

ABB Sustainability review summary 2005



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Strengthening our corporate responsibilities

Fred Kindle, President and CEO

At ABB, a sustainable approach to business is part of our commitment to act responsibly towards all stakeholders - from shareholders and customers to employees and the communities where we operate around the world. But corporate responsibility, underpinned by key values and beliefs, is ongoing work that requires careful monitoring and openness in order to improve performance.

As a company we try to do the right thing. We seek to balance economic development, environmental stewardship and social progress.

We exercise corporate responsibility, for example, by developing technologies that lower the environmental impact of our activities and those of our customers; sustainability is built into different aspects of our business, including the manufacturing of energy saving products, systems and solutions.

Technologies such as high-voltage direct current for long-distance power transmission, energy-efficient motors and drives, Azipod podded propulsion units that steer ships, automation solutions that control factories and power plants, are some of ABB's offerings that contribute significantly to lower energy use and emissions.

In this review, we highlight a number of spheres of responsibility: for example, the contribution that our technologies are making to bring alternative sources of power – in particular wind energy – via the power grid to consumers, as a contribution towards improving our environment.

The ABB case studies from around the world highlight different aspects of following the triple bottom line approach to business – including how our technologies reduce costs and emissions, and our social projects from Brazil to China.

One of our key priorities in 2005 and the years to come is rather closer to home: it involves improving health and safety awareness and performance. Every death or injury involving an ABB employee or subcontractor is unacceptable; such incidents are a tragedy for us all. We will continue to focus on training and improving procedures to raise our performance.

We remain committed to a sustainable approach to business. Sustainability is embedded in both our products and systems, and in our vision for the future.

Part of our vision statement for the coming years reads: "By 2009, ABB will be recognized as the top global engineering company in terms of market impact, growth and profitability, value creation, sustainability and ethical behavior." We will seek to live up to our responsibilities and achieve these goals.

Sustainability highlights

- ABB launches new targets for phasing out use of hazardous materials
- Health and safety training for senior managers stepped up throughout group
- Corporate-level stakeholder dialogue held on ways of cutting CO₂ emissions
- ABB enters into six-year corporate sponsorship support program with International Committee of the Red Cross
- ABB set to expand Access to Electricity rural electrification projects in East Africa
- Prestigious Hellen Keller award won by ABB in India for efforts to help disabled people obtain gainful employment



ABB technology that contributes to a cleaner world

Wind power has become one of the world's fastest growing sources for renewable energy – a source that is clean and free. ABB is a leading supplier to the worldwide wind power industry, offering a comprehensive range of high-technology products and systems.

Claus Madsen, who heads a newly-created wind power business initiative in ABB, says: "There are three main reasons why the wind power market suits ABB so well; it's a rapidly growing global need, its requirements are matched perfectly by our product portfolio, and it meets our quest for sustainability."

The demand for electricity is growing steadily with consumption worldwide expected to increase by 2.4 percent each year over the next few decades.

In the developing world, consumption is rising due to economic progress, population growth and the increasing number of new consumers being connected each day to electricity networks. In developed countries, more extensive automation and greater use of information technology throughout society increase dependence on power.

A wider use of renewable energy sources is an obvious way to meet Kyoto Protocol commitments and the challenge of climate change.

Wind energy is one of the fastest growing energy sources. Installed capacity has increased on average by almost 16 percent in each of the last five years and reached

a total of 50 gigawatts in 2005. The value of the global wind installation business was more than \$9 billion in 2004 and the industry expects it to double by 2010.

To date, close to 70 percent of wind energy plants have been installed in Europe, where Germany, Spain and Denmark are the leading nations. Outside Europe, the United States, India and China are important growth markets.

Over the years, the wind business has evolved from small scale, land-based, individual wind mills to large scale, multi-turbine wind farms developed and owned by large professional investors. The coming years are expected to see rapid growth in the offshore wind market.

ABB is the world's largest supplier of the electrical heart of wind turbines with a global market share of 25 percent for generators and 35 percent for low- and medium-voltage equipment.

Based on this strong market position and its close collaboration with leading turbine manufacturers, ABB has developed cost-efficient products and solutions that have become today's de-facto standard for wind turbine pods.

ABB is also a leading supplier to the whole wind power industry, supplying not only generators, transformers and low- and medium-voltage equipment for individual wind turbines. ABB also connects entire wind farms to the grid and delivers large scale control systems (SCADA), transformers and HVDC (high-voltage direct current) Light transmission technology for offshore wind parks.

Two examples illustrate the worldwide nature of ABB's business.

The Nysted offshore wind farm, close to the Danish island Lolland, produces 500 gigawatt-hours of electricity per year. A 132 kilovolt sea cable connects the wind farm to the mainland grid. Overall, the power plant comprises 72 wind turbines, each rated at 2.1 MW, providing a total installed capacity of 150 MW.

ABB supplied generators, converters, switches, relays and cables to the wind turbine manufacturer, and power transmission cables, power transformers, switchgear, control and communication equipment to the park owner and developer.

