



# ABB Group Sustainability Performance 2012 Building on strong foundations

Power and productivity  
for a better world™



# This is ABB

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

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We report our sustainability performance according to the Global Reporting Initiative's (GRI) G3.1 Guidelines. 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.

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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.

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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 145,000 people.

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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.



# Building on strong sustainability foundations



Two years ago, we carried out our largest-ever sustainability stakeholder dialogue, in which some 600 people inside and outside ABB gave their views on where we needed to improve performance and where we should increase focus.

Having evaluated the input, we have been working hard to prepare ABB for the years ahead. Among other things, this means strengthening the knowledge and skills of our employees, developing robust objectives and improving communications.

We are building on strong foundations and are confident we can reach the aims set under our sustainability strategy. These include being seen as a world leader in sustainability in the years to come.

What is already clear is that sustainability issues and considerations increasingly impact our business and operations. Whether it is ABB's role in capitalizing on global megatrends or our customers' needs for increasingly energy-efficient products, systems and solutions – sustainability requirements are helping to set the agenda.

In addition to what we offer customers, we are taking further steps to save energy and cut emissions in our own manufacturing processes and at our sites, and to ensure robust processes in our business to meet health and safety, security, environmental and social challenges.

We are improving steadily on many fronts. But as our health and safety record in 2012 shows there is still some way to go, and – amid growing instability in different parts of the world – we continue to face a variety of security, environmental and social challenges.

We know that all these issues, and the way we manage them, can have a potentially positive or negative impact on our business and on our relationships with key stakeholders such as customers, investors, suppliers and the communities where we operate. In other words, intelligently integrating how we manage sustainability issues with day-to-day business must be at the heart of how we operate.

ABB started its sustainability journey nearly 20 years ago when we published the first report on our environmental impacts; in recent years, we have expanded the scope and depth of reporting which reflects both the growing importance and value of sustainability in the corporate world, and our confidence in our own performance.

We intend to drive forward on sustainability issues. We have a strong sense of purpose and we are excited to see how our efforts benefit our business and our stakeholders in the future.

A handwritten signature in black ink, reading 'Joe Hogan'. The signature is fluid and cursive, with a large 'J' and 'H'.

**Joe Hogan**  
CEO  
ABB Ltd.

# Making progress in different fields

ABB took further steps in 2012 towards achieving our strategic goal of becoming a leader in the field of sustainability through measures to improve our environmental, social, health and safety and security performance.

Some of those steps were unspectacular but vital; others demonstrated how sustainability considerations are increasingly becoming part of our day-to-day business and are essential to overall success.

In 2012, this progress was evident in different aspects of our business:

- Resource efficiency and emissions reduction have increasingly become a consideration across ABB's value chain – from research and development and supply chain through to sales
- Sustainability experts worked on numerous occasions with sales teams to engage with customers or respond to customer queries, and to carry out risk assessments of proposed and existing projects
- Business units increasingly factored in health, safety and security training and measures as part of their duty of care to employees and contractors, particularly in high-risk environments
- Sustainability specialists worked more frequently alongside Investor Relations colleagues to engage with investors on the company's sustainability agenda
- Dedicated sustainability staff are now embedded in functions such as supply chain management, delivering a Supplier Sustainability Development Program, and the mergers and acquisitions process, carrying out due diligence on the sustainability performance of targeted companies

There are many such examples. They constitute further evidence that we are moving towards one of our sustainability strategy targets – where sustainability considerations and values are seamlessly embedded in business practice. We are not there yet, but we are moving firmly in the right direction.

## Materiality

We have been involved in considerable work in the past three years 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, with detailed input from nearly 600 people in 2010/2011, helped to determine which sustainability considerations are material to ABB's business, and shaped the development of our strategy.

Our sustainability strategy, known as Sustainability Strategy 2015+, is designed to ensure that sustainability considerations and values are understood, implemented and communicated across ABB's value chain and become a seamless part of business practice, and help our customers become more successful.

Our areas of sustainability focus – covering the environment, health and safety, security, and social and human rights issues – are all material both to ABB's success and to our diverse stakeholders.

For this reason, considerable space is devoted in the 2012 Sustainability Report to examining our performance in three areas deemed material to the company's success: governance, resource efficiency and people.

Good governance and integrity underpin everything we are trying to achieve as a company and so we report on this in detail. The measures we have taken to strengthen governance, the ways in which we manage risk, how we engage with our stakeholders, our efforts to improve sustainability in the supply chain and our impacts on communities are material to our everyday business and results. Best practice contributes to our ability to deliver on our corporate tagline of "Power and Productivity for the better world."

Under resource efficiency, we examine the sustainability dimensions of innovation, and how our technology is improving energy and resource efficiency for our customers, as well as our efforts to reduce the use of hazardous substances, and improve our own manufacturing and waste management processes. All these issues help us to meet our customers' needs and have a direct bearing on our business performance.

How we attract and develop people, and our efforts to ensure their health, safety and security, all have a direct influence on our ability to carry out successful and resilient business, and contribute to societal progress. More detail on materiality and the process for defining report content can be found under Global Reporting Initiative Standard Disclosure Indicator 3.5 in this report.

#### **Governance improvements**

We have further strengthened the company's sustainability governance structure. The ABB Sustainability Board, made up of the entire Executive Committee, met for the first time in 2012 to oversee how sustainability policies and programs support business goals and aspirations, and to monitor progress.

In addition, there was regular reporting of individual issues such as health and safety, and security performance to the Executive Committee and Board of Directors.

Work also started to update a series of internal directives and instructions which provide the framework for our performance on the environment, health and safety, security, social and human rights issues. These are applied throughout the group, and will provide greater clarity and consistency of performance.

#### **Sustainability strategy implementation**

We took further steps in 2012 to implement our strategy and achieve our overall goal for 2015 and beyond of being a leading contributor to a more sustainable world and being recognized as a top-performing company in terms of sustainable business practice.

Three work streams are helping us to implement the strategy. One of them aims to develop business-relevant objectives, backed by key performance indicators, across different parts of the business. Proposals to develop these objectives through work with a number of business units were approved by the ABB Sustainability Board in 2012.

A second work stream is charting a competence and organizational development program to ensure that our sustainability professionals around the world have the skills necessary to meet growing and changing demands.

In addition, several projects are under way as part of a communications and engagement work stream to raise awareness of the role of sustainability in the business, to measure progress, and to strengthen ABB's position as a sustainability leader. This includes projects to build up internal and external communications, improve the scope of stakeholder engagement, and measure the benefits of our community support programs.

### Way forward

A number of programs are being driven forward to improve performance. These include:

- Health and safety training and awareness raising will continue at all levels of the business in 2013. Following a fatality-free period in 2011, there were four fatal incidents in 2012 – three at the workplace and one during road travel.
- Among environmental improvement initiatives, more ABB facilities are looking to implement the voluntary international standard ISO 50001 which was established to improve energy use in industrial plants and commercial organizations. ABB facilities in Argentina and Germany received ISO 50001 certification in 2012.
- As part of our Supplier Sustainability Development Program, we conducted 121 audits and trained more than 1,000 suppliers and 1,255 ABB employees in 2012, focusing on Brazil, China, India and Mexico. We plan to train 50 percent more suppliers in 2013 and also include countries in Eastern Europe.
- Efforts to ensure the security of our people and assets continued in different parts of the world, including the Middle East and North Africa, throughout 2012. As part of ongoing work, a program to further improve security at ABB facilities, particularly in high-risk areas, is under way in 2013. The project will provide guidelines for both physical and procedural security measures at factories, warehouses and offices.
- Further training is being given in different countries in 2013 to raise awareness among senior managers of human rights, following courses in India and Brazil in 2012. A project is also under way to build capacity within the company so that more sustainability specialists around the world are able to advise local business units on human rights issues and impacts.

We know considerable work remains to be done to achieve our goals. But we are confident that the progress made in 2012 is contributing to ABB's business success, and will continue to do so in the future.

| Sustainability objectives 2012   | Overview of progress   | Status of completion  |
|--|--|---|
| 1. Resource efficiency   |  |   |
| All sites to reduce use of energy by 2.5 percent annually  | – Energy use reduced by about three percent in 2012  |    |
| Water: Action plans at facilities in water stressed regions  | – ABB Water Tool rolled out to facilities in water scarce and extremely water scarce areas<br>– Water Action plans developed for 34 facilities   |   |
| 2. Travel  |  |   |
| Develop action plans to reduce the environmental impact of business air travel   | – Low levels of progress on action plans. However, overall CO <sub>2</sub> emissions from business air travel by ABB staff dropped by seven percent in 2012 compared to 2011   |    |
| 3. Risk assessment   |  |   |
| Formal review of social, security, OHS and environmental risks instituted at early stage of divisional project risk assessments    | – Formal assessments of risks carried out at divisional and Business Unit levels. Regular reviews in some areas of business; still sporadic in other areas   |   |
| 4. Crisis management   |  |   |
| Maintain and improve crisis management, security and human rights capability   |  |   |
| Security and crisis management training/ exercises in all regions during 2012 as part of regular three year program                | – 38 crisis response training exercises at country level in 2012<br>– Nearly 100 percent coverage of all ABB countries over past three years<br>– Other training included travel security briefings and general security awareness |  |
| Human rights training for senior employees in 12 main manufacturing/export countries/regions by end of 2012                        | – Two more training sessions in 2012, bringing to nine total held in different parts of world<br>– First round of capacity building exercises held with more than 40 participants from different regions                           |  |
| Implement security and crisis management systems and programs across all regions, according to priorities based on risks and needs | – Two security programs (crisis management and travel security) completed across all regions   |  |



| Sustainability objectives 2012   | Overview of progress  | Status of completion  |
|--|---|---|
| <b>5. Occupational health and safety (OHS)</b>   |   |   |
| Consolidate implementation of programs identified in existing Executive Committee-approved OHS plan:           |   |    |
| Maintain strategic, Group-led OHS programs, such as OHS leadership training                                    | <ul style="list-style-type: none"><li>– OHS leadership training program maintained across regions for all line managers and their direct reports</li><li>– Training on occupational hygiene delivered across all regions</li><li>– Fourth intake of candidates for International Diploma in Occupational Health and Safety</li></ul>  |   |
| Maintain and increase the reach of Business Unit-specific OHS initiatives                                      | <ul style="list-style-type: none"><li>– Maintained major OHS programs within Power Systems, Power Products and Process Automation divisions with increasing support of countries</li><li>– Started new programs within Discrete Motion Motors and Generators, and Power Systems Grid Systems business units</li><li>– Appointed Group Service OHS advisor and Group Occupational Health physician</li></ul> |   |
| Ensure implementation of country strategic OHS plans, with quarterly KPI reporting                             | <ul style="list-style-type: none"><li>– All countries submitted approved plans</li><li>– Quarterly reporting maintained, analyzed and results circulated to support management reviews locally</li><li>– OHS incident data reporting extended and improved</li></ul>  |   |
| <hr/>  |   |   |
| <b>6. Supply chain</b>   |   |   |
| Improve sustainability performance in the supply chain through the Supplier Sustainability Development Program |   |  |
| – 110 audits in high-risk countries in 2012  | – 121 audits in high-risk countries in 2012   |   |
| – Face-to-face training with 250 suppliers in defined, high-risk countries                                     | – More than 1,000 suppliers trained   |   |
| – On-line training developed and available   | <ul style="list-style-type: none"><li>– Delivered and available</li><li>– Internal sustainability auditor certification training developed and launched</li></ul>   |   |



# Governance and stakeholder relations

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# Governance and integrity

## Our framework for business

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

ABB's technology makes a major contribution to businesses and communities around the world. However, it is not only what we do, but how we do it that determines our reputation with stakeholders and ensures our continued success.

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

### Standards of business conduct: ABB integrity program

The ABB Code of Conduct is the integrity framework that describes the behavior expected of employees and stakeholders. The Code of Conduct contains practical instructions to help employees in their day-to-day work and has been translated into 45 languages to ensure it is accessible to everyone at ABB.

All current and new employees are required to take Code of Conduct face-to-face and e-learning training. Both the basic and advanced training sessions cover the ABB integrity directives, including anti-bribery and anti-trust. A variety of case studies to illustrate both desirable and undesirable behaviors, as well as discussion of the various reporting channels, are available to employees. Code of Conduct training is also a key element of post-merger acquisition integration activities.

The Code of Conduct is underpinned by a strong set of internal standards and policies that provide specific guidelines for implementation of the Code in daily activities. These directives cover issues such as bribery and corruption; gifts, entertainment and expenses; appointment of ABB representatives; political and charitable contributions; agreements with sub-contractors and consortium partners; and mergers and acquisitions due diligence.

During 2012, these directives were further strengthened with the release of a series of anti-trust guidance notes. These guidance notes, along with the key elements of our integrity standards and policies, are publicly available on our [website](#).

The chief responsibility for ensuring that employees are aware of these messages lies with the businesses. Division managers and financial controllers regularly review and report on integrity developments in their business, and the issues are a regularly required agenda item for division reviews.

### Prevention and detection

ABB also maintains additional programs to prevent non-compliant behavior and to detect integrity concerns. Anti-bribery reviews of business units are conducted frequently throughout the year by the internal audit department. Internal surveys are conducted to understand employee attitudes, awareness and perceptions of integrity at ABB, and enhanced integrity processes have been developed to address certain areas with greater compliance risk.

Multiple channels are available to all employees to report integrity concerns. A multilingual business ethics hotline, run by a third party, is available 24 hours a day, seven days a week. Calls are treated confidentially and people with information can choose to remain anonymous. A stakeholder hotline is available to our external business partners. For more information on our reporting channels please see details on our [website](#).

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In 2012 ABB embarked upon a new global, face-to-face Integrity training program for all employees covering a variety of risk areas such as anti-bribery and anti-trust. A total of 132,000 employees completed the training, representing approximately 95 percent of all ABB employees worldwide. The remaining employees who did not receive training in 2012 under this initiative are being covered at the beginning of 2013.

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ABB also has an Ombuds program as an additional route for integrity reporting. This program was expanded during 2012, with 70 trained Ombuds persons now available in 48 countries. The ABB Ombuds persons 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 approximately 500 employees, full-time and part-time, at headquarters and around the world.

### Sustainability governance

Sustainability principles and considerations are embedded in ABB's business strategy and guide what we manufacture, how we operate the company and the way we behave towards stakeholders.

As we strive to balance economic success, environmental stewardship and social progress to benefit all our stakeholders, we rely on every employee to take responsibility to help us achieve our goal: a better world.

During 2012 we took a number of steps to reinforce ABB's sustainability governance structure and to further develop the capacity and capability of our sustainability network. We are broadening the scope of our sustainability competency management program to deliver improvement and enhance career development in the fields of environment, occupational health and safety, security and corporate responsibility. We are also updating our sustainability governance framework to ensure sustainability responsibilities are embedded in day-to-day business.

