



ABB Group
Sustainability Performance 2011
Preparing for the future

This is ABB

For ABB, sustainability is about balancing economic success, environmental stewardship and social progress to benefit all our stakeholders.

Sustainability considerations cover how we design and manufacture products, what we offer customers, how we engage suppliers, how we assess risks and opportunities, and how we behave in the communities where we operate and towards one another, while striving to ensure the health, safety and security of our employees, contractors and others affected by our activities.

We report our sustainability performance according to the Global Reporting Initiative's (GRI) indicators. Our self-declared level of application of the GRI Guidelines is B. The GRI indicator numbers are shown alongside each item and a table of numerical performance indicators covering the last three years is included. These indicators have been verified by the independent verification body Det Norske Veritas.

ABB is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 135,000 people.

Highlights 2011

- New Group sustainability strategy approved after largest-ever stakeholder consultation process
- Sustainability Governance Board established
- Target achieved to reduce annual energy consumption at main sites by 2.5 percent
- Further improvement in health and safety performance
- Global training programs in health and safety, security and human rights continued
- 19 awards worldwide received for environmental and social performance

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While this report provides certain information with respect to ABB products, services, technologies and standards of conduct, its contents must not be construed as constituting an expressed or implied warranty or representation.

Progress in many fields

ABB took major steps forward on its sustainability strategy, performance and governance in 2011.

Working in alignment with the ABB Group strategy review, which was published in November 2011, we finalized a new ABB sustainability strategy – known as Sustainability Strategy 2015+ – early in 2012, after analyzing the results of extensive consultations with internal and external stakeholders.

Our goal: By 2015 and beyond, ABB will be a leading contributor to a more sustainable world and will be recognized as a top-performing company in terms of sustainable business practice.

Our strategy

Our sustainability strategy is to ensure that sustainability considerations and values are understood, implemented and communicated across ABB's value chain, become a seamless part of business practice and help our customers become more successful. In short, to work in the knowledge that sustainability is good for our business, for our customers and for society.

Embedding good sustainability practice in ABB's daily business processes is key to success, both for the company and our stakeholders.

We are already contributing technology to strengthen energy and resource efficiency for our customers, in our own manufacturing processes and at our sites, and we will continue to develop innovative solutions to help mitigate some of the world's main energy and climate change challenges. There are many ways in which we can contribute.

ABB's corporate tagline is "Power and productivity for a better world" and we want to deliver on that promise to contribute to "a better world" – a more sustainable society in which a growing population has fair access to resources, health and well-being now and into the future.

Materiality – key focus areas

Considerable work was undertaken in 2010 and 2011 to understand what internal and external stakeholders expect of the company's sustainability performance and what our strategy should focus on.

The widest-ever sustainability stakeholder survey by ABB resulted in input from nearly 600 people including senior ABB executives and employees from all parts of the business in different countries, and external stakeholders specialized in key areas of our sustainability focus – the environment, climate change, human rights, health and safety, and security.

The results were evaluated in 2011 with the support of a strategy steering committee and an external company, resulting in a materiality matrix – highlighting the issues of relevance to ABB and our stakeholders.

Most of these issues are already priorities. A clearer understanding of their importance to our stakeholders has led to them being defined as five areas of focus. They are:

- Developing world-class products, systems and services to lower our customers' energy use, reduce their emissions and improve resource efficiency on a long-term basis.
- Ensuring our own operations are energy and resource efficient.
- Proactively ensuring our suppliers, employees and business partners work in a safe, healthy and secure environment, and to the highest standards of integrity.
- Creating value and promoting social development in communities where we operate.
- Strengthening employees' involvement in and commitment to improve the company's sustainability performance.

Governance

In 2011, we strengthened the company's sustainability governance structure. An ABB Sustainability Board, made up of the entire Executive Committee, will now oversee how sustainability policies and programs support business goals and aspirations, and monitor progress.

The establishment of a Sustainability Board is in addition to regular reporting of individual issues such as health and safety, and security performance to the Executive Committee and Board of Directors.

Our sustainability work is underpinned by policies covering the environment, social performance, human rights, health and safety, security, ethics and integrity, and the supply chain. Regular training on many issues was provided to employees in 2011.

Three work streams have been established to help us implement the strategy.

- Key performance indicators are being formulated to cover the full value chain of our business. They will enable us to measure progress, assess internal improvement programs and report more fully on our sustainability work.
- A competence management and organizational development program will help to build the required capacity, competence and structure to improve performance on sustainable business issues.
- We are also focusing on communications, awareness-raising and stakeholder engagement to strengthen ABB's reputation as a sustainability leader and to support ABB's efforts to capitalize on business opportunities emerging from megatrends.

Progress in 2011

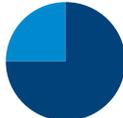
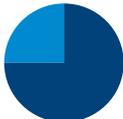
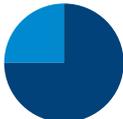
ABB made progress in several key areas in 2011. For the first time since new reporting standards were introduced in 2003, ABB reported no fatalities related to work among our employees and contractors. This marks an important step forward because running a safe business is one critical aspect of running an excellent business. Nonetheless, the number of serious injuries increased so there can be no let-up in our OHS improvement efforts.

Further work was also undertaken to embed core sustainability criteria in key business decision-making processes, including the review of proposed projects, supply chain and mergers and acquisitions. Our sustainability experts are now involved systematically in reviewing potential acquisition targets; our suppliers are being made increasingly aware of our environmental, social, human rights, and health and safety standards and requirements; and sustainability considerations are part of discussions with our two systems business divisions prior to tendering for projects.

The value of our global crisis management training was highlighted in 2011. Our executives and employees in Japan were trained on crisis scenarios – including earthquakes – shortly before the Fukushima tragedy; and their reactions helped to ensure the safety of employees, as well as business continuity. The benefits of crisis training and expertise were also much in evidence as ABB ensured the safety of employees and contractors during the revolutions in Egypt and other parts of North Africa.

ABB recognizes that considerable work remains to be done to achieve our goals. But we are confident that the progress made in 2011 is contributing to ABB's business success and to a "better world."

Sustainability objectives 2010/11	Overview of progress at end of 2011	Status of completion
1. All sites to reduce use of energy by 2.5 per cent annually	<ul style="list-style-type: none"> – Energy use reduced by total of 5.5 percent in 2010 and 2011 – Energy audits carried out or planned in 23 of most energy-intensive production sites 	
2. Develop guidelines to monitor the environmental impact of transport of goods	<ul style="list-style-type: none"> – Pilot projects in Italy, Saudi Arabia and United States completed – Key Performance Indicators developed – Data on cross-border transportation (2010) evaluated; data collection and calculation methods updated; air and sea transportation data (2011) collected and under evaluation – Draft guidelines remain in test phase, proposed release during 2012 – Transportation Council of regional and Group logistics managers constituted to guide and coordinate Group transport and logistics strategy and programs 	
3. Monitor and reduce environmental impact from business air travel	<ul style="list-style-type: none"> – Data collection and methodology for emissions calculation established and tested; first data collection accomplished – Review of reduction possibilities commenced 	
4. Phase out the use of hazardous substances in ABB's products and processes	<ul style="list-style-type: none"> – Status investigated of use/phasing out of hazardous materials in countries/local business units. Some materials such as organic lead in polymers almost completely eliminated – Volatile Organic Compounds (VOC) reduction program established in Power Products division, which is responsible for more than 70 percent of Group VOC emissions – Group-wide list of restricted substances updated; program to enhance implementation under way 	
5. Ensure that environmental and health and safety aspects are considered in product development	<ul style="list-style-type: none"> – Survey among product and project managers to assure that sustainability aspects are embedded in product development – Developed and launched supporting tools and training material 	
6. Early assessment of social, security, OHS and environmental risk in ABB's project risk management process, to better manage sensitive projects	<ul style="list-style-type: none"> – Regular meetings with two divisions (Process Automation and Power Systems) to identify potential risks at project pursuit stage rather than at later stage of tendering, with ongoing involvement of sustainability and security experts in project risk reviews and evaluation – Ongoing training for business managers and key functions to raise awareness of potential health and safety, security and human rights risks 	

Sustainability objectives 2010/11	Overview of progress at end of 2011	Status of completion
7. Due diligence on all security companies according to ABB standards	<ul style="list-style-type: none"> – Global roll-out started in 2011 and will continue in 2012 – Due diligence on security companies conducted on continuous basis for new contracts and on needs basis for existing contracts 	
8. Ensure rapid response capability and enable ABB in risk-rated countries to prepare and respond to potential threats	<ul style="list-style-type: none"> – Threat map and new security website introduced to help company to prepare for, or mitigate, potential threats – By end of 2011, about 850 managers in all eight regions were trained in crisis management with workshops and exercises – Almost all ABB country organizations were trained on crisis management in 2011; remaining training scheduled for 2012 – Country crisis and security plans maintained, updated and implemented 	
9. Develop ABB travel security system into a more supportive system for ABB	<ul style="list-style-type: none"> – Improvements to travel security system completed. System now includes all main threat areas, including maritime threats, plus supporting documentation for travelers – Several upgrades to travel security system and further global training conducted in 2011 	
10. Occupational Health and Safety Plan 2008–2011 continues, as approved by Executive Committee	<ul style="list-style-type: none"> – Continued with delivery of second generation leadership training to all local division and local business unit managers, and first line reports – Strategic risk management programs delivered in all countries covering range of issues, including occupational hygiene, point of work risk assessment, management review, human error and desired behaviors – Further OHS improvement programs for business units in Process Automation and Power Systems divisions and Power Products Service that addressed business unit-specific risks. This included local training and audit programs 	
11. Increase monitoring of key potential and existing suppliers so that ABB is not complicit in any social, environmental, human rights or health and safety abuses	<ul style="list-style-type: none"> – 125 supplier sustainability audits conducted by third party, two-thirds in high risk countries (China, India and Mexico) – Supplier sustainability audit protocols revised and updated, based on practical experience, for use from 2012 in continuing supplier audit program – Supplier sustainability awareness training developed and delivered to over 200 suppliers in India and China 	
12. Extend social, environmental, human rights, and health, safety and security risk assessment in mergers and acquisitions (M&A) processes.	<ul style="list-style-type: none"> – Sustainability work stream embedded in M&A process – Specialists on environment, human rights, OHS and security regularly consulted as part of due diligence on target companies – Extensive coaching provided for local sustainability specialists involved in M&A projects – External specialists used to support the sustainability work stream on a case-by-case basis 	

Governance and integrity

Guiding our growth

(includes GRI standard disclosures 3.6, 3.9, 4.1, 4.8, 4.9, and 4.12)

During 2011, ABB released ambitious new growth targets for our business, aiming to increase revenues for 2011 to 2015 organically at a compound annual growth rate of 7–10 per cent, with the potential for an additional 3–4 percentage points of growth by acquisition.

The achievement of such targets will be challenging, and is supported by programs in all areas of our business. These programs include work to ensure that sustainability considerations and values are a seamless part of our business practice along the value chain. Growth on this scale will also not be possible unless our behavior is firmly guided by our business principles of responsibility, respect and determination.

Standards of business conduct: ABB integrity program

ABB sets high standards of integrity, which are expected of every employee and in every country where we do business. We use a systematic approach, supported by tools and processes and a zero tolerance policy for violations.

Integrity is driven by the businesses with division heads and financial controllers regularly reviewing and reporting on integrity developments. The divisions' business performance evaluations also include consideration of integrity.

The ABB Code of Conduct is the integrity framework that describes the behavior expected of employees and stakeholders. It contains practical instructions to help employees in their day-to-day work and is underpinned by standards and policies covering issues such as corruption and illegal payments.

The Code of Conduct has been translated into 45 languages. All current and new employees are required to take Code of Conduct face-to-face and e-learning training, and to acknowledge their commitment to adhere to the Code of Conduct. Managers also have to re-acknowledge the Code of Conduct on a regular basis.

Multiple channels are available to all employees to report integrity concerns. A multilingual Business Ethics Hotline is available 24 hours per day, seven days per week, run by a third party. Calls are treated confidentially and people with information can choose to remain anonymous. A Stakeholder Hotline is available to our external business partners.

ABB also has an Ombuds program as an additional route for integrity reporting. The ABB Ombudspersons are respected, experienced business colleagues available for discussion and to provide confidential guidance.

ABB investigates all potential integrity concerns and cooperates fully with law enforcement agencies. There is a strict zero tolerance policy for violations of the law or the ABB Code of Conduct, which is enforced through systematic disciplinary actions.

Overall, the ABB integrity program is supported by a team of some 330 employees, full-time and part-time, at headquarters and around the world.

Other policies, principles and procedures

We have also implemented environmental, social, human rights, and health and safety policies and a Supplier Code of Conduct. These [policies](#) include references to international standards to which they relate. For example, the human rights and social policies draw on the Universal Declaration of Human Rights, the ILO Core Conventions on Labor Standards, UN Global Compact, the OECD Guidelines for Multinational Enterprises and the Social Accountability 8000 standard.

Sustainability governance

For ABB, sustainability is about balancing economic success, environmental stewardship and social progress to benefit all our stakeholders; to truly contribute to a better world.

Ultimately, every ABB employee is responsible for sustainability. The commitment of line managers to implement our objectives is key to achieving ABB's sustainability and business goals.

As part of our 2011 review of sustainability strategy, in alignment with the Group strategy review, we reinforced ABB's sustainability governance structure. A Sustainability Board, comprising the ABB Executive Committee, will now be accountable for the sustainability performance of ABB. The Sustainability Board will oversee sustainability policies and programs, to ensure consistency with business goals and ambitions and will monitor progress towards our targets.

The ABB Sustainability Affairs organization is responsible for the development and coordination of policies and programs covering health and safety, environment, corporate responsibility, and security and crisis management. Sustainability Affairs reports directly to Executive Committee member Gary Steel.

A network of sustainability specialists worldwide reports to the Sustainability Affairs management team. In countries where ABB entities have or could have significant sustainability impacts, we have appointed country sustainability controllers, country health and safety advisors and country security managers responsible for ABB's sustainability management program and for gathering the data consolidated in this report. Where needed, regional responsibilities have also been assigned.

The country and regional specialists are supported by local sustainability officers and health and safety advisors. Overall, the sustainability network is supported by a team of some 800 employees, full-time and part-time, at headquarters and around the world.

Sustainability risks and opportunities are also investigated in coordination with business divisions and other Group functions, e.g. Mergers and Acquisitions (due diligence), Real Estate and Insurance (real estate liabilities, security and site risk), Internal Audit and ABB's bid evaluation committee (customer and project risk assessments).

We aim to cover all ABB Group companies, wholly owned subsidiaries and majority-owned joint ventures worldwide that might have significant sustainability impacts, with ABB's formal sustainability reporting system. Integration of Baldor Electric Company, acquired in January 2011, is continuing. For 2011, we have collected environmental data for Baldor covering water, energy and waste parameters. Data collection for other environmental parameters, health and safety and corporate responsibility will be implemented during 2012.

The data in this report relating to social performance cover 89 percent of ABB employees, whereas data relating to environmental performance cover 85 percent of employees. The environmental performance of the remaining 15 percent of employees, located in non-manufacturing entities without significant impacts, is covered by estimated data.

We use three computerized data reporting questionnaires to measure and collect performance data throughout the Group via the ABB intranet – an annual social report from every country, an annual environment report from every site and a monthly health and safety report from every country.

Externally developed charters, principles and initiatives

ABB subscribes to externally developed charters and principles for sustainability management. Applying such principles is helping ABB to make progress in core areas. These charters and principles include the International Chamber of Commerce Business Charter for Sustainable Development, which ABB signed in 1992, and ISO 14000 standards and technical reports.

ABB has adopted ISO 14001 for environmental management systems; ISO/TR 14025 for Environmental Product Declarations; ISO 14040-45 for Life Cycle Assessments; and ISO 19011 for environmental auditing of organizations.

ABB has incorporated the principles of OHSAS 18001, the International Labour Organization (ILO) guidelines on occupational health and safety management systems, and the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases into its health and safety program.

ABB facilities are encouraged to implement integrated management systems for environmental and quality issues, and for occupational health and safety. Almost 250 sites now use integrated systems, many of which have been externally certified.

