconded two of its

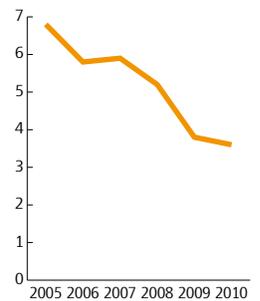
safety specialists from the U.K. to Poland and the Czech Republic. Skanska's commitment to improving safety is not limited to its own operations. World-class safety expertise can be used to improve working conditions in the entire industry. Skanska has therefore begun to engage with leading competitors and government regulators in several markets where improvement is needed, in order to change attitudes and help to deliver best practices throughout the whole sector. Skanska Poland initiated an agreement with several major competitors to improve safety in its home market.

Skanska aims to be a learning organization, and in 2008 the use of Global Safety Stand Downs (GSSDs) was introduced. Extensive investigation of procedures, systems, equipment and behaviors takes place after every fatal accident. This enables lessons to be learned with the aim of preventing similar occurrences in the future. Skanska has further developed this reporting procedure to cover other serious incidents.

## A safer workplace brings rewards

The drive to reduce accidents to zero and provide a safe working environment for everyone associated with any Skanska project also has economic benefits. Research undertaken by Skanska USA shows that by improving a project's risk rating, its insurance premiums can be reduced significantly. This results in more competitive tendering and lower ultimate project costs for the client.

Lost Time Accident Rate (LTAR) 2005–2010



(Number of lost time accidents times 1,000,000 hours) divided by (total labor hours)

\*Skanska has recorded lost time accident rate (LTAR) on a global basis since 2005, which serves as the base year for these statistics. To reduce the number of accidents, Skanska established a three-year target: by the end of 2010, to reach an overall LTAR in the Skanska Group not exceeding 4.

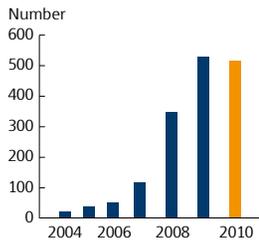
As the chart indicates, Skanska achieved an LTAR of 3.8 by the end of 2009, and 3.6 by the end of 2010.



Skanska Safety Week, held for the sixth consecutive year, was a great success in 2010. Tens of thousands of Skanska employees, contractors and customers took part in the world's largest workplace safety initiative organized by a company. The Safety Week themes were "Being involved" and "What can we do better?".

# The Journey to Deep Green™

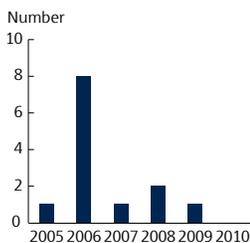
## Eco-design professionals



LEED® AP's, BREEAM, CEEQUAL and other eco design professionals.

## ISO 14001 Major Non-conformances (MNCs)

The frequency of MNC in 2005–2010



In 2010 Skanska Business Units had zero MNCs. Since January 1, 2005, Skanska recorded a total of thirteen MNCs.

## Delivering consistently beyond compliance

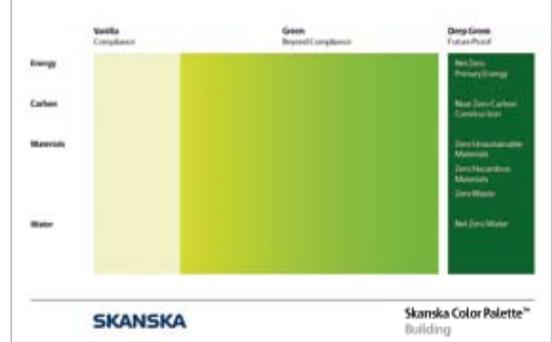
It is now more than 10 years since Skanska became the first construction company to be globally certified to ISO 14001. Using this internationally recognized environmental management system provides a consistent framework for continual improvement.

Projects are now regularly delivered that exceed the national standards and voluntary eco-design frameworks set for green construction, such as: LEED (Leadership in Energy and Environmental Design), BREEAM (Building Research Establishment Environmental Assessment Method) and EU GreenBuilding.

