

**SUSTAINABILITY REPORT
2010**



A SCULPTURE THAT PRODUCES ENERGY

When kids play on the sculpture they activate the integrated LED lights. The sculpture won the JEC Innovation Award for 2010



Sustainability is a driver for **business and innovation**



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Photo: Scanpix / Morten Larsen

INTRODUCTION

Sustainability drives innovation

As we experience an increasing demand for sustainable solutions across business lines and regions, sustainability creates new business opportunities and drives innovation.

It forces us to think differently and provide solutions that integrate renewable energy, take due consideration of climate change, and reduce water consumption. It also invites us to find solutions that are healthy, responsible, and inviting for users and surrounding communities alike.

Our multidisciplinary set of skills is a prerequisite to deliver sustainable solutions to our customers. Our many competent employees in engineering, environmental sciences, social sciences, economy and planning have

to work side-by-side when it comes to sustainable solutions.

Being a member of the UN Global Compact and the UN Caring for Climate underlines our engagement and commitment to working with sustainability. Our commitment to these international principles reminds us that working with sustainability is an ongoing process in which we can always improve our performance.

Yours sincerely

Lars Peter Søybe, President, CEO

WORLDWIDE CONSULTANCY SERVICES

COWI approaches challenges set by customers from every angle in order to provide consultancy services – from economic analyses through environmental impact assessments to designing major bridges

Economics, management and planning

- Economic analyses and tools
- Financial analyses and law
- Evaluation and impact assessment
- Organisational development and social studies
- Communication and policy advice
- Transport planning and modelling
- Public transport and ITS
- Spatial planning and urban development

Water and environment

- Health, safety and environment
- Water supply and wastewater
- Water and natural resources management
- Environmental impact assessment and monitoring
- Solid waste management
- Contaminated sites
- Strategic environmental consultancy

Geographical information and IT

- GIS and IT
- 3D visualisation and modelling
- Maps and geodata products
- Mapping and data capture
- Surveying
- Property rights and land administration





Industry and energy

Industry
Energy
Oil and gas

Bridge, tunnel and marine structures

Bridges
Tunnels
Structures for infrastructure
Offshore wind farms
Marine, coastal and geotechnical engineering
Operation and maintenance
Risk management and analysis
Service life design

Buildings

Building design
Sustainable and green buildings
Fire engineering
Hospitals and health care
Project management consultancy
High-rise
Master planning and urban development
Refurbishment and retrofit

COWI's broad palette of consultancy services means that we can tackle professional challenges from a range of vantage points

Railways, roads and airports

Roads and highways
Railways
Light rails
Metros
Airports



Photo: COWI

KEY ACTIVITIES IN 2010

During 2010, COWI experienced an increasing interest in sustainable solutions that integrate social, environmental and economic considerations in the final product

New management board

We define sustainability as integrating social, environmental and economic considerations in the final product.

To promote sustainability in our business activities, COWI established a Sustainability and Climate Change Management Board. The Board ensures an overall coordination of relevant business initiatives across business units and regions. The Board consists of top level management as we believe it is important to anchor decisions related to sustainability at the highest possible level in the organisation.

Integrated in our strategy

It is COWI's ambition that sustainability is an integrated part of everything we do. Both internally and externally.

To realise our ambition, sustainability has been selected as one of the six pillars in COWI's overall future strategy. This means that all business units and regions are defining how sustainability can work as a business differentiator in their markets.

Business related results

During 2010, COWI focused on climate change adaptation, climate mitigation, sustainable buildings and sustainable urban planning. Within all four areas, we have positioned ourselves as strong consultants and have won assignments in all our international regions.

The Sustainability Report 2010 highlights how urban development has successfully integrated sustainability as a business differentiator. The report highlights how

← Sustainability in Salman Bay

The master plan for Salman Bay in Saudi Arabia is one of the projects in which COWI is integrating sustainability and promoting it through innovative design as well as education and awareness through research centres and collaborative community projects.



Annemarie Meisling
Group Sustainability Director

Customers are interested in **sustainable solutions** that give a return on investment in the **long run**

sustainability has been integrated in projects in Sweden, Norway, Denmark, Saudi Arabia, China and Serbia.

Network activities on sustainability

To push the sustainability agenda internally in COWI, a number of meetings have been held in COWI's sustainability network. In 2010, the meetings focused on sustainability in marine projects, concrete structures, tunnels and infrastructure. The network consists of close to 100 employees from various departments who are important change agents.