Further afield, ABB is supplying equipment and services to Hawaii's newest and

largest wind energy farm - the Kaheawa Pastures Wind Farm project on the island of Maui.

The ABB scope of supply includes engineering services and key project components – including a modular substation and interconnect facility, the plant's electrical infrastructure collections system and a fiber optics SCADA communications network.

Working in the wind power industry also encapsulates ABB's triple bottom line approach to business: such projects lead to clear economic, environmental and societal benefits.

ABB sustainability initiatives worldwide



In common with many other companies and individuals, ABB and its employees were involved in helping people, communities and businesses recover in the aftermath of natural disasters around the world in 2005.

Donations came from far and wide – for example, from North America for Tsunami victims, from Australia for the victims of the Kashmir earthquake – and ABB supported a range of reconstruction efforts.

From the southern United States to India came heartening stories of personal and professional commitment in the face of heart-rending losses.

As well as helping people in the affected areas and donating generously, getting customers' businesses back up and running after hurricanes ripped through the southeastern United States was one of the priorities in the U.S. ABB, its engineers and employees in the U.S., Canada and Mexico responded quickly with funds and expertise.

■ They helped ExxonMobil, Southern Company, Florida Power and Light, Entergy, the Central Louisiana Electric Company and many other companies which made urgent requests on an ABB toll-free hotline in the storms' aftermath.

■ ABB engineers slept on air mattresses at Dow Chemical, Westlake Petrochemical and Sasol locations in order to help these customers resume operations as quickly as possible.

- Service professionals arrived at an Ingalls Shipyard facility in Mississippi four days after Katrina and worked 18-hour days for weeks to restore power.

The rebuilding of homes, schools and infrastructure formed a key element in ABB's efforts to help communities recover. In India, ABB – working with NGOs - helped hundreds of women and fishermen to pick up their shattered lives and livelihoods. Two examples:

- Chinnaponnu, a 45-year-old widow living in a coastal village in Tamil Nadu state, lost two young children and the ability to feed her remaining two children. A self-help group, supported by ABB, has helped her set a small business selling fish and she can now support her family.
- Selvaraj, a disabled young man who cannot move without help, found himself the family breadwinner after the Tsunami. With ABB help, he now has a refreshments and cold drinks shop, with a new refrigerator, and is supporting himself and other family members.

From Mexico to Thailand, there were many cases of personal commitment. After devastating hurricanes, ABB employees in Mexico joined efforts to bring provisions – canned food, bottled water, clothing and blankets – to collection points. In several parts of southeast Asia, ABB employees sought to help Tsunami survivors with a variety of collections and projects.

No ABB employees died in the disasters. But they serve as strong reminders of how a company and individuals can make a difference in the face of adversity.

ABB's safety performance in 2005 was characterized by contrasts. On the one hand, the number of deaths and injuries was similar to 2004 and this remains a matter of concern and priority action. At the same time, safety leadership training has been continuing at many levels of management and for safety specialists throughout ABB.

A total of 20 people died as a result of ABB operations in 2005. Of these 11 were in the workplace, and nine were road travel-related. A total of 47 people were seriously injured.

The number of employees who died in Lost Time Incidents (LTIs) at work fell for the second year, but contractor fatalities and road traffic-related incidents rose.

A number of measures initiated in 2004 were driven forward last year. ABB implemented an Occupational Health and Safety Management System (OHMSMS) globally and continued safety leadership training for senior managers. 96 percent of business units had achieved 75 percent or more OHSMS implementation by the end of 2005.

Site observational tours, in which managers monitor health and safety standards and implementation, were introduced to encourage greater local involvement in health and safety matters. By the end of 2005 1,470 managers had received this training. This is continuing in 2006.

Training top managers is only a part of embedding a safety-conscious culture within a company. Cascading safety

leadership training into countries and business units plays a critical role. At the end of 2005 1,700 local managers had received such training.

To ensure actions target key risk areas, ABB country-level operations were required in 2005 to establish formal Lost Time Injury reduction programs for their businesses.

Among the other safety improvement measures: ABB is continuing to engage outside expert safety assistance, and global business operations, with similar risks around the world, have been focusing on key issues such as working at height or with high-voltage equipment.

ABB recognizes it still has a long way to go in its safety journey. Involving and engaging people at every level of the organization is key to building an effective safety culture. This "spirit of working safely" with supporting safety-related systems and practices is designed to make ABB a safe place to work.