Our Sustainability Board, comprising the ABB Executive Committee, now oversees sustainability policies and programs, reviews developments and monitors progress to our targets on an annual basis. At a meeting in 2012, the Board reviewed and approved plans to develop new sustainability objectives and key performance indicators with the support of a number of business units.

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. All eight regions where ABB operates have region health and safety advisors and corporate security managers.

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 830 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), Supply Chain Management (supplier audits), Internal Audit and ABB's bid evaluation committee (customer and project risk assessments).

We aim to cover all ABB Group companies in our formal sustainability reporting system, including wholly owned subsidiaries and majority-owned joint ventures worldwide that might have significant sustainability impacts. Baldor Electric Company, acquired in January 2011, is now integrated into this system. Integration of Thomas & Betts (T&B), acquired in May 2012, is continuing and data collection for environmental parameters, health and safety and corporate responsibility will be implemented during 2013.

Data in this report relating to social performance cover 89 percent of ABB employees, whereas data relating to environmental performance were sourced from more than 390 ABB sites and offices, covering 82 percent of employees. The environmental performance of the remaining non-T&B employees, located in non-manufacturing entities without significant impacts, is covered by estimated data. We have not estimated environmental impacts for T&B employees who constitute approximately seven percent of the ABB workforce.

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.



### **Sustainability policies, principles and procedures**

We have 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, the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the Social Accountability 8000 standard.

### **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. We have also taken note of non-certifiable ISO 26000 on Social Responsibility.

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 our health and safety program.

ABB facilities are encouraged to implement integrated management systems for environmental and quality issues, and for occupational health and safety. More than 260 sites now use integrated systems, with external certifications achieved for 287 environmental management systems and for 276 health and safety management systems.

ABB is a signatory to the World Economic Forum's "Partnering Against Corruption Initiative" (PACI). The initiative is focused on activities that are likely to deliver the greatest impact and build on the global momentum to fight corruption.

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 benefit from involvement in such organizations.

During 2012, ABB became a lead supporter of TRAC, a global platform that captures, assesses and shares baseline due diligence information on organizations and individuals across the supply chain. TRAC is a tool provided by TRACE International, Inc., a non-profit membership association that pools resources and cost-effective anti-bribery compliance solutions for multinational companies and their commercial intermediaries.

### **Other GRI indicators**

#### **SO2 Business units analyzed for corruption risks**

ABB's internal audit team carries out an annual risk assessment as the basis for their audit planning for the following year. They 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 robustness of controls and identify possible violations of ABB's anti-bribery procedures.

#### **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 received training on anti-corruption procedures during 2012.

#### **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 2012 ABB identified five incidents of corruption of a government official (of which three incidents are still under investigation). During the year four employees were dismissed.

#### **SO5 Public policy and lobbying**

In a period of challenging economic conditions in Europe, ABB provided continuous input to the EU policy process, supporting measures that help Europe in regaining competitiveness and reaching its ambitions in climate change mitigation, renewable energy supply and energy efficiency.

ABB argued for a common European approach on energy policy, in particular with a view to further developing and strengthening the power grid, which is necessary to harness the increasing renewable energy sources in the European energy mix. ABB's innovative technologies – for example in the fields of High Voltage Direct Current (HVDC), smart grids or energy efficiency – can foster a sustainable, secure and affordable energy system in Europe. We maintained a dialogue with EU institutions aimed at working toward political and regulatory conditions which enable the uptake of these technologies and encourage further research and development.

ABB is providing active policy input through key European business associations, such as the European Association of the Electricity Transmission and Distribution Equipment and Services Industry (T&D Europe), the European Engineering Industries Association (Orgalime), the European Round Table of Industrialists (ERT) or the European Wind Energy Association (EWEA).

In the United States, a divisive presidential election campaign and debate over public spending kept much of Washington policy activity in check for 2012. Despite this environment, ABB was successful in strategically working with our trade associations to accomplish many tasks. Of note is our work with two of our trade groups, the National Electrical Manufacturers Association (NEMA) and the American Wind Energy Association (AWEA), to secure an extension of a critical wind energy tax credit, passage of energy efficiency legislation, and full funding for energy research and development programs.

We launched a new public policy and political branding campaign targeted at Washington DC stakeholders. It focused primarily on our smart grid and energy efficiency capabilities and was conveyed through media advertisements, participation in a congressionally-hosted renewable energy forum and release of technology white papers.

Working with the Business Roundtable (BRT), we participated in and contributed to the development of a new policy blueprint for America's energy and environment future and engaged the National Association of Manufacturers (NAM) in planning an energy-related tax reform strategy for 2013.

In China, ABB supported government activities in the areas of energy conservation and environmental protection in line with China's 12th Five-Year Plan. ABB continued to contribute 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 after a rigorous approval process which includes the approval of the Chief Integrity Officer. In 2012, ABB Inc. in the United States made employee-raised donations through its Political Action Committee (PAC). In addition two contributions took place in Australia through one of the companies acquired by ABB. The various donations have been vetted as part of ABB's approval process. In addition they have been disclosed/lodged with the relevant government authorities in both Australia and the United States.

#### **SO7 Legal actions for anti-competitive behavior**

ABB has been cooperating with various anti-trust authorities regarding their investigations into certain alleged anti-competitive practices. 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 did not face any significant fines or sanctions for non-compliance with laws and regulations in 2012. 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 2012, ABB did not receive any injunctions or complaints related to product information or labeling.

##### **PR8 Complaints regarding breaches of customer privacy**

No complaints regarding breaches of customer privacy were received during 2012.

#### **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 2012 for non-compliance related to products and services.

# Stakeholder relations

## A business reminder from stakeholders

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

The business value of sustainability is increasingly at the heart of many of the discussions with both internal and external stakeholders.

As we seek to integrate sustainability further into day-to-day business thinking and processes, we are seeing more evidence that sustainability considerations are playing a greater role in business decisions by key stakeholders.

In 2012, we have seen

- Increasing pressure from customers to demonstrate that our products, systems and solutions can deliver resource and energy efficiency
- An increasing flow of questionnaires to ABB for us to assure the sustainability of our products and our supply chain
- Slow but mounting interest among mainstream investors about how we manage sustainability risks
- Social, environmental, ethical and security factors underpinning decisions to enter new markets
- Engagement with export credit agencies to review the social and environmental dimensions of major infrastructure projects

### Working with customers

Sustainability experts joined sales managers on numerous occasions in 2012 to support potential business opportunities, answer customer inquiries and review customers' processes.

Detailed discussions were held, for example, with an international company on potential sustainability risks associated with a major infrastructure project in Africa. Among the subjects reviewed: the potential health and safety, security, environmental and human rights risks in the project, and ways of mitigating those risks.

On another occasion, a potential business partner asked for a presentation of ABB's sustainability approach as part of discussions on a tender to upgrade an automation system for a bioprocess testing plant in Europe. The customer was seeking reassurance that its partners and suppliers were committed to good sustainability performance.

In a further example, a security manager engaged with a customer in the oil industry to ensure that security and health and safety measures foreseen at installations in a particular country met ABB's standards and whether additional costs would have to be factored into contracts to meet any shortfall. These are not infrequent examples.

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ABB sustainability experts had a formal meeting with about 20 Swedish investors in mid-2012 to present the company's sustainability agenda and to take questions. Compliance was an area of investor focus, along with energy efficiency, health and safety, security and human rights. ABB learned more about investors' priorities; investors heard more about how sustainability risks are managed proactively in the company.

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Our most important stakeholder engagements are with our customers. Gauging customers' levels of satisfaction with our performance is central to our overall success.

For the third year running, ABB employed a customer satisfaction initiative called the "net promoter score" to measure customer feedback to help us improve our business performance. The results for 2012 show a further rise in the percentage of our customers who are enthusiastic about our service and a decrease in those unhappy with our service.

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 (CCRP) – also provides valuable pointers for improvement.

### Developing our engagement process

As part of ABB's sustainability strategy, work is under way to create a more standardized engagement process with stakeholders on sustainability-related issues. The aims are to ensure a more consistent approach to such dialogues, and see how stakeholders' views are captured, evaluated – and acted on – at a national and Group level.

ABB engaged with a wide variety of stakeholders around the world in 2012, 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 round-table 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.

The subject matter and consequences vary widely:

- In many countries, our engagement with suppliers focuses on improving their performance. This can take the form of supplier audits, as in Brazil, China, India and Mexico in 2012 or discussions with suppliers about environmental, and health and safety requirements.
- In the Finnish city of Vaasa, where ABB is a major employer, senior company and key figures from the community meet on an annual basis to discuss issues such as the use of land, infrastructure, the employment situation and future perspectives.
- Internal or improvement processes are often the focus of attention. In South Africa, a formal roundtable in 2012 focused on ABB's community engagement projects in the country, and a new tool being introduced in 2013 to measure the benefits and value of such projects.
- In a number of countries, external input helps ABB to strengthen its internal processes. In Italy, for example, external dialogues have prompted further efforts to strengthen corporate volunteering for social projects and to provide more work opportunities for disabled people.

The academic world is another area of strong focus for ABB. There is a 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.

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. We were also part of two access to energy initiatives run by the WBCSD and the UN Global Compact in the run-up to the Rio+20 summit in 2012.

Events such as the Rio summit or WBCSD meetings are useful opportunities to hear more about other companies' views and initiatives, and gauge progress on trends such as the move towards integrated reporting.

### Awards

In recognition of our social, environmental and community engagement activities, ABB won 22 awards worldwide in 2012. Several of these were in the United States where our health and safety efforts at different sites were recognized by local authorities.

ABB also won an award for an internal awareness-raising campaign run throughout the India, Middle East and Africa region aimed at preventing accidents and minimizing hazards in the workplace.

Activities spanned every office across the region with sessions such as electrical safety training, blood donation campaigns, training with automatic external defibrillators to treat cardiac arrests, yoga and stress management, safety observational tours, office safety training and road safety. Elsewhere in the region, ABB in Oman was recognized as one of the top Corporate Social Responsibility practitioners in the Middle East and North Africa in the Arabia Corporate Social Responsibility Awards in 2012.

The types of award won by ABB varied considerably. In China and India, there were several awards for environmentally-friendly practices and social responsibility; in Peru, there was recognition for best practice in human resources management.

There were also a number of environmental awards. ABB in Australia received a prestigious environmental and business award for green technology. The Australian Banksia Award in Clean Technology recognized ABB's new SF<sub>6</sub> (sulfur hexafluoride) gas recycling technology; in the United Kingdom, the Engineering Employers Federation's Future Manufacturing Green Growth Award was a reward for the company's efforts to persuade customers to adopt energy-saving measures for motor-driven processes.

And in Estonia, ABB was named Green Economy Promoter of the Year for 2012 for the company's environmentally-friendly business processes. These awards represent both recognition of good performance and an additional impulse to make further progress.

#### Other GRI indicator

##### 4.13 Memberships in associations

Listed below are some of the principal associations, organizations 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
- 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 management of risk is essential to a company's success and resilience. ABB has made considerable efforts in recent years to strengthen proactive management of sustainability risks, including health and safety, environmental, social, human rights and security challenges.

We know that failure to understand and manage such risk at an early stage can lead to negative impacts to society and the environment, potential additional costs to the company, and damage to reputation.

There were a number of examples in 2012 of how training and preparatory work pays off. In the United States, for example, security and crisis training programs helped ABB prepare for Hurricane Sandy at our offices and manufacturing sites on the east coast before the devastating hurricane struck.

ABB was able to maintain business continuity, and in addition contributed to our customers' business resilience through a specially-organized emergency recovery task force led by Power Products division, front-end sales and manufacturing teams. The team helped to assess hurricane damage to electrical infrastructure, rushed emergency equipment to where it was needed, and supported utilities in their efforts to get the lights back on as soon as possible.

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ABB carries out dozens of security and crisis response training sessions around the world every year to ensure that managers are as prepared as they can be for the different types of emergencies that may occur. Nearly 40 sessions were held in different countries in 2012, tailored to local needs and likely threats. These were complemented by travel security briefings and general security awareness training sessions.

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As a company with global operations, the security of our employees and contractors is paramount. By the end of the year, more than 1,200 managers in nearly all of the countries where ABB has operations had received training on crisis management, and a new three-year training cycle began in 2013. This training was put to good use in 2012 amid ongoing instability in parts of the Middle East and North Africa when it became necessary to adapt to fast-changing circumstances and temporarily re-deploy staff in a few locations with minimal disruption to our business.

Proactive risk management training is ongoing in a number of other sustainability areas. Health and safety training continued throughout the company in 2012 to try to ensure that employees and contractors can recognize potential dangers and follow the rules in high-risk areas such as working with electricity, working at height and road travel.

A global human rights training program, launched in 2010, was extended in 2012 to improve understanding of potential risks in the business of complicity in human rights abuses, and to build greater capacity among sustainability professionals within the company.

As part of our efforts to ensure sustainability risk management in the business, 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 work in the supply chain teams and mergers and acquisitions processes.

Sustainability due diligence can take many forms: in 2012, environmental specialists were involved in company acquisitions, as well as project assessments; health, safety and security specialists helped to assess our own and customer sites and processes; and human rights specialists in the company reviewed a number of issues and dilemmas before making recommendations to the business.

Overall, ABB has a global integrated and Group-wide risk management process which received an international award for excellence in 2012. The Enterprise Risk Management (ERM) process won the 2012 Risk Management award for innovation and excellence from Treasury Management International magazine.

Under the ERM, the executive management and the Board of Directors perform a risk assessment once a year, 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 ERM. The process directly involves all ABB group functions, regions, divisions and the majority of our country organizations and global business units.

The ERM is supported by a common ABB risk catalogue and training sessions for the participating entities. The number of participating entities increased in 2012 to more than 100.

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 round tables 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. Participating entities also report key performance indicators that they will use to measure their progress on mitigating the risk and reflect on their risk profile in 12 months (residual risks).

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 round table which involves senior managers from different parts of the Group, including the sustainability function.

The ongoing instability around the world and emergence of different types of challenges underline the value of good risk management in contributing to an agile and resilient organization. We will maintain our focus on identifying, managing and mitigating risk in all its forms.

# Working in the community

## Helping people in different ways

(includes GRI indicators EC8, SO1 and EC9)

ABB focuses on two main areas of work in communities: supporting education and health. This engagement in different parts of the world is part of our social license to operate. We know we can make a difference, and it is good for our business to be welcome in the areas where we operate.

Our activities include supporting schoolchildren and students in Brazil, China, India and many other countries, and promoting health care causes in different parts of Asia, Europe, North America and the Middle East. We also work in partnerships with non-governmental organizations to support rural and relief projects in Africa and Asia.