ABB is a signatory to the World Economic Forum's "Partnering Against Corruption Initiative" (PACI), signed by 170 companies committed to strengthening efforts to counter corruption and bribery.

In addition, ABB has taken note of the UN Guiding Principles on Business and Human Rights and is using its recommendations to assess expectations of corporate behavior.

As a founder member of the United Nations Global Compact, ABB has been closely involved in its development. ABB's understanding of human rights and day-to-day business benefits from involvement in such organizations.

Other GRI indicators

SO2 Business units analyzed for corruption risks

ABB's internal auditors carry out an annual risk assessment as the basis for their audit planning for the following year. Anti-fraud risk assessment is part of this. ABB's internal auditors also carry out anti-bribery compliance reviews of business units and countries globally. In these reviews, ABB's internal auditors review business processes, accounts and balances, and test transactions to assess the robustness of controls and identify possible violations of ABB's anti-bribery procedures. In addition, every significant customer project is the subject of a risk review process, which also covers corruption risk considerations.

SO3 Employees trained in anti-corruption procedures

Substantially all employees have completed training on ABB's Code of Conduct. In addition, approximately 95 percent of all employees have received training on anti-corruption procedures.

At the end of 2011 into the beginning of 2012, ABB started expanding its Ombuds program to increase geographical coverage, now covering 47 countries with over 60 Ombudspersons.

SO4 Actions taken in response to corruption

ABB applies a strict zero tolerance policy to combat corrupt payments. Every incident is sanctioned and may include termination of employment. In 2011, ABB identified three incidents of corruption of a government official (two of which are still under investigation). During the year one employee was dismissed.

SO5 Public policy and lobbying

ABB provided input to the European policy process on transmission, distribution and on smart grid technologies, as well as on all aspects of resource efficiency and industrial competitiveness. ABB made a strong case for the further integration of the European energy market and for the necessary interconnections. ABB supported the pursuit of ambitious binding targets for renewable energy sources, as well as their integration in the power grids in European Union energy policy. ABB helped advance and create the necessary regulatory environment for offshore wind and solar energy projects and lobbied for the promotion of available "green" technologies through procurement and in international agreements to achieve a low carbon economy. The year was particularly important for long-term issues, such as the multi-annual financial framework, the budget allocations for R&D and for the European Investment Bank policy guidelines. All these activities supplement ABB's involvement in initiatives of the relevant business associations such as BusinessEurope, EURELECTRIC, European Association of the Electricity Transmission and Distribution Equipment and Services Industry (T & D Europe), European Energy Forum and Bundesverband der Deutschen Industrie.

In the United States, a partisan government slowed the development of energy efficiency and climate policy legislation. Continuing funding from the now-expired Stimulus Package advanced technology and demonstration programs in the areas of renewables, electric automotive design, and industrial design. New regulatory regimes were introduced in the emissions reduction area. In this environment, ABB worked to promote our energy efficiency, smart grid, and renewables portfolios through active lobbying input and participation through two key business/manufacturing organizations, the Business Roundtable and the National Association of Manufacturers, and our lead trade group, the National Electrical Manufacturers Association, where ABB holds key leadership roles.

In China, ABB supported government activities in the area of energy conservation and environment protection in line with China's 12th Five-Year Plan. ABB continued to contribute our products with the latest technology, introducing our worldwide solutions and expertise in smart grids and energy efficiency solutions to government agencies and key stakeholders.

SO6 Political contributions

Under ABB's Code of Conduct, contributions to political parties, politicians and related institutions are to be made only in exceptional cases and only with the approval of the Chief Integrity Officer. In 2011, ABB Inc. in the United States made employee-raised donations through its Political Action Committee (PAC).

SO7 Legal actions for anti-competitive behavior

ABB has been cooperating with various antitrust authorities regarding their investigations into certain alleged anti-competitive practices in the gas insulated switchgear business, the power transformer business, the cables business, and the flexible alternating current transmission system (FACTS) business. For further information, please refer to the Commitments and contingencies note in the Notes to the Consolidated Financial Statements contained in the ABB Group Annual Report.

Compliance – society

SO8 Significant fines and sanctions for non-compliance with laws and regulations

ABB has not faced any significant fines or sanctions for non-compliance with laws and regulations in 2011. For further information, please refer to the Commitments and contingencies note in the Notes to the Consolidated Financial Statements contained in the ABB Group Annual Report.

PR4 Non-compliance concerning product information and labeling

During 2011, ABB did not receive any injunctions or complaints related to product information or labeling.

PR8 Complaints regarding breaches of customer privacy

One complaint regarding breach of customer privacy was received during 2011. An internal communication related to new business from a customer was communicated externally without prior customer approval. ABB's process for review and approval of articles for external release specifically includes a requirement for customer review and approval where references to the customer are included in the article. This process has been re-communicated and reinforced with ABB personnel in the country concerned.

Compliance – product responsibility

PR9 Significant fines for non-compliance with laws and regulations concerning products and services

No significant fines were levied against the company during 2011 for non-compliance related to products and services.

Stakeholder relations

Listening and learning

(includes GRI indicator PR5, and GRI standard disclosures 2.10, 4.14–4.17)

Stakeholder engagement on sustainability-related issues is becoming increasingly important to ABB from a strategic and business perspective.

One of the work streams stemming from Sustainability Strategy 2015+ foresees the introduction of an improved stakeholder engagement process throughout the Group by the end of 2013. Work is already under way to standardize how dialogues on sustainability issues are held and how stakeholders' views are captured, evaluated – and acted on – at a national and Group level.

Our new strategy was based on the widest-ever sustainability stakeholder survey with nearly 600 individuals inside and outside the company providing their views in 2010 and 2011 on ABB's sustainability performance and potential improvements.

The survey included top ABB executives and business representatives from all regions, as well as customers, suppliers, investors, governments, academics and students and specialists involved in our key focus areas – the environment, climate change, human rights, health and safety, and security.

One of the main suggestions we received: ABB should take a higher profile on sustainability issues, based on the progress and improvements made internally over the past few years and given the positive contribution made by many of our products and systems over their life cycle. Stakeholders felt ABB's sustainability profile had been too modest.

The strategy and the issue of ABB's profile were assessed at the main Group-level stakeholder session in Zurich, Switzerland in 2011, which brought together experts on the business impact on the climate and environment, and labor and human rights.

Key issues raised at the meeting included the need for ABB to communicate more about the business opportunities for sustainability, and ensure this message is understood within the company. Some initial ideas, presented by ABB, were criticized for not being sufficiently appealing to an external audience.

ABB engaged with a wide variety of stakeholders around the world in 2011, seeking contact with organizations and individuals who may be affected by our business operations, and whose actions may, in turn, affect the company. Some of the meetings were formal roundtable discussions but many were face-to-face meetings with specialists.

The most frequent discussions involved customers and suppliers, as well as ABB employees. There were also meetings with government representatives, unions, NGOs, media representatives and academics at a national and corporate level.

Among the most common themes raised during the discussions: ways of improving customers' energy efficiency, and strengthening suppliers' understanding of our environmental, labor and health and safety requirements.

In the United States, for example, discussions with customers focused mainly on energy efficiency and climate issues, particularly concerns about greenhouse gas emissions. In the Finnish city of Vaasa, where ABB is a major employer, our management met officials from the city and surrounding municipalities – which is an annual event – to discuss use of land, infrastructure issues and the employment situation, as well as the company's performance.

In many countries ABB focused on working with suppliers to improve their performance. This can take the form of supplier audits, as in China, India and Mexico in 2011 or discussions with suppliers about health and safety requirements, as happened in Colombia.

Ideas arising from these sessions led to changes within the company, several of them focused on improved communications and processes.

- In Germany, for example, a survey of employee satisfaction led to guided dialogues on ways of improving leadership
- A formal roundtable meeting in South Africa with a range of stakeholders resulted in ABB carrying out an advertising and communications campaign to promote energy efficiency and water technology capabilities
- In Peru, a meeting with a union, centering on employee rights and benefits, led to improvements in the existing agreement strengthening – among other things – education benefits for employees' children
- Communications efforts were stepped up in Qatar to create better understanding of ABB's business and health and safety goals, following discussions with customers and suppliers
- In Italy, a network of corporate volunteers is being created to strengthen the company's social activities around the country, and a team was established to provide more opportunities for disabled employees

Among other stakeholders, there is also strong interaction with universities and academic institutions on issues ranging from collaborative research projects to teaching students in Sweden and Switzerland about the corporate responsibility to respect human rights. In Peru, five meetings were held with the main universities focusing on energy efficiency and ways of mitigating climate change. Students were encouraged to join a competition on how to lower carbon emissions using ABB products and solutions.

ABB also participates in and learns from involvement in a number of multi-stakeholder organizations. We are members of the World Business Council for Sustainable Development's electricity utilities working group, and participate in the energy and climate focus area, as well as the Access to Energy initiative in the run-up to the Rio+20 summit in 2012.

At the United Nations Global Compact, we are also taking part in an energy initiative and events linked to the UN's year of access to sustainable energy for all in 2012.

In recognition of our social and community engagement activities, ABB won 19 awards worldwide in 2011. One came from a customer: ABB was one of two suppliers to win Bombardier Transportation's first Sustainable Suppliers Award.

The list included an award in Sweden for human rights performance, recognition of good health and safety practices in Brazil, Singapore and the United States, a best working environment accolade in Saudi Arabia, an overall corporate social responsibility award in the United Arab Emirates, and recognition for strong environmental performance in China.

ABB in Germany won a business magazine award for its "Generation program" which seeks to ensure that young and older employees work together well, that knowledge transfer is organized, and that employees of all ages benefit from job opportunities and better working conditions. In several countries, including Sweden and Switzerland, ABB was designated an employer of choice in 2011.

Customer relations

ABB introduced a metric called the "net promoter score" program in 2011 as part of our efforts to better measure and monitor customer satisfaction, perceptions and expectations. The metric is straightforward for the customer and easy for our managers to interpret, track and act upon.

The net promoter scorecard is part of ABB's overall commitment to building a culture of quality and continuous improvement that drives growth through customer loyalty.

ABB also compiles, validates, tracks and analyzes all customer complaints in a single, global system that helps resolve problems quickly and efficiently. This system – the Customer Complaints Resolution Process – also provides valuable pointers for improvement.

Other GRI indicator

4.13 Memberships in associations

Listed below are some of the principal associations and initiatives with which ABB is involved in the area of sustainability:

- Chalmers University of Technology, Sweden
- Global Business Initiative on Human Rights
- Global Reporting Initiative
- Hunger Project, Switzerland
- Institute for Human Rights and Business
- International Committee of the Red Cross
- International Institute for Management Development, IMD
- Swedish Standards Institute
- oikos International, Switzerland
- Pew Center on Global Climate Change, US
- Transparency International
- United Nations Global Compact
- World Business Council for Sustainable Development
- World Childhood Foundation, Sweden
- World Economic Forum
- WWF

Risk management

The benefits of good planning

(includes GRI standard disclosure 4.11)

Good risk management is essential to business success. In this context, considerable efforts have been made in recent years to strengthen proactive identification and management of sustainability risks – such as environmental, health and safety, social, human rights, and security issues – and those efforts yielded very positive results in 2011.

The benefits to the business were apparent in many areas. Security and crisis management exercises are carried out in all regions - and sometimes they are fortuitously well timed. In Japan, for example, the exercise for managers looked at the consequences of a major earthquake shortly before the Fukushima tragedy. Our crisis team in Japan worked with the Group crisis task force and was well primed to ensure the safety of our employees and business continuity.

In Egypt, a crisis exercise was held shortly before the revolution. In a major operation, involving local, regional and corporate managers and security officials, expatriate staff and their families were repatriated safely, assets were secured and business was only briefly disrupted.

By the end of 2011, about 850 managers in all eight ABB regions, as well as almost all country management teams, had been trained on crisis management.

Health and safety training is also another significant area of risk management. ABB employees and contractors can be exposed to risk if they do not follow the rules and instructions that have been established. Ongoing health and safety training in 2011 in high-risk areas, such as working with electricity and road travel, led to greater awareness of potential dangers and a significant fall in the number of incidents.

Overall, ABB has a global integrated and Group-wide risk management process. Once a year, the executive management and the Board of Directors perform a risk assessment in accordance with the company's risk management processes and take appropriate actions where necessary.

We take a comprehensive top-down and bottom-up approach to Enterprise Risk Management (ERM). The process directly involves group functions, regions, country management, divisions and large global business units, and is supported by a common ABB risk catalogue and training for the participating entities. The number of participating entities increased in 2011.

The common risk catalogue specifically includes consideration of external, strategic and operational risks, including the legislative environment and topics related to climate change. Participating entities are expected to organize ERM roundtables where top risks are identified, assessed and reported along with a detailed risk description, the likelihood of such risks occurring, the potential impact on profitability, and mitigation plans. The risk management approaches of Group ERM and Internal Audit are aligned.

The raw and residual risks are consolidated and analyzed at a Group level by the Group ERM team and discussed at the Group ERM roundtable which involves management from different parts of the Group.

We know that effective risk management on sustainability issues supports business goals and continuity; failure to understand and manage such risk at an early stage can lead to additional cost and damage to reputation. To that end, in recent years we have integrated Group-wide sustainability criteria into our risk assessment process for projects, our supplier selection guidelines and processes, and into the due diligence performed on potential acquisitions.

Sustainability experts are now embedded in the supply chain teams and mergers and acquisitions processes. And as part of the objective to identify and, where appropriate, mitigate potential risks as early as possible in the decision-making process, members of the sustainability management team now work with two key divisions to look at projects at the pursuit stage rather than shortly before a tender is made.

Sustainability due diligence is regular and can take many forms: In 2011, environmental specialists were involved in acquisitions as well as project assessments; security experts were involved in assessing the risks at individual project sites and countries around the world, as well as planning for different contingencies in many countries, including North Africa and the Middle East. Human rights specialists in the company reviewed a number of potential projects before making recommendations to the business.

In a year which was unpredictable in many different areas, good risk management proved its worth in all parts of the business. The need to focus on predicting, managing and mitigating risk – in all its forms – will continue.

Innovation

Investing in the future

Innovation is at the heart of ABB's success and crucial to our long-term competitiveness. Through continuous development of our product and solution portfolio, ABB helps customers improve their operating performance, grid reliability and productivity while saving energy and resources and lowering environmental impact.

ABB's approach to innovation consists of three pillars: Corporate research and development (R&D), alliances with academic and research institutes, and our corporate venture capital unit, ABB Technology Ventures (ATV).

To support our R&D effort, ABB employs some 7,500 highly skilled people in different businesses and at seven corporate research centers worldwide. Spending on research and development in 2011 was \$1.37 billion, representing 3.6 percent of revenue during the year.

ABB's research engineers and scientists launch R&D projects in close cooperation with our businesses or directly with pilot customers, to ensure a clear understanding of present and future business needs and opportunities.

When developing new products and technologies, ABB designers follow sustainability guidelines in each phase of the process. These include, for example, standardized Life Cycle Assessment procedures, a handbook for environmentally aware design, a health and safety checklist to identify potential risks, and a list of prohibited and restricted substances to ensure our sustainability objectives are also embedded into product development.

Power electronics helping to shape the grid of the future

The power sector is facing rapid changes due to ever-increasing levels of electricity consumption, increased use of alternative, often remote, energy sources, and a greater focus on energy efficiency, grid reliability and the need to reduce greenhouse gas emissions.

ABB has pioneered the development of a variety of technologies to help the power industry address these challenges. Many of these technologies rely on power semiconductors, the key building blocks of power-electronics-based switching devices that control the flow of electricity and convert it to the form required for different applications.

The development of power semiconductors has brought many subsequent innovations, including the efficient bulk transmission of electrical energy in the form of high-voltage direct current (HVDC), the introduction of energy-saving variable speed drives, the development of frequency converters used by electric trains and metros, and the introduction of FACTS (Flexible AC Transmission Systems) to enhance control and increase the power transfer capability of the network.

Having developed the technology in the 1950s, ABB continues to advance HVDC applications, helping to deliver large amounts of electricity over thousands of kilometers from remote sources of generation to busy population centers and installing submarine HVDC cable interconnections between Western European countries, such as the NorNed project connecting Norway with the Netherlands. HVDC technology has also allowed the connection of offshore wind farms to the mainland, including the BorWin 1 project, the most remote offshore wind farm in the world, located 128 kilometers from the German mainland.

