



ABB Group  
Sustainability Performance Report 2013  
A longer-term perspective



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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.

# This is ABB

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ABB is one of the world's leading power and automation technology companies. We operate in around 100 countries and employ about 150,000 people.

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We provide solutions for secure, energy-efficient generation, transmission and distribution of electricity, and for increasing productivity in industrial, commercial and utility operations.

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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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We are present throughout the entire renewables value chain, from power generation to transmission, distribution and electric mobility.

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

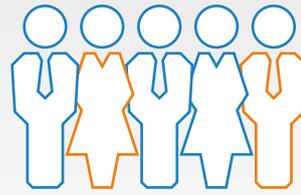
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We report our sustainability performance according to the Global Reporting Initiative's (GRI) G3.1 Guidelines. Our self-declared level of application of the GRI Guidelines is B. A summary table of numerical performance indicators is included. The indicators in this table have been verified by the independent verification body Det Norske Veritas.



**\$ 1.5**  
billion  
invested in R&D in 2013

**400**  
TWh energy saved  
by ABB drives



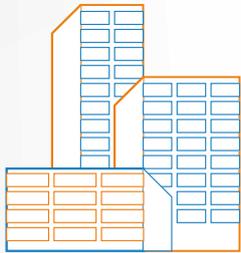
**150,000**  
employees

**150**  
nationalities



**\$ 42**  
billion  
revenues  
in 2013

**\$ 61**  
billion  
market capitalization  
at December 31, 2013

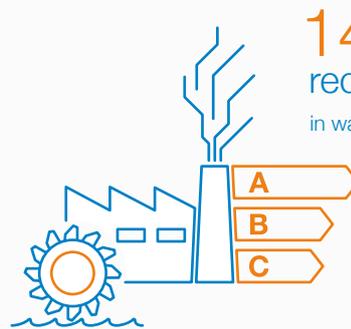


**1** company delivering  
power and productivity  
for a better world



**\$ 8**  
million  
spent on community  
projects in 2013

**20**  
awards  
for good corporate  
citizenship worldwide



**14%**  
reduction in water use  
in water-scarce areas since 2011

**3.5%**  
improvement  
in energy efficiency in 2013



**400+**  
managers trained  
on human rights

**99%**  
of employees  
received face to face integrity training

**150**  
supply chain  
sustainability  
assessments in 2013



**1,800+**  
critical suppliers trained  
since 2011

# Taking a longer-term perspective



Twenty years ago ABB produced a first Sustainability Report which was devoted to environmental issues such as our manufacturing processes and the implementation of management systems at our facilities. It was a pioneering report, one of the first of its kind.

We have come a long way since then, adding different aspects of health and safety, social engagement, environmental responsibility, security and human rights to the palette of activities we manage and review on a regular basis.

Nowadays, sustainability for ABB covers our efforts to build a clean, safe, secure and respectful environment through our products and services and the way we behave in all areas of business. Our company slogan is “Power and productivity for a better world” and we believe that what we manufacture for our customers and how we act can and do make a significant contribution to a better, more sustainable world.

The sustainability strategy we unveiled in 2013 is aligned with corporate strategy, reflecting a clear understanding that good performance in these areas is part of good business practice and success. The sustainability strategy, which covers 2014–2020, comprises a series of focused objectives which impact all areas of our value chain.

It’s important to emphasize that our sustainability goals – in the areas of products and services, responsible operations and relationships, and the right resources – were developed with and are supported by ABB’s executive management. We are committed to this path as the ABB Group.

We have gone beyond thinking of sustainability and the business as separate; they are inextricably inter-linked – sustainability is part of our business.

We will continue to embed sustainability practices and values into different areas of the business – such as product development where we take a life-cycle approach – and will seek to maximize resource efficiency and minimize our own and our customers’ energy use and emissions.

Other sustainability criteria are embedded in many areas such as our requirements of suppliers, and in the due diligence processes we apply to business projects, sourcing and acquisitions. Coherence and consistency of approach are core to success in all parts of the business.