Sustainability achievements and outlook

Corporate	Environmental dimension	Social dimension
<p>Achievements during 2005</p> <ul style="list-style-type: none"> ■ The implementation of occupational health and safety management systems and a continued drive toward a positive health and safety culture ■ Environmental and social performance requirements defined for use by ABB's freight forwarders ■ Application of environmental and social assessments of customer projects intensified ■ Decision taken to establish necessary actions to compensate for ABB's own emissions of CO₂ and other greenhouse gases ■ Wind power business initiative launched to better serve the global wind power industry ■ Solutions to reduce customers' energy needs given top priority <p>Outlook for 2006</p> <ul style="list-style-type: none"> ■ Establish action plan to compensate for ABB's own emissions of greenhouse gases (approximately 1.5 million tons of CO₂ equivalent) ■ Conduct stakeholder dialogues to assess ABB's sustainability performance and identify new priorities ■ Establish and formalize system for the sustainability assessment of customer projects ■ Assess and identify sustainability requirements for ABB's supply chain ■ Further integrate sustainability issues in ABB's project risk assessment model ■ Continue a strong focus on management and employee engagement in health and safety 	<p>Achievements during 2005</p> <ul style="list-style-type: none"> ■ Significantly reduced the use of hazardous materials ■ Updated ABB's list of restricted materials ■ Introduced lead-free soldering to comply with the EU Directive on the Restriction of Hazardous Substances ■ Established take-back systems to comply with the EU Directive on Waste Electrical and Electronic Equipment ■ Completed approximately 200 continual improvement projects identified by the local environmental management systems ■ Helped develop and install the world's largest lithium ion (Li-ion) battery for emergency back-up power ■ In Finland, delivered the country's largest wind power generator <p>Outlook for 2006</p> <ul style="list-style-type: none"> ■ Complete the phasing out of remaining hazardous materials, where technically viable ■ Establish new environmental performance challenges for the group ■ Identify opportunities to reduce ABB's internal use of energy and to compensate for ABB's own emissions of greenhouse gases ■ Introduce water-borne paint for robots to reduce emission of solvents ■ Publish the first Environmental Product Declaration for robots ■ Significantly reduce the use of cadmium in batteries for robots ■ Significantly reduce the use of lead-based soldering 	<p>Achievements during 2005</p> <ul style="list-style-type: none"> ■ Health and safety training for senior managers stepped up throughout the group; regional occupational health and safety advisor network developed ■ Received 12 awards worldwide for ABB's social performance ■ In ten countries employee job satisfaction improved. In 12 it remained unchanged, and in one country it decreased ■ Twelve countries implemented policies which go beyond the national requirements for equal opportunities and non-discrimination ■ Fifteen countries conducted stakeholder dialogues ■ Launched Access to Electricity project in India ■ Contributed to the development of BLIHR's new human rights guide for business ■ Entered into a corporate sponsorship support program with the International Committee of the Red Cross <p>Outlook for 2006</p> <ul style="list-style-type: none"> ■ Establish procedures to audit ABB's business ethics performance ■ Review criteria for assessing countries that could fall under ABB's export control policy ■ Review reporting procedures to better quantify social performance ■ Apply the next revision of the GRI Guidelines, expected in Autumn 2006 ■ Conduct training courses for relevant groups of employees on human rights issues ■ Continue with the development of safety leadership throughout the whole organization ■ Further develop the ABB health and safety audit process

The journey so far

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
ABB signs International Chamber of Commerce Business Charter for Sustainable Development, establishes its environmental affairs organization and sets up an environmental advisory board.	Network of environmental controllers appointed for countries and factories. Thirty-eight countries participate in start-up of ABB's environmental management program. First reporting procedures introduced.	Implementation of environmental management systems is set as group-wide objective, involving 43 countries. ABB publishes its first environmental report.	ABB publishes its environmental objectives and launches design tool for life cycle assessment of products. Fifteen sites certified to BS 7750 or EMAS environmental standards.	ISO 14001 is introduced. A total of 50 sites gain certification, including first site in China and first construction site.	123 sites gain certification to ISO 14001. ABB publishes second generation of environmental objectives and launches second-generation life cycle assessment software tool and database.	ISO 14001 is implemented in 449 sites. ABB's CEO serves on World Commission on Dams, which produced guidelines for hydroelectric power projects. Summaries of ABB's environmental report published in 23 languages.	ABB produces first environmental product declarations (EPDs). ABB's CEO initiates World Energy Council's greenhouse gas reduction program. ISO 14001 is implemented in an ABB Black Economic Empowerment company.	ABB launches social policy and publishes first sustainability report including both environmental and social performance. ABB participates in launch of the United Nations Global Compact. ISO 14001 is implemented in 98 percent of sites.	Dow Jones Sustainability Index rates ABB top of its group for the third year. ABB produces first "triple bottom line" sustainability report, inspired by the Global Reporting Initiative. ISO 14001 implemented in 98 percent of sites.	Sustainability business plans implemented in 50 countries. ABB launches "Access to Electricity" initiative at World Summit in Johannesburg. Environmental program expanded to include employees in non-manufacturing facilities.	ABB to implement health and safety systems based on OHSAS 18001 by end 2004. First "Access to Electricity" projects in Tanzania. With other companies, ABB launches Business Leaders Initiative on Human Rights. New environmental policy launched.	Health and safety training for top managers begins worldwide. Further health and safety training for top managers around the world. ABB joins corporate support group of International Committee of Red Cross.	ABB launches new targets for phasing out hazardous materials. Further health and safety training for top managers continues worldwide.