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ABB's high-voltage cables factory in the Swedish town of Karlskrona faced a problem: a shortage of skilled labor in an area of high youth unemployment. In agreement with unions, ABB started a job induction project to give unemployed young people who had no previous work experience and, in some cases, no qualifications work on a trial six-month basis. All but two of the 36 people who went on the intensive course in the first year now have contracts with ABB.

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Our community work is key to ABB's business success. The educational schemes and institutions we support serve to improve learning opportunities, raise ABB's profile and help us to recruit qualified engineers and other staff. Strengthening health care can have positive social and economic impacts among key company stakeholders, such as employees, suppliers and customers, and the communities around our facilities. A healthy environment has a clear business benefit.

We participated in a wide variety of projects in 2012.

- In the United States, ABB supports a range of causes, including support for scholarships for students, cultural institutions, sports events in aid of cancer relief, disaster relief, different charities, and an exhibition designed to explain Smart Grids to children. In Canada, financial contributions are raised in a variety of ways, including auctions and a special breakfast served by the country manager.
- To address the skills gaps of students who leave college with little prospect of employment in industry, ABB works

with the Swiss-South African Co-operation Initiative to provide workplace experience for engineering students at further education and training colleges. About a dozen students come to ABB every year under the scheme, and several have been hired.

- In India, ABB outsources part of its electrical relay sub-assembly work to centers for differently-abled people. Dozens of people benefit from training and earn between \$45–70 a month, providing them with an income and increased self-respect.
- ABB has an innovative scheme in Brazil in which children aged between eight and 16 are brought into schools that are set up at factories in São Paulo, and given an extra half day of tuition and medical care as a way of preparing them for a working life. The program now covers 200 children a year, and about 70 percent go on to gain employment.
- In Finland, a local business unit delivers unused or malfunctioning equipment to a recycling organization which employs long-term unemployed people. The proceeds from the sale of repaired products helps fund the organization.

In total, ABB employees and companies were involved in nearly 300 projects worldwide in 2012. They donated approximately \$5.5 million in cash and provided about 5,000 man-days in volunteering time.

About half a million people benefited as a result of these efforts. ABB is introducing a Group-wide method of measuring the impacts of our community projects in 2013 which is designed to strengthen the link between identified community needs, business benefits and the objectives of the projects.

### Education

We support schools, students and universities in different ways. There are schemes in countries such as Brazil, Chile, China, Colombia, India, Peru, Poland, South Africa and Thailand to help young people and schools in disadvantaged areas.

The kinds of ABB contribution vary considerably. In China, for example, we support students through involvement in a scholarship scheme called the New Great Wall project which provides funds to needy students. In India, ABB supports six government schools in communities where we operate. Some 3,400 children from disadvantaged backgrounds benefited in 2012 through improved education, medical check-ups and a midday meal paid for by ABB employee contributions.

In the Peruvian capital, Lima, ABB contributes to a program – financially and through training and equipment – to teach young people with few employment prospects to become electrical specialists. About 97 percent of young men and women go on to find work after the training.

There is clear business value in contributing to technical schools and universities, raising skill levels and brand awareness among potential recruits. We give equipment and support training programs at such institutions in Australia, Estonia, France, Latvia, Saudi Arabia, Turkey and the United States.

At another level, ABB in Sweden is one of four main sponsors of Mattecentrum, an organization which helps young students to improve their mathematics skills. Volunteers help to teach the students in their spare time.

#### Health care

The company is also involved in a range of projects focusing on health care. Cancer charities are the focus of fund-raising activities in Denmark, the United States and United Kingdom; employees improve the homes of elderly people in Shanghai and Singapore; in South Africa, we support a project to help orphans of HIV/AIDS victims; and in Egypt, the company helps a leading pediatric hospital in Cairo.

Some of ABB's main volunteering activities have a health focus. Every year about 150 ABB employees in Germany spend a week of their holidays helping people with mental disabilities take part in the Special Olympics, a rich experience for the athletes, volunteers and an increasing number of customers who take part. A similar program is supported in the United Kingdom. In the Czech Republic, all employees are given a day off each year to volunteer for a variety of activities, many of which include helping people with disabilities in activities such as skiing.

Employees in Italy support people with Multiple Sclerosis and their families to ensure that those affected are not marginalized by the illness. Employees spend a day a year helping people with the illness to take part in public activities, family weekends and national events.

#### Corporate programs

At a corporate level, more than 100 students from around the world have now received scholarships from the ABB Jürgen Dormann Foundation for Engineering Education, which helps talented engineering students in need of financial support. Students from Indonesia entered the program in 2012, joining colleagues from Brazil, India, China, Malaysia, Mexico, Poland, Turkey and Vietnam in the scheme. A total of 30 scholars attended the biennial international meeting held in Switzerland in 2012.

ABB has a number of Group-level sponsorships which have major impacts on the ground. The largest such agreement is with the Geneva-based International Committee of the Red Cross (ICRC) which came into effect at the start of 2012. It is the second six-year agreement ABB has signed with the ICRC.

ABB's annual contribution in 2012 supported the ICRC's programs to supply clean water to thousands of people in Iraq and the eastern Democratic Republic of Congo. A number of exchanges of expertise are also ongoing and in 2012, for the second consecutive year, ABB engineers contributed to a training session on electromechanical engineering for ICRC staff members in Geneva.

We also continued our partnership with WWF, the global conservation organization which covers three ongoing projects in India, China and Tanzania. In the India project, which started in 2012, a solar-powered battery charging station has been set up to provide poor communities in a coastal area of West Bengal with access to a clean and reliable source of electricity. Initial results are encouraging with dozens of households and small stores benefiting from electricity, and efforts are under way to expand the project.

The importance of ongoing, in-depth stakeholder consultation in community projects was underlined in one of ABB's "Access to Electricity" rural electrification programs in India. With the support of an external consultant we carried out a detailed survey of the social and economic impacts of distributed solar energy electricity in an 8,000-strong community we have been supporting for the past six years. There has been increased access to health care and more schooling but the benefit of increased earnings is not uniform. The survey's conclusions will inform the next steps in the project.

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.

# Human rights

## Working on dilemmas

(includes GRI indicator HR2, 3)

ABB continued to build on its human rights work in 2012 focusing on internal training, capacity building, and further steps to embed human rights into business decision-making processes.

Given the variety of our business activities and areas of operation, many different issues can arise. Here are two brief examples of the kinds of human rights issues and dilemmas we faced in 2012 and which required extensive due diligence.

- **New markets:** ABB put in place a process covering human rights when considering re-entry into Myanmar in 2012 after many years absence. This includes appropriate levels of due diligence on proposed business partners and end-users and on-the-ground discussions with different stakeholders. The situation is being closely monitored.
- **Mergers and acquisitions:** As part of due diligence on a company targeted for acquisition, there was a lack of clarity over the conditions of homeworkers currently employed by the target company. Mitigation measures were included in the business case for the potential acquisition.

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.

ABB has been working on some of the substantive issues contained in the UN Guiding Principles on Business and Human Rights for some years. For example, internal human rights experts have increasingly been carrying out due diligence on projects as part of the business process. Depending on the nature of potential impacts, some projects are selected for in-depth due diligence – either in the form of desktop research or through visits to sites and stakeholder engagement.

A second area of focus is internal awareness training and capacity building. A global program, designed for senior managers in our main manufacturing and exporting countries started in 2010 and is ongoing. Training was held in Brazil and India in 2012, and has so far taken place in nine countries. Several more sessions are scheduled in 2013.

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.

A further program of internal capacity building was launched in 2012 in order to increase the number of people who are able to advise managers at a local level on business and human rights issues in different parts of the world. More than 40 people received a first round of training; further in-depth sessions will be held in 2013 to deepen knowledge and capabilities.

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An external audit showed that a supplier in the Gulf region was retaining the passports of its 250-strong migrant workforce. The practice was not illegal in that country but, depending on circumstances, may run counter to international standards. Following intervention by ABB, the supplier ended that practice and the passports were returned to the employees.

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ABB is continuing to look at the third pillar of the UN Guiding Principles – the issue of access to remedy for victims of human rights abuses. Among other measures, ABB has a Business Ethics Hotline, which was introduced in 2006 to provide all ABB employees and stakeholders worldwide with a means to report suspected violations of the ABB Code of Conduct or applicable laws. Contact details are published on ABB's internal and external websites.



ABB has also 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 carried out 121 audits in 2012. A number of cases related to employment conditions were found and are being addressed in corrective action plans. No cases of child labor were reported. ([See Sustainability in the supply chain](#)).

ABB has long understood the materiality of human rights, knowing that association with or contribution to human rights violations can have legal, financial, human and reputational consequences – all of which are bad for business and inconsistent with our standards. 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 throughout the company and the right measures are taken.

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 2012, 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.

Among the international meetings addressed by ABB experts: a European Union conference in Denmark on implementation of the UN Guiding Principles, a UN Global Compact event at the Rio+20 summit in Brazil, a session at the UN Working Group's annual stakeholder forum in Geneva and a meeting on business and human rights organized by the United Arab Emirates government.

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.

#### **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 in Sudan or North Korea for several years.

#### **HR4 Non-discrimination violations**

All countries in ABB's sustainability management program are asked to report any incidents of discrimination. There were 13 substantiated cases of harassment and two of discrimination in 2012, resulting in one termination, one resignation and a range of other measures, including formal 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 2012 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 no cases of underage labor were found in 2012.

#### **HR8 Training of security personnel in human rights**

ABB recognizes the importance of training security personnel, as well as ABB country and regional managers, on the human rights dimensions of security work. It has been part of general security training in different parts of the world for several years.

As far as security personnel are concerned, ABB recognizes it is essential that they observe human rights. We require due diligence to be carried out on security companies according to ABB and international standards. This is an area of focus for our regional and country-level security staff, and will continue in 2013.

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

In 2012, nearly 40 crisis management training courses were held for country managers in different parts of the world. More than 1,200 managers in more than 90 percent of ABB countries have now been trained on crisis management; depending on local needs, some of that training contains sessions on human rights.

Work is also under way to strengthen ABB's Group-wide security guidelines, taking the Voluntary Principles for Security and Human Rights into account. These internal guidelines, which form the basis of ABB's security activities worldwide, will be finalized in 2013.

#### **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 2012.

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

This data is 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 is 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 to internal and external stakeholders, and an Ombuds Program, where employees can report concerns confidentially. Figures are available for cases of discrimination and harassment (HR 4).

# Sustainability in the supply chain

## Facilitating change

(includes GRI indicators EC6 and HR2)

ABB took further steps in 2012 to develop suppliers into strategic business partners who share our commitment to sustainability and to strengthen our supply chain management to ensure appropriate support for improving supplier performance.

Under our global Supplier Sustainability Development Program (SSDP), we conducted 121 audits and trained more than 1,050 suppliers and 1,255 ABB employees in 2012, focusing on Brazil, China, India and Mexico. A customized internal training program was also launched during the year, enabling ABB employees to achieve certification as sustainability auditors.

The training includes classroom instruction, assignments and on-site audits under the supervision of accredited third parties. Supplier audits in Mexico are now conducted solely by qualified ABB employees, enabling us to follow the development of suppliers more closely throughout the audit and improvement process.

Our program is structured around a combination of training for both suppliers and ABB employees, on-site auditing and monitoring of performance improvement plans. The ABB Supplier Code of Conduct underpins the SSDP, defining minimum standards regarding fair and legal labor conditions, occupational health and safety, environmental responsibility and business ethics.

Suppliers are selected for participation in the SSDP using a risk-based approach, according to country risk, purchasing volume, commodity risk and criticality of the supplier. Country risk, related to issues such as business ethics and human rights, is assessed based on publicly-available data from third parties, including Amnesty International and the International Labour Organization. Commodity risk is related to the potential environmental or human rights impacts of certain processes, such as the risks of labor violations associated with piece-workers on assembly lines.

We are starting to see steady progress. Capacity-building has resulted in improved audit performance by suppliers who have participated in our training programs. However, audits continue to reveal a number of situations where ABB's standards are not met. Similar to 2011 audit findings, the issues discovered during 2012 included excessive overtime, inadequate remuneration, poor waste storage and disposal practices, and a lack of appropriate protective equipment for workers. No cases of child labor were detected during 2012.

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In Mexico, participants in the ABB Supplier Sustainability Development Program have seen the business benefits of improving their sustainability performance and have taken further action to embed sustainability in their businesses. One supplier relocated operations to enable a new layout and installation of new equipment to assure worker safety and compliance with regulations. Other suppliers have opted to invest in additional staff and training, or to set their own ambitious environmental and health and safety improvement targets.

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At the completion of audits, suppliers are assigned a risk rating based on the findings from the assessment. The risk rating determines the required pace of corrective action and whether a re-audit is required for the closure of corrective actions.

ABB supply chain or quality managers are assigned to follow up the corrective action plans. Should a supplier fail to comply with their corrective action commitments, ABB commences a process to de-source that supplier. During 2012, four suppliers were blocked due to unsatisfactory progress with corrective actions. Purchases from these suppliers were suspended pending satisfactory progress by a defined date. Should these suppliers not meet these requirements, then the next step will be their removal as ABB-approved suppliers.

The SSDP will continue to expand in 2013. We plan to train 50 percent more suppliers than in 2012, to roll out the internal sustainability audit certification training in more countries, and to increase the scope of the SSDP to include some countries in Eastern Europe.

Another area of focus for 2013 will be the supplier qualification and approval process. When qualifying suppliers, ABB has long considered sustainability principles alongside the more traditional aspects of quality, cost and on-time delivery. This process will be further strengthened during 2013 with the launch of a new global online supplier registration and pre-qualification system.

ABB has engaged an experienced external supplier to manage the collection of extensive supplier information and to improve the quality, completeness and global availability of supplier information. This will help us to identify and minimize supplier risks, including legal, compliance, health, safety and environmental issues.

As part of our ongoing commitment to integrity and transparency, ABB has agreed to support TRAC, a global platform that allows efficient verification of entity information. Suppliers are invited to submit information, including ownership details and responses to compliance questions related to issues such as bribery and forced labor. Approved applicants receive a unique TRAC number and are then continuously screened against international sanctions and watch lists. In 2013, ABB will test and evaluate TRAC.

In addition to the SSDP, ABB's global sustainability network conducts focused environmental audits of suppliers, as part of our own facilities' ISO 14001 management systems. Almost 1,100 documented environmental audits of suppliers were performed during 2012. Overall, more than 50 percent of approximately 1,700 key suppliers are externally certified to ISO 14001 and a further 11 percent have implemented "self-declared" environmental management systems.