A further recent development in HVDC, the Caprivi Link Interconnector project in Namibia allowed the world's first application of HVDC in overhead transmission lines, fulfilling the customer's economic and technical needs while providing a more stable power supply for poor and remote communities.

About the same time that ABB was revolutionizing long-distance high-voltage DC power transmission in the 1950s with HVDC, we were also revolutionizing the transportation of AC power over long distances with flexible AC transmission systems (FACTS). FACTS is a generic term for a group of technologies that dramatically increase the security, capacity and flexibility of power transmission systems.

FACTS technologies, which rely on the switching capabilities of specialized semiconductors, have a small footprint and minimal impact on the environment. Project implementation times are considerably shorter and investment costs substantially lower than the alternative of building more transmission lines or new power generation facilities. A recent addition to the FACTS family now includes an energy storage system that not only helps to ensure grid stability, but can also deliver active power to the network, providing an alternative to the need for extra capacity for peak-load support.

Semiconductors are also applied in variable-speed drives to efficiently control industrial motors. First launched in 1969, ABB variable-speed drives can reduce energy consumption by 30 to 50 percent by precisely matching the speed and torque of the motor to the needs of the application. Motors are used to power fans, pumps and compressors in a wide range of industries, such as cement, chemical, pulp and paper, metal, and oil and gas, and account for an estimated 65 percent of all industrial energy use. ABB's continued development of drives technology has reduced their size and cost, improved reliability and broadened their applications, to improve energy efficiency, productivity and process control across industrial sectors.

Further developments in semiconductor technology have also provided solutions for frequency converters, used to alter the power frequency of the domestic grid to suit the power frequency used in electric rail transport. In various countries, railway power grids are operated at a different frequency from the public power grid. In the past, dedicated power plants were built to supply single-phase railway grids. Progressively the public three-phase AC network is being interconnected to the railway grid via frequency converters. ABB is a pioneer and world market leader in providing these railway interconnections.

Collaboration to grow smart grid knowledge

As well as conducting research in our own laboratories, ABB collaborates with over 70 universities and research institutions across the world. We have long recognized the value of teaming up with other pioneers. Investments in research initiatives, fellowships and strategic partnerships have enhanced the ABB portfolio and led to international and cross-industrial cooperation in almost every ABB business.

Such collaborations are proving particularly important in the area of smart grids, where the increasing impact of renewable energies and distributed generation is changing the management of electricity distribution networks from "passive" to "active." The structures of the power systems, as well as their operational schemes, have to be re-invented to a significant extent to meet the challenge of balancing load and generation. Close cooperation between suppliers of technology, users and policy makers is needed to align the different sectors of electricity supply and consumption and to develop solutions for the future.

To this end, ABB is working on a joint development project with the Nordic utility Fortum to design and install a large-scale smart grid in a new district of Stockholm. The R&D project will test the concept of a flexible, low-emission power network in the Stockholm Royal Seaport area as part of a larger initiative to cut emissions in the Swedish capital by two-thirds by 2020.

ABB and Fortum are developing a variety of solutions to ensure that excess power generated from renewable energy sources in the district (from sources such as rooftop solar panels) can be fed into the power grid and to enable electric vehicles to draw electricity from the grid or feed it back in. The project will also investigate energy storage options and how to provide more flexibility and transparency in the distribution grid, helping to lower consumption and emissions.

The project with Fortum is one of our many smart grid collaborations with industrial partners and learning institutions around the world, including projects in the US, Denmark, Germany and Italy. In the US, for example, ABB is a corporate partner of the FREEDM Systems Center, a National Science Foundation Engineering Research Center headquartered at North Carolina State University that is developing key technologies to revolutionize the US energy grid.

ABB Technology Ventures grow ABB's business

The third pillar of ABB's technology edge is the corporate venture capital unit, ABB Technology Ventures (ATV). ATV investments are used to build technology leadership strategically and drive growth. In 2011, investments strengthened ABB's focus on renewables and expanded our portfolio of energy solutions for data centers.

ABB's investment in California-based GreenVolts provides access to their proprietary technology and enables us to offer turnkey solutions for concentrating photovoltaic power plants in addition to our current capabilities in solar thermal and conventional photovoltaic power plants. The technology complements our recent acquisition of a stake in Novatec Solar, a leading provider of Linear Fresnel concentrating solar power technology.

ABB also purchased a controlling interest in Validus DC Systems, a leading provider of direct current (DC) power infrastructure equipment for data centers. The Validus investment boosted ABB's presence in the data center power market, following our investment in Power Assure, which provides data center energy management solutions. These investments ensure that ABB is well positioned as these markets develop.

Recognition, such as Cleantech Corporation of the Year, awarded at the San Francisco Cleantech Forum in March 2011 and nomination as one of the Thomson Reuters' 2011 Top 100 Global Innovators, confirms our commitment to innovation and the future success of ABB and our customers.

GRI indicators

PR1 Health and safety impacts of our products

ABB products generally help improve users' health and safety. They do this, for example, by improving industrial environments (automation control products), reducing exposure to aggressive, repetitive or hazardous operations (robotics), and reducing potential explosions, fire risks and oil pollution (oil-free capacitors and cables). Products with a potentially negative impact are those that could contribute to global warming (leak of SF₆ gas from substations), require deforestation and present a visual impact (transmission lines), cause losses of energy (most electrical products), or cause electrocution if misused.

PR2 Number of non-compliance incidents relating to product health and safety

All countries in ABB's sustainability management program are asked to give details of any non-compliance incidents, including those concerning health and safety impacts of products and services. No such incidents were reported for 2011.

PR3 Product and service information

ABB's goal is to produce Environmental Product Declarations (EPDs) for our core products. They describe and quantify the environmental impact and performance of ABB products through every phase of their life cycles, covering raw material extraction, component manufacture, transportation and use over their full operating lifetime. They also contain recovery, recycling and disposal instructions for when the product has completed its useful life. The EPDs are published on ABB's website and help customers to select products that will improve their own environmental performance. We have developed associated Life Cycle Assessment (LCA) tools, such as the "LCA Light" tool that helps sales representatives to include environmental aspects in their discussions on the relative costs and benefits of different ABB solutions. ABB also engages with customers with particular reporting needs to ensure clarity and completeness of environmental data.

PR6 Adherence to marketing communication regulations

PR7 Non-compliance concerning marketing communications

This is not an issue for ABB, which works in the field of advanced technologies and does not supply to the consumer product market.

Energy efficiency, renewable energy and climate change

How we address core issues

(includes GRI indicators EC2, EN5, EN6, EN7, EN18)

ABB has been in the energy business for nearly 130 years. Our products and solutions help customers along the entire energy value chain to extract, transform and use energy effectively and to increase industrial productivity in a sustainable way.

Mitigation of climate change is likely to be the most complex, long-term energy challenge that societies need to address and solve within the coming decades. With more than 80 percent of primary energy supplied by oil, coal and natural gas, and an increasing demand for energy, mostly in emerging economies, greenhouse gas emissions reach new record levels every year.

The link between energy efficiency, renewable energy and mitigating climate change is clear. According to the 2011 World Energy Outlook, published by the International Energy Agency, more than 70 percent of projected CO₂ emission reductions by 2020 can be delivered by energy efficiency. A combination of energy efficiency measures and renewable power generation could deliver almost 70 percent of the required emissions reduction over the next two decades.

Energy efficiency and renewable energy also contribute to resolve other major energy-related challenges such as energy poverty, resource depletion and security of supply.

ABB's Growth Strategy 2011–2015 identifies mitigation of climate change, renewable energy and energy efficiency as key drivers and growth opportunities for our business. Already, nearly 60 percent of our revenues are related to products and services in our energy efficiency portfolio that help customers save energy and reduce greenhouse gas emissions. ABB has created a dedicated Energy Efficiency industry sector initiative to bring the full potential of our portfolio to address opportunities to improve energy efficiency and mitigate greenhouse gas emissions.

During 2011, the initiative began working with ABB's businesses and geographies to launch comprehensive energy efficiency "solution sets" for sectors as diverse as printing and vehicle assembly. Each sector has unique energy challenges. However, many share inefficiencies in their operations or facilities which can be addressed through proven solutions.

In a similar way, ABB offers broad, cross-functional solution sets of products and services to the wind, water and solar industry sectors, as well as rail. Rail is becoming an increasingly important solution for sustainable mobility, helping to mitigate emissions as well as noise and congestion, as urbanization grows at historic rates.

In 2011, ABB won an order worth around \$1 billion to supply a power link connecting offshore North Sea wind farms to the German mainland grid. This was the largest power transmission order in ABB's history. It will deploy the world's largest offshore HVDC (high-voltage direct current) system with a rating of over 900 megawatts (MW), keeping electrical losses to less than 1 percent per converter station. The completed link will be capable of supplying more than 1.5 million households with wind-generated electricity and help to avoid more than three million tons of carbon dioxide emissions per year by replacing fossil fuel-based generation.

ABB is a global leader in the development of smart grid technologies. These solutions will help create a lower-carbon power supply system by enabling more distributed generation, more power generated from renewable sources and a two-way grid that can receive as well as deliver reliable power.

In addition to our robust energy efficiency portfolio, ABB continues to make research and development investments as well as exploring early stage technologies and business processes through venture capital activity. Past activities have ranged from e-mobility to solutions for energy efficiency in data centers and smart grid communications.

Addressing climate risk

Potential climate change risk in ABB's operations is addressed in our comprehensive Enterprise Risk Management process. A wide array of risks is mapped at country, regional and divisional level and a consolidated risk mapping is made at Group level. Reviews of facilities are made annually or biennially. All facilities are required to develop, implement and test business continuity plans. The risk management process has not identified any significant climate change-related physical risk to ABB's operations. Issues considered include increased storm activity, heavy precipitation, floods or rising sea levels, availability and quality of water supply, and risk of disease/pandemic. Neither have we identified any regulatory risks related to our products, with the potential exception of further regulations related to the use of SF₆ in electrical equipment.

Working with partners to build capacity

In 2011, ABB published one of the most comprehensive overviews of energy efficiency in industry and utilities, [Trends in Global Energy Efficiency](#). This publication is a contribution to raising awareness about the importance of using energy more efficiently and the opportunities that exist for industry and power utilities.

The first part of the report measures and analyzes the attitudes and ambitions of business around the world regarding energy efficiency. The second part provides a global overview of energy efficiency in industry and utilities, as well as in-depth reviews of the countries which collectively account for 75 percent of the world's energy consumption.

At country level, ABB works with a variety of partners, including policy makers, non-governmental organizations, academic institutions, industry peers and customers to raise awareness about technology solutions for improving energy efficiency, to share understanding about the risks and opportunities of different policy approaches, and to test technical solutions. For example, ABB in Italy organized an energy efficiency workshop where CEOs and top management of Italian public and private entities met international experts to examine the international energy situation and energy efficiency solutions in Italy. ABB also collaborates with learning institutions and industrial partners in Sweden, US, Denmark, Germany and Italy to investigate smart grid concepts, to build understanding of how today's grids can evolve to more interactive networks.

ABB participates in the World Economic Forum's steering committee for energy efficiency and contributes to its New Energy Architecture study. This report addresses the need for a rapid transition towards a new energy supply system with reduced carbon intensity, and how this should be managed to minimize economic, social and technological risks.

Concrete action to reduce our climate impact

ABB in Italy is pursuing a "green fleet" policy for company personal cars and service cars, targeting an emission reduction of 1,000 tons of CO₂ per year. The first step in the program is the introduction of a new range of company cars with average emissions of less than or equal to 150 gCO₂/km. This choice required a complete revision of the company car offer and the introduction of several new car models including, for the first time, hybrids. With this choice, ABB Italy estimates that in the years 2011–2012 the average emission per car within the offer will decrease from 148 gCO₂/km to 140 gCO₂/km, substantially closer to the objective that the EU imposed on car manufacturers, of 130 gCO₂/km by 2015. The program is supplemented by the introduction of eco-drive modules within the safe-driving courses program promoted by ABB in Italy and the distribution of tips for eco-driving to all employees.

ABB in Benelux received its CO₂ awareness certificate from Dutch railway infrastructure company ProRail in March 2011. The CO₂ awareness certificate scheme aims to encourage suppliers to become more active and aware of their own greenhouse gas emissions. To achieve the certificate, ABB in Benelux established its baseline carbon footprint, agreed CO₂ reduction objectives based on their seven sites in Benelux, undertook internal and external communications about the project, and agreed to participate in external CO₂ reduction collaboration initiatives.

The CO₂ emission reduction activities undertaken by ABB in Benelux during 2011 included energy efficiency programs at all sites, switching to 100 percent certified renewable energy, thereby saving 41 percent of their 2009 carbon footprint, and reducing emissions from car travel by switching to the use of e-cars for inter-office travel and boosting the use of videoconferencing.

Energy efficiency begins at home

At ABB, we aim to steadily increase the efficiency of our own operations, including through the use of our own products. We set ourselves the target of reducing the energy we use as a company by 2.5 percent per employee per year for 2010 and 2011. To implement the objective, our 23 most energy-intensive production sites were required to conduct energy audits and all sites were required to develop an energy saving program.

By the end of 2011 we had achieved our energy efficiency objective, reducing energy consumption per employee by 5.5 percent from 2009. Absolute direct energy consumption (oil and gas) was almost unchanged in 2011, compared with 2009, despite significant increases in production and employee numbers. Electricity consumption increased by approximately 10 percent, in absolute terms, from 2009 to 2011, whereas electricity consumption per employee remained stable. We expect to see further improvements in energy efficiency as energy savings programs gain further traction.

Emissions of SF₆ increased six percent year on year, less than the 10 percent increase in SF₆ handling at our facilities. We continue to pursue emission reduction programs at different sites, with actions ranging from improved handling and inventory procedures to leak detection and improvements in storage methods. However, challenges remain to ensure appropriate handling procedures at both ABB and customer sites.

We are working to improve our data collection around transport emissions, from our own fleet, from transport of our goods by external suppliers and from business air travel.

During 2011, we finalized the development of key performance indicators to monitor the environmental impact of transport of goods and completed pilot projects in Italy, Saudi Arabia and the US to help us understand how these indicators can be applied practically for both domestic and international transport. Draft guidelines for the application of these indicators have been developed and are still in a testing phase, with a proposed release date in 2012. Carbon dioxide emissions from cross-border transportation and air and sea transportation have been collected and are under evaluation. To guide and coordinate Group transport and logistics strategy and programs, we have formed a Transportation Council of regional and Group logistics managers.

For business air travel, we have established the means for data collection and the methodology for emissions calculation, based on the UK Department for Environment, Food and Rural Affairs and Department of Energy and Climate Change methodology. Data collection began in 2010, and the 2011 data are now included in our third party assurance process.

Energy and climate performance: Other GRI indicators

EN3 Direct energy use by ABB (Gigawatt-hours – GWh)

Primary fuel	2011+Baldor ^a	2011 ^b	2010	2009
Oil (11.63 MWh/ton)	94	92	114	87
Coal (7.56 MWh/ton)	0	0	0	0
Gas	589	417	427	415
Total direct energy	683	509	542	502

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

EN4 Indirect energy use: Consumption and losses at utilities (Gigawatt-hours – GWh)

Energy source	2011+Baldor ^a	2011 ^b	2010	2009
District heat consumption	195	195	223	259 ^c
District heat: Losses at utilities	29	29	33	39
Electricity consumption	1,621 ^e	1,447 ^e	1,335 ^d	1,321 ^c
Electricity: Losses at utilities	2,239	1,999	1,844	1,824
Total indirect energy	4,084	3,670	3,436	3,442

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

^c The figure is based on reported data from 85 percent of employees and an assumed energy use of 3 megawatt-hours (MWh) per employee for district heat and 12 MWh per employee for electricity for the remaining 15 percent of employees.

^d The figure is based on reported data from 87 percent of employees and an assumed energy use of 12 MWh per employee for electricity for the remaining 13 percent of employees.

^e The figure is based on reported data from 85 percent of ABB employees and an assumed energy use of 12 MWh per employee for electricity for the remaining 15 percent of employees. All Baldor employees covered by the relevant reporting.