ABB's overall success will not only be determined by improved short-term performance but also by a longer-term perspective on how we can adapt to the trends shaping our future and our business – such as how we can contribute to efforts to mitigate climate change, and offset the impacts of growing urbanization and transportation needs.

We have proven technologies to meet our customers' demands for energy-efficient and low-emission products and services. And our 8,000 technologists around the world are at the forefront of innovative ideas, advancing the sustainable business agenda.

Our web-connected fast-chargers for electric vehicles are just one recent example. In 2013 we received an order to install them throughout the Netherlands, following a similar contract in Estonia. At the start of 2014 we announced a six-year collaboration in China for fast-chargers for electrical vehicles in that huge market.

However far we have come in the past 20 years, we still face considerable challenges on our journey. Nowhere is this more apparent than in our health and safety performance where our record in 2013 undermined previous grounds for optimism in recent years. We strive for a zero incident rate and yet seven contractors died – six of them from one business unit – and 69 people suffered serious injuries during the year.

This is unacceptable. Many processes and best practices to improve occupational health and safety performance have been put in place in recent years. We are re-doubling our efforts in this area with further targeted training in particular business areas and programs to ensure correct behavior, and are also reviewing appropriate levels of responsibility and accountability within the company. We have a duty of care and will not rest in pursuit of our goals.

As a truly multinational company, one of the other challenges we face is attracting and retaining the right people in different parts of the world. Greater efforts are being made to develop a diverse workforce, and we detail some examples later in this report. We know a diverse workforce – and we have some 54 nationalities represented at headquarters alone – provides for huge opportunities and a dynamic working environment.

**“Sustainability is inextricably inter-linked with our business.”**

Our employees expect to work for a company with the highest standards of integrity, which manages its risks and understands its impacts on society. We describe some of our efforts and advances in this area in this report, as well as on our website.

We have come a long way in the past two decades and recognize that our stakeholders' expectations have also developed significantly in that time. Our ability to embed strong values within the company, exercise our duty of care, and fully understand our commitments to social progress are material to our license to operate, and are key to building sustainable success for the company.