Launch of supplier code of conduct

COWI wishes to collaborate with suppliers who promote a healthy environment, good working conditions and an honest conduct of business.

In 2010, COWI developed a supplier Code of Conduct which has initially been sent to all Danish suppliers. COWI will be in dialogue with the suppliers to ensure compliance with the policy.

Women in management

During 2010, COWI continued its endeavours to increase the number of women in management positions under the initiative 'Charter for more women in management', which is supported by the Confederation of Danish Industries. COWI Group President and CEO, Lars-Peter Søbye, served as mentor for a female manager in Danish pension fund ATP. In turn, one of COWI's female managers was mentored by the CEO of ATP.

With this initiative we hope to inspire more women to become managers as we believe diversity is important at all levels in the organisation.

The hotline on business ethics is working well

COWI's hotline on anti-corruption and business ethics has been open since 2009. The hotline can be used by employees and other stakeholders to report on unethical behaviour such as corruption, financial fraud and discrimination.

In 2010, the hotline was used five times, and it served its purpose well.

The hotline has been approved by the Danish Data Protection Agency and as such meets the highest standards of data protection of employees.

Reducing our own footprint

In COWI we are continuously working to reduce our CO₂ emissions and environmental footprint. The COWI offices in Denmark and Norway have published CO₂ accounts which help keep track of performance.

UN Global Compact

COWI's sustainability report is also used as communication on progress to the UN Caring for Climate and the UN Global Compact. COWI has been a member of the Global Compact since 2006.

The report and additional information on sustainability in COWI can be found at www.cowi.com/sustainability.

OUR SUSTAINABILITY APPROACH

We work to integrate considerations of people, planet and profit in all areas where we have an influence



Integrating sustainability

COWI wishes to integrate sustainability, so it becomes an integrated part of everything we do. This means integrating it with our business activities, in relation to our employees, in the management of our facilities and in our interaction with society.

This report highlights some of the results COWI achieved during 2010 in the four areas.

You can read more about sustainable business on page 12, our people on page 22, our facilities on page 24, and our activities relating to our society on page 26.

Our main influence lies in the work we perform for **our customers**

Policy for sustainable development

In the COWI Group we will take into account environmental and social aspects in connection with the tasks we perform for our customers. We consider this a fundamental obligation for both the companies in the Group and for our employees.

The COWI Group considers the adherence to local legislation and international conventions a matter of course.

We wish to further contribute to sustainable development through constant improvement of our services, through our operation and through dialogue and co-operation with the world around us.

In the COWI Group we will direct our employees' attention to and enhance their knowledge about environmental and social conditions in order to further the consideration for sustainable development in all of our activities.

Photo: Niels Aage Skovbo



SUSTAINABLE URBAN PLANNING

Sustainable urban planning means integrating social, environmental and economic considerations in our final solutions. COWI works with sustainable urban planning all over the world

SUSTAINABLE URBAN PLANNING



Roskilde, Denmark

Integrating music and culture in urban planning, page 15



Brøset, Norway

Developing a carbon-neutral neighbourhood, page 15



Helsingborg, Sweden

Integrating renewable energy and street life, page 14

six examples of projects in sustainable urban planning



Belgrade, Serbia

Using the river for heating and cooling, page 16



Salman Bay, Saudi Arabia

Developing affordable housing for citizens, page 8 and 17



Zhangjiagang, China

Designing environmentally-friendly EcoCities, page 16



Mette Mogensen
Architect and R&D Manager

CITIES FOR THE FUTURE

Today more than half of the world's inhabitants live in urban areas, so it is important that we design our cities and urban areas in a sustainable way



SUSTAINABLE URBAN PLANNING

The good city is a healthy and sustainable place where people feel welcome and can explore new things.

Listening to the user

People like to experience cities at a leisurely pace. Over the past 50 years, however, traffic congestion, high-rises and parking lots have forced out the plazas and squares where people once congregated.

When COWI develops urban areas we emphasise the importance of listening to the people who will be living in the city and its buildings. We invite citizens to be involved throughout the design and implementation process. Diversity and access for everyone are also important focus areas.

Sustainability has to be fun

It is important that sustainability is not seen as a heavy burden. If you want to promote sustainable living, it should be easy and accessible for the people visiting and living in the cities.

Mette Mogensen, one of COWI's experts in sustainable urban development, explains COWI's approach:

"We promote a new form of sustainable thinking. Back in the 1990s, sustainability was about growing your own food in the backyard and feeling guilty if you drove your car to work. But sustainability should not be about spending less, eating less and holding your breath. It should be about doing things in a smarter way. In our Generation 2.0 of sustainability we want to make a positive difference to society instead of doing less harm. Obviously, new technology, renewable energy, smart grids and electric cars are integrated into the solution in order to make it easier for people to make the right choices."