Megawatt-hours (MWh) per employee

2011 + Baldor^a	18.7
2011^b	16.9
2010	18.0
2009	17.9

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

Direct and indirect^a energy use by type for 2011^b

Oil	4%
Gas	19%
District heat ^a	9%
Electricity ^a	67%



^a Not including losses at utilities

^b Data for ABB only, not including Baldor

EN16, EN17 Greenhouse gas emissions

(kilotons CO₂ equivalents)

EN29 Significant environmental impacts of transportation

(kilotons CO₂ equivalents)

	2011+Baldor ^a	2011 ^b	2010	2009
Scope 1				
CO ₂ from use of energy	144	109	117	107
SF ₆	263	263	247	263
CO ₂ from transport by own fleet	350 ^c	350 ^c	350 ^c	350 ^c
Scope 2				
District heat consumption	43	43	49	57
District heat: Losses at utilities	7	7	8	9
Electricity consumption	348	309	293	290
Electricity: Losses at utilities	480	427	405	400
Scope 3				
Air travel	N/A	185	160 ^d	N/A

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

^c Estimated figures

^d 2010 data originally reported as 645 kilotons CO₂ equivalents. Assurance of 2010 and 2011 data uncovered a calculation error, which has now been corrected.

Environmental responsibility

Seeking continuous improvement

(includes GRI indicators EN2, EN9-15, EN21, EN24-27)

ABB has been working for many years to manage and reduce our environmental impacts, both within our own plants and offices, and those caused by our products and projects. We take a life cycle approach to assess the impacts throughout the phases of a product's life cycle – from manufacture and transportation to customer use and final recycling and disposal.

Life cycle assessment (LCA) is required as part of a product's research and development phase. Checklists provide guidance on how to reduce the use of hazardous substances, avoid other environmental and health risks, minimize consumption of resources, and design for recycling and easy end-of-life treatment. As part of our sustainability objectives, we have developed and launched supporting tools and training materials to ensure that these sustainability aspects are embedded in product development.

LCA is also used in the concept development phase for next generation products. In addition, we have developed associated LCA tools, such as the "LCA Light" tool that helps sales representatives to explicitly include environmental aspects in their discussions on the relative costs and benefits of different ABB solutions.

ABB has a long history of involvement in LCA. Our experts participated in the development of the ISO 14040 series of standards covering LCA and the ISO 14020 series on environmental labeling and we are still active participants in the Chalmers Life Cycle Center, a global competence center that continues to develop methodology and tools.

ABB develops Environmental Product Declarations to communicate the environmental performance of our core products over their complete life cycle. Declarations are based on LCA studies, created according to ISO/TR 14025. More than 80 declarations for major product lines are published on our website (www.abb.com).

To ensure continual improvement in our operations, we require all manufacturing and service facilities to implement environmental management systems according to the ISO 14001 standard. For non-manufacturing sites we have implemented an adapted environmental management system to ensure management of environmental aspects and continual improvement of performance. Almost all of these approximately 360 sites and offices currently work in compliance with the requirements of the standard and our environmental management program now covers operations in 59 countries.

Our management systems are underpinned by intranet-based tools and procedures. Our "Sustainability Toolbox" contains information to support the development of eco-efficient products and processes, and the implementation of ABB's sustainability objectives for 2010 and 2011

Hazardous substances

As part of our sustainability objectives, ABB is working to phase out the use of hazardous substances in our products and processes, where technically and economically feasible. We have developed lists of prohibited and restricted substances to guide this process and update them regularly, in line with developments in international regulations. ABB's suppliers are also required to apply this list to their own processes and supply chain.

Plant-specific phase-out programs are showing results, with some materials such as organic lead in polymers almost completely eliminated. This is mostly thanks to an improvement project at ABB's low-voltage products factory at Marostica in Italy, which has led to a significant reduction of organic lead used in extruded PVC products. The project involved the investigation of material requirements and selection and working with suppliers to obtain lead-free alternatives. The project continues, with a goal to obtain lead-free PVC production.

Alongside plant-specific schemes, global Business Unit (BU) focus programs continue. For example, the Volatile Organic Compounds (VOC) reduction program in the Transformers BU of our Power Products division is progressing well. The goal of the initiative is to reduce the solvent emissions from painting across the complete manufacturing spectrum of the business unit. The project aims to reduce the emissions from painting by 80 percent within BU Transformers, which would yield a reduction of 44 percent in the total emissions of ABB.

Conventional paints emit VOC and the main sources in ABB operations are the paint shops for transformers and motor manufacturing. In reduced VOC painting systems, the amount of solvent used as a carrier for the solid paint particles has been significantly reduced or replaced with another type of non VOC carrier, such as water. As well as reducing the environmental impacts of the release of VOCs to the atmosphere, this also makes the paint more pleasant to work with for our employees and reduces the health risks associated with VOC releases.

In cooperation with our suppliers, ABB Corporate Research Center has developed reduced VOC painting systems based on the ISO standard 12944-2. Paint solutions have been standardized globally and four suppliers have been approved for the program. Not only will this result in better environmental performance, but it also promotes standardization and secured quality across the global BU.

Over a two-year roll-out period, all ABB transformer manufacturing sites will convert to the lower VOC painting systems. This transition requires intensive work, site by site, including local system evaluation and testing, process mapping, quality assurance, transition planning and intensive training. Significant plants in Sweden, Finland, US, Poland and elsewhere have already converted to low VOC systems and work is ongoing in other countries. It is a complex process that sometimes must be shaped around commercial aspects, such as long-term frame contracts that require certain types of painting treatments and coordination of changeover in plants that supply to many customers.

When this internal initiative is completed, we intend to extend the program to our sub-suppliers who paint parts on our behalf.

Water

ABB's manufacturing processes do not use significant amounts of water, with extractions of groundwater and surface water used mainly for cooling purposes. None of these extractions caused significant changes to the water sources in 2011.

Approximately 50 percent of ABB's manufacturing sites use water for process purposes, and of these sites, about 60 percent use water for cooling. Water used for cooling is sourced mainly from local water sources and is returned to these sources without contamination. The use of closed-loop processes and reuse of waste water in other ways saved approximately 3,900 kilotons of water in 2011. In China, South Africa, Colombia and India, for example, water treated in ABB's own treatment plants is reused for local irrigation and in sanitary services.

About 81 percent of ABB locations discharge water to the public sewers, with 27 percent of these sites first processing that water through their own treatment plants. Excluding cooling water returned to the source of extraction, about 19 percent of locations discharge to local water sources, with about 50 percent of these sites first applying their own treatment. Two sites with their own treatment plants consider that their discharge of water affects the recipient. One site is currently addressing the capacity of its treatment plant to ensure that the water is of sufficient quality prior to discharge, while the discharge from the other site affects the receiving body as it is a near-permanently dry riverbed.

In order to better understand the impacts of ABB's water withdrawals, we have used the World Business Council for Sustainable Development Global Water Tool to characterize the renewable water resource availability in the countries and watersheds in which we operate. We have classified water resources according to the Food and Agriculture Organization methodology.¹

When considering watersheds, 44 sites are located in extremely water-scarce watersheds (of these, 27 are manufacturing facilities), 48 in water-scarce watersheds (of these, 17 are manufacturing facilities) and 67 in water-stressed watersheds (of these, 33 are manufacturing facilities).

We have now developed an in-house tool for mapping and analysis of water flows at our facilities. Following pilot testing at a number of facilities in early 2012, the tool will be used in developing action plans at manufacturing facilities in water-stressed regions.

Thanks to a wide products and solutions portfolio, we provide our customers with enhanced performance, efficiency and reliability in water management. ABB's goal is to optimize the employment of water and energy resources to manage the integrated water cycle.

For example, ABB is providing a turnkey electrical control instrumentation and mechanical solution for the Réseau de Collecte water transfer scheme in Algeria, one of the largest water projects ever undertaken in the Sahara region. When completed, the water transfer scheme will pump and deliver 50,000 cubic meters of water a day via pipeline through the Sahara Desert from In Salah to Tamanrasset, a distance of almost 750 kilometers.

¹ Food and Agriculture Organization of the United Nations (FAO) (2003). *Review of world water resources by country. Water Reports 23. Rome.* According to this methodology, a watershed is considered water-stressed if the total actual renewable water resources (TARWR) are below 1,700 m³ per person and year, water-scarce if below 1,000 and extremely water-scarce if below 500.

The ABB solution will power the whole water collection system and connect the In Salah site to the local power grid to ensure a safe and reliable supply of electricity to site operations. ABB instrumentation will measure the flow, temperature, pressure and quality of the water, and an ABB distributed control system will monitor and control the entire process. Earmarked as one of the Algerian government's key infrastructure projects, the capacity of the scheme is expected to triple to 150,000 cubic meters a day by 2030 to meet the needs of Tamanrasset's rapidly growing population.

Waste and recycling

ABB products contain mostly steel, copper, aluminum, oil and plastics. Approximately 90 percent of the material is reclaimable after the end of a product's useful life. ABB enhances the ability to recycle by designing products that can be dismantled more easily, and by providing users with recycling instructions.

The main waste streams at ABB organizations are metal, wood, paper, oil and plastic. We aim to reduce the amount of waste sent to landfill and to increase our use of materials which are recycled or made available for reuse.

ABB sent approximately nine kilotons of hazardous waste for disposal in 2011, unchanged from the previous year, despite increased business volumes and plant refurbishments and consolidation. This waste was mostly used for heat recovery at specialized plants. ABB follows legal regulations to transport and dispose of hazardous waste only through officially authorized disposal agents.

In 2011, 72 percent of total waste was sent for recycling. In-house recycling, mainly of thermoplastics and packaging material, reduced the amount of waste by approximately 3.2 kilotons. Additionally, the lead used as counterweights for robots and the cadmium used in industrial batteries are recycled materials.

As well as working to cut waste and improve material efficiency in our manufacturing processes, ABB also works to improve administrative processes and reduce costs. In many cases, this involves partnering with suppliers to develop win-win solutions. For example, in Australia, ABB is working with Fuji Xerox to exploit the potential of managed print services. This potential includes environmental and cost savings, as well as improvements in business workflows and efficiencies. By optimizing the employee to print device ratio, the Australian operation expects to make significant reductions in the number of printers running concurrently, potentially cutting annual CO₂ emissions by up to 66 tons through electricity savings. Additionally, paper-saving default settings on the new printers are expected to reduce annual paper consumption by 15 percent.

ABB provides an extensive range of maintenance, repair and refurbishment services to help customers minimize costs and lengthen the life cycle of their products. These services cover control systems, as well as diverse products such as drives, robots, analytical instruments and transformers.

For example, many of ABB's low-voltage and medium-voltage products have successfully served their application for over 10 or 20 years and may continue to do so for some years to come. In order to enable an extension to the product life cycle, ready-made and easy-to-apply upgrade and retrofit kits are designed for several product lines. These include conversion kits for legacy low-voltage breakers, upgrades for legacy low-voltage switchgear with modern intelligent technology for motor control, and upgrade kits for medium-voltage drive controllers, to allow better control, using the same equipment.

Biodiversity and conservation

ABB's manufacturing and workshop facilities are not located in, or adjacent to, protected areas or areas of high biodiversity value, as defined in internationally recognized listings or national legislation or internationally recognized listings such as the International Union for Conservation of Nature Protected Areas Categories 1–4, world heritage sites or biosphere reserves. Nonetheless, ABB works to rehabilitate our own sites and some of our operations are working with partners to contribute to local biodiversity. For example, ABB employees in Indonesia, Philippines and Qatar participate in activities to preserve local beach and marine environments, while ABB supports local forest preservation and tree planting schemes in the US, China, Italy and Dubai. ABB in Peru, Taiwan, and Malaysia contributes to wetland conservation, partnering with local parks to support the rehabilitation and maintenance of these valuable sites.

ABB in Switzerland focuses on its own premises and aims to landscape them in a natural way. Site maintenance using native trees and plants, and avoiding the use of fertilizer and biocides, helps to conserve biodiversity. Untouched flower fields, for example, are home to butterflies and many other insects. Sites in Deitingen and Dättwil are now certified as nature parks by "Natur und Wirtschaft," a foundation set up by the Swiss federal office for the environment and local trade associations with the goal to turn 10 percent of Swiss industrial real estate into green and natural areas.

Environmental performance: Other GRI indicators

EN1 Use of hazardous substances (tons)

	2011 ^a	2010	2009
Phthalates – softener for PVC	47	31	16
PBB and PBDE – flame retardants in plastics	~0	~0	3.1
Lead in submarine cables	5,725	3,632	3,600
Organic lead in polymers	1.3	52	24
Lead in other products, eg, backup batteries and counter-weights in robots	227	265	313
Cadmium in industrial batteries delivered to customers	1.6	1.7	2.2
Cadmium in rechargeable batteries	10	5.9	4.7
Cadmium in lead alloy	4.3	2.7	2.5
Cadmium in other uses	0.02	0.18	0.05
Mercury in products delivered to customers	0.030	0.038	0.011
SF ₆ insulation gas (inflow to ABB)	1,052	968	962
SF ₆ insulation gas (outflow from ABB)	1,040	959	951

^a ABB operations only, not including Baldor facilities

Water

EN8 Water consumption

EN10 Water recycled and reused

Water withdrawals (kilotons)

	2011+Baldor ^a	2011 ^b	2010	2009
Purchased from water companies	3,400	3,400 ^c	3,300 ^c	3,300 ^c
Groundwater extracted by ABB ^d	N/A	3,200	2,700	2,900
Surface water extracted by ABB ^d	N/A	2,600	2,900	2,700
Total water withdrawal	9,200	9,200	8,900	8,900
Water saved through recycling and reuse (kilotons)	N/A	3,900	3,000	800

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

^c The figure is based on reported data from 87 percent of employees (85 percent in 2011) and an assumed water consumption of 10 tons/year/employee for the remaining 13 percent of employees (15 percent in 2011).

^d Estimated (rounded) figures

Air emissions

EN19 Emissions of Volatile Organic Compounds (tons)

	2011 ^a	2010	2009
Volatile Organic Compounds (VOC)	810	786	782
Chlorinated Volatile Organic Compounds (VOC-Cl)	13	11	5

^a ABB operations only, not including Baldor facilities

The major constituents of VOCs and VOC-Cl are xylene, thinner and perchloroethylene. Increases in 2011 were due to increased business volume involving certain processes.

EN20 Emissions of NO_x and SO_x (tons SO₂ and NO₂)

	2011 ^a	2010	2009
SO _x from burning coal	0	0	0
SO _x from burning oil	68	84	64
NO _x from burning coal	0	0	0
NO _x from burning oil	51	63	48
NO _x from burning gas	90	92	90

^a ABB operations only, not including Baldor facilities

These figures are for fossil fuels consumed in ABB premises for heating and process purposes.

Waste and recycling

EN22 Waste generated (kilotons)

	2011+Baldor ^a	2011 ^b	2010	2009
Scrap metal sent for recycling	161	97	135 ^c	71
Other waste sent for recycling	42	39	44	46
General waste sent for disposal	47 ^e	45 ^e	38 ^d	29 ^d
Hazardous waste	11	9	9	6
Total waste	262^e	190^e	227^c	153

^a ABB and Baldor facilities included

^b ABB operations only, not including Baldor facilities

^c 51 kilotons are scrap metals from several locations in South Africa that have now been consolidated to one site.

^d The figure is based on reported data from 87 percent of employees and an assumed waste output of 0.33 tons/year/employee for the remaining 13 percent of employees.

^e The figure is based on reported data from 85 percent of employees and an assumed waste output of 0.33 tons/year/employee for the remaining 15 percent of employees. All Baldor employees covered by the relevant reporting.

Environmental incidents and penalties

EN23 Numbers of significant spills

EN28 Significant fines for non-compliance

Number of incidents

	2011	2010	2009
Oil spills	5	4	3
Chemical spills	0	0	0
Emissions to air	4	0	1
Others	0	3	0

Incidents were analyzed and adequate decontamination procedures were implemented to prevent any permanent contamination of soil and water due to these spills. Corrective actions, such as improved control systems, have been taken to reduce the risk of future spills. One incident related to an oil spill remains under consideration to determine the appropriate system improvements to prevent a recurrence.