## The Deep Green Society

The Journey to Deep Green™ was a major focus of resources, training and commitment throughout 2010. Skanska's Journey to Deep Green™ will eventually take the company, its customers, suppliers and the people who benefit by occupying or utilizing everything that is constructed by Skanska, to a Deep Green Society. This is a place where projects have a near zero environmental impact. In a Deep Green Society, assets and facilities are future-proofed by the improvement of energy efficiency and materials use and the reduction of carbon emissions and water consumption. Deep Green can be measured in zeros, using six key indicators:

- Net zero primary energy
- Near zero carbon construction
- Zero waste
- Zero hazardous materials
- Zero unsustainable materials
- Net zero water for buildings and zero potable water for construction in civil/infrastructure



Today, vanilla buildings and infrastructure are the norm. There is a growing list of green projects around the world. While these may meet today's requirements, will they be good enough tomorrow – will their value be future-proofed? The concept of "green" is a moving target, so Skanska prefers to push towards Deep Green projects.

## Getting to Deep Green

The Skanska Color Palette™, a strategic framework and communication tool for Green Business, has been developed to measure the company's performance along the way. The palette comprises three colors:

- Vanilla – The construction process or product performance is in compliance with law, regulations, codes and standards.
- Green – The construction process or product performance is beyond compliance, but can not yet be considered to have near-zero impact. Green can be qualified by voluntary classifications such as: EU GreenBuilding, LEED and BREEAM.
- Deep Green – signifies a construction process where product performance is future-proofed – for example, it uses zero net energy and produces zero waste. Deep Green is the ultimate destination for the projects undertaken on behalf of Skanska's more forward-looking customers.

## Exceeding norms in Poland

Delivering beyond compliance is exemplified by the Grunwaldzki Center in Wrocław, Poland. Designated an EU GreenBuilding, the modern office facilities consume 30 percent less energy than Polish building norm. The building is equipped with an advanced Building Management System, which manages the heating, ventilating and air conditioning system and all the indoor parameters to ensure optimal energy use. Heat recovery systems in the air handling units recycle 90 percent of the energy from the outgoing air and outgoing warm air is recirculated through the garage levels to avoid the need for space heating. The project also achieved 98 percent recycling of waste materials, which were segregated on site.



pl. Grunwaldzki



## Harnessing heat from people

Apartments in the Blå Jungfrun development in Stockholm have no conventional space heating, they are warmed by the heat of the occupants themselves, household appliances and passive solar heating. As a result, these apartments consume less than half the energy of a comparable building types in Sweden.

The Skanska Color Palette™ is now being used to benchmark new projects. Each of the key indicators is mapped according to project performance.

### A sustainable sports arena

Completed in April 2010, the New Meadowlands Stadium in New Jersey – home to both the New York Giants and New York Jets – is one of the most sustainable sporting venues in the U.S. Local employment was encouraged through the Construction Management Building Blocks program, a training program designed to help small business owners from minority social groups. During the construction phase and the first year of operation, carbon dioxide emissions were reduced by approximately 1.68 million metric tons. The new stadium uses around 30 percent less energy than its predecessor, despite having double the floor space, while water usage has been reduced by 25 percent. By working closely with the customer and the U.S. Environmental Protection Agency, Skanska USA delivered a USD 1.1 billion project that sets new standards for sustainability and spectator enjoyment. Read more about the stadium on page 30.

### Enhancing the natural environment

The United Nations designated 2010 as the International Year of Biodiversity.

The forests of Brazil represent around one third of the world's remaining rainforests and are home to an estimated 56,000 species of plants and over 3,600 species of animals. They also provide the country with two million jobs. Skanska is currently helping to reduce deforestation and encourage sustainable forest management by supporting The Forest Trust, a Swiss non-governmental organization. Aided by contributions from Skanska, TFT has enabled Rondobel, a Brazilian forestry company that works 16,000 hectares of the forest, to progress toward full Forest Stewardship Certification (FSC) for

its products. Carbon emissions resulting from air travel to corporate events involving large numbers of employees and day-to-day travel for a number of corporate functions are balanced through these contributions. This has several advantages over conventional carbon offsetting. As well as encouraging responsible forest management, the social welfare of the communities who rely on the rainforest is enhanced. Established forests are also more efficient carbon sinks than the newly-planted woodland that forms the basis of many offset programs. At project level, where biodiversity can be enhanced or improved, Skanska recognizes its broader responsibility to assist in species protection.