Strong supplier performance ensuring resilient, cost-effective and sustainable supply chains is a key factor in business success, and critical to growth plans. Our Supplier Sustainability Development Program is helping us to embed sustainability principles along our supply chain. The results are encouraging but we still have work to do. We will continue to build capacity within our own organization and our supply base in the belief that improved sustainability performance of our suppliers contributes to ABB's own success.

| Country       | No. of audits |            |           | No. of suppliers trained |            |          | No. of ABB persons trained |            |          |
|---------------|---------------|------------|-----------|--------------------------|------------|----------|----------------------------|------------|----------|
|               | 2012          | 2011       | 2010      | 2012                     | 2011       | 2010     | 2012                       | 2011       | 2010     |
| China         | 48            | 36         | 11        | 820                      | 145        | 0        | 1,000                      | 96         | 0        |
| India         | 20            | 39         | 17        | 96                       | 0          | 0        | 60                         | 37         | 0        |
| Mexico        | 21            | 14         | 0         | 61                       | 0          | 0        | 10                         | 0          | 0        |
| Brazil        | 23            | 4          | 0         | 75                       | 0          | 0        | 35                         | 0          | 0        |
| Rest of world | 9             | 38         | 0         | 0                        | 0          | 0        | 150                        | 0          | 0        |
| <b>Total</b>  | <b>121</b>    | <b>131</b> | <b>28</b> | <b>1,052</b>             | <b>145</b> | <b>0</b> | <b>1,255</b>               | <b>133</b> | <b>0</b> |





# Resource efficiency

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# Innovation

## Investing in the future

ABB is first and foremost a technology company, and every year we devote more than \$1 billion to research and development activities. We maintain seven corporate research centers, employ 8,000 scientists and support 70 university collaborations around the world.

Sustainability remains a top priority for most of our customers, and for ABB as a company, so it commands a significant share of our R&D budget.

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).

At the heart of it are our people, in R&D and beyond, together with our partners: customers, suppliers and leading technology institutions around the world. Our R&D centers around the globe are close to both our customers and our technology partners. In recent years, we have strengthened our research presence in growing markets like India and China, as well as in the United States.

### The power grid revolution

The growing global population is driving an even greater increase in the demand for electricity. Added to this, governments around the world are focusing on reducing CO<sub>2</sub> emissions by increasing the use of renewable energy sources in the power chain.

Whereas traditional power plants were typically located close to centers of consumption, emerging renewable generation often requires transmission from remote areas. Existing grids are under pressure to meet growing demand for power, as well as provide a stable and sustainable supply of electricity, often over long distances.

High-voltage direct current (HVDC), pioneered by ABB's predecessor company ASEA in the 1950s, is the technology of choice for bulk power transmission over long distances with minimal losses. HVDC lines also require less space and can transmit electricity underwater or underground.

Deployment of HVDC has led to an increasing number of point-to-point connections in different parts of the world. The logical next step is to connect the lines and optimize the network. However, a major stumbling block has been the absence of an HVDC circuit breaker that acts quickly enough to interrupt current and isolate faults and at the same time keep losses to a minimum.

ABB has now developed a solution to this century-old challenge – the world's first circuit breaker for HVDC. It combines very fast mechanics with power electronics, and will be capable of interrupting power flows equivalent to the output of a large power station within 5 milliseconds; that is, 30 times faster than the blink of a human eye.

Considered a game-changing technology, ABB's new breaker will enable the development of HVDC transmission grids. These grids will enable interconnection and load balancing between HVDC power superhighways, integrating renewables and transporting bulk power across long distances with minimal losses. We are now in discussions with power utilities to identify pilot projects for the new development.

In recognition of this groundbreaking development, ABB has been selected as one of the world's 50 disruptive companies by the MIT Technology Review, a publication of the prestigious Massachusetts Institute of Technology in the United States.

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Conclusions of a two-year joint research project with General Motors show that the batteries in electric vehicles on the road today could find a new life down the road as energy storage systems in the power grid. The project demonstrated that a device combining five battery packs from plug-in hybrid Chevy Volts is capable of providing enough electricity to power three to five American homes for up to two hours and could serve the grid for at least 10 years.

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### Collaboration to grow our knowledge

ABB has 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.

In addition to our support for 70 university collaborations across the globe, we have recently announced the ABB Research Grant Program, intended to support promising graduate students and senior researchers working on projects with industrial applications in the power and automation area.

We selected 40 research projects for funding from over 500 proposals submitted by more than 250 universities in 46 countries. Grants typically range from \$50,000 to \$80,000 per year. Funding is initially for one year, but the program is designed to fund projects over multiple years.

Through this university collaboration program, we reinforce our commitment to an open innovation approach. By partnering researchers from the ABB Corporate Research Centers with the best graduate students and professors from around the world, ABB plans to support a truly collaborative innovation ecosystem.

Within ABB, we launched a program in 2012 to support more ambitious and larger internal collaborative research projects called “big bet projects.” These “big bets” are expected to deliver breakthrough technologies that have a significant impact on ABB’s business – for example, by delivering a significant cost reduction or performance improvement, or even a new functionality or product. ABB has selected nine such research projects to pursue in 2013, including the further development of bulk power transmission, active management of local energy flows from renewable energy sources, and potential life-cycle cost reduction in transformers.

### **Investing in technology leadership**

The third pillar of ABB’s technology approach is the corporate venture capital unit, ABB Technology Ventures (ATV). ATV investments are used to build technology leadership strategically and drive growth. We make early- and growth-stage investments in novel companies introducing new technologies or improvements to existing technologies. This both complements and adds to the activities of our existing R&D programs.

In 2012, we made a key investment in TaKaDu, a provider of advanced monitoring solutions for water distribution networks. This investment gives ABB access to a field-proven monitoring system that complements our automation portfolio for the water sector. This includes a range of power and automation products and integrated solutions that allow customers to produce, transport, distribute, treat and use water efficiently, reducing energy consumption, minimizing losses and improving reliability.

Girish Nadkarni, managing director at ABB Technology Ventures, has recently been selected for the Global Corporate Venturing Powerlist 100, an inaugural selection made by the monthly magazine “Global Corporate Venturing” that recognizes the most influential corporate venturing units around the world.

This sort of acknowledgement, along with the recognition by MIT and other innovation awards, confirm 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 SF<sub>6</sub> 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. One potential violation was reported for 2012, concerning certification of an ABB supplier’s product. This case is still under investigation.

#### **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 can 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. 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.

# Environmental responsibility

## Pursuing efficiency through the life cycle

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

As a business, ABB focuses on 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. We take a life cycle approach to assess the impacts throughout the phases of a product's life.

Environmental impact can occur in all phases of a product's life cycle, from raw material supply to manufacture, transportation, customer use and final recycling and disposal. ABB has been working for many years to manage our impacts, both those caused by our products and projects and within our own facilities.

To ensure continual improvement in our own operations, we require all manufacturing and service facilities to implement environmental management systems according to the ISO 14001 standard. Our newly-acquired Baldor sites pursued a robust ISO 14001 implementation program during 2012, and is due to complete it in 2013.

For non-manufacturing sites, we have implemented an adapted environmental management system to ensure management of environmental aspects and continual improvement of performance. Of the more than 390 ABB facilities and offices in 64 countries covered by our environmental management program, approximately 95 percent currently comply with the ISO 14001 standard.

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ABB life cycle assessment experts have worked with our sales teams to develop customized tools and environmental reporting approaches tailored to specific customer needs. One tool uses Environmental Product Declarations and other data sources to track specified environmental impacts for a specified project, while another tool helps customers to visualize both the environmental and financial costs and benefits of different ABB solutions.

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Life cycle assessment (LCA) is required as part of a product's research and development phase and is also used in the concept development phase for next generation products. ABB designers follow sustainability guidelines in each phase of the product and technology development process. These include standardized LCA procedure and a handbook to guide consideration of environmental, and health and safety aspects during design, such as 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.

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

### Water

Even though ABB's manufacturing process does not consume significant amounts of water, we have undertaken a program to better understand the patterns and impacts of ABB's water withdrawal, use and discharge. To start the program, we developed an in-house tool for mapping and analysis of water flows at our facilities. The tool, based on the World Business Council for Sustainable Development Global Water Tool, was piloted at a number of facilities in early 2012 and then rolled out to 42 manufacturing facilities in water-scarce and extremely water-scarce watersheds.<sup>1</sup>

In this extended pilot phase, we targeted manufacturing plants to gain a broader view of both industrial and domestic water use patterns. The facilities were required to gather a team to systematically review water flows, analyze water-related opportunities and threats to their operations and develop a water action plan to minimize risks and to leverage opportunities.

Action plans were received from 34 facilities. A number of small sites that do not use process water were exempted from developing formal action plans, but did work through the process and submitted completed water maps for their facilities.

<sup>1</sup> 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 m<sup>3</sup> per person and year, water-scarce if below 1,000 and extremely water-scarce if below 500.

Action plans identified both technical solutions, such as waste water treatment plants to enable water reuse and behavioral aspects to improve water efficiency. The most frequently described actions were awareness-raising and training programs, the installation of flow meters to detect leakages and measure usage, the installation of aerators for taps, and the introduction of waterless urinals. How the plans progress will be monitored at Group level through 2013.

When looking at ABB's global operations, more than three quarters of our water withdrawals are used for cooling processes and returned to source at similar or higher quality (44 percent) or are used for domestic purposes such as sanitation, cooking or garden maintenance (32 percent). None of our water extractions caused significant changes to water sources in 2012.

Of those ABB sites that use water for process purposes, approximately 30 percent use closed-loop systems, mainly for cooling, surface treatment processes and the production of electrical insulation paper. Excluding cooling water returned to the source of extraction, the use of closed-loop processes and reuse of waste water in other ways saved approximately 3,700 kilotons of water in 2012. Without these recycling and reuse processes, ABB's water withdrawals would have been almost 40 percent higher.

Our facilities are increasingly installing waste water treatment plants to allow the reuse of domestic and process water in other applications. Most notably in Australia, India and South Africa, rain water tanks have been installed to replace water supplied by utilities for sanitary and gardening uses, and in Italy, a new air conditioning system capable of reusing process cooling water has been introduced.

Not including cooling water, about 52 percent of water was discharged to public sewers, with almost 30 percent of that volume first processed at our own treatment plants. Another 38 percent was discharged to surface or ground water, with 45 percent of that volume pre-treated, and the remainder was handled by hazardous waste water treatment companies.

Thanks to a wide portfolio of products and solutions, we provide our customers with enhanced performance, efficiency and reliability in water management. During 2012, different elements of ABB's water portfolio received industry awards for water efficiency and for innovation in "smart water networks."

At the 2012 H<sub>2</sub>O awards, celebrating achievements of the Middle East and North Africa water industry, ABB's AquaMaster3™ flow meter device won the "Most Water Efficient product category." The award recognized the device's effectiveness in addressing water leaks, boosting water efficiency and lowering utilities' environmental impact. The technology heralds a new era in water leakage management and was designed in response to the industry's demands for enhanced metering capability – enabling a more efficient and cost-effective operation and compliance with increasing legislative requirements.

ABB was also recognized through a global leadership award by Frost & Sullivan for our innovation in the sector of "smart water networks/grids." ABB's commitment to the water sector with technology solutions was commended in the areas of automation and control, metering and utility hardware, design and engineering, and information communication technologies.

### Waste and recycling

The main waste streams at ABB organizations are metal, wood, paper, oil and plastic. With the ongoing integration of the newly acquired operations of Baldor and Thomas & Betts, the characteristics of our waste streams and the opportunities for waste minimization and recycling are changing. We are working to understand these differences and learn from established good practices, but we continue to aim to reduce the amount of waste sent to landfill and to increase our use of materials that are recycled or made available for reuse.

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.

In 2012, 82 percent of total waste was sent for recycling. In-house recycling, mainly of thermoplastics and packaging material, reduced the amount of waste by approximately 23 kilotons, a significant increase from 3.2 kilotons in 2011. The lead used as counterweights for robots and the cadmium used in industrial batteries are also recycled materials.

ABB generated approximately 12 kilotons of hazardous waste in 2012, but around 34 percent of that amount was sent for recycling rather than disposal, including batteries, electronics and used oil. The waste sent for disposal 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.

Many different plant level waste reduction and recycling programs were undertaken during 2012, depending on the characteristics of the production process and the local waste infrastructure. Facilities in India reduced scrap metal quantities through specialized material yield projects, while in South Africa the focus was on reducing copper wire offcuts. Many plants investigated how to recycle used oil instead of sending it for incineration, including developing methods to separate the used oil from water-based mixtures. In another plant, scrap wooden pallets were ground and sent to a paper mill for reuse and as fuel.

### **Hazardous substances**

ABB continues 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 international regulations.

Our recent acquisitions, Baldor Electric Company and Thomas & Betts, use different processes and products at their facilities, so we are looking at the substances they use and, where necessary, we will update their monitoring and reporting processes related to hazardous substances. As ABB's suppliers are also required to apply the list of prohibited and restricted substances to their own processes and supply chain, we will also work towards including these areas in the integration process.

Possibly the most extensive ABB program to reduce hazardous substances is the ongoing Volatile Organic Compounds (VOC) reduction program in the Transformers Business Unit of our Power Products division, involving 62 factories in 27 countries. The challenge is to reduce VOCs by replacing the solvent-based paint used on transformer tanks with water-based and high-solid paints.

The roll-out is a complex process that must be planned around commercial aspects such as frame contract conditions and coordination of customers with differing requirements, as well as robust quality assurance and training programs. Plants in Finland, Poland, Saudi Arabia, Sweden, Turkey, the United States and elsewhere have already converted to low VOC systems and work is ongoing in other countries.

Conventional paints emit VOC and the main sources in ABB operations are the paint shops for transformers and motor manufacturing. Previously, the transformers business has been the most significant source of VOC emissions for ABB. However, the acquisition of the Baldor Electric Company, specializing in motor manufacturing, has resulted in a significant increase in our Group VOC emissions.

Plant-specific hazardous substance phase-out programs are showing results, with some materials such as organic lead in polymers almost completely eliminated. During 2012, the use of lead solder was eliminated in some U.S. facilities and some Indian facilities switched to non-chlorinated solvents.

### **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 and conservation efforts.

For example, in China the anti-desertification efforts of ABB, Inner Mongolia Electric Power, and Ordos Electric Power Bureau are succeeding in preventing soil erosion and in protecting power transmission lines.

Desertification and soil erosion are major issues in China. Every year sandstorms engulf the region even as far away as Beijing, which not only threatens the environment and the livelihoods of people, but also the infrastructure that feeds the region with electric power, the loss of which has huge economic implications.

ABB has worked with our partners to plant a corridor of fast-growing plants that thrive in desert environments in Inner Mongolia to bind the sand and prevent it from forming dunes that damage the pylons and overhead power lines.



Prior to the creation of the corridors, maintenance teams from the Inner Mongolia Power Company had to constantly clear the ever-drifting sand to prevent power interruptions and maintain the compulsory 11-meter safety distance between the lines and earth. Now that the dunes are more stable, a further agreement to expand the initiative has been signed by the three parties.

Additionally, ABB supports local forest preservation and tree planting schemes in China, Italy and the U.S. ABB employees in the Philippines and Qatar help to preserve local beach and marine environments, while ABB in Malaysia, Peru and Taiwan partner with local parks to support the rehabilitation and maintenance of wetlands.