Blog on urban development

Mette Mogensen is blogging on sustainability and urban development. Find her Danish blog on [byudvikling.wordpress.com](#).

Sustainability means considering all relevant **social, environmental and financial** aspects of the project

A street full of life

The H+ project in Helsingborg is one of Sweden's largest urban development projects. COWI is part of a team developing one of the main streets called Bredgatan. The street has its own vision to be creative, sustainable and full of life. A strong environmental agenda supports the vision and requires the area to integrate renewable energy, support a healthy lifestyle and include green areas where possible.

Facts: 1,000,000 m²

Photo: Kanozi architects





Music and sustainability

Musicon is a former industrial area in Roskilde, Denmark, which is being transformed into a cultural and musical centre. Sustainability is considered during construction, operation and maintenance. It will be integrated in relation to surfaces, materials, remediation of soil and water, lighting and roads. Sustainable transportation and green zones are part of the development.

Facts: 15,000 m², 650 residential houses, 2,000 cultural jobs.

Photo: COWI



A carbon-neutral neighbourhood

So far it is still a field, but residents in the proposed Norwegian suburb Brøset will be able to live sustainably without having to give up modern conveniences. The plan for the new settlement is based on a sustainability approach which challenges the idea that sustainability is synonymous with privation and restrictions. Instead, modern technologies will make it possible for everyone in Brøset to live a sustainable life.

Facts: 195,000 m², 2,700 new homes, a school for 500-600 pupils, a nursing home, day-care facilities and assisted living facilities.

Photo: Trondheim Municipality





Using the river for cooling and heating

In the future, the Danube River will be an important source for recreation as well as district cooling and heating. Even though the river runs through central Belgrade, Serbia, a vast harbour and industrial area prevent residents and tourists from accessing the waterfront. The project, which is a collaboration between COWI Liebeskind and Gehl Architects, will change that by opening for commercial and residential development.

Facts: 4.7 km²

Photo: Studio Daniel Libeskind



EcoCities in China

Some 300 million Chinese will move from rural areas to the city during the next ten years. Environmentally-friendly EcoCities are springing up all over China and share an aim to make cities liveable with as little pollution as possible. COWI is working with the municipalities in Zhangjiagang and Huoxian to set achievable environmental targets that can make a big difference for the cities. Energy efficiency is a key parameter for the success.

Facts: 60,000 residents, 30,000 jobs.

Photo: Stig Stasig





Nathan Cox
Head of Department
Master Planning

It is our **multidisciplinary skills** that enable us to deliver sustainable services

Planning for climate changes

Planning for the adverse impacts of climate changes becomes increasingly important in urban development projects. This includes taking into account the risks of increased water levels, flooding, massive rainfalls and drought.

Carbon neutrality is a priority for many of our customers and our solutions integrate the reduction of CO₂ emissions through solar energy, geothermal heating, wind power and other renewable sources of energy.

The environmental footprint

The layout and design of buildings and local infrastructure have important implications on the environment. An environmental assessment is part of all sustainable urban planning projects. COWI also looks for solutions that create a positive impact on the environment. If, for example, contaminated soil is found on a development site, COWI will look for ways to remediate it as an integrated part of the project.

Multidisciplinary approach

Working with sustainable urban development requires a multidisciplinary approach. It is one of COWI's strengths that we can provide in-house expertise in a large number of very different areas.

According to COWI's Head of the Master Planning Department in Bahrain, Nathan Cox, sustainability and multidisciplinary skills are interdependent.

"In undertaking a major project like Salman Bay in Saudi Arabia, we drew upon our many in-house specialists in the disciplines of master planning, urban design, landscape architecture, transportation, environmental science, marine engineering, public health, engineering and architecture. It's been critical to the project's success that the complementary disciplines work side by side."

SUSTAINABLE URBAN PLANNING

← Affordable housing, Salman Bay, Saudi Arabia

COWI was honoured with the 'Best Master Planned Community' at the 2010 Bahrain Affordable Housing Summit for the Salman Bay project. The success story stems from establishing an understanding of the client's needs early in the project and achieving those interests as our own success criteria.

Sustainability is integrated from the outset. COWI is delivering what is good for the client who is driven to respect the environment and to deliver what is required by the community.