### Carbon

Skanska reports its Scope 1 and 2 emissions in accordance with the internationally recognized Greenhouse Gas Protocol and supplies this data to several external stakeholder groups, including the Carbon Disclosure Project. Scope 1 Absolute Carbon Dioxide emissions were 336,082 metric tons and Scope 2 Absolute Carbon Dioxide emissions were 106,189 metric tons in 2010. In addition, Skanska's ambition is to further develop its reporting within Scope 3 in line with emerging international guidance.

Energy efficiency and carbon reduction are major sustainability opportunities for Skanska. The progress made in previous years was strengthened in 2010 with the development and use of carbon footprinting tools, both to benchmark the total lifetime carbon emissions of a structure and to help identify low carbon options for projects.

During 2010 Skanska's Building Information Modeling (BIM) competence centre in Finland incorporated a carbon calculator so that, for the first time, trade-offs between cost, structural performance and carbon can be assessed for different materials and structures.

Skanska's business units are developing a range of approaches to carbon footprinting, depending on local regulations and market requirements. In 2010,



### Planning for safety

The Norra Länken project, winner of the Skanska 2009 Health and Safety Award, uses Building Information Modeling (BIM) as part of safety improvement plans. BIM makes it possible to plan every step of construction. For example, the project employed BIM to illustrate materials using 3-dimensional tools at startup meetings with different trade contractors, which helped provide a better picture of the work to be carried out and any difficulties that might arise. This enabled some of the risks to be removed. The project also went on to win the Swedish Road Administration Safety Award in 2010.

### Green – from the roof down

Due for completion in 2011, the new ten-story 733 10th and G building in Washington, D.C. is being constructed to a minimum standard of LEED Gold. Innovative building features include a green roof to minimize "heat island" effects and reduce storm water overflow. Inside, sensors will monitor carbon dioxide levels and regulate ventilation. Energy efficiency measures will provide an estimated 14 percent reduction in annual energy costs. Outside, special parking is provided for alternate fuel vehicles. High performance, low solar gain glass is complemented by the re-use of materials.



Skanska Sweden launched its own ECO2 tool, which was used for the first time on the Nyhamn-Gävle Strand residential project. ECO2 is linked directly to cost estimating, enabling carbon emissions to be calculated according to the project specification and construction material profiles. Skanska Finland used BIM to calculate the carbon footprint of its new headquarters building, Skanska House, while in Norway the Norwegian Government's carbon calculator was applied during the construction of the Nesodden Community Center.

### Reducing carbon emissions

In the U.S., footprinting of the Hillsboro Intermodal Transport Facility (HTIF) a multi-story vehicle and bicycle parking project in Oregon, helped in the selection of low carbon options for a range of primary construction materials, resulting in the avoidance of over 3,600 metric tons of carbon dioxide equivalent (tCO<sub>2e</sub>). HTIF has been designed to consume significantly less energy than conventional parking garages. Using energy-efficient lighting designed to perform at 82 percent below code and a 60kW photovoltaic solar energy system that generates 89 percent of the power requirements, the carbon footprint of the project has been reduced significantly and the Hillsboro project rates beyond compliance, or Green on the Skanska Color Palette™.

Meanwhile, in the U.K., Skanska calculated the carbon footprint of the recently delivered One and Two Kingdom Street projects in Paddington, London. Embodied carbon is typically estimated at 20 percent of a construction project, with the remaining 80 percent due to energy consumption during lifetime occupancy. Results produced for Skanska UK show that thanks to energy-efficient design and construction, operational carbon for these projects is predicted to fall to approximately 70 percent of the total. Meanwhile the Bristol Private Finance Initiative (PFI) schools in which Skanska Infrastructure Development is an investor are now part of the largest biomass boiler cluster in the U.K.

Low-carbon homes will play an important part in achieving the energy reduction targets, particularly those set in Europe. Skanska has already built over 50 percent of all the "passive house" stock in Sweden. The latest development, completed in 2010, represents the first high-rise rental apartment building to be constructed to Swedish passive house standards.

### Energy

Skanska continues to benefit from energy efficiency and renewable energy. During the year the Commercial Property Development business units in the Nordic countries and Central Europe focused on beating national energy codes by at least 25 percent to obtain EU GreenBuilding recognition for their projects. Most business units also have energy efficiency plans for their own offices and projects. In addition to energy efficiency measures, supply contracts were switched to Green tariffs and in the case of the Civil business area of Skanska USA, two large photovoltaic systems were installed in New Jersey and Colorado, and surplus generation is sold to the state grids.