## Environmental performance: Other GRI indicators

### EN1 Use of hazardous substances (tons)

|  | 2012 <sup>a</sup> | 2011 <sup>b</sup> | 2010  |
|--|-------------------|-------------------|-------|
| Phthalates – softener for PVC  | 28                | 47                | 31    |
| PBB and PBDE – flame retardants in plastics                                  | ~0                | ~0                | ~0    |
| Lead in submarine cables   | 5,633             | 5,725             | 3,632 |
| Organic lead in polymers   | 0.9               | 1.3               | 52    |
| Lead in other products, e. g. backup batteries and counter-weights in robots | 363               | 227               | 265   |
| Cadmium in industrial batteries delivered to customers                       | 5.6               | 1.6               | 1.7   |
| Cadmium in rechargeable batteries  | 6.3               | 10                | 5.9   |
| Cadmium in lead alloy and other uses   | 4.5               | 4.3               | 2.9   |
| Mercury in products delivered to customers                                   | 0.011             | 0.030             | 0.038 |
| SF <sub>6</sub> insulation gas (inflow to ABB)                               | 1,139             | 1,052             | 968   |
| SF <sub>6</sub> insulation gas (outflow from ABB)                            | 1,118             | 1,040             | 959   |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

## Water

### EN8 Water consumption

### EN10 Water recycled and reused

#### Water withdrawals (kilotons)

|   | 2012 <sup>a</sup>  | 2011 <sup>b</sup>  | 2010               |
|---|--------------------|--------------------|--------------------|
| Purchased from water companies              | 3,900 <sup>c</sup> | 3,400 <sup>c</sup> | 3,300 <sup>c</sup> |
| Groundwater extracted by ABB <sup>d</sup>   | 3,000              | 3,200              | 2,700              |
| Surface water extracted by ABB <sup>d</sup> | 2,800              | 2,600              | 2,900              |
| <b>Total water withdrawal</b>               | <b>9,700</b>       | <b>9,200</b>       | <b>8,900</b>       |
| Water saved through recycling and reuse     | 3,700              | 3,900              | 3,000              |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

<sup>c</sup> The 2010 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). In 2012 the data covered 88 percent of employees (not including Thomas & Betts) and an assumed water of consumption of 19.6 tons/year/employee for the remaining 12 percent of employees.

<sup>d</sup> Estimated (rounded) figures

## Air emissions

### EN19 Emissions of Volatile Organic Compounds (tons)

|   | 2012 <sup>a</sup> | 2011 <sup>b</sup> | 2010 |
|---|-------------------|-------------------|------|
| Volatile Organic Compounds (VOC)                | 1,355             | 810               | 786  |
| Chlorinated Volatile Organic Compounds (VOC-Cl) | 12                | 13                | 11   |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

The major constituents of VOCs and VOC-Cl are xylene, thinner and perchloroethylene. The significant increase in 2012 was due to the inclusion of Baldor facilities.

### EN20 Emissions of NO<sub>x</sub> and SO<sub>x</sub> (tons SO<sub>2</sub> and NO<sub>2</sub>)

|                                   | 2012 <sup>a</sup> | 2011 <sup>b</sup> | 2010 |
|-----------------------------------|-------------------|-------------------|------|
| SO <sub>x</sub> from burning coal | 0                 | 0                 | 0    |
| SO <sub>x</sub> from burning oil  | 69                | 68                | 84   |
| NO <sub>x</sub> from burning coal | 0                 | 0                 | 0    |
| NO <sub>x</sub> from burning oil  | 52                | 51                | 63   |
| NO <sub>x</sub> from burning gas  | 120               | 90                | 92   |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

These figures are for fossil fuels consumed in ABB premises for heating and process purposes. The significant increase in NO<sub>x</sub> from burning gas in 2012 is due to the inclusion of Baldor facilities, which use higher quantities of gas than the existing ABB facilities.

## Waste and recycling

### EN22 Waste generated (kilotons)

|                                 | 2012 <sup>a</sup>      | 2011<br>+Baldor <sup>a</sup> | 2011 <sup>b</sup>      | 2010                   |
|---------------------------------|------------------------|------------------------------|------------------------|------------------------|
| Scrap metal sent for recycling  | 150                    | 161                          | 97                     | 135 <sup>c</sup>       |
| Other waste sent for recycling  | 41                     | 42                           | 39                     | 44                     |
| General waste sent for disposal | 43 <sup>d</sup>        | 47 <sup>d</sup>              | 45 <sup>d</sup>        | 38 <sup>d</sup>        |
| Hazardous waste                 | 12 <sup>d</sup>        | 11                           | 9                      | 9                      |
| <b>Total waste</b>              | <b>246<sup>d</sup></b> | <b>262<sup>d</sup></b>       | <b>190<sup>d</sup></b> | <b>227<sup>c</sup></b> |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

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

<sup>d</sup> The 2010 figure is based on reported data from 87 percent of employees (85 percent in 2011) and an assumed waste output of 0.33 tons/year/employee for the remaining 13 percent of employees (15 percent in 2011). In 2012 the data covered 88 percent of employees (not including Thomas & Betts) and an assumed general waste output of 0.21 tons/year/employee and hazardous waste output of 0.05 tons/year/employee for the remaining 12 percent of employees.

## Environmental incidents and penalties

### EN23 Numbers of significant spills

### EN28 Significant fines for non-compliance

#### Number of incidents

|                  | 2012 <sup>a</sup> | 2011 <sup>b</sup> | 2010 |
|------------------|-------------------|-------------------|------|
| Oil spills       | 6                 | 5                 | 4    |
| Chemical spills  | 0                 | 0                 | 0    |
| Emissions to air | 5                 | 4                 | 0    |
| Others           | 0                 | 0                 | 3    |

<sup>a</sup> Baldor facilities included; Thomas & Betts facilities not included

<sup>b</sup> Baldor facilities not included

The emissions to air involved the accidental release of SF<sub>6</sub> gas in four incidents and one release of HCFC-22 from an air conditioning system. The oil spills were contained and adequate decontamination procedures were implemented to prevent any permanent contamination of soil and water. Root causes of the incidents were analyzed and corrective actions, such as improved control systems, upgraded secondary containment and additional training, have been taken to reduce the risk of future spills or emissions. Combined costs of remediation and corrective actions were approximately \$150,000.

During 2012, one of our U.S. facilities was fined less than \$1,000 for the late submission of an annual air report in 2011.

## EN30 Environmental protection expenditure and investments

For 2012, ABB's expenditure on environmental management throughout our global sustainability affairs network was as follows:

| Expenditure on environmental management | \$ thousands  |
|---|---------------|
| Group level                             | 10,750        |
| Country level                           | 5,300         |
| Site level                              | 4,300         |
| <b>Total</b>                            | <b>20,350</b> |

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.

# Energy efficiency, renewable energy and climate change Improvements for the long-term

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

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, about 55 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 can help industrial and utility customers improve energy efficiency by providing specialists to audit energy use and identify areas for improvement, and with equipment, systems and solutions to use energy more efficiently.

We have a wide range of products and services based on pioneering innovative technologies to reduce energy consumption and improve productivity. Our technologies are used along the entire energy value chain from the extraction of resources, the liquefaction of natural gas or refinement of petroleum products, to their transformation into electricity and their efficient use in industry, transportation and buildings.

The link between energy efficiency, renewable energy and mitigating climate change is clear. The International Energy Agency (IEA), in its 2012 World Energy Outlook, says that economically viable energy efficiency measures could halve energy demand growth by 2035. Energy efficiency could delay the "lock-in" of CO<sub>2</sub> emissions foreseen under the 2°C scenario from 2017 to 2022. Renewable energy is likely to become the world's second largest source of power generation by 2015, second only to coal. However, without policy support, up to two thirds of the economically viable potential to improve energy efficiency will remain unrealized through 2035.

Despite the strong financial and environmental case for energy efficiency, many barriers remain blocking implementation of such measures. To overcome some of these barriers, ABB has designed a new approach to improving energy efficiency in industry. Using this approach, ABB has identified energy savings of five to 20 percent across a wide range of industries and utilities.

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ABB in the United Kingdom has demonstrated its commitment to reducing greenhouse gas emissions by gaining the Certified Emissions Measurement and Reduction Scheme (CEMARS) certification. CEMARS is a carbon verification scheme that recognizes organizations for credible carbon measurement, management and reduction. The certification requires companies to audit their carbon footprint and demonstrate year on year reduction of emissions, while taking steps to mitigate emissions in the future.

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ABB partners with the customer, assuming the performance risk for the solutions implemented and bundling multiple small projects into one major project to simplify execution. Providing the expertise and tools to execute efficiently, financing where needed, and measurement technologies to demonstrate performance improvement, ABB works to overcome customers' risk aversion and to provide confidence in the delivery of real energy savings.

This approach is bringing real rewards for customers and the environment. For example, ABB worked with ArcelorMittal to identify annual energy savings of \$13.5 million at a steel mill in France. The measures identified cover 53 individual energy savings opportunities, including both electrical and gas savings, along with some zero capital investment opportunities.

ABB in the United Kingdom has taken a similar approach to persuade customers to adopt energy-saving measures for motor-driven applications. Their Energy Efficiency Plan consists of a targeted energy appraisal that identifies energy and CO<sub>2</sub> savings potential for no more than five selected applications, simplifying the process for the customer. The approach was recently recognized by the Engineering Employers' Federation of the United Kingdom with the Future Manufacturing Green Growth Award.

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.

After pioneering high-voltage direct current (DC) technology, ABB is now applying DC to medium- and low-voltage applications in electric vehicle charging, power distribution systems in ships, in buildings and in data centers. These investments are bringing rewards for the environment and for our business.

For example, ABB has supplied 165 web-connected DC chargers to Estonia to form the backbone of the world's first nationwide fast-charging network for electric vehicles. Each charger can recharge an electric vehicle in just 15 to 30 minutes, a fraction of the eight hours standard chargers typically require.

ABB partnered with HP and Green, one of the top information and communications technology service providers in Switzerland to open the world's most powerful data center using DC technology. ABB installed the one megawatt DC power distribution solution for the 1,100 m<sup>2</sup> expansion of Green's Zurich-West data center. The facility recently earned the Watt D'Or award, a prestigious energy efficiency award from the Swiss government,

for the scale of energy savings achieved through the pioneering use of DC technology.

### Solar technology in action

To demonstrate ABB's solar capabilities, as well as reduce our own environmental impacts, more and more ABB facilities are installing on-site photovoltaic (PV) power plants. Currently, PV plants are installed or are being constructed at 18 ABB sites in 14 countries across Europe, Asia and Latin America. Globally, the installations contribute less than one percent of our annual electrical energy needs, but can contribute up to 50 percent of the installation's electricity needs, such as in Hungary and Mexico.

### Focus on "green" real estate

ABB also carefully considers potential environmental impacts when investing in our global real estate portfolio. The ABB Green Building Policy guides site selection, building design and choice of materials in order to maximize water and energy efficiency, minimize resource use and provide a comfortable and safe indoor environment for employees and visitors. The policy guides new development, refurbishment and selection and management of rented space.

Several recent and ongoing projects demonstrate the benefits of this approach:

- At Lodz in Poland, design of a new transformer factory is improving energy efficiency by incorporating upgraded insulation, skylights, renewable energy generation, a building management system to optimize ventilation, heating and cooling, energy efficient lighting design, as well as ABB electrical equipment with lower losses. Projections show that, compared with a standard building complying only with local requirements, the new building will save approximately 1,000 tons of CO<sub>2</sub> emissions per year.
- A planned new HVDC center in Ludvika, Sweden will be certified to Leadership in Energy and Environmental Design (LEED) Gold status. Similar to Lodz, design has focused on good insulation, use of ABB systems for energy efficient building management, renewable energy, and water management.
- ABB's new headquarters in Budapest, Hungary is one of the most environmentally efficient commercial development projects on the Hungarian office market and the first one to be pre-certified to LEED Platinum level. Intelligent building control systems, including ABB's KNX-iBus technology, solar panels on the roof, gray water recycling and innovative heating and cooling solutions all help to minimize impacts.

### Overall performance

As part of our goal to steadily increase the efficiency of our own operations, we have set ourselves the target of reducing energy use by 2.5 percent per year. This includes both direct and indirect energy use, for manufacturing processes and to operate buildings. For 2012, we have included Baldor operations in this target, using the baseline established in 2011.

We achieved our energy efficiency objective for 2012, reducing energy consumption per employee by more than three percent from 2011. Gas consumption was significantly reduced and electricity consumption decreased slightly in 2012, despite organic growth in production and employee numbers. District heat consumption, although a small contributor to our overall energy consumption, increased by 12 percent.

ABB facilities implemented a range of activities to achieve these results. Among the most common measures: switching to energy efficient lighting solutions, investigating and enhancing the insulation of buildings, implementing or updating heat recuperation from machines and processes, and optimizing heating, ventilation and cooling systems, often using ABB's own technology. We expect to see further improvements in energy efficiency as energy savings programs gain traction.

Emissions of SF<sub>6</sub> increased by more than 25 percent year on year. The majority of this increase was due to a 60 percent increase in volume from a particular type of production process. During 2012, that business undertook considerable work to adapt the design of the product and the production process, with the goal to eliminate up to three quarters of the SF<sub>6</sub> consumed. We await approval of the new design by the relevant certification body. 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.

During 2012, we continued to work with our logistics suppliers to improve the quality and availability of emissions data from cross-border transportation and air and sea transportation of goods. A Transportation Council of regional and Group logistics managers helps to guide and coordinate Group transport and logistics strategy and programs.

Logistics optimization programs have also been initiated at Business Unit (BU) level. One good example is the cooperation between our BU Transformer factories in Lodz, Poland and Ludvika in Sweden. The challenge was to find a more efficient way to load trailers to reduce the number of trips from Lodz

to Ludvika and to identify an efficient use for the return trips to ensure that the trailer did not return empty. Now, the loading has been optimized, the number of departures reduced from five to two per week and, with cooperation of a third factory at Figeholm in Sweden, the trailers return with production materials for Lodz. Costs have been reduced by €400,000 annually and associated CO<sub>2</sub> emissions reduced by 70 percent.

In addition to existing programs to optimize modes and routes of transport, we started a project in 2012 to investigate packaging design. Improved packaging has the potential to reduce environmental impacts both through more efficient resource use for the packaging itself and through reduced transport emissions from lighter packaging and more efficient loading. The program is still in its pilot stages, with several ABB facilities currently screening the tools and methodology.

Greenhouse gas emissions from business air travel decreased by seven percent during 2012. Whilst there is slow progress in implementing action plans to reduce the environmental impacts of air travel, we are observing incremental changes. For example, many sites have improved or installed videoconferencing facilities to enable fuller participation in virtual meetings.