During 2011, a \$74,000 penalty was imposed on a US facility for a failure to report a complete Form R in a timely manner to the US EPA and the State of Virginia, a violation of Emergency Planning and Community Right-to-Know (EPCRA) Section 313. The issue occurred during 2009 and the case is now settled. An ABB plant in Italy was fined approximately \$4,000 during 2011 for exceeding a water discharge parameter.

EN30 Environmental protection expenditure and investments

For 2011, ABB's expenditure on environmental management throughout its global sustainability affairs network was as follows:

Expenditure on environmental management	\$ thousands
Group level	11,200
Country level	5,200
Site level	3,850
Total	20,250

ABB limits the accounting of sustainability to the costs of implementing and maintaining environmental management systems to ISO 14001, health and safety management systems to OHSAS 18001, and running the sustainability network, including personnel costs and the cost of developing sustainability tools, education and training.

This does not include costs related to improvement projects. For example, the decision to invest in a new manufacturing process is the result of integrating many decisions in addition to environmental considerations.

Our people

A key to business success

(includes GRI indicator LA11)

In 2011, ABB adopted an ambitious Group strategy for 2015 which foresees major business growth and expansion. Ensuring we can attract, develop and retain employees in increasing numbers is a key factor in ensuring business success and strategic goals.

A number of programs are under way to ensure we have high-caliber people at all levels of the Group and processes to support our goals.

Several new tools and processes were introduced in 2011. They are designed to strengthen global mobility, and to improve both the quality and value of the annual appraisal and development system, and the approach to internal and external talent management. This has been done, for example, through the introduction of a global competence framework and a new organizational structure for recruitment.

ABB continued to move forward on the issue of diversity, following the adoption of a Group-wide diversity and inclusion statement in 2010, which reaffirmed our commitment to develop and retain people from all walks of life in a global company. We recognize that a diverse and talented workforce, recruited globally, provides the quality and skills that create competitive advantage. Such diversity promotes both innovation and business success if allowed to flourish in an atmosphere of inclusiveness.

Our diversity agenda is currently focused mainly on gender. For the first time, a woman was elected to the Board of Directors in 2011, and several other women – including the new heads of Corporate Strategy and Investor Relations – were among those appointed to high-ranking business and functional positions within the company.

Efforts to promote diversity are also under way on a regional level. The newly created diversity council in the North America region has established a strategy with milestones to attract, develop, retain and leverage diverse talent; and in the Mediterranean area, a diversity working group has set a strategy and is addressing areas such as recruitment, talent management, communication, flexibility and key performance indicators.

In some areas the evidence of a diverse workforce is palpable – there are, for example, people from 50 countries among the 600-strong workforce at the company's headquarters in Zurich. This is a sign of improvement; work in other areas continues.

We continued to invest during 2011 in our ability to attract and develop the best people. There has, for example, been a major investment in talent processes – such as our global recruitment policy, our global web-based recruitment tool for both internal and external talent, and our talent identification process – to better support the company's business requirements and provide the best career development opportunities for existing employees.

The Talent Management process has been embedded in all regions and around 90,000 personal performance and development assessments were conducted in 77 countries through the new tools. The process focuses on identifying those people with potential, building on their strengths, and supporting development activities so they have greater opportunities to advance within the company.

To support employees in their chosen careers there is also a series of Human Resources-led competence assessments and functional development programs in place. Assessment centers have been introduced for those wishing to become first line managers and a global competence framework was introduced in 2011. The Talent Development Assessment helps employees identified as having strong potential to move into first line manager positions and takes them through a series of exercises to identify their current strengths and development areas.

A program of functional competence management has also continued to assess and develop skills in areas such as finance, project management, information systems and sales.

Programs are complemented by initiatives such as Global Mentoring – launched in 2008 – which is based on a “leaders developing future leaders” model. About 130 mentors and 180 mentees have attended the program so far; in 2011, 76 mentoring pairs attended six introductory workshops worldwide. Feedback confirms that mentoring supports the learning of both mentors and mentees.

Surveys underline the impact of the mentoring program. They indicate 50 percent of mentees took on new roles either during or after the mentoring program. More than 90 percent of those employees said mentoring had helped them significantly during their period of transition.

ABB is regarded as an employer of choice among engineering students in a number of countries, including Switzerland and Sweden, and this is reflected in the continued popularity of ABB's two-year global trainee scheme which involves three or four six-month assignments in a wide range of countries and across multiple disciplines.

The number of global trainees increased to 35 in 2011 compared to 26 the year before. The trainees, who come from 19 countries, were selected for a range of programs, including finance, human resources, sustainable energy futures, sustainability, marketing and sales.

Our Group recruitment policy focuses on ensuring that employees can move more freely within ABB and pursue vacant positions. All positions, except for a small number in senior management where the talent pool is well documented, are now posted in a global online recruitment tool which supports greater transparency and encourages equal opportunity. The online recruitment tool also allows employees to track opportunities against their personal profile and to post their Curriculum Vitae so it is available to the recruitment teams in every country. Managers are required to encourage the development of their teams and are not allowed to block an employee's opportunity to advance.

The number of international assignments has been increasing steadily as part of measures to increase global mobility. More than 800 people were on international assignments in 2011 – a 15 percent increase on 2010. These assignments are both personal development opportunities and help to meet business needs within growing markets.

Despite the changing economic climate, ABB has continued to invest in leadership development programs. In the fifth year of running the Senior Leadership Development Program, two courses were held in the Swiss city of Lausanne in partnership with the internationally renowned IMD business school. A total of 95 senior managers attended during 2011. Both the Middle Manager and First Line Manager programs are now running all around the world and covered a further 300 middle managers and 900 first line managers in 2011.

ABB seeks to strengthen leadership at every level, and all employees are offered the opportunity to attend the three-day Leadership Challenge program, which is delivered in 14 languages and which focuses on taking personal leadership, irrespective of the position or role in the company. About 47,800 employees have completed the course since it started in 2004. ABB Life is a program to develop and prepare talented young people for future leadership roles. A total of 440 young employees went through the program in 2011.

As part of efforts to promote development, work started in 2011 on creating a new learning center – a building complex close to ABB Group headquarters in Zurich, Switzerland – which will host conferences, training and development sessions and provide opportunities to meet stakeholders. The center is due to be opened in 2012.

In a further area of employee development, ABB introduced a scheme in 2011 which allows all employees and their family members with an internet connection to access a high-quality online Standard English training course free of charge anywhere in the world. Participants have the opportunity to take part in a free Business English skills test and certificates of achievements are issued to signify their progress from one level of English skills to the next. The scheme already has users in 97 countries and more than 22,000 people have activated a license.

Training is ongoing throughout the Group. From a sustainability perspective, a wide range of training sessions were held in 2011 at a global, regional or country level on issues such as health and safety, security, crisis management, and human rights.

One of the key focus areas for 2011 was occupational health and safety leadership. A program was launched to involve country managers and local business unit and division managers to highlight safety leadership as a management priority. As part of the program, the ABB Chief Executive launched a global communications campaign to highlight personal leadership and responsibility.

Social Performance: Other GRI indicators

Employment

LA1 Full-time workforce by region

2.8 Scale of the reporting organization

Full-time employees by region	2011	2010	2009
Europe	60,300	58,800	60,600
The Americas	25,900	17,700	17,100
Asia	37,400	30,900	29,900
Middle East and Africa	10,000	9,100	8,500
Total	133,600	116,500	116,100

The significant increase in 2011 was partly due to the acquisition of Baldor Electric Company in the United States.

LA1 Part-time workforce by region

The following numbers of part-time employees are included in the total figures LA1.

For 2011, these figures are also shown as percentages of the total workforce in the countries covered by our social reporting system (89 percent of employees).

Part-time employees by region	2011	2010	2009
Europe	2,924 5%	3,133	2,984
The Americas	108 1%	143	92
Asia	106 <1%	183	268
Middle East and Africa	1 <1%	4	112
Total	3,139 3%	3,463	3,456

LA2 Rate of employee turnover by region

Rate of turnover of all employees, including part-time:

For 2011, the figures show the turnover number, as well as the percentage of the total workforce in the countries covered by our social reporting system (89 percent of employees).

Turnover by region (all employees)	2011	2010	2009
Europe	5,712 10%	11%	10%
The Americas	2,823 15%	16%	23%
Asia	4,615 13%	14%	11%
Middle East and Africa	854 14%	8%	5%
Total turnover for whole Group	14,004 12%	12%	12%

Turnover of all female employees, including part-time:

For 2011, these figures are also shown as a percentage of the total workforce in the countries covered by our social reporting system (89 percent of employees).

Turnover by region (female employees)	2011	2010	2009
Europe	1,364 2%	1,407	1,439
The Americas	531 3%	631	635
Asia	1,086 3%	1,060	520
Middle East and Africa	184 3%	51	19
Total turnover for whole Group	3,165 3%	3,149	2,613

LA3 Benefits provided to employees

As a multinational organization with operations in around 100 countries, ABB has difficulty in providing meaningful information for this indicator. ABB provides competitive salaries and benefits to employees, taking legal requirements into account and benchmarking against other companies. In view of the different legal requirements from country to country and the adverse cost-benefit ratio in producing this information, ABB has decided not to report against this GRI indicator.

Labor/management relations

LA4 Employees covered by collective bargaining agreements

Approximately 61 percent of the company's employees (excluding Baldor) are subject to collective bargaining agreements in various countries. Collective bargaining agreements are subject to various regulatory requirements and are renegotiated on a regular basis in the normal course of business.

LA5 Minimum notice periods regarding significant operational changes

ABB is not in a position to provide Group-wide aggregated information, as the figures vary from country to country depending on local regulations. For the 27 countries of the European Union, ABB is represented on the EU's European Works Council where such matters are discussed.

LA10 Training/LA13 Women in management positions

ABB has decided to report on the top 10 countries by employee numbers in this section, representing about 60 percent of Group employees. All countries reported figures for 2011 and the full list appears on the ABB website.

We define women in top management positions as women in Hay Grades 1–10, whereas prior to 2010 top management was defined as country management plus the two levels below them. We can now compare figures from country to country on the same basis.

Women were appointed to a number of senior management positions in different parts of the world in 2011. ABB shareholders elected Ying Yeh to the Board of Directors in 2011 to replace an outgoing Board member. She is the first woman to join the Board. Other senior appointments included the heads of Investor Relations, Corporate Strategy, and the Group's solar initiative. Women were appointed to management positions in several businesses, including Power Products High Voltage business units in Sweden and the United States, and as the head of Supply Chain Excellence.

LA13 Other indicators of diversity

As at December 31, 2011, ABB's Board of Directors had eight members – seven men and one woman – of seven nationalities, whereas the Group Executive Committee had 11 members, including one woman, of eight nationalities. In addition, people from 50 countries were among the 600-strong workforce at the company's headquarters in Zurich.

Diversity and equal opportunity

LA14 Ratio of basic salary of men to women

In ABB, salaries are decided according to the nature of duties performed.

LA15 Return to work and retention rates after parental leave

The number of people who took parental leave in 2011 was just over 3,000. This figure was evenly divided between men and women, and varied according to culture and region. ABB is consolidating figures on the retention rates of people who took parental leave, and we expect to be able to publish this data in the 2012 report.

	Training hours per employee			Percentage of women in management		
	2011	2010	2009	2011	2010	2009
Brazil	25	26	28	7%	7%	–
China	34	40	24	25%	25%	–
Czech Republic	11	10	13	18%	19%	–
Finland	13	13	24	15%	17%	–
Germany	16	16	15	7%	4%	–
India	5	4	3	2%	2%	–
Italy	17	17	10	7%	7%	–
Sweden	12	10	10	22%	22%	–
Switzerland	17	20	20	7%	7%	–
US	25	25	25	16%	15%	–

LA12 Employees receiving performance reviews

ABB has a Group-wide policy to review at least annually the performance of every employee, providing opportunities to discuss work achievements, set future objectives and provide feedback and coaching.

ABB completed the roll-out in 2011 of a new online tool, covering 90,000 employees in 77 countries. The new system is part of Human Resources Group Tools that run on a common SAP platform and provide a new way of identifying talent within the organization, as well as managing performance and development. Many other employees complete paper-based appraisals.

Other performance indicators

Economic Performance Indicators

EC3 Benefit plan obligations

EC4 Government financial assistance

EC5 Wage level ratios

EC7 Local hiring procedures

As a multinational organization with operations at approximately 360 sites and offices in more than 100 countries, ABB has difficulty in selecting appropriate countries and providing meaningful information for these indicators. In view of the adverse cost-benefit ratio in producing this information, ABB has decided not to report against these GRI economic performance indicators for the time being.

Occupational health and safety

Committed to excellence

Everybody in ABB is committed to maintaining a positive and effective occupational health and safety (OHS) culture where we understand and are constantly aware of the potential health and safety risks within our operations. It is a culture where people at every level of the organization deliver on their individual responsibilities, strive to achieve excellence in risk management, and lead and support safe working throughout our businesses and regions.

The engagement and participation of all of our people in managing health and safety are central to ABB's strategic plans for OHS. However, the diversity of our operations and the cultures within which we operate also means this is challenging.

Our many business-specific and combined activities, driven through Group, regional, country and business OHS plans, took ABB to a significant milestone in our OHS journey in 2011 when no employee or contractor fatalities occurred. However, the number of serious injuries increased which means we still have considerable work to do. As ABB continues to grow and explore new opportunities, we will remain focused on our improvement programs to address the fundamentals of safety leadership and behavior.

We have also maintained a strong focus on building competence and capacity for the effective leadership and management of OHS, setting and improving standards for risk control and monitoring our facilities and operations. At Group level we worked to extend the reach of our Leadership Training program, providing the knowledge and skills essential for effective personal OHS leadership. It also drives active local improvement across our businesses.

One consequence of effective OHS leadership has been the increasing number of business-led OHS programs. These initiatives foster the development of standards and deliver specialized training consistent with the particular needs and activities of the different business units (BUs).

During 2011, existing OHS programs such as the BU Substations' "Energizing Safety" and initiatives in the BU Transformers, the medium- and high-voltage businesses and the Service business were strengthened and extended. Additional programs were developed in the Process Automation division.

To maintain and build the skills of the advisory networks that support our businesses, we enhanced our functional competency assessment process and supporting OHS training programs.

Significant milestones were achieved and programs implemented across the ABB world during 2011:

US distinctions

As an example of the knowledge and experience within our network, we have been proud to support Darryl C. Hill, ABB's Vice President Safety and Health, North America, in his duties as President of the American Society of Safety Engineers during its centennial year. Darryl continues to work tirelessly not only to support ABB but also to share skills and experience within a wider community.

Also in the US, Medium Voltage and High Voltage Service did not have a single Occupational Safety and Health Administration (OSHA) recordable injury for the fifth consecutive year. This is an exceptional achievement, considering all services are carried out under field conditions.

Managers Assistance Program in Australia brings results

ABB in Australia has developed a program of education and support in safety leadership, change management and progressive compliance, called the "Managers Assistance Program." The program is designed to implement existing systems progressively and to change worker behavior by giving managers clear actions and goals on a month-by-month basis. All actions and deadlines are closely monitored, addressing leadership activities and behavioral improvements in managers and supervisors, as well as compliance. The results have been excellent, with ABB Australia achieving its best safety performance on record. This program of supported change can work in each ABB country, and on a larger scale, and supports all current systems and programs.

Kevlar "Wrap & Strap" safety device improves substation safety

Employee teams at ABB in the US have developed an innovative way to mitigate the hazard of moving and working near pressurized porcelain insulators used at substations. Kevlar insulator covers have been designed to protect against explosion, which can happen when an insulator with a defect or crack is moved or pressurized. The covers were tested and improved under controlled conditions and are now available for sale to customers.

A systematic approach to UK occupational road safety

To promote the integration of occupational road risk into the day-to-day consideration of their employees, ABB in the UK developed the Road Ahead program. The program has brought together 10 key habits in a systematic approach, with the aim to ensure all personnel driving on company business drive a safe vehicle and are aware of the dangers associated with road travel.

South America – safety awards

ABB in Colombia established an OHS and environment contest to promote a safety and environment culture. Employees are nominated by their peers for the “Eco Safe Hero” award for outstanding contributions. The award scheme has now been adopted in all countries in South America and at the end of 2012 an additional award will be made to the overall winner within the region.