### External engagement – carbon and energy

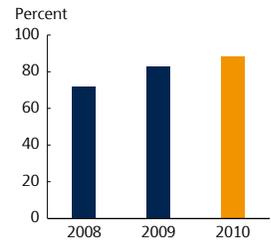
Skanska works with the influential EU Corporate Leaders Group on Climate Change to support policy-makers by promoting a forward-looking agenda on climate change.

The Company is also continuing its participation in the World Business Council for Sustainable Development's Energy Efficiency in Buildings Initiative. Skanska is playing a leading role in developing the project with the International Energy Agency into a high level policy document and is facilitating the development of a sector Carbon Dioxide Measurement Protocol together with ENCORD - the European Network of Construction Companies for Research and Development. In addition, Skanska supports the UN Environment Program's Sustainable Building & Climate Initiative and piloted its Common Carbon Metric tool for buildings.

### Water conservation

Water is regarded as one of the planet's finite resources that will be severely affected by climate change. Although construction and infrastructure development does not consume large quantities of water, the subsequent occupancy of buildings can be responsible for high levels of water consumption during their service lifetime. Skanska is reducing this consumption in a number of ways, and for the first time water is a specific focus area in both the Skanska Color Palette™ and the 2011-2015 Environmental Strategy. Reuse of rainwater, grey water recycling and reducing the consumption of potable water are important considerations for all projects. For example, Skanska UK's involvement in construction for the 2012 London Games involves a comprehensive program of ground and surface water treatment and reuse. When complete, the project is expected to use over 60 percent non-potable water.

Total average amount of waste diverted from landfill 2008-2010



Waste diverted from landfill. Target for 2010 >90%.

### Royal green

Playing an active role in the EU Corporate Leaders' Group on Climate Change, an initiative that is supported by His Royal Highness the Prince of Wales, is part of Skanska's commitment to sharing sustainable best practices. Skanska's contribution to building a more sustainable future was acknowledged personally by His Royal Highness in a letter he sent from Clarence House.

His Royal Highness The Prince of Wales



Photo: Chris Jackson

## Sustainable procurement

Over 80 percent of Skanska's revenue flows through its supply chain. As well as playing a key role in materials selection and use, sustainable procurement is of great strategic importance. Skanska will only ever be as safe, green and ethical as its supply chain. As a consequence, one of the most important business challenges is to ensure that subcontractors as well as materials and product suppliers are aligned with Skanska's own sustainability agenda. Clear communication with the supply chain is vital to ensure that goods and materials have a chain-of-custody. Pre-qualification of suppliers and subcontractors is also an important tool for improving safety performance. Skanska UK works systematically to ensure that the supply chain understands the precise requirements. Assistance is given to suppliers, to enable them to work towards compliance and appreciate the importance of sustainable sourcing.

The activities of Skanska's Nordic Procurement Unit are greatly influenced by sustainability considerations. Suppliers are encouraged to consider green solutions, aimed at reducing whole-life cost, as part of their bids. Where alternative materials and products have already been used successfully in projects, details are communicated throughout Skanska's Nordic business units. There is also increased focus on using additional factors besides price in determining the suitability of a product, service or supplier, for example by integrating the Skanska Color Palette™ into the procurement process.

Skanska Norway actively supports the EU Chem Xchange project. Started in 2009, it offers the European construction sector a tailor-made, low-priced, fully digitalized chemical information system covering risk assessment, supply chain communication and management. A database will soon provide information in 23 EU languages plus Norwegian.

Skanska's Green IT commitment demands that suppliers replace substances of high concern such as phthalates, PVC cables and brominated flame retardants with commercially viable alternatives. For many years Skanska has committed to reducing hazardous substances in its projects, for example through membership of the Business Group of NGO ChemSec.

## Community engagement

Skanska works closely with small suppliers and under-represented minority groups to encourage their involvement in the supply chain. During 2010, three training programs aimed at young offenders have been undertaken by Skanska UK with the encouragement of its customer, the National Grid. Working with the South East Electricity Substation Alliance (SEESA) and the Rochester Young Offenders Institution, Skanska has helped to teach participants to find work at the end of their sentences. The ten-week courses have been so successful that employment is now being offered by Skanska to many of those who complete the training.