## Energy and climate performance: Other GRI indicators

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

|                            | 2012 <sup>a</sup> | 2011<br>+Baldor <sup>a</sup> | 2011 <sup>b</sup> | 2010       |
|----------------------------|-------------------|------------------------------|-------------------|------------|
| Oil (11.63 MWh/ton)        | 93                | 94                           | 92                | 114        |
| Coal (7.56 MWh/ton)        | 0                 | 0                            | 0                 | 0          |
| Gas                        | 556               | 589                          | 417               | 427        |
| <b>Total direct energy</b> | <b>649</b>        | <b>683</b>                   | <b>509</b>        | <b>542</b> |

<sup>a</sup> Baldor facilities included; Thomas & Betts not included

<sup>b</sup> Baldor facilities not included

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

|                                      | 2012 <sup>a</sup> | 2011<br>+Baldor <sup>a</sup> | 2011 <sup>b</sup> | 2010         |
|--------------------------------------|-------------------|------------------------------|-------------------|--------------|
| District heat consumption            | 219 <sup>c</sup>  | 195                          | 195               | 223          |
| District heat: Losses at utilities   | 33                | 29                           | 29                | 33           |
| Electricity consumption <sup>d</sup> | 1,599             | 1,621                        | 1,447             | 1,335        |
| Electricity: Losses at utilities     | 2,208             | 2,239                        | 1,999             | 1,844        |
| <b>Total indirect energy</b>         | <b>4,058</b>      | <b>4,084</b>                 | <b>3,670</b>      | <b>3,436</b> |

<sup>a</sup> Baldor facilities included; Thomas & Betts not included

<sup>b</sup> Baldor facilities not included

<sup>c</sup> The figure is based on reported data from 88 percent of employees (not including Thomas & Betts) and an assumed energy use of 1.3 megawatt-hours (MWh) per employee for district heat for the remaining 12 percent of employees.

<sup>d</sup> The 2010 figure is based on reported data from 87 percent of employees (85 percent in 2011) and an assumed energy use of 12 MWh per employee for electricity for the remaining 13 percent of employees (15 percent in 2011). In 2012 the data covered 88 percent of employees (not including Thomas & Betts) and an assumed energy use 7.7 MWh/year/employee for electricity for the remaining 12 percent of employees.

### Megawatt-hours (MWh) per employee

|                            |      |
|----------------------------|------|
| 2012 <sup>a</sup>          | 18.1 |
| 2011 + Baldor <sup>a</sup> | 18.7 |
| 2011 <sup>b</sup>          | 16.9 |
| 2010                       | 18.0 |

<sup>a</sup> Baldor facilities included; Thomas & Betts not included

<sup>b</sup> Baldor facilities not included

### Direct and indirect<sup>c</sup> energy use by type for 2012<sup>a</sup> (2011<sup>b</sup>)

|                                    |
|------------------------------------|
| Oil 4% (4%)                        |
| Gas 23% (19%)                      |
| District heat <sup>c</sup> 9% (9%) |
| Electricity <sup>c</sup> 65% (67%) |



<sup>a</sup> Baldor facilities included; Thomas & Betts not included

<sup>b</sup> Baldor facilities not included

<sup>c</sup> Not including losses at utilities

## EN16, EN17 Greenhouse gas emissions

(kilotons CO<sub>2</sub> equivalents)

## EN29 Significant environmental impacts of transportation

(kilotons CO<sub>2</sub> equivalents)

|  | 2012 <sup>a</sup> | 2011<br>+Baldor <sup>a</sup> | 2011 <sup>b</sup> | 2010 |
|--|-------------------|------------------------------|-------------------|------|
| <b>Scope 1</b>   |                   |                              |                   |      |
| CO <sub>2</sub> from use of energy                       | 137               | 144                          | 109               | 117  |
| SF <sub>6</sub>  | 332               | 263                          | 263               | 247  |
| CO <sub>2</sub> from transport by own fleet <sup>c</sup> | 350               | 350                          | 350               | 350  |
| <b>Scope 2</b>   |                   |                              |                   |      |
| District heat consumption                                | 48                | 43                           | 43                | 49   |
| District heat: Losses at utilities                       | 7                 | 7                            | 7                 | 8    |
| Electricity consumption                                  | 337               | 348                          | 309               | 293  |
| Electricity: Losses at utilities                         | 465               | 480                          | 427               | 405  |
| <b>Scope 3</b>   |                   |                              |                   |      |
| Air travel   | 171               | n/a                          | 185               | 160  |

<sup>a</sup> Baldor facilities included; Thomas & Betts not included

<sup>b</sup> Baldor facilities not included

<sup>c</sup> Estimated figures, not included in the scope of DNV assurance





# Our people

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# Developing our people

## Central to business success

(includes GRI indicator LA11)

ABB is a truly international company. We are headquartered in Switzerland and have strong historical ties there and in Sweden, but this company is not the product of a particular country or national identity.

A walk along any corridor at corporate headquarters in Zurich underscores the company's cultural diversity. People from 50 countries are represented in the 700-strong workforce. It's a diversity – and strength – that is mirrored in many of the 100-plus countries where ABB has business operations.

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ABB operates in about 100 countries around the world, so understanding and working with cultural differences is key to success. Particular value is placed on a cross-cultural workforce. A total of 2,350 people have roles with global responsibility at ABB. They come from 70 different countries, providing cultural awareness and sharing experiences that help international teams work together in a unified way.

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ABB has been expanding rapidly in recent years as part of ambitious growth plans. A highly trained, motivated and well-integrated international workforce is a key factor in achieving business success and strategic goals.

### Supporting business success

New tools and processes have been introduced by human resources specialists to strengthen the business, and support the development and mobility of employees. For example, a number of learning and development work streams were developed in 2012 focusing on sales, project management and service, which are key to ABB's growth.

Other programs being introduced in 2013 include specialized tools and processes for new and existing employees in the growing service business in order to recruit and retain the right people, maximize their skills and equip them for a changing work environment. A sales simulator has also been developed to provide sales staff around the world with an interactive way to develop and refine their skills.

Employee mobility is also becoming increasingly important to business success. Mobility improves the sharing and transfer of knowledge, and forms part of career development.

Considerable efforts have been made in ABB to capitalize on the benefits of increased mobility. About 950 people were on international assignments in 2012 – a 12 percent increase on 2011.

We are also starting to see more employees from emerging economies move on assignments to ABB locations in mature markets, as well as the more customary moves in the other direction. In 2012, for the first time, India and China entered the top ten exporting countries for talent within ABB. China saw a 21 percent increase in the number of assignees going to other countries while India saw an 11 percent increase.

Under a cross-region talent sharing scheme introduced in 2012, ABB employees facing the economic downturn in Mediterranean countries have increasingly been prepared to re-locate to other ABB units, particularly in central Europe and South America, where there were job vacancies. In Spain, for example, employees whose motors unit was being downsized were encouraged to seek new jobs at other ABB European locations.

### Diversity

For ABB, achieving cultural diversity is a function of how we run an international business. A diverse and talented workforce, recruited globally, provides the quality and skills that support innovation and business success.

However, one area of diversity where we have room for improvement is gender, and this is where our effort is currently concentrated with a number of local and corporate-level initiatives.

In India, for example, ABB has launched a number of programs to strengthen the presence of women in executive, functional and factory roles. Among the measures are workshops for line managers to strengthen understanding of the business value of diversity and inclusiveness; and efforts to increase the number of women in the interview pipeline, and to raise the number of women on the shop floor. Child care centers have also been opened to enable more women to work.



In Saudi Arabia, people from more than 30 countries work for ABB. For the first time, we also hired Saudi women in 2012 in accordance with labor laws and a number of women were selected for internships. The emphasis in South Africa is different: all employees received training to promote greater understanding of disabilities and ways of integrating disabled people into the workforce.

A Group-wide inclusiveness network was established in 2012, aimed primarily at finding and highlighting female talent in regions and business divisions. ABB also takes part in international initiatives. We have 18 women, half from functions and half from the business, representing the company at the international Women's Forum for the Economy and Society.

ABB currently has one woman on the Group Executive Committee and one on the Board of Directors. A number of women were promoted to senior positions in 2012, including head of Investor Relations, and country and region-level business and functional leadership roles.

### Training and development

Another key area of focus is how we can develop talented employees in increasing numbers to meet our business goals.

Despite the economic downturn, we continued to invest during 2012 in learning and development programs for our employees to ensure we have high-caliber people in the right places. Our programs include:

- A Talent Management process which has been improved and embedded in all regions. Around 89,000 personal performance and development assessments were conducted in 76 countries through new tools. The process focuses on identifying those people with potential, building on their strengths, and supporting development activities.
- Leadership development programs for different levels of management. A total of 95 senior managers attended two courses of the Senior Leadership Development Program held in partnership with the IMD business school in the Swiss city of Lausanne. The Middle Manager and First Line Manager programs covered a further 400 middle managers and 1,600 first line managers in 2012.
- The three-day Leadership Challenge program, offered to all employees and delivered in 14 languages, focuses on taking personal leadership, irrespective of position or role in the company. Another 5,600 employees completed the course in 2012, bringing the overall total to about 54,000 since it started in 2004.

### Attracting young people

Attracting talented young people and developing them for future leadership roles is also key to business success.

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.

There were 28 global trainees from 20 countries in 2012. They were selected for a range of programs, including finance, human resources, energy, sustainability, marketing and sales.

Competition to attract talented graduates is fierce. One of the ways ABB seeks to attract the best prospects is through partnering with CEMS, a strategic alliance of leading business schools and multinational companies whose goal is to set a global standard of excellence for pre-experience Master's in management. ABB has been a partner for the past three years. About 60 CEMS alumni work at ABB.

Once graduates join the company, they benefit from the ABB Life program which is designed to develop and prepare talented young people for future leadership roles. A total of 320 young employees went through the program in 2012.

Other Human Resources-led programs are also available to help in personal development. These include the Global Mentoring scheme which was launched in 2008. A total of 216 mentors and mentees attended the program in 2012. Mentees benefit from advice and guidance; mentors also learn things and appreciate the opportunity to pass on their knowledge and experience.

And, as part of other efforts to improve language skills, ABB has a Standard English training course offered online and free of charge to employees and their family members. About 24,000 people in around 100 countries have so far activated a license to strengthen their skills.

All these programs are designed to foster business excellence and success, and strengthen the development and loyalty of employees. As we forge ahead with our growth plans, much more work lies ahead.

## Social Performance Indicators

### Employment

#### LA1 Full-time workforce by region

##### 2.8 Scale of the reporting organization

| LA1 Employment                |                |                |                |
|-------------------------------|----------------|----------------|----------------|
| Full-time employees by region | 2012           | 2011           | 2010           |
| Europe                        | 64,000         | 60,300         | 58,800         |
| The Americas                  | 34,400         | 25,900         | 17,700         |
| Asia                          | 38,300         | 37,400         | 30,900         |
| Middle East and Africa        | 9,400          | 10,000         | 9,100          |
| <b>Total</b>                  | <b>146,100</b> | <b>133,600</b> | <b>116,500</b> |

#### LA1 Part-time workforce by region

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

For 2012, 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 | 2012            | 2011         | 2010         |
|-------------------------------|-----------------|--------------|--------------|
| Europe                        | 2,835 5%        | 2,924        | 3,133        |
| The Americas                  | 169 1%          | 108          | 143          |
| Asia                          | 1391 4%         | 106          | 183          |
| Middle East and Africa        | 4 <1%           | 1            | 4            |
| <b>Total</b>                  | <b>4,399 3%</b> | <b>3,139</b> | <b>3,463</b> |

#### LA2 Rate of employee turnover by region

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

For 2012, 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                    | 2012              | 2011       | 2010       |
|---------------------------------------|-------------------|------------|------------|
| Europe                                | 5,083 8%          | 10%        | 11%        |
| The Americas                          | 3,689 14%         | 15%        | 16%        |
| Asia                                  | 4,149 12%         | 13%        | 14%        |
| Middle East and Africa                | 911 15%           | 14%        | 8%         |
| <b>Total turnover for whole Group</b> | <b>13,832 11%</b> | <b>12%</b> | <b>12%</b> |

#### Turnover of all female employees, including part-time:

For 2012, 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 of all female employees, including part-time | 2012            | 2011         | 2010         |
|---|-----------------|--------------|--------------|
| Europe  | 1,218 2%        | 1,364        | 1,407        |
| The Americas  | 676 3%          | 531          | 631          |
| Asia  | 1,023 3%        | 1,086        | 1,060        |
| Middle East and Africa                                | 70 1%           | 184          | 51           |
| <b>Total turnover for whole Group</b>                 | <b>2,987 2%</b> | <b>3,165</b> | <b>3,149</b> |

#### LA3 Benefits provided to employees

ABB, as a multinational organization with operations in around 100 countries, 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 49 percent of the company's employees 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 66 per cent of Group employees. All countries reported figures for 2012 and the full list appears on the ABB website.

We define women in top management positions as women in Hay Grades 1–10. This enables us to compare figures from country to country on the same basis.

##### LA10 Training and education

| Training per year per employee<br>(average hours) | 2012 | 2011 | 2010 |
|---|------|------|------|
| Brazil  | 27   | 25   | 26   |
| China   | 31   | 34   | 40   |
| Czech Republic                                    | 12   | 11   | 10   |
| Finland   | 14   | 13   | 13   |
| Germany   | 16   | 16   | 16   |
| India   | 18   | 5    | 4    |
| Italy   | 16   | 17   | 17   |
| Sweden  | 12   | 12   | 10   |
| Switzerland                                       | 19   | 17   | 20   |
| USA   | 24   | 25   | 25   |

##### LA13 Diversity and equal opportunity

| Women in senior management<br>(percentage) | 2012 | 2011 | 2010 |
|--|------|------|------|
| Brazil                                     | 16   | 7    | 7    |
| China                                      | 27   | 25   | 25   |
| Czech Republic                             | 19   | 18   | 19   |
| Finland                                    | 16   | 15   | 17   |
| Germany                                    | 7    | 7    | 4    |
| India                                      | 2    | 2    | 2    |
| Italy                                      | 7    | 7    | 7    |
| Sweden                                     | 24   | 22   | 22   |
| Switzerland                                | 7    | 7    | 7    |
| USA  | 15   | 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.

#### LA13 Other indicators of diversity

As at December 31, 2012, ABB's Board of Directors had eight members – seven men and one woman – of seven nationalities, whereas the Group Executive Committee had 12 members, including one woman, of eight nationalities. In addition, people from 50 countries were among the 700-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 2012 was just over 4,400. Nearly half of those were women. The numbers varied according to culture and region. ABB expects to be able to provide further detailed data in the 2013 report.

#### 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 on approximately 390 sites 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

## Learning and building together

ABB is committed to achieving excellence in Occupational Health and Safety (OHS) and works to achieve this objective through both strategic, Group-led programs and business-specific initiatives.