Facts: 14 km², iconic tourist attractions, five-star hotels, marinas, private islands, around 90,000 inhabitants.

Photo: Stig Stasig



Kristian Kolstrup
Project Manager
Economics Management and Planning

We need to be more specific about the **financial benefits** of sustainable solutions

SUSTAINABLE URBAN PLANNING

Sustainable solutions pay off in the long run

Is it more cost-effective to locate residential houses on the east or the west side of the river? From an environmental point-of-view, where should we locate office buildings?

There are always a number of ideas on the table during an urban planning process. Where should homes be located and how can they mesh with existing or planned infrastructure?

COWI has developed an urban planning programme that helps investors and city planners try out various options and create a match between the economy, the environment and the overall vision of the project.

Makes communication easier

The tool calculates the economic consequences of different scenarios. For example, it can calculate how costs and environmental benefits vary depending on the mix of residential areas, offices, retail and cultural institutions. "The customer appreciates having this information at a very early stage," says Kristian Kolstrup, Project Manager in COWI. "We make the planning process easier as the parties involved have a common language when discussing various solutions. We see that the tool minimises the risk of misunderstandings."

The visual effect

The computer programme is based on aerial photos of the area, adding a visual element to it. Just like a computer game, the user can shift focus and look at various parts of the urban area in question. The user can also click on a building or a road and move it to another location and explore if the change will minimise environmental costs. The costs relate to areas such as electricity, heating, drainage, sewage, climate change adaptation, wind, humidity, temperature, groundwater levels, risk of flooding, the need to clean contaminated soil etc.

Financial feasibility

The financial benefits of our sustainable solutions need to be clearly articulated and defined. If not, there is a risk that they will not be prioritised during an economic downturn. "It is important that sustainability is seen as a 'need to have' and not a 'nice to have'. We can only achieve this by being very clear about the financial benefits such as a less expensive energy bill in the long run," says Kristian Kolstrup, Project Manager, Economics, Management and Planning.

Climate change adaptation

The tool has been used to estimate the costs of climate change adaptation in an urban setting. This included how to place the roads in order to allow for rainwater to flow towards the sea and how to best protect the buildings from rising sea levels and heavy rain.

Photo: COWI



Marine project

The tool has been used on a harbour area in Denmark. It helped the developer and the investor design the site in the most cost-effective way taking due consideration of the environment. The tool provided the parties with a common language and a unified set of data, which aided the collaboration.

Photo: Peter Sørensen



Calculating the sustainable profit

The model is as easy to use as a computer game. Users navigate an aerial photo, and new parts of the urban area become visible. They can click on a building and move it to another location, and the costs and environmental implication of the change are automatically calculated.

Photo: COWI



A CARBON NEUTRAL HOUSE

The Green Lighthouse is Denmark's first public carbon neutral house, located at the University of Copenhagen





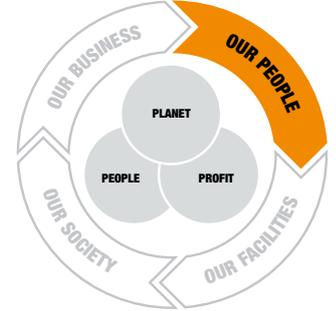


Lone Hass
Executive Vice President
People Relations and Responsibility

Diversity helps us to deliver more **innovative** solutions

DIVERSITY MEANS BUSINESS

Diversity is a competitive advantage. By actively building diverse teams, we secure the best results for our customers



DIVERSITY AND OUR PEOPLE

Diversity has many faces in COWI. We are aiming to improve the gender balance and work towards a high degree of cultural diversity. We are also focusing on mixing people with different competencies and educational backgrounds.

Diversity is a business parameter

“In COWI we are working to increase the level of diversity, because we believe that everyone should have equal opportunities and because it makes simple business sense,” says Lone Hass, Executive Vice President. “We want our customers to reap the benefits from the many different skills we have in the organisation, and we experience that our solutions improve when we bring our workforce’s diversity to the table.”

Succession planning

It is COWI’s goal that the gender balance in the management group reflects the gender balance among the employees. In order to improve the gender balance, all top level managers have to include women in their

pipeline of successors. It is the goal that the pipeline for top level managers matches the gender balance in the business area. There is still room for improvement in this area for COWI, and we therefore need to maintain a focus on women in management in the coming years.

A new transparent career system

In 2010, COWI implemented a new career system. Four distinct career paths have been defined including line management, project management, specialists and business development. Each career path clearly defines what is expected of the employee at the various levels. The transparency in the system makes it easier for all employees, regardless of their gender, cultural background and education to navigate in the system and define where they want their career to take them.