Education at every level is important and Skanska takes its responsibilities seriously. In Argentina, Skanska has been working with the Cimientos Foundation since 2005, helping to support and encourage children through their secondary schooling.

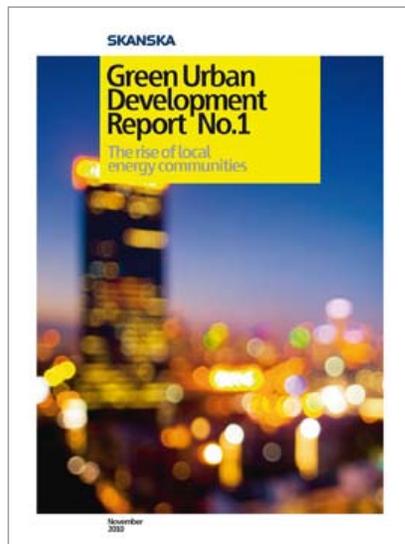
## The road ahead

In 2010 several of Skanska's key sustainability initiatives were strengthened and further developed, while Skanska's Journey to Deep Green™ is already changing the way new projects are visualized and implemented.

Looking forward, sustainable development concepts will play a central part in the Company's 2011–2015 business plan. The social priorities of ethics and safety will be actively managed alongside green business opportunities linked to energy, carbon, materials and water.

## Green Urban Development Report

Skanska's new series of Green Urban Development Reports highlights trends and developments that will make our society greener. The first issue features how energy consumers turn into producers. In the near future, citizens will become stakeholders in a local energy community. Smart technology will empower citizens to become urban energy farmers. Skanska will issue two reports per year and you can find them at [www.skanska.com/greenreport](http://www.skanska.com/greenreport)



## Awards won

- Top construction company, Nordic Region, in the Carbon Disclosure Project (Skanska Group)
- The Sunday Times - Best Green Companies Award: 2nd overall and winner of large company and winner of best corporate environmental strategy (Skanska UK)
- The US Green Building Council's Leadership Award (Skanska USA Building)
- Winner of the Supplier Diversity category in the Mayor of London's Responsible Procurement Awards (Skanska UK)
- Safety - Premio Apolo Award ENDESA (Skanska Latin America)
- Via Bona awards, presented by the Pontis Foundation for Skanska's commitment to business ethics (Skanska Slovakia)

## Solar power in Colorado

**Location:** Cortez, Colorado

**Unit:** Skanska USA Civil

**Project:** 1,260 solar panels

**Capacity:** 258 kWh

**Investment:** USD 1.5 M

**Environmental benefit:** Reducing CO<sub>2</sub> emissions by purchasing substantially less electricity produced by coal fired power plants

In the Rocky Mountains, some 2,000 meters (over 6,000 ft.) above sea level, Skanska is capturing the sun. Skanska's local office in Cortez, Colorado has switched to solar power. Not only that – surplus energy will flow from its new system into the local electrical grid.

Skanska's 1,260 solar panels will generate 258 kW when operating at capacity. The desert-dry landscape around Cortez has few rainy days and the sun shines 240 days a year. The solar panels will also generate electricity even on cloudy days.

The office's solar panels are capable of rotating and are connected to a GPS tracking system that enables them to follow the sun and maintain an optimal angle. This boosts their efficiency by 30 percent compared to fixed panel arrays.

Heavy road, excavation and construction jobs are part of Skanska's day-to-day work in the "Four Corners" region. Giant bulldozers and other heavy machinery parked in the Skanska USA Civil yard in Cortez normally attract people's attention. But no longer – today the big eye-catcher is 15 rows of shiny new solar panels.

The Cortez office also showed its precision know-how by performing its own site preparation, including pole and solar panel installation.

The message has been snapped up by its surroundings. A number of potential customers have already contacted the office to get help with their own solar energy systems. Skanska has also been given the Green Business of the Year award by the Cortez Area Chamber of Commerce.

At today's energy prices, the office's USD 1.5 M investment will pay for itself in six years. The environmental benefit cannot be measured in money, but the transition to solar energy is estimated to save the equivalent of 227 metric tons of carbon dioxide emissions yearly.

Skanska USA Civil's office in New Jersey also generates its own electricity, using roof-mounted solar panels.