To support these initiatives, we continue to invest in the competence and development of our people through widespread training and the International Diploma program, and through the provision of additional, specific resources in areas of growth and known high risk activities.

Nonetheless, following an extended fatality free period, sadly we recorded four fatal incidents during 2012; three at the workplace and one during road travel. The fatalities involved two ABB employees and two contractors and occurred in Saudi Arabia, Sweden, Brazil and Congo-Brazzaville.

The number of serious injuries to ABB employees and contractors also increased from 38 in 2011 to 42 in 2012. Serious injuries occurred in all divisions and all regions, with the most common risks identified as falls from height, electrical contact and being struck by objects. All incidents are investigated to identify root causes and lessons learned are communicated throughout the company.

The loss of colleagues and contractors and the increase in serious injuries are of grave concern for us and provide additional impetus for our continued strong focus on OHS improvement programs.

During 2012, we continued to embed OHS in business practices, developing a framework to align goals, standards and processes across our global markets and operational divisions. Business-led OHS programs continued to focus on the particular needs and activities of the different business units (BU) and a new program was initiated in the Motors and Generators BU of the Discrete Automation and Motion Division.

This BU has grown significantly following the acquisition of Baldor Electric Company in 2011 and the OHS improvement program was initiated by the BU to build awareness, knowledge and consistent practices across its operations. The program focused on BU-specific risks, such as lifting, electrical testing, and mechanical handling. It consisted of intensive training in theory and practice and sessions were held in factories in Finland, India, Italy and China, each resulting in improvement action plans.

To support ABB's strategy to grow our service business, we appointed a Group Service OHS Advisor in 2012. The Advisor is responsible for developing the OHS strategy for ABB Service in line with its growth ambitions and the risk profile of the business, and to coordinate activities throughout regional, country and BU service organizations.

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[In the service business, collaboration with our customers and other partners is critically important for mutual success. Such a collaboration with ABB Full Service customer Vale at its Voisey's Bay nickel mine in northern Canada has achieved a major safety milestone – three years with no lost-time incidents. Vale Concentrator Department, ABB and Iskueteu, a local operations support company, worked together to implement best practices for workforce safety, production efficiency and maintenance excellence. Together, we have instilled a strong safety culture into the workforce.](#)

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In recognition of the value our service customers place on strong OHS performance, ABB also launched an internal Global Service Award for Safety. The award is intended to recognize service activities resulting in more effective injury or illness prevention and to promote leadership in this area. The 2012 award acknowledged the creation of a guide that provides safety instructions for different machines found in the workplace, with easily-understood material for both new and experienced employees.

In 2012, ABB also expanded the scope of our Group-led programs, rolling out our Group occupational health strategy with a series of awareness training sessions around the world. More than 120 people in seven regions were trained to address occupational health risks, such as exposure to hazardous substances, physical agents, noise and vibration.

The sessions involved a combination of theory and practice to assist effective management and monitoring of risks at country and site level. Participants prepared their own occupational hygiene management programs and during 2013 we will conduct reviews to assess implementation of these programs.

The strategy is led by a global Occupational Health Team consisting of occupational health physicians and OHS professionals who also provide support and guidance for local programs. In 2012, we appointed a Group Occupational Health Physician to spearhead this program.

At country level, OHS improvement programs are organized according to formal country OHS strategic plans that are tailored according to local conditions and business needs. Progress towards performance targets and implementation of training and development programs is monitored quarterly at Group level.

Increasingly, local ABB OHS programs are being recognized by external stakeholders. For example, in the US in 2012, ABB Inc. was named one of America's safest companies by EHS Today, a leading publication and resource for safety, health and industrial hygiene professionals. Newly-integrated Baldor plants also received the Award of Excellence in Safety from the state of Georgia, the North Carolina Department of Labor Safety Award, the South Carolina Chamber of Commerce Commendation for Excellence for Safety and the Arkansas Department of Labor Safety Award.

For 2013, we will continue to develop our model for OHS excellence, building awareness and understanding at every level of the company. We will build our OHS behavior standard as an integral part of the Group processes that define the values of the company and work to ensure business-specific needs are recognized and met.

## 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 Labour Organization (ILO) guidelines. The form of health and safety consultation with employees varies according to local requirements and cultures. It 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

|  | 2012*  | 2011  | 2010  |
|--|--------|-------|-------|
| Employee work-related fatalities               | 1      | 0     | 1     |
| Incident rate                                  | 0.01   | 0     | 0.01  |
| Employee work-related serious injuries         | 22     | 22    | 15    |
| Incident rate                                  | 0.16   | 0.18  | 0.13  |
| Employee business travel fatalities            | 1      | 0     | 2     |
| Incident rate                                  | 0.01   | 0     | 0.02  |
| Employee business travel serious injuries      | 0      | 3     | 5     |
| Incident rate                                  | 0      | 0.02  | 0.04  |
| Contractor work-related fatalities             | 2      | 0     | 2     |
| Contractor work-related serious injuries       | 20     | 16    | 16    |
| Contractor business travel fatalities          | 0      | 0     | 0     |
| Members of the public fatalities               | 0      | 0     | 0     |
| Employee lost days due to industrial incidents | 10,345 | 9,478 | 8,362 |
| Employee occupational health diseases          | 10     | 7     | 13    |
| Employee total recordable incident rate        | 13.04  | 13.17 | 13.48 |

\* These data do not include incidents from Thomas & Betts, a company acquired by ABB during 2012.

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. The 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**

More than 30 ABB country organizations report programs in place to address serious diseases. The majority of programs include stress management, health screening for conditions such as diabetes and hypertension, and counseling schemes to assist employees to maintain healthy lifestyles and a suitable work-life balance. Other initiatives include vaccination programs and cancer screening.

In four countries (Brazil, Mexico, Philippines and South Africa) ABB has specific programs in place to address HIV/AIDS and ABB in Italy worked with "Save the children" and the Association of Volunteers in International Service (AVSI) Foundation to collect funds for a program to fight HIV/AIDS in developing countries.

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.

# 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 2012, 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 a 12-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, the Chief Technology Officer 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 145,000 people as of December 31, 2012.

### 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, Germany, India, Italy, Korea, Norway, Russia, 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, 2012, Investor AB, Stockholm, Sweden, held 182,030,142 ABB shares, representing 7.9 percent of the company's share capital and voting rights. As of July 25, 2011, BlackRock Inc., New York, U.S., together with its direct and indirect subsidiaries, held 69,702,100 ABB Ltd shares, corresponding to 3.0 percent of total share capital and voting rights.



To the best of ABB's knowledge, as of February 28, 2013, 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 [Developing our people chapter](#) for data on employee numbers.

**Sales (revenues) for 2012: \$39,336 million**  
(**\$37,990 million for 2011**)

| Sales by region        | 2012 | 2011 | 2010 |
|------------------------|------|------|------|
| Europe                 | 36%  | 38%  | 39%  |
| The Americas           | 27%  | 24%  | 20%  |
| Asia                   | 27%  | 27%  | 28%  |
| Middle East and Africa | 10%  | 11%  | 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 2012, the largest of which was U.S. low-voltage product manufacturer Thomas & Betts, completed in May and valued at \$3.9 billion. Since being consolidated into ABB's financial results as of May 2012, Thomas & Betts has contributed approximately \$1.53 billion in revenues and approximately \$280 million of operational EBITDA.

During the first quarter, ABB completed the acquisition of Switzerland-based Newave Energy International, a manufacturer of uninterrupted power supplies, for a total consideration of approximately \$170 million.

Other acquisitions during the year 2012 included Tropos Networks Inc., a Silicon Valley-based company that develops and markets wireless technologies and products for distribution area.

As at December 31, 2012, ABB's Board of Directors comprised eight non-executive members, one woman and seven men, of seven nationalities.

As at December 31, 2012, the Group Executive Committee comprised the CEO, the Chief Financial Officer and ten other members, including one woman, of eight nationalities.

## 2.10 Awards received

See [Stakeholder relations chapter](#).

## Report parameters

### 3.1 Reporting period

Calendar year 2012.

### 3.2 Date of previous report

March 2012, covering calendar year 2011.

### 3.3 Reporting cycle

Annual. Next report to be released in March 2014, covering calendar year 2013.

### 3.4 Contact point for the report

E-mail: [sustainability.abbzh@ch.abb.com](mailto:sustainability.abbzh@ch.abb.com)

Web address: [www.abb.com/sustainability](http://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 were 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 this report, we have structured the content of these five focus areas under three main headings: Governance and stakeholder relations, Resource efficiency and Our people.

### 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 covers all ABB employees wherever they work and all contractors for whom ABB is contractually responsible. The report does not cover Thomas & Betts operations.

### 3.8 Comparability

The Sustainability Performance report covers all employees working in premises owned or leased by ABB. During 2012, ABB acquired Thomas & Betts, a North American manufacturer of industrial motors, with approximately 9,800 employees. The report does not cover Thomas & Betts operations.

During 2011, ABB acquired Baldor Electric Company, a North American manufacturer of electric motors, with approximately 6,800 employees. The 2011 report did not cover Baldor operations, except for some selected environmental parameters. This report covers Baldor operations with the full scope of sustainability indicators.

### 3.9 Data measurement

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

### 3.10 Effect of restatement of information

Nothing significant has arisen during 2012 which would require a restatement of information provided in earlier ABB Sustainability Performance reports.

Not including Thomas & Betts, the number of ABB employees was around 136,000 in 2012, significantly higher than the 128,000 covered by our reporting in 2011. The number of manufacturing sites, workshops and offices covered by the sustainability management program, not including Thomas & Betts, was approximately 390 in 64 countries in 2012.

### 3.11 Significant changes

There were no significant changes during 2012 in the scope, boundary, or measurement methods applied in the report.

### 3.12 GRI content index

A table appears on page 55 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 54 of this report.

## Governance

Corporate governance is covered in detail in the ABB Group Annual Report. The GRI content index table on page 55 of this report gives cross-references to the appropriate parts of the corporate governance section, wherever relevant.

# Summary of main performance indicators<sup>1</sup>

| GRI ref.      | Indicator description   |              |              |              |
|---------------|---|--------------|--------------|--------------|
| Environmental |   | 2012         | 2011         | 2010         |
| <b>EN1</b>    | <b>Materials</b>  |              |              |              |
|               | Phthalates (tons)   | 28           | 47           | 31           |
|               | Brominated flame retardants (tons)  | ~0           | ~0           | ~0           |
|               | Lead in submarine cables (tons)   | 5,633        | 5,725        | 3,632        |
|               | Organic lead in polymers (tons)   | 0.9          | 1.3          | 52           |
|               | Lead in other products (tons), e.g. backup batteries and counterweights in robots | 363          | 227          | 265          |
|               | Cadmium in industrial batteries (tons)  | 5.6          | 1.6          | 1.7          |
|               | Cadmium in rechargeable batteries (tons)  | 6.3          | 10           | 5.9          |
|               | Cadmium in lead alloy and other uses (tons)                                       | 4.5          | 4.3          | 2.9          |
|               | Mercury in products (tons)  | 0.011        | 0.030        | 0.038        |
|               | SF <sub>6</sub> insulation gas (inflow to ABB facilities) (tons)                  | 1,139        | 1,052        | 968          |
|               | SF <sub>6</sub> insulation gas (outflow to customers) (tons)                      | 1,118        | 1,040        | 959          |
|               | No. of transformers with PCB oil in ABB facilities                                | 1            | 2            | 3            |
|               | No. of capacitors with PCB oil in ABB facilities                                  | 32           | 0            | 0            |
|               | Mercury in instruments in ABB facilities (tons)                                   | 0.203        | 0.263        | 0.422        |
| <b>EN3</b>    | <b>Direct energy consumption (Gigawatt-hours – GWh)</b>                           |              |              |              |
|               | Oil (11.63 MWh/ton)   | 93           | 92           | 114          |
|               | Coal (7.56 MWh/ton)   | 0            | 0            | 0            |
|               | Gas   | 556          | 417          | 427          |
|               | <b>Total direct energy used</b>   | <b>649</b>   | <b>509</b>   | <b>542</b>   |
| <b>EN4</b>    | <b>Indirect energy consumption (Gigawatt-hours – GWh)</b>                         |              |              |              |
|               | District heat consumption   | 219          | 195          | 223          |
|               | District heat: Losses at utilities  | 33           | 29           | 33           |
|               | Electricity consumption   | 1,599        | 1,447        | 1,335        |
|               | Electricity: Losses at utilities  | 2,208        | 1,999        | 1,844        |
|               | <b>Total indirect energy used</b>   | <b>4,058</b> | <b>3,670</b> | <b>3,436</b> |
|               | Megawatt-hours (MWh) per employee   | 18.1         | 16.9         | 18.0         |
| <b>EN8</b>    | <b>Water withdrawal (kilotons)</b>  |              |              |              |
|               | Purchased from water companies  | 3,900        | 3,400        | 3,300        |
|               | Groundwater extracted by ABB  | 3,000        | 3,200        | 2,700        |
|               | Surface water extracted by ABB  | 2,800        | 2,600        | 2,900        |
|               | <b>Total water withdrawal</b>   | <b>9,700</b> | <b>9,200</b> | <b>8,900</b> |

<sup>1</sup>Note that data in this table, except LA1 for 2012, do not include Thomas & Betts. Data for 2011 and 2010 do not include Baldor.

| GRI ref.    | Indicator description  | 2012  | 2011 | 2010 |
|-------------|--|-------|------|------|
| <b>EN16</b> | <b>Greenhouse gas emissions (kilotons CO<sub>2</sub> equivalent)</b>                           |       |      |      |
|             | <b>Scope 1*</b>  |       |      |      |
|             | Energy   | 137   | 109  | 117  |
|             | SF <sub>6</sub> (in CO <sub>2</sub> equivalents)   | 332   | 263  | 247  |
|             | <b>Scope 2</b>   |       |      |      |
|             | District heat consumption  | 48    | 43   | 49   |
|             | District heat: Losses at utilities   | 7     | 7    | 8    |
|             | Electricity consumption  | 337   | 309  | 293  |
|             | Electricity: Losses at utilities   | 465   | 427  | 405  |
|             | <b>Scope 3</b>   |       |      |      |
|             | Air travel   | 171   | 185  | 160  |
| <b>EN19</b> | <b>Emissions of volatile organic compounds (tons)</b>  |       |      |      |
|             | Volatile organic compounds (VOC)   | 1,355 | 810  | 786  |
|             | Chlorinated volatile organic compounds (VOC-Cl)  | 12    | 13   | 11   |
| <b>EN20</b> | <b>Emissions of NO<sub>x</sub> and SO<sub>x</sub> (tons SO<sub>2</sub> and NO<sub>2</sub>)</b> |       |      |      |
|             | SO <sub>x</sub> from burning coal  | 0     | 0    | 0    |
|             | SO <sub>x</sub> from burning oil   | 69    | 68   | 84   |
|             | NO <sub>x</sub> from burning coal  | 0     | 0    | 0    |
|             | NO <sub>x</sub> from burning oil   | 52    | 51   | 63   |
|             | NO <sub>x</sub> from burning gas   | 120   | 90   | 92   |
| <b>EN22</b> | <b>Waste (kilotons)</b>  |       |      |      |
|             | Scrap metal recycled   | 150   | 97   | 135  |
|             | Other waste recycled   | 41    | 39   | 44   |
|             | General waste sent for disposal  | 43    | 45   | 38   |
|             | Hazardous waste  | 12    | 9    | 9    |
| <b>EN23</b> | <b>Significant spills</b>  |       |      |      |
|             | Total number of spills   | 11    | 9    | 7    |