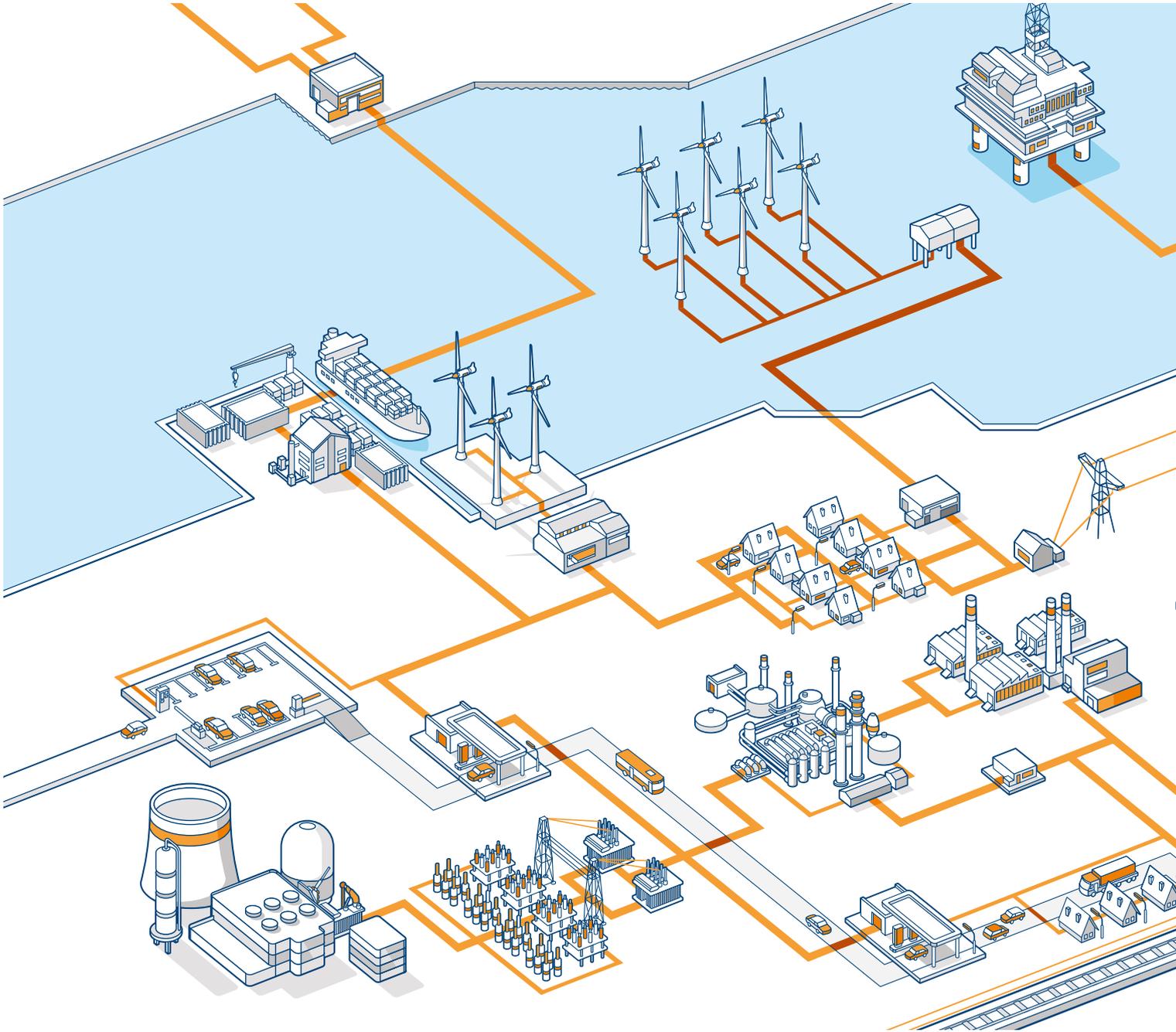
We see very good opportunities ahead to benefit and contribute through our core strengths of delivering power and productivity in a rapidly changing world. We have many opportunities and are confident we can fulfil them.



**Ulrich Spiesshofer**  
CEO

# What ABB does

Power ABB is the world's leading supplier of power grids worldwide. Our technologies are present across the entire power value chain from generation to transmission and distribution. ABB technologies also enable renewable energy to be integrated into the grid, whether from offshore wind parks, hydropower or solar farms. Our solutions extend to on-board DC grids for ships, power systems for trains, and fast-chargers for electric vehicles.