Middle East, India and Africa – raising awareness

Health and safety was the focus of one of our biggest community efforts in 2011. More than 5,000 ABB employees and subcontractors – as well as family members – took part in a week of activities in the Gulf states, India and some parts of Africa to promote greater health and safety awareness and performance in the workplace, at home and on the roads. ABB won the Middle East Electricity Corporate Social Responsibility Award of the Year for our work on continually improving health and safety standards.

As we move into 2012, we commence the next phase of our OHS journey. We have defined a new aspirational vision, moving away from “Stop hurting people” to “Committed to achieving OHS excellence.”

Our future strategies are founded upon empowering the many competent people across our organization, encouraging greater autonomy and ownership within businesses, recognizing individual programs and avoiding a “one size fits all” approach, while maintaining clear standards for control and behavior. With everyone’s participation we will continue in our quest for excellence and ever-improving OHS performance.

Occupational health and safety performance: GRI indicators

LA6 Percentage of total workforce represented in health and safety committees

Health and safety consultation is an integral part of ABB’s commitment to introduce into all businesses occupational health and safety management systems based on OHSAS 18001 and the International Labor Organization (ILO) guidelines. The form of health and safety consultation with employees varies according to local requirements, and includes health and safety committees and employee forums.

At Group level, ABB has a standing Occupational Health and Safety (OHS) committee chaired by an Executive Committee member whose mandate covers all employees.

LA7 Injuries, lost days, diseases and fatalities

	2011	2010	2009
Employee work-related fatalities	0	1	1
Incident rate	0	0.01	0.01
Employee work-related serious injuries	22	15	27
Incident rate	0.18	0.13	0.23
Employee business travel fatalities	0	2	1
Incident rate	0	0.02	0.01
Employee business travel serious injuries	3	5	0
Incident rate	0.02	0.04	0
Contractor work-related fatalities	0	2	3
Contractor work-related serious injuries	16	16	11
Contractor business travel fatalities	0	0	0
Members of the public fatalities	0	0	0
Employee lost days due to industrial incidents	9,478	8,362	7,633
Employee occupational health diseases	7	13	47
Employee total recordable incident rate	13.17	13.48	14.32

In these statistics, figures for fatalities also include deaths occurring within one year as a result of injuries sustained. Incident rates are according to the ILO rate per 1,000 employees. Total recordable incident rate includes the following incidents: serious injuries, lost time incidents, medical treatment injuries, occupational health diseases and restricted work day cases. "Lost days" are calendar days, and are counted from the day after the incident. Business travel incidents include injuries related to road travel. Incidents during air travel, on business trips, are excluded.

LA8 Programs in place regarding serious diseases

ABB has developed a Group-wide occupational health strategy to ensure the robust and active management of occupational hygiene issues, such as exposure to hazardous substances, occupational carcinogens, physical agents, musculo-skeletal disorders, noise and vibration. The strategy will be rolled out during 2012, and will include training programs to assist effective management and monitoring at country and site level. The strategy is led by a global Occupational Health Team consisting of occupational health physicians and OHS professionals who will also provide support and guidance for local programs.

In three countries (Brazil, Philippines and South Africa) ABB has specific programs in place to address HIV/Aids.

At Group level, ABB has a program in place to deal with pandemic diseases, involving the development of pandemic plans for all countries, which are an element of a country's overall crisis response plans. The key reference used by ABB is the World Health Organization.

Additionally, all ABB travelers receive destination-specific security and health advice prior to travel. The health advice includes medical preparedness, medical screening where needed and advice on particular health risks at their destination.

LA9 Health and safety topics covered in formal agreements with trade unions

This information is not recorded by the Group, but local legislation requires formal agreements in some countries such as Germany and South Africa. Group health and safety performance is reported annually by the head of Group Function Sustainability Affairs at a meeting with the European Works Council.

Human rights

Recognizing risks and building capacity

(includes GRI indicator HR2,3)

ABB continued to strengthen its human rights performance in 2011, amid growing international pressure on all companies to uphold their responsibility to respect human rights.

Several new standards were introduced, including the United Nations-approved Guiding Principles for Business and Human Rights, which have focused attention on the corporate responsibility to respect human rights. The Organization for Economic Cooperation and Development and the International Finance Corporation also strengthened their human rights recommendations for business during the course of the year.

The Guiding Principles and other standards emphasize the need for companies to perform due diligence on human rights impacts and risks – a process ABB has been pursuing for several years and which we are continuing to develop.

ABB adopted a human rights policy in 2007, and has since concentrated on training employees and embedding human rights in key business decision-making processes – most notably, the divisional risk review process which all major tenders have to go through, supply chain procedures and – significant for a company that has been expanding – the mergers and acquisitions process.

Experts within the company carry out due diligence in different ways. For example, regular meetings are held with managers of the two systems divisions to identify projects at an early stage of pursuit to determine if there might be human rights, social, environmental or security risks or impacts. The aim is to carry out due diligence on potential risks at a very early stage – well before a project pursuit becomes a formal tender subject to risk review procedures.

Depending on the nature of potential impacts, the projects are selected for in-depth due diligence – either in the form of desktop research or through visits to sites and stakeholder engagement. In two recent cases, an ABB human rights specialist examined two projects in Brazil and China, drawing on external support for the work.

ABB has been strengthening its supply chain procedures in recent years, recognizing the potential risks, as well as benefits, of having tens of thousands of first-tier suppliers around the world. Labor and human rights considerations are built into several supply chain procedures, including the supplier code of conduct, supplier qualification requirements and checklists for site auditors.

Supply chain specialists found a total of 11 cases of child labor at two suppliers in 2011. Immediate corrective measures were introduced to safeguard the rights of the children.

Due diligence is also performed as part of the company's mergers and acquisitions (M&A) process. A sustainability work stream has been built into the M&A workflow and potential risks at companies that have been targeted for acquisition are examined in detail. In 2011, human rights due diligence was carried out on several potential target companies – and in one case that included an external review of not just the target company but also its main customers' human rights performance.

ABB has long understood the materiality of human rights, knowing the potential financial, legal and reputational downside to the business if abuses occur, and the benefits of being a force for good. The company has taken considerable steps forward in recent years but recognizes this is work in progress and challenges remain to ensure that human rights risks are fully understood and the right measures are taken.

A global human rights training program, designed to raise awareness of the risks and opportunities in the company's operations, is under way to support these efforts. The latest ABB Group sustainability objectives set a target of training senior managers in ABB's top 12 manufacturing and exporting countries by the end of 2012.

After starting the training in Europe and the Middle East in late 2010, several further training sessions were held in China, Finland, Malaysia and Sweden in 2011. More training sessions are planned – particularly in Asia, the Americas and Europe – in 2012.

Those attending the sessions include business and country management representatives, and members of functions such as Supply Chain Management, Legal and Integrity, Communications and Sustainability. The course, designed and delivered by internal experts, looks at stakeholders' human rights expectations, ABB's journey on human rights so far, the company's main risk areas, ABB case studies, supply chain issues and community engagement programs.

As part of capacity building efforts in 2012, training is being extended within the company to set up a network of human rights specialists in different parts of the world who can advise managers at a local level. Job descriptions are being amended to reflect the expected levels of competence and development.

While we are relatively modest about speaking of our progress, our experts have been involved in international efforts to promote the corporate responsibility to protect human rights. In 2011, our external activities included speaking at a number of international meetings, taking part in podium discussions, and working with university students in Switzerland and Sweden.

ABB works with and supports a number of organizations, including the UN Global Compact and some of its local networks, the Institute for Human Rights and Business, and the Global Business Initiative on Human Rights (GBI). At one GBI-organized event, held in Kuala Lumpur in 2011, ABB's human rights specialists addressed two sessions for Malaysian and South-East Asian businesses. ABB expects to continue such engagement in 2012.

Human rights performance: Other GRI indicators

HR1 Significant investment agreements that include human rights

ABB maintains and regularly reviews a list of sensitive countries where it has, or considers engaging in, business operations. Human rights, as well as legal, financial and security criteria, are included in risk assessments, and are among the factors in deciding whether ABB does business in a particular country.

Based partly or wholly on human rights considerations, ABB has not taken any business with Myanmar or North Korea for several years. ABB completed its withdrawal from Sudan in June 2009.

HR4 Non-discrimination violations

All countries in ABB's sustainability management program are asked to report any incidents of discrimination. Five substantiated cases of discrimination and 32 of harassment were reported in 2011, resulting in six terminations, three resignations and a range of other measures, including warnings, counseling and further training.

HR5, HR6, HR7 Operations at risk

Freedom of association and collective bargaining, child labor, forced or compulsory labor

There were no ABB operations identified during 2011 to be at significant risk concerning employee rights to freedom of association and collective bargaining, incidents of child labor, or incidents of forced or compulsory labor. In ABB's supply chain, 11 cases of underage labor were found at two suppliers in 2011. Immediate corrective measures were introduced to safeguard the rights of the children.

HR8 Training of security personnel in human rights

ABB sees the training of security personnel, as well as ABB country and regional managers, on the human rights dimensions of security work as important. It has been part of general security training in different parts of the world for several years. By the end of 2011 more than 850 managers in more than 90 percent of ABB countries had been trained on crisis management; depending on local needs, some of that training contained sessions on human rights.

New Group-wide security guidelines are being drawn up, based on the Voluntary Principles for Security and Human Rights. They are due to be finalized in 2012. ABB already requires due diligence on all security companies according to ABB and international standards, and the new guidelines will establish standard operating procedures for security providers to include instructions on human rights issues.

In addition, ABB's country and regional security heads have been made aware of growing stakeholder expectations that human rights need to be observed, and of the kinds of human rights issues that could arise in communities where ABB has operations or business activities.

HR9 Indigenous rights violations

All countries in ABB's sustainability management program are asked to report any incidents of indigenous rights violations. No such incidents were reported in 2011.

HR10 Percentage of total number of operations that have been subject to human rights reviews and/or impact assessments

These data are not available. ABB is involved as a supplier in thousands of projects worldwide each year. Depending on the scope and size of the project – such as larger power infrastructure projects – some will require at least an Environmental and Social Impact Assessment performed by the customer. The data are currently not consolidated by ABB.

HR11 Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanism.

ABB has a number of formal grievance mechanisms, including a third-party run Business Ethics hotline available round the clock and an Ombuds program, where employees can report concerns confidentially. Figures are available for cases of discrimination and harassment (HR 4); other data are not available.

Sustainability in the supply chain

Developing strength in our networks

(includes GRI indicators EC6 and HR2)

ABB's suppliers – from raw materials to subcontractors – are an extension of our own business. As we pursue our growth strategy to 2015, strong supplier performance ensuring resilient, cost-effective and sustainable supply chains will be a key factor in our success.

When qualifying suppliers, ABB has long considered sustainability principles alongside the more traditional aspects of quality, cost and on-time delivery. We require suppliers to identify the health and safety and environmental risks in the scope of their supply to us, and we request evidence of social and human rights policies, and sustainability improvement programs. On-site audits have been conducted by ABB personnel and by the suppliers themselves in a self-assessment process.

The ABB Supplier Code of Conduct (SCC) defines the minimum standards for any company wishing to sell to ABB. All suppliers are required to fulfill their contracts according to standards comparable with those defined in the SCC. The code covers supplier performance in fair and legal labor conditions, occupational health and safety, environmental responsibility and business ethics. The SCC also requires suppliers to be responsible for the sustainability performance of the sub-suppliers they hire to provide direct or indirect goods or services to ABB.

To embed these principles both in our supply base and within our own supply chain management network, we are continuing our Supplier Sustainability Development Program. Commenced in late 2009, the program aims to develop suppliers into strategic business partners who share our commitment to sustainability and to build capacity in our supply chain management to ensure appropriate support for improving supplier performance.

The program began with a series of pilot sustainability audits of ABB suppliers conducted by a third-party company in 2009 and 2010. The audits focused on suppliers in higher risk countries, producing commodities using hazardous processes, such as castings and forgings, and were used to road-test new, Group-wide guidelines for auditors.

During 2011, we began full implementation of the program, conducting 125 third-party audits in 18 countries, with two-thirds of those audits in “high risk” countries, such as emerging economies. These audits revealed a number of situations where ABB's standards were not met. The issues which were discovered included excessive overtime, poor waste disposal practices, or a lack of appropriate protective equipment for

workers. In particular, at two suppliers 11 cases of child labor were detected. As soon as these cases were detected, the children were accompanied home by supplier personnel. The suppliers committed to pay for the children's education and to continue to pay the children's wages until they reached majority age, at which time the children would be allowed to recommence work at the supplier's premises.

ABB supply chain or quality managers are assigned to follow up the corrective action plans developed by the suppliers following their audits. Suppliers can be re-audited to ensure closure of corrective actions. Should a supplier not comply with their corrective action commitments, ABB will commence a process to de-source that supplier. To date, we have not de-sourced any suppliers as a result of sustainability audit findings.

Audits conducted during 2011 targeted both “high risk” and developed countries, to test our assumption that the majority of high risk findings would occur in high risk countries. Our assumptions were confirmed, and in 2012 we will focus the sustainability audit program in China, India, Mexico, Brazil and Eastern Europe, aiming to conduct 110 third-party audits during the period.

We developed and delivered supplier awareness training to over 200 suppliers in India and China in face-to-face sessions in 2011 to help them better understand our Supplier Code of Conduct and to help them to evaluate and improve their sustainability performance. In 2012, we will continue to expand the capacity-building program, conducting more face-to-face training with suppliers, developing online training modules and delivering specific training for our own supply chain staff, embedding that training in the existing Supply Chain Excellence program.

In addition to the focused Supplier Sustainability Development Program, ABB's global sustainability network also conducts focused environmental audits of suppliers, as part of our own facilities' ISO 14001 management systems. More than 950 documented environmental audits of suppliers were performed during 2011. Overall, more than 50 percent of approximately 1,500 key suppliers are externally certified to ISO 14001 and a further 10 percent have implemented “self-declared” environmental management systems.

The results show that we still have work to do to embed sustainability principles along our supply chain. We are committed to building capacity both within our own organization and our supply base, and believe that improved sustainability performance of our suppliers is a prerequisite for ABB's growth and improved performance into the future.

Working in the community

Committed to the community

(includes GRI indicators EC8, SO1 and EC9)

ABB engages in the community because we believe it is the right thing to do and we know it is good for our business if we are welcome in the areas where we operate.

From supporting schools in Brazil, India and South Africa, to charity fund-raisers in North America, or helping athletes at European Special Olympics, to an anti-desertification program in China, we work in a wide variety of ways to strengthen environmental, social and economic development in the communities close to our sites and offices.

ABB's community engagement focuses on two core areas: education and health care. In total, ABB employees and companies donated approximately \$6.5 million in funding and provided about 4,000 man-days in volunteering time in 2011 – a sharp increase in the number contributed in 2010.

For ABB, community engagement goes beyond philanthropy. The company needs local “buy-in” from communities close to our operations; it's essential to our social license to operate. Support for education projects not only raises standards but in some cases helps ABB to recruit qualified engineers and other staff.

We support schools, students and universities in different ways. There are schemes in countries such as Brazil, Czech Republic, Chile, China, India, Peru, Poland and South Africa to help young people and schools in disadvantaged areas. In China, for example, we support students through involvement in a scholarship scheme called the New Great Wall project.

There is clear business value in some of the programs. In Finland, for example, the company contributed to four universities in 2011 as a way of ensuring that engineering graduates have the qualities required by the industry. In Saudi Arabia, ABB holds annual training programs for students from vocational institutes and offers technical training to engineering students.

In other countries, support for universities is extended to individual student projects. In Finland, the company backed students developing solar technology for a sailing boat, while in Turkey, ABB supported a series of innovative projects at different universities. Elsewhere, such as in Chile and Peru, contributions are made towards building or improving school facilities.

ABB employees enjoy volunteering for projects. The largest such effort in 2011, which was backed by 1,000 man-days, was in the India, Middle East and Africa region. About 5,000 ABB employees and subcontractors – as well as family members – took part in a week of activities to promote greater health and safety awareness and performance in the workplace, at home and on the roads.