\* Note that CO<sub>2</sub> from transport by own fleet is not included in the scope of DNV assurance.

| GRI ref. | Indicator description  |                |            |                |            |                |            |
|----------|--|----------------|------------|----------------|------------|----------------|------------|
| Social   |  | 2012           |            | 2011           |            | 2010           |            |
| LA1      | <b>Employment</b>  |                |            |                |            |                |            |
|          | Total workforce by region (ABB employees);<br>2012 data including Thomas & Betts |                |            |                |            |                |            |
|          | Europe   | 64,000         |            | 60,300         |            | 58,800         |            |
|          | The Americas   | 34,400         |            | 25,900         |            | 17,700         |            |
|          | Asia   | 38,300         |            | 37,400         |            | 30,900         |            |
|          | Middle East and Africa   | 9,400          |            | 10,000         |            | 9,100          |            |
|          | <b>Total</b>   | <b>146,100</b> |            | <b>133,600</b> |            | <b>116,500</b> |            |
|          | Total numbers of part-time employees included above                              |                |            |                |            |                |            |
|          | Europe   | 2,835          | 5%         | 2,924          | 5%         | 3,133          | 5%         |
|          | The Americas   | 169            | 1%         | 108            | <1%        | 143            | 1%         |
|          | Asia   | 1,391          | 4%         | 106            | <1%        | 183            | 1%         |
|          | Middle East and Africa   | 4              | <1%        | 1              | <1%        | 4              | <1%        |
|          | <b>Total</b>   | <b>4,399</b>   | <b>3%</b>  | <b>3,139</b>   | <b>3%</b>  | <b>3,463</b>   | <b>3%</b>  |
| LA2      | <b>Employee turnover</b>   |                |            |                |            |                |            |
|          | Turnover of all employees, including part-time                                   |                |            |                |            |                |            |
|          | Europe   | 5,083          | 8%         | 5,712          | 10%        | 6,351          | 11%        |
|          | The Americas   | 3,689          | 14%        | 2,823          | 15%        | 2,567          | 16%        |
|          | Asia   | 4,149          | 12%        | 4,615          | 13%        | 4,346          | 14%        |
|          | Middle East and Africa   | 911            | 15%        | 854            | 14%        | 463            | 8%         |
|          | <b>Total turnover for whole Group</b>  | <b>13,832</b>  | <b>11%</b> | <b>14,004</b>  | <b>12%</b> | <b>13,727</b>  | <b>12%</b> |
|          | Turnover of all female employees, including part-time                            |                |            |                |            |                |            |
|          | Europe   | 1,218          | 2%         | 1,364          | 2%         | 1,407          | 2%         |
|          | The Americas   | 676            | 3%         | 531            | 3%         | 631            | 4%         |
|          | Asia   | 1,023          | 3%         | 1,086          | 3%         | 1,060          | 4%         |
|          | Middle East and Africa   | 70             | 1%         | 184            | 3%         | 51             | <1%        |
|          | <b>Total turnover for whole Group</b>  | <b>2,987</b>   | <b>2%</b>  | <b>3,165</b>   | <b>3%</b>  | <b>3,149</b>   | <b>3%</b>  |
| LA7      | <b>Occupational health and safety</b>  |                |            |                |            |                |            |
|          | Fatalities, injuries, lost days, diseases  |                |            |                |            |                |            |
|          | Employee work-related fatalities   | 1              |            | 0              |            | 1              |            |
|          | Incident rate  | 0.01           |            | 0              |            | 0.01           |            |
|          | Employee work-related serious injuries   | 22             |            | 22             |            | 15             |            |
|          | Incident rate  | 0.16           |            | 0.18           |            | 0.13           |            |
|          | Employee commuting/business travel fatalities                                    | 1              |            | 0              |            | 2              |            |
|          | Incident rate  | 0.01           |            | 0              |            | 0.02           |            |
|          | Employee commuting/business travel serious injuries                              | 0              |            | 3              |            | 5              |            |
|          | Incident rate  | 0              |            | 0.02           |            | 0.04           |            |
|          | Contractor work-related fatalities   | 2              |            | 0              |            | 2              |            |
|          | Contractor work-related serious injuries   | 20             |            | 16             |            | 16             |            |
|          | Contractor business travel fatalities  | 0              |            | 0              |            | 0              |            |
|          | Members of the public fatalities   | 0              |            | 0              |            | 0              |            |
|          | Employee working days lost due to industrial incidents                           | 10,345         |            | 9,478          |            | 8,362          |            |
|          | Employee occupational health diseases (number of cases)                          | 10             |            | 7              |            | 13             |            |
|          | Employee total recordable incident rate  | 13.04          |            | 13.17          |            | 13.48          |            |



| GRI ref.    | Indicator description                          | 2012     | 2011  | 2010    |
|-------------|--|----------|-------|---------|
| <b>HR4</b>  | <b>Non-discrimination</b>                      |          |       |         |
|             | Total number of incidents of discrimination    | 2        | 5     | 6       |
|             | Total number of incidents of harassment        | 13       | 32    | 18      |
| <b>SO6</b>  | <b>Public policy</b>                           |          |       |         |
|             | Financial and in-kind political contributions  | \$30,000 | \$500 | \$9,000 |
| <b>LA10</b> | <b>Training and education</b>                  |          |       |         |
|             | Training per year per employee (average hours) |          |       |         |
|             | Brazil   | 27       | 25    | 26      |
|             | China  | 31       | 34    | 40      |
|             | Czech Republic                                 | 12       | 11    | 10      |
|             | Finland  | 14       | 13    | 13      |
|             | Germany  | 16       | 16    | 16      |
|             | India  | 18       | 5     | 4       |
|             | Italy  | 16       | 17    | 17      |
|             | Sweden   | 12       | 12    | 10      |
|             | Switzerland                                    | 19       | 17    | 20      |
|             | USA  | 24       | 25    | 25      |
| <b>LA13</b> | <b>Diversity and equal opportunity</b>         |          |       |         |
|             | Women in senior management (percentage)        |          |       |         |
|             | Brazil   | 16%      | 7%    | 7%      |
|             | China  | 27%      | 25%   | 25%     |
|             | Czech Republic                                 | 19%      | 18%   | 19%     |
|             | Finland  | 16%      | 15%   | 17%     |
|             | Germany  | 7%       | 7%    | 4%      |
|             | India  | 2%       | 2%    | 2%      |
|             | Italy  | 7%       | 7%    | 7%      |
|             | Sweden   | 24%      | 22%   | 22%     |
|             | Switzerland                                    | 7%       | 7%    | 7%      |
|             | USA  | 15%      | 16%   | 15%     |

## INDEPENDENT VERIFICATION OF MAIN PERFORMANCE INDICATORS 2012

### 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 50–53 in the pdf version and in the interactive version on internet presented at [this link](#). The verification was conducted in January and February 2013.



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

To assess the validity of the numerical values of the environmental indicators, DNV carried out telephone interviews with Local Sustainability Officers (LSO). To include several of the Baldor sites acquired in 2011, the number of interviews was expanded to cover 15 out of 398 LSO reports. To verify the process for collecting information for the social indicators DNV carried out telephone interviews with Country Sustainability Controllers and Country Occupational Health and Safety Advisors from five out of 58 countries. DNV also interviewed five people in the ABB Group Function Sustainability Affairs, Legal and Integrity, and Supply Chain Management with responsibility for collecting, aggregating and/or presenting the data in the Table.

During the verification, DNV

- carried out interviews and reviewed the database containing the environmental and social performance data
- checked ABB's routines for aggregating data
- checked consistency and understanding of reporting from selected ABB sites
- checked the database for inconsistencies

Countries included in verification interviews:  
CSC: China, Malaysia, Peru, Qatar, USA  
LSO: Argentina, Benelux, Canada, China, France, Germany, India, Korea, Mexico, Singapore, South Africa, Sweden, Taiwan, UK, USA

### Conclusions

It is the opinion of DNV that ABB has a well-established web-based internal reporting system. ABB has also provided training and follow up to facilitate accurate reporting from newly acquired Baldor sites.

A few minor reporting inconsistencies were discovered and highlighted to ABB. Identified 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 be reasonably fair and accurate.

Høvik, Norway, 18<sup>th</sup> February 2013

Ingebjørg Gravlien  
Project manager  
Det Norske Veritas AS

*Det Norske Veritas expressly disclaims any liability or responsibility for any decisions, whether investment or otherwise, based on results of assessment activities.*

# GRI content index table

| GRI ref.  | Description                          |   |
|-----------|--------------------------------------|---|
| 1         | Strategy and analysis                |   |
| 1.1       | CEO's letter                         | page 2 and ABB Group Annual Report          |
| 1.2       | ABB's key sustainability issues      | pages 3–7, 48–49                            |
| 2.1–2.10  | Organizational profile               | pages 15, 47–48                             |
| 3.1–3.13  | Report parameters                    | pages 11, 48–49                             |
| 4.1–4.10  | Governance                           | pages 10–11 and ABB Group Annual Report     |
| 4.11–4.13 | Commitments to external initiatives  | pages 12, 16–18 and ABB Group Annual Report |
| 4.14–4.17 | Stakeholder engagement               | pages 14–15                                 |
| 5         | Performance indicators               |   |
|           | Economic performance indicators      |   |
|           | EC1 (ABB key figures)                | ABB Group Annual Report                     |
|           | EC2                                  | pages 18, 35–36                             |
|           | EC3–5, EC7                           | page 43                                     |
|           | EC6                                  | pages 24–25                                 |
|           | EC8–9                                | pages 19–20                                 |
|           | Environmental performance indicators |   |
|           | EN1, EN10                            | pages 31, 33                                |
|           | EN2                                  | page 32                                     |
|           | EN3–4, EN16–17, EN29                 | page 37                                     |
|           | EN5–7, EN18                          | pages 35–37                                 |
|           | EN8, EN19–20                         | page 33                                     |
|           | EN9, EN21                            | page 31                                     |
|           | EN11–14                              | pages 32–33                                 |
|           | EN22, EN27                           | pages 31, 32, 34                            |
|           | EN23, EN28, EN30                     | page 34                                     |
|           | EN26                                 | page 30                                     |
|           | Social performance indicators        |   |
|           | SO1                                  | pages 19–20                                 |
|           | SO2–8                                | pages 12–13                                 |
|           | PR1–3, PR6–7                         | page 29                                     |
|           | PR4, PR8–9                           | page 13                                     |
|           | PR5                                  | page 14                                     |
|           | LA1–5                                | page 42                                     |
|           | LA6–9                                | pages 45–46                                 |
|           | LA10, LA12–15                        | page 43                                     |
|           | LA11                                 | pages 40–41                                 |
|           | HR1–11                               | pages 21–23                                 |
|           | HR2                                  | pages 24–25                                 |

# UN Global Compact reporting for 2012

## The company

ABB ([www.abb.com](http://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 145,000 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 2012.

## Statement of support

### 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 on-going commitment, ABB is involved in different initiatives and local networks, 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, 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: it continued in 2011 in four other countries with training in two more countries in 2012. In all, training was carried out in nine countries, three fewer than foreseen in a group sustainability objective for the period. A further training objective has been set for 2013. The training is aimed at business managers, and key functions such as Supply Chain Management, Human Resources, Legal and Integrity, Communications and Sustainability.

- A capacity building program to raise human rights capability began in 2012 with a first round of training for more than 40 sustainability specialists.
- Active participation in international meetings, organizations and workshops seeking to promote business awareness and respect for human rights. In 2012, ABB was an active participant at an EU conference in Denmark, a UNGC event at the Rio summit in Brazil, a business and human rights conference in the United Arab Emirates, and the UN Working Group meeting in Switzerland. ABB continues to be an active member of the Global Business Initiative on Human Rights, UN Global Compact Human Rights Working Group, and the Global Agenda Council of the World Economic Forum.

### 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 2012 with internal training in Brazil and India. Training includes issue of complicity. Target group as above in Principle 1.
- A capacity building program to raise human rights capability began in 2012 with a first round of training for more than 40 sustainability specialists.
- Further work with ABB's two systems divisions in 2012 to monitor projects at very early stage of pursuit to check for possible complicity issues.
- Due diligence carried out on several potential projects to avoid potential complicity.
- Due diligence carried out on a potential target for acquisition.
- Due diligence work done in advance of entry into two new markets in Asia and Africa.

## Labor

### 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 2012.
- 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 labor**

- 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 2012.
- The principle of “no forced or compulsory labor” is included in ABB’s Supplier Code of Conduct, and protocol for supplier audits.

#### **Principle 5: The effective abolition of child labor**

- 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. No violations were reported. A total of 121 audits of suppliers were carried out in 2012. No cases of child labor were reported.
- 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. There were 13 substantiated cases of harassment and two of discrimination in 2012, resulting in one termination, one resignation, and a range of other measures, including formal 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. Supporting tools and training materials have been developed 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.
- A support unit in ABB’s Corporate Research organization provides environmental expertise, guidelines and tools to business units to ensure they meet upcoming environmental requirements and challenges, and customer demand for compliance and other environmental information.

#### **Principle 8: Undertake initiatives to promote greater environmental responsibility**

- Work with international organizations and initiatives, such as the 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, auditing 121 suppliers and training more than 1,000 suppliers during 2012.
- 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, and continually reviewed and updated since then. 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 environment 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.
- During 2012 ABB conducted face-to-face Integrity training, covering both anti-corruption as well as anti-trust risk areas, to over 130,000 employees.
- 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. The Ombuds program was introduced mid-2009 to complement existing ways of raising compliance issues. The program now numbers 70 Ombuds-persons in 48 countries.
- As part of the anti-corruption program, ABB also carried out several additional training and communication initiatives in 2012, focusing on company leadership and middle management, and including integrity films, biweekly case studies published on the intranet, and proactive action such as anti-bribery compliance reviews of ABB units around the 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 2012 Sustainability Performance Report is published in March 2013. Further detail on ABB's environmental, social, human rights, and health and safety performance can be found on [www.abb.com/sustainability](http://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
- 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