EMPLOYEES AND SUCCESSORS IN THE COWI GROUP 2010

		2010	2009
Employees in %	Men	67%	68%
	Women	33%	32%
Successors in %	Men	72%	75%
	Women	28%	25%

During 2010, the share of female successors in the COWI Group increased by three per cent to 28 per cent. As such we are getting closer to our goal of ensuring that the number of female successors reflects the number of female employees, which was 33 per cent in 2010.

Being mentored by a CEO

As part of COWI’s focus on women in management, our Head of Department for Hospitals and Health Buildings, Helle Gaub, entered into a mentorship arrangement with the CEO of the Danish pension fund ATP. Helle Gaub met with the CEO on several occasions and discussed her path in the career system. “The meetings helped me define what is needed to take the last steps towards a top level managerial position. Both in terms of skills and mind-set.” Similarly, COWI Group President and CEO, Lars-Peter Soby, served as a mentor for a female manager in ATP.

Photo: Ulrik Jantzen



Charter for women in management

COWI has signed the 'Charter for more women in management', and according to COWI Group President and CEO, Lars-Peter Søbye, there are a number of business advantages in having a more diverse management group. "Our decisions and solutions are often better when we bring our workforce's diversity into play. This includes education, gender, ethnical background, age, technical skills and so forth."

Photo: Stig Stasig



More women than men in COWI China

All managers in the Chinese office are women. "To keep a mixed gender balance and secure diversity in the management group, we probably have to look for men to match the very competent women we have in management positions today," says Managing Director Mads Jensen Møller.

Photo: Morten Larsen

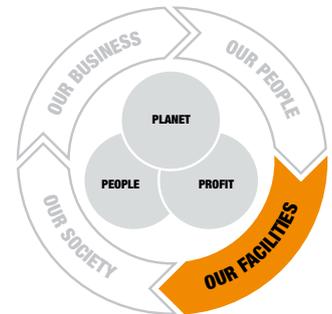




Barbro Sørlid Eng
Senior Vice President
Environmental and Social Planning and Managing Director

GREENING OUR FACILITIES

Reducing our own CO₂ emissions is a win win situation. It is good for the environment and it saves money at the same time



CO₂ ACCOUNTS

Reducing our CO₂ emissions continues to be a high priority in COWI. To keep track of our performance, two of the biggest regions in COWI have developed CO₂ accounts. More regions will follow.

Decreasing CO₂ emissions in Denmark

The offices in Denmark are working actively to reduce their carbon footprint, and 2010 saw significant reductions in their CO₂ emissions. The total amount of energy for heat and electricity has decreased by 11 per cent from 2009 to 2010, reducing the equivalent CO₂ emission with 240 kg per employee or 525 tonnes in total. In COWI's headquarters in Lyngby, the reduction is even higher per employee, mainly due to a transition to LED lighting.

Improvements in the area of transportation

In 2010, 145 equivalent tonnes of CO₂ were saved on transportation compared to in 2009. The reduction is partly due to a slight shift from car to train, and it corresponds to savings of 65 kilos per employee.

Air travel continues to be the biggest challenge in COWI Denmark as it accounts for around 50 per cent of the total CO₂ emissions.

Recycling and water

All in all, recycling in COWI Denmark has increased by 35 per cent, water consumption has decreased by 2 per cent, and the overall equivalent CO₂ emission per employee has fallen by 6.5 per cent from 3.88 tonnes in 2009 to 3.63 tonnes in 2010.

Environmental certification in Norway

The major offices in Norway are certified with the Norwegian 'Environmental Lighthouse' certification. This means that each of the certified offices has appointed a person to ensure continuous improvements in the areas of working environment, procurement, waste, energy, transportation, emissions to air and water as well as aesthetics.

Calculating CO₂ emissions in Norway

In 2010, COWI Norway prepared its first CO₂ account showing the amount of CO₂ per employee. COWI Norway will continue to prepare CO₂ accounts in the future in order to compare performance from year to year.

Electric and hybrid cars lead the way

The Norwegian offices are working actively on reducing their CO₂ footprint. In 2010, 25 per cent of the cars acquired for common use were electric or hybrid cars. The office is also using video conferencing to a higher extent in order to decrease CO₂ emissions related to air travel.

They are also working to reduce the use of paper, by having two-sided printing as default, and is focusing on a high quality source separation of waste.