During the week, a series of training sessions and fun events were held in all Gulf Arab states, as well as Egypt, Jordan, India and parts of Africa. The events included road safety awareness sessions, safety inspections of employees' vehicles, safety observation tours by management and special trainings for working at height and electrical safety, as well as quizzes, a photo competition, health checks and relaxation therapy for employees.

In recognition, ABB won the Middle East Electricity Corporate Social Responsibility Award of the Year for our work to continually improve our health and safety standards.

The second largest volunteering effort in 2011 was in Germany where about 100 employees used a week of their holidays to support athletes with intellectual disabilities at the Special Olympics. More than 2,000 ABB employees have supported this annual event since the company began its involvement a decade ago. Similar events are backed by ABB volunteers in Italy, the United Kingdom and the United States.

The company is also involved in a range of projects focusing on health care. Employees in Canada and the United States raise funds through donations and charity events for hospitals and health-care organizations. In South Africa, we support a project to help orphans of HIV/Aids victims; in Egypt, the company helps a leading pediatric hospital in Cairo; and in the United Kingdom fund-raising efforts are focused on a cancer care charity.

ABB does not have a Group-wide method of measuring the impacts of community projects, but this is under development. For the time being, individual countries have their own ways of measuring success.

- ABB in Switzerland has an innovative program to give a second chance of an apprenticeship to young people who failed to complete their first apprenticeship. Success is defined as completion of their “second chance” and/or finding a job. More than 60 young people have taken part in the scheme so far with an 80 percent success rate.
- In India, the success of ABB’s support for six government schools in communities where we operate is measured and evaluated. The results include 1,670 children from disadvantaged backgrounds who received a free midday meal paid by ABB employee contributions, and some 217 children who received a medical check-up in the western city of Nashik in 2011.
- In Italy, country management is informed on a quarterly basis on the progress of projects using a set of key performance indicators. In common with other countries, non-governmental organizations are required to report fully on the effectiveness of their partnership programs with ABB.
- ABB has an innovative scheme in Brazil in which children aged between 7 and 16 are brought into schools set up at factories in Sao Paulo, and given an extra half day of tuition and medical care as a way of preparing them for a working life. Success here can be measured by the number of children who go on to a better life and jobs once they reach the age of 16.

At a corporate level, more than 80 students from around the world have now received scholarships from the ABB Jürgen Dormann Foundation for Engineering Education, which helps engineering students in need of financial support. Students from Malaysia entered the program in 2011, joining colleagues from Brazil, China, India, Mexico, Poland, Turkey and Vietnam in the scheme. The program is expected to be extended to other countries in 2012.

Students on the program will come together in August 2012 at the second international meeting of foundation scholars in Switzerland. A film about the foundation’s work is also being produced in 2012.

Turning to corporate partnerships, ABB renewed its six-year agreement to support the Geneva-based International Committee of the Red Cross (ICRC) at the end of 2011. It is the company’s largest corporate sponsorship.

Under the agreement, ABB will contribute financially to the ICRC’s Water and Habitat program, which supports people in water-stressed areas and countries, and provides emergency accommodation to people caught up in zones of conflict. In 2012, ABB’s funds are being used to support water programs in the Democratic Republic of Congo and Iraq.

ABB has benefited from training sessions given by ICRC specialists on humanitarian law and crisis management, as well as informal exchanges. In 2011, ABB engineers contributed to a training session on electromechanical engineering for ICRC staff members in Geneva.

We also continued our partnership agreement with WWF, the global conservation organization. There are four ongoing projects with WWF, two of which formally started in 2011. ABB in India is partnering with WWF to set up a solar-charged battery project in West Bengal for people to recharge their electrical goods; and in South Africa, solar panels were installed at a center for orphans of HIV/Aids victims.

In another project, a joint energy-efficiency training program for Chinese industry representatives has been held in five cities, including Beijing and Shanghai, with around 330 people taking part.

ABB’s common efforts continue to focus on our “Access to Electricity” rural electrification program in India and Tanzania, which is strengthening the economic, social and environmental development of people in remote communities.

In Tanzania, ABB has partnered with local authorities and WWF to provide electricity to a village in the south of the country. The benefits of increased access to electricity have been marked and measurable. They include more schooling after dark, the health clinic being able to treat patients for more hours a day, and the start of new businesses such as an electric sawmill and an oilseed press which are raising incomes and supporting better environmental management.

And in the Indian state of Rajasthan, ABB has partnered with an NGO and state authorities to bring distributed solar power to a widespread desert community. Some 8,000 people are benefiting from increased earnings because of the ability to work after dark, increased access to health care and more schooling. Tailors and weavers, for example, are earning up to 50 percent more because they can work at night, and the number of children attending school has doubled.

In these and other projects, ABB seeks to make a difference to the communities where we operate. We will continue to build on such activities with further engagement and contributions.

GRI standard disclosures

This section provides a selection of base information, defined by the Global Reporting Initiative Guidelines, comprising an organizational profile, report parameters, governance, commitments to external initiatives, stakeholder engagement, and remaining sustainability performance indicators. Reference numbers are those used in the GRI Guidelines.

Organizational profile

2.1 Name of the organization

ABB Ltd is the parent company of the worldwide ABB Group.

2.2 Primary brands, products and services

ABB is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. ABB's products, systems, solutions and services are designed to improve the reliability of electricity supply grids, raise industrial productivity and save energy.

The Power Products division manufactures the key components to transmit and distribute electricity, such as transformers, switchgear, circuit breakers and cables. The Power Systems division offers turnkey systems for power transmission and distribution grids, and for power plants. These include complete substations, as well as high-voltage alternating and direct current transmission systems, together with their automation and network management systems.

The Process Automation division offers products and solutions for instrumentation, automation and optimization of industrial processes. The industries served include oil and gas, power, chemicals and pharmaceuticals, pulp and paper, metals and minerals, marine and turbocharging. Key customer benefits include improved asset productivity and energy savings.

The Discrete Automation and Motion division includes products and systems targeted at discrete manufacturing applications, such as robotics and programmable logic controllers (PLCs), and providing motion in plants, such as motors and drives. These businesses help customers to increase the productivity and energy efficiency of their assets.

The Low Voltage Products division manufactures low-voltage circuit breakers, switches, control products, wiring accessories, enclosures and cable systems to protect people, installations and electronic equipment from electrical overload. The division further makes KNX systems that integrate and automate a building's electrical installations, ventilation systems, and security and data communication networks.

ABB is a manufacturing and services group which outsources only some of its work (for example, information technology support infrastructure).

2.3 Operational structure of the organization

At the end of 2011, the ABB Group comprised five power and automation divisions named in 2.2 above, supported by staff functions (such as Sustainability Affairs, Corporate Communications, Controlling, Legal and Integrity, Human Resources, etc.), all reporting to an 11-member Executive Committee. The president of the Executive Committee is the Chief Executive Officer of the company. Also represented on the Committee are the heads of the five divisions, the Chief Financial Officer, the head of Global Markets, the head of Marketing and Customer Solutions, the General Counsel and the head of Human Resources, who is also the Executive Committee member responsible for Sustainability Affairs.

The ABB Group comprises primarily operating companies, subsidiaries and majority-owned joint ventures, located worldwide and employed about 135,000 people as of December 31, 2011.

2.4 Location of headquarters

The headquarters of the ABB Group is located in Zurich, Switzerland.

2.5 Countries where the organization operates

The ABB Group of companies operates in around 100 countries. ABB's largest operations are in Australia, Brazil, Canada, China, Finland, France, Germany, India, Italy, Norway, Saudi Arabia, Spain, Sweden, Switzerland, United Kingdom and United States.

2.6 Nature of ownership and legal form

ABB is listed on the SIX Swiss Exchange and the exchanges in Stockholm and New York.

As of December 31, 2011, Investor AB, Sweden, held 179,030,142 ABB Ltd shares corresponding to 7.7 percent of total ABB Ltd share capital and voting rights as registered in the commercial register on that date.

Pursuant to its disclosure notice, BlackRock Inc., US, announced that, as per July 25, 2011, it held together with its direct and indirect subsidiaries 69,702,100 ABB Ltd shares corresponding to 3.0 percent of total ABB Ltd share capital and voting rights as registered in the commercial register on that date.

To the best of ABB's knowledge, as of February 28, 2012, no other shareholder holds 3 percent or more of ABB's shares.

ABB Ltd is the holding company for the entire ABB Group and is registered as a corporation (Aktiengesellschaft) in the commercial register of the canton of Zurich, Switzerland.

2.7 Markets served

ABB's products, systems and services are supplied directly to many industries worldwide. These include electric, gas and water utilities, as well as a range of process, manufacturing and consumer industries, and the commercial and residential building sector.

ABB also serves the market through channels such as original equipment manufacturers, system integrators, distributors, and engineering, procurement and construction companies.

2.8 Scale of the reporting organization

See [Our people chapter](#) for data on employee numbers

Sales (revenues) for 2011: \$37,990 million
(\$31,589 million for 2010)

Sales by region	2011	2010	2009
Europe	38%	39%	41%
The Americas	24%	20%	19%
Asia	27%	28%	27%
Middle East and Africa	11%	13%	13%

See the ABB Group Annual Report for further details on financial results.

2.9 Significant changes in size, structure and ownership

ABB made a number of acquisitions in 2011, the largest of which was US-based industrial motor manufacturer Baldor Electric Company, completed in January and valued at \$4.2 billion, including debt repayment. Since being consolidated into ABB's financial results as of the end of January 2011, Baldor has contributed approximately \$2 billion in revenues and approximately \$390 million of operational EBITDA.

During the fourth quarter, ABB completed the acquisition of Trasfor, a Switzerland-based specialty transformer manufacturer. In December, the company also announced an offer to acquire Switzerland-based Newave Energy International, a manufacturer of uninterrupted power supplies, for a total consideration of approximately \$170 million. The deal was completed in the first quarter of 2012.

Other acquisitions during the year 2011 included Envitech, a Canadian supplier of electrical products for urban transit systems; Powercorp, an Australian renewable power automation company; Lorentzen & Wettre, a Swedish manufacturer of control solutions for the pulp and paper industry; Epyon, a Netherlands-based supplier of electrical vehicle charging solutions; and Mincom, a supplier of enterprise asset management software to the mining and other industries, based in Australia.

ABB announced in January 2012 an agreed offer to acquire US low-voltage equipment manufacturer Thomas & Betts for a total cash consideration of \$3.9 billion. The transaction, to be fully funded by cash and debt, is expected to be closed in the second quarter of 2012, pending approval of the deal by Thomas & Betts shareholders and customary regulatory approvals.

As at December 31, 2011, ABB's Board of Directors comprised eight non-executive members, one woman and seven men, of seven nationalities.

As at December 31, 2011, the Group Executive Committee comprised the CEO, the chief financial officer and nine other members, including one woman, of eight nationalities.

2.10 Awards received

See [Stakeholder relations chapter](#).

Report parameters

3.1 Reporting period

Calendar year 2011.

3.2 Date of previous report

March 2011, covering calendar year 2010.

3.3 Reporting cycle

Annual. Next report to be released in March 2013, covering calendar year 2012.

3.4 Contact point for the report

E-mail: sustainability.abbzh@ch.abb.com

Web address: www.abb.com/sustainability

3.5 Process for defining report content

Considerable work was undertaken in 2010 and 2011 to understand what internal and external stakeholders expect of the company's sustainability performance and what our strategy should focus on. The results were evaluated in 2011, resulting in a materiality matrix highlighting the issues of relevance to ABB and our stakeholders.

Most of these issues are already priorities namely: energy efficiency and climate change, managing environmental impacts, product innovation, health and safety, human rights, sustainability in our supply chain, and working in the community. Following the feedback from our stakeholders, we have now defined five areas of focus. They are:

- Developing world-class products, systems and services to lower our customers' energy use, reduce their emissions and improve resource efficiency on a long-term basis.
- Ensuring our own operations are energy and resource efficient.
- Proactively ensuring our suppliers, employees and business partners work in a safe, healthy and secure environment, and to the highest standards of integrity.
- Creating value and promoting social development in communities where we operate.
- Strengthening employees' involvement in and commitment to improve the company's sustainability performance.

For the 2011 reporting cycle, we have maintained the same reporting structure as for 2010 to allow consistency in reporting on our Sustainability Objectives 2010–2011. However, the report content also covers the five focus areas defined in 2011.

3.6 Boundary of the report

See [Governance and integrity chapter](#).

3.7 Limitations on the scope of the report

The report does not cover work carried out by ABB on our customers' sites. However, health and safety data cover all ABB employees wherever they work and all contractors for whom ABB is contractually responsible. The report does not cover Baldor operations, except for some selected environmental parameters, where indicated.

3.8 Comparability

The Sustainability Performance report covers all employees working in premises owned or leased by ABB. During 2011, ABB acquired Baldor Electric Company, a North American manufacturer of industrial motors, with approximately 6,800 employees. The report does not cover Baldor operations, except for some selected environmental parameters, where indicated.

ABB also acquired Mincom, an industrial software provider employing nearly 1,000 people. Mincom was included in the scope of 2011 sustainability performance reporting only as estimations for energy and water consumption, and waste generation per employee.

The format adopted in the 2006 report to address the concepts contained in Version 3 of the GRI Guidelines, particularly the focus on those issues considered material to the sustainability impacts of the organization, has been maintained in this report to ensure consistency and comparability.

3.9 Data measurement

See the [Governance and integrity chapter](#).

3.10 Effect of restatement of information

In 2010, the CO₂ emissions from air travel were incorrectly reported as 645 kilotons CO₂ equivalents. The correct figure for 2010 is 160 kilotons CO₂ equivalents. Assurance of the 2010 and 2011 air travel data uncovered a calculation error, which has now been corrected.

Not including Baldor, the number of ABB employees was around 127,000 in 2011, significantly higher than the 117,000 in 2010. The number of manufacturing sites, workshops and offices covered by the sustainability management program, not including Baldor, has approximately 360 in 2011.

3.11 Significant changes

There were no significant changes during 2011 in the scope, boundary, or measurement methods applied in the report.

3.12 GRI content index

A table appears on page 44 of this report which identifies the page numbers of all the standard disclosure indicators required by the GRI Guidelines.

3.13 Independent assurance

ABB believes in the importance of independent external assurance to enhance the credibility of its sustainability report. ABB's main environmental and social performance indicators have been verified by the independent verification body Det Norske Veritas (DNV) through a review of information in the ABB sustainability performance database and interviews at various levels of the company prior to publication. Their statement appears on page 43 of this report.

Governance

Corporate governance is covered in detail in the ABB Group Annual Report. The GRI content index table on page 44 of this report gives cross-references to the appropriate parts of the corporate governance section, wherever relevant.

Summary of main performance indicators¹

GRI ref.	Indicator description	2011	2010	2009
Environmental				
EN1	Materials			
	Phthalates (tons)	47	31	16
	Brominated flame retardants (tons)	~0	~0	3.1
	Lead in submarine cables (tons)	5,725	3,632	3,600
	Organic lead in polymers (tons)	1.3	52	24
	Lead in other products (tons), e.g. backup batteries and counterweights in robots	227	265	313
	Cadmium in industrial batteries (tons)	1.6	1.7	2.2
	Cadmium in rechargeable batteries (tons)	10	5.9	4.7
	Cadmium in lead alloy (tons)	4.3	2.7	2.5
	Cadmium in other uses (tons)	0.02	0.18	0.05
	Mercury in products (tons)	0.030	0.038	0.011
	SF ₆ insulation gas (inflow to ABB facilities) (tons)	1,052	968	962
	SF ₆ insulation gas (outflow to customers) (tons)	1,040	959	951
	No. of transformers with PCB oil in ABB facilities	2	3	6
	No. of capacitors with PCB oil in ABB facilities	0	0	0
	Mercury in instruments in ABB facilities (tons)	0.263	0.422	0.803
EN3	Direct energy consumption (Gigawatt-hours – GWh)			
	Oil (11.63 MWh/ton)	92	114	87
	Coal (7.56 MWh/ton)	0	0	0
	Gas	417	427	415
	Total direct energy used	509	542	502
EN4	Indirect energy consumption (Gigawatt-hours – GWh)			
	District heat consumption	195	223	259
	District heat: Losses at utilities	29	33	39
	Electricity consumption	1,447	1,335	1,321
	Electricity: Losses at utilities	1,999	1,844	1,824
	Total indirect energy used	3,670	3,436	3,442
	Megawatt-hours (MWh) per employee	16.9	18.0	17.9
EN8	Water withdrawal (kilotons)			
	Purchased from water companies	3,400	3,300	3,300
	Groundwater extracted by ABB	3,200	2,700	2,900
	Surface water extracted by ABB	2,600	2,900	2,700
	Total water withdrawal	9,200	8,900	8,900
EN16	Greenhouse gas emissions (kilotons CO₂ equivalent)			
	Scope 1			
	Energy	109	117	107
	SF ₆ (in CO ₂ equivalents)	263	247	263
	CO ₂ from transport by own fleet	350	350	350
	Scope 2			
	District heat consumption	43	49	57
	District heat: Losses at utilities	7	8	9
	Electricity consumption	309	293	290
	Electricity: Losses at utilities	427	405	400
	Scope 3			
	Air travel	185	160	N/A

¹Note that all data in this table, except LA1 for 2011, cover ABB facilities only.

GRI ref.	Indicator description	2011	2010	2009
EN19	Emissions of volatile organic compounds (tons)			
	Volatile organic compounds (VOC)	810	786	782
	Chlorinated volatile organic compounds (VOC-Cl)	13	11	5
EN20	Emissions of NO_x and SO_x (tons SO₂ and NO₂)			
	SO _x from burning coal	0	0	0
	SO _x from burning oil	68	84	64
	NO _x from burning coal	0	0	0
	NO _x from burning oil	51	63	48
	NO _x from burning gas	90	92	90
EN21	Discharge of process water (percentage of ABB plants)			
	Discharge to public sewer	N/A ²	84	72
	Discharge to recipient without treatment	N/A ²	3	9
	Discharge to own treatment plant	N/A ²	13	20
EN22	Waste (kilotons)			
	Scrap metal recycled	97	135	71
	Other waste recycled	39	44	46
	General waste sent for disposal	45	38	29
	Hazardous waste	9	9	6
EN23	Significant spills			
	Total number of spills	9	7	12
EN27	Products and services			
	Percentage of reclaimable material in products	90	90	90
Social		2011	2010	2009
LA1	Employment			
	Total workforce by region (ABB employees); 2011 data including Baldor			
	Europe	60,300	58,800	60,600
	The Americas	25,900	17,700	17,100
	Asia	37,400	30,900	29,900
	Middle East and Africa	10,000	9,100	8,500
	Total	133,600	116,500	116,100
	Total numbers of part-time employees included above			
	Europe	2,924 5%	3,133 5%	2,984
	The Americas	108 1%	143 1%	92
	Asia	106 <1%	183 1%	268
	Middle East and Africa	1 <1%	4 <1%	112
	Total	3,139 3%	3,463 3%	3,456
LA2	Employee turnover			
	Turnover of all employees, including part-time			
	Europe	5,712 10%	6,351 11%	10%
	The Americas	2,823 15%	2,567 16%	23%
	Asia	4,615 13%	4,346 14%	11%
	Middle East and Africa	854 14%	463 8%	5%
	Total turnover for whole Group	14,004 12%	13,727 12%	12%

GRI ref.	Indicator description	2011		2010		2009
	Turnover of all female employees, including part-time					
	Europe	1,364	2%	1,407	2%	1,439
	The Americas	531	3%	631	4%	635
	Asia	1,086	3%	1,060	4%	520
	Middle East and Africa	184	3%	51	<1%	19
	Total turnover for whole Group	3,165	3%	3,149	3%	2,613
LA7	Occupational health and safety					
	Fatalities, injuries, lost days, diseases					
	Employee work-related fatalities	0		1		1
	Incident rate	0		0.01		0.01
	Employee work-related serious injuries	22		15		27
	Incident rate	0.18		0.13		0.23
	Employee commuting/business travel fatalities	0		2		1
	Incident rate	0		0.02		0.01
	Employee commuting/business travel serious injuries	3		5		0
	Incident rate	0.02		0.04		0
	Contractor work-related fatalities	0		2		3
	Contractor work-related serious injuries	16		16		11
	Contractor business travel fatalities	0		0		0
	Members of the public fatalities	0		0		0
	Employee working days lost due to industrial incidents	9,478		8,362		7,633
	Employee occupational health diseases (number of cases)	7		13		47
	Employee total recordable incident rate	13.17		13.48		14.32
HR4	Non-discrimination					
	Total number of incidents of discrimination	5		6		0
	Total number of incidents of harassment	32		18		0
SO6	Public policy					
	Financial and in-kind political contributions	\$500		\$9,000		0
LA10	Training and education					
	Training per year per employee (average hours)					
	Brazil	25		26		28
	China	34		40		24
	Czech Republic	11		10		13
	Finland	13		13		24
	Germany	16		16		15
	India	5		4		3
	Italy	17		17		10
	Sweden	12		10		10
	Switzerland	17		20		20
	USA	25		25		25

²In order to improve the quality and depth of reporting, we have changed the water reporting this year. This means that the discharge of process water data cannot be included in the table above, as the 2011 data are not comparable with 2010 and 2009. See page 20 for reporting on water discharge.

GRI ref.	Indicator description	2011	2010	2009
LA13	Diversity and equal opportunity			
	Women in senior management (percentage)			
	Brazil	7%	7%	–
	China	25%	25%	–
	Czech Republic	18%	19%	–
	Finland	15%	17%	–
	Germany	7%	4%	–
	India	2%	2%	–
	Italy	7%	7%	–
	Sweden	22%	22%	–
	Switzerland	7%	7%	–
	US	16%	15%	–

Independent verification of main performance indicators

INDEPENDENT VERIFICATION OF MAIN PERFORMANCE INDICATORS 2011 - DRAFT

Scope and method of work

Det Norske Veritas AS has been engaged to verify the numerical values of the environmental and social performance indicators presented in the "Summary of main performance indicators" table (the "Table"). The verification is limited to the numerical values presented on pages 39 – 42 in the pdf version and in the interactive version on internet presented at [this link](#). The verification was conducted in January and February 2012.



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The verification was based on a review of the sustainability performance data, supplemented by spot checks of the collection and aggregation process which has been carried out by the sustainability organisation of ABB.

DNV has reviewed the databases containing the environmental and social performance data. To assess the validity of the numerical values of the environmental indicators DNV carried out telephone interviews with ten selected local sustainability officers. Additionally, to verify the process for collecting information for the social indicators DNV carried out telephone interviews with five country sustainability controllers. DNV also interviewed five people in the ABB Group Functions Sustainability Affairs, Legal and Integrity, and Supply Chain Management with responsibility for collecting, aggregating and/or presenting the data in the Table. Furthermore, DNV carried out interview with representatives from AMEX, responsible for the aggregation and reporting of the emission data from air travels.

The verification was limited to assessing the numerical values of the indicators for 2011 reported in the Table in the "ABB Group Sustainability Performance 2011 – GRI Indicators".

Conclusions

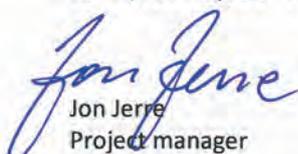
It is the opinion of DNV that ABB has a well-established web-based internal reporting system, which has seen continuous improvement in recent years. Also focus has been given to internal training to increase the quality of the reported data.

During the interviews, and the review of the databases, it was observed that some of the parameters related to hazardous substances have a degree of uncertainty to them due to several sites not having complete knowledge of hazardous materials on site. ABB are however aware of the situation and are taking proactive steps to resolve it.

A few minor reporting errors were discovered. However, none of these were considered to be systematic. These errors were immediately corrected, and the Table that is presented in this review includes the updated numbers.

Based on the findings, DNV considers the numbers published in the Table to give a reasonable representation of ABB's sustainability performance.

Høvik, Norway, 29th February 2012


Jon Jerre
Project manager
DNV

GRI content index table

GRI ref.	Description	
1	Strategy and analysis	
1.1	Chairman and CEO's letter	ABB Group Annual Report
1.2	ABB's key sustainability issues	pages 2–5, 38
2.1–2.10	Organizational profile	pages 10, 36–37
3.1–3.13	Report parameters	pages 7, 37–38
4.1–4.10	Governance	pages 6, 7
4.11–4.13	Commitments to external initiatives	pages 7, 8, 11, 12 and ABB Group Annual Report
4.14–4.17	Stakeholder engagement	pages 10, 11
5	Performance indicators	
	Economic performance indicators	
	EC1 (ABB key figures)	ABB Group Annual Report
	EC2	page 16, 17
	EC3–5, EC7	page 27
	EC6	page 33
	EC8–9	pages 34, 35
	Environmental performance indicators	
	EN3–4, EN16–17, EN29	page 18
	EN5–7, EN18	pages 16–18
	EN26	page 19
	EN9–10, EN21, EN25	page 20
	EN2, EN11–15, EN24, EN27	page 21
	EN1, EN8, EN10, EN19–20, EN22	page 22
	EN23, EN28, EN30	page 23
	Social performance indicators	
	SO2–5	page 8
	SO6–8, PR4, PR8, PR9	page 9
	PR5	page 11
	PR1–3, PR6–7	page 15
	LA11	page 25
	LA1–5	page 26
	LA10, LA12–15	page 27
	LA6–7	page 29
	LA8–9	page 30
	HR2–3	page 31
	HR1, HR4–11	page 32
	HR2	page 33
	SO1	page 34

UN Global Compact reporting for 2011

The company

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 135,000 people.

ABB has been a member of the UN Global Compact since 2000. In common with other members, ABB reports every year on progress on the Compact's ten principles. This is the Communication on Progress for 2011.

Statement of support from

Joe Hogan, ABB Chief Executive Officer

"ABB is a founding member of the UN Global Compact and remains committed to its principles and goals. We work with the Global Compact to ensure that its initiatives and ten principles reach a wider audience, and seek to embed the principles into our own business practice. As part of our ongoing commitment, ABB is taking part in the Access to Energy initiative in advance of the Rio+20 summit in mid-2011, and continues to be a member of the Human Rights Working Group."

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights

- Human rights policy and public statement adopted by ABB Group in 2007.
- Further work to embed human rights into business decision-making processes, including risk review for projects. Human rights considerations integrated in supply chain questionnaire, new Supplier Code of Conduct, mergers and acquisitions process.
- Human rights considerations embedded in internal protocol for deciding where ABB should have business activities.
- Global human rights training workshops started in ABB in 2010 with sessions in three countries, and continued in 2011 in four other countries. A formal sustainability objective has been set to conduct training in ABB's top 12 manufacturing and exporting countries by end of 2012. Training is aimed at business managers, and key functions such as Supply Chain Management, Human Resources, Legal and Integrity, Communications and Sustainability.
- Active participation in international organizations and workshops seeking to promote business awareness and support for human rights. These include UN Global Compact and the Global Business Initiative on Human Rights.

Principle 2: Make sure they are not complicit in human rights abuses.

- Human rights policy adopted in 2007 is designed to raise performance and avoid complicity.
- Global human rights training workshops continued in ABB in 2011 with internal training in four countries. Training includes issue of complicity. Target group as above in Principle 1.
- Further work with ABB's two systems divisions in 2011 to monitor projects at very early stage of pursuit to check for possible complicity issues.
- In-depth due diligence carried out on several potential projects to avoid contributing to abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

- Embedded in Code of Conduct, Principle 1 of ABB Human Rights Policy and Principle 6 of ABB Social Policy. All countries were asked to formally report on this principle. No violations were reported in 2011.
- In countries where law does not permit this right, ABB facilitates regular consultation with employees to address areas of concern.

Principle 4: The elimination of all forms of forced and compulsory labour.

- Covered by ABB Group Code of Conduct, Principle 1 of ABB Human Rights Policy and Principle 4 of ABB Social Policy. All countries were asked to formally report on this principle. No violations were reported in 2011.
- The principle of "no forced or compulsory labor" is included in ABB's new Supplier Code of Conduct, and protocol for supplier audits.

Principle 5: The effective abolition of child labour.

- Included in ABB Group Code of Conduct, Principle 1 of the ABB Human Rights Policy and Principle 3 of ABB Social Policy.
- All countries were asked to formally report on this principle. Eleven cases of child labor at two suppliers were reported in 2011. Immediate and appropriate corrective action was taken.
- The principle of "no child labor" is included in ABB's Supplier Code of Conduct as well as protocol for supplier audits.

Principle 6: Eliminate discrimination in respect of employment and occupation.

- Contained in ABB Group Code of Conduct, Principle 1 of the ABB Human Rights Policy and Principle 7 of ABB Social Policy. All countries were asked to formally report on this principle.
- Five substantiated cases of discrimination and 32 of harassment were reported in 2011, resulting in six terminations, three resignations and a range of other measures, including warnings, counseling and further training.
- ABB also has country-specific procedures and programs to ensure that policies are fully observed.

Environment

Principle 7: Business should support a precautionary approach to environmental challenges

- Environmental considerations mandatory in the GATE model for product and process development. Based on interviews conducted during 2010, supporting tools and training materials developed and released to further improve application of checklist.
- Standardized Life Cycle Assessment procedures used to assess new products' environmental impact throughout their life cycle.
- Ongoing program to phase out use of hazardous substances in manufacturing and products.
- ABB continuing its internal energy efficiency program, with target to reduce energy use by 2.5 percent per year.

Principle 8: Undertake initiatives to promote greater environmental responsibility.

- Work with international organizations and initiatives, such as World Business Council for Sustainable Development, German Climate Service Center, ISO and Chalmers University's Swedish Life Cycle Center.
- ABB has implemented new and strengthened protocol for auditing of suppliers' environmental performance.
- ABB's ongoing Access to Electricity rural electrification programs in India and Tanzania.
- ABB is investigating environmental impact of logistics and business air travel, as part of sustainability objectives.

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

- Covered by Code of Conduct and Principle 5 of ABB Environmental Policy.
- Energy-efficient products and renewable energy equipment identified as key driver for ABB's business opportunities. More than 50 percent of research efforts are aimed at increasing energy efficiency.
- Transfer of technologies and best practices between countries to ensure same level of environmental performance throughout Group.
- Group-wide list of prohibited substances for products and processes strengthened in 2007. The phasing out of hazardous substances is part of ABB sustainability objectives.
- ABB GATE model for product and process development contains defined steps for considering improvements in environmental and safety performance.

Anti-corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

- Covered by Principle 4 of ABB Human Rights Policy, ABB Group Code of Conduct and Principle 13 of Social Policy, and Supplier Code of Conduct.
- Underpinned by zero tolerance policy on non-compliance.
- ABB offers a number of different reporting channels, including a third party held Business Ethics hotline available 24/7 and an Ombuds program, where employees can report concerns confidentially. Ombuds program was introduced mid-2009 to complement existing ways of raising compliance issues. Program now numbers more than 40 Ombudspersons in 29 countries; further training and extension of geographical spread expected in 2012.
- ABB rolled out new e-learning module on "FCPA and Anti Bribery" to nearly 90,000 employees; the e-learning is available in 32 different languages.
- As part of ABB's anti-corruption program, in 2011 ABB also conducted several other trainings, as well as additional proactive initiatives such as anti-bribery compliance reviews of ABB units around world.

Additional information: Policies:

ABB has Group-wide policies: The Social Policy, Environment Policy, Human Rights Policy, Health and Safety Policy, as well as a Code of Conduct and Ethics Policy. These can be found online, and are also contained in ABB Group's annual Sustainability Performance Report.

Reporting:

ABB's sustainability performance is compiled in an annual Sustainability Performance Report which measures the company's performance against the Global Reporting Initiative's indicators. The 2011 Sustainability Performance Report is published in March 2012. Further detail on ABB's environmental, social, human rights, and health and safety performance can be found on

www.abb.com/sustainability

Main partnerships:

ABB is a member of many international groups and organizations, apart from the Global Compact. Listed below are some of the principal associations and initiatives with which ABB is involved in the area of sustainability:

- Global Business Initiative on Human Rights
- Global Reporting Initiative
- Hunger Project, Switzerland
- Institute for Human Rights and Business
- International Committee of the Red Cross
- Transparency International
- World Business Council for Sustainable Development
- World Childhood Foundation, Sweden
- WWF