Going green helps
us **save money**

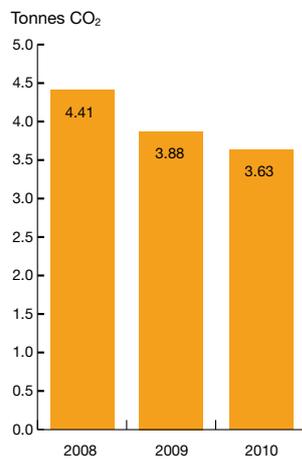


Environmental consciousness in Oman

The Muscat office recycles paper, reviews use of concrete and other high CO₂ materials and develops in-house expertise in low energy design. Externally, the Oman office lobbies for statutory energy savings directives and participates in organisations where they can make a difference such as the Environmental Society of Oman.

Photo: Stig Stasig

CLIMATE IMPACT PER EMPLOYEE IN DENMARK



CLIMATE IMPACT PER EMPLOYEE IN NORWAY, TONNES CO₂*

	2010
Electricity	0.704
Air travel	0.489
Cars	0.377
Number of employees	783

*The Norwegian figures are based on the recommended CO₂ factors given by the Norwegian authorities.

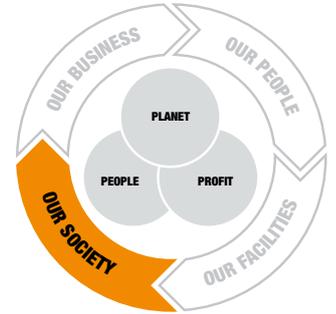
*The figures for electricity and cars cover the three main offices, Oslo, Fredrikstad and Trondheim. An average from these three locations is used as a basis for COWI Norway.



Stig P. Christensen
R&D Director

SUPPORTING EDUCATION

Engaging in research and development helps COWI deliver cutting edge knowledge to its customers



RESEARCH AND EDUCATION

COWI is a knowledge-based company, and we depend on the latest research in our areas of work. As a result, we support collaboration with universities, students and other companies on a variety of topics. The support comes directly from our business areas or through COWIfonden (the COWIfoundation), which is a majority owner of COWI A/S.

Intelligent energy systems

COWI is taking part in a large-scale Danish research project on intelligent energy systems, also called smart-grids. The purpose of the collaboration is to come up with a solution on how to increase the use of renewable energy, reduce greenhouse gases and make Denmark less dependent on fossil fuels.

The smart grid solution integrates two-way communication between energy-producing companies and consumers. It will enable the system to increase the use of renewable energy when it is available and make consumers pay a higher price if they use energy during peak hours.

Smart grid collaboration

The smart grid collaboration consists of 32 groups from leading universities, research institutions, energy companies and the Danish Ministry of Science, Technology and Innovation. It is a EUR 16 million investment and COWI A/S is contributing with some EUR 135,000.

The COWIfoundation

An objective of the COWIfoundation is to support research and development in the engineering sector. This is accomplished through support to projects that lie within our professional disciplines and areas of operation. These include engineering, environmental, economic and social sciences. In 2010, the COWIfoundation provided EUR 193,000 to support 15 different projects.

It is a **natural choice** to support research institutions and universities, as we depend on the latest research

Engaging children in science and technology

Stimulating children's interest in science and technology is a long-term investment in our future employees. In 2010, COWI sponsored the First Lego League, which is a robotics programme for 9 to 16-year-olds. It is a competition to get children excited about science and technology and encourage their talent for finding innovative solutions. The competition also teaches children valuable skills for their future careers and is quite popular with 15,000 teams in 50 countries.

Photo: Stig Stasig



Engineers without borders

The COWI foundation supported the NGO Engineers Without Borders. The mission of the NGO is to improve quality of life in disadvantaged communities through education and implementation of sustainable engineering projects. Recent projects include water and sanitation in Haiti, building a primary school in Sierra Leone and reconstructing a bridge in Liberia.

Photo: Stig Stasig



Earthquake assistance to Haiti

Images from the earthquake in Haiti touched us all. Two COWI employees, Randi Jahnsen and Jan Andreasen, wanted to help the victims and were immediately granted leave from COWI to work for the Norwegian Church Aid in Port Au Prince for a total of six months. In Port Au Prince they assisted within their field of expertise by coordinating water resources and improving sanitation facilities.

Photo: Arne Grieg Riisnæs



Sustainability

At www.cowi.com/sustainability you can read more about sustainability. You can also contact Annemarie Meisling, Group Sustainability Director