## Energizing and controlling power plants

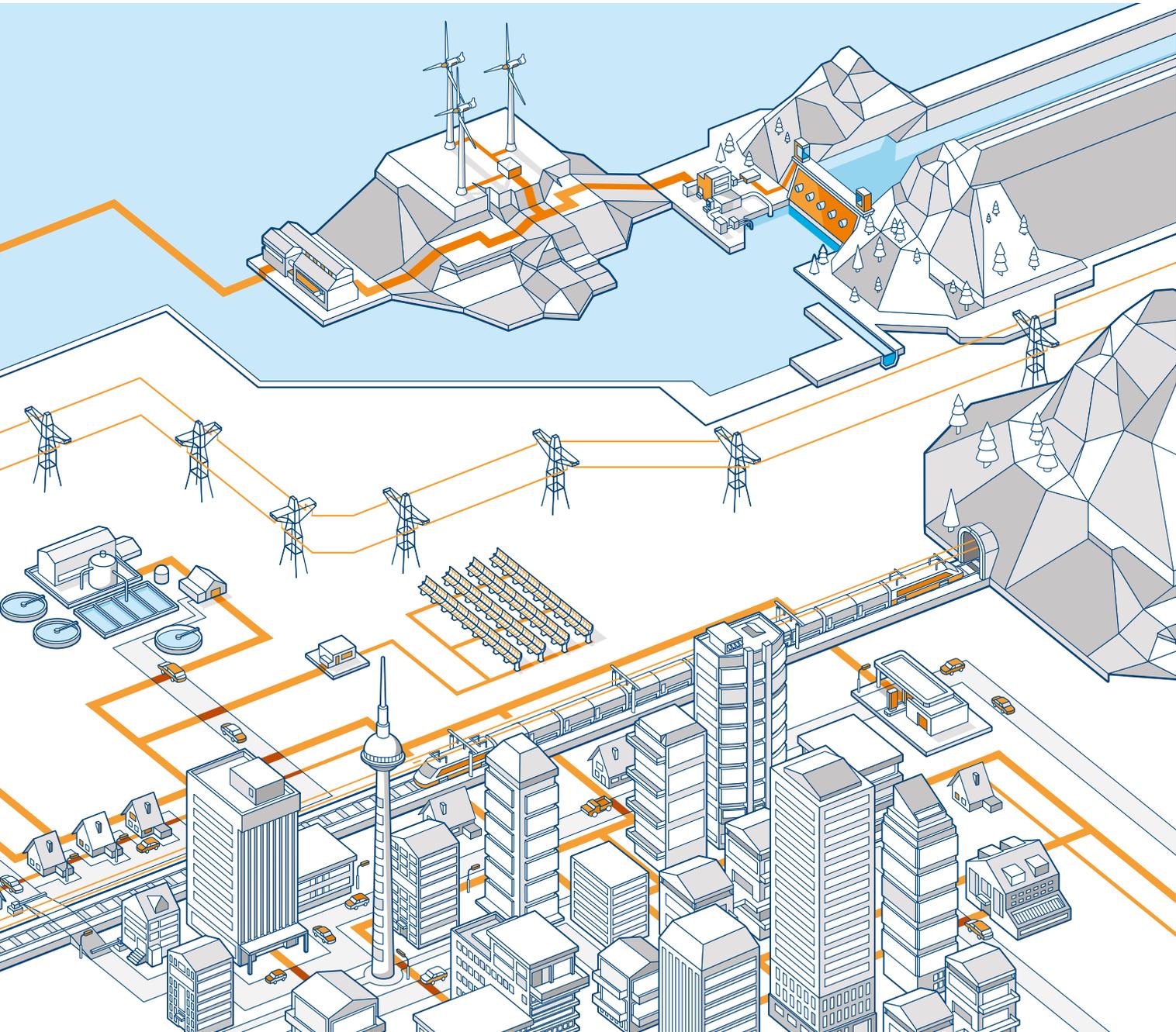
Power plant operators aim to run their installations at the highest possible level of efficiency, regardless of the energy source. With more than 130 years of experience and a vast installed base, ABB offers technologies for complete electrical and automation solutions as well as controls and instrumentation products for conventional and renewable-based power generation plants.

## Power transmission

ABB is a pioneer and market leader in technologies for the efficient and reliable transmission of power over long distances with minimal losses. Our ultrahigh and high-voltage solutions up to 1,200 kilovolt (kV), including technologies like HVDC, HVDC Light, FACTS and cable systems, help transport power and connect transmission grids over land, underground and even underwater.

## Substations

Transmission and distribution substations enable power transfers with a range of high- and medium-voltage products that ensure reliability and efficiency, such as surge arrestors, protection equipment, switchgear and circuit breakers. Transformers adjust voltage levels higher or lower for a vast range of purposes, while special automation systems protect and optimize the flow of power within a substation.



### Managing the distribution network

ABB's advanced energy management, automation and communications solutions improve the reliability and efficiency of utility and industrial operations. Our products, systems and services boost capacity, enhance security and improve productivity. Coupled with enterprise software for asset management and business applications, we bridge the gap between operations technology and IT, providing complete solutions for asset-intensive industries.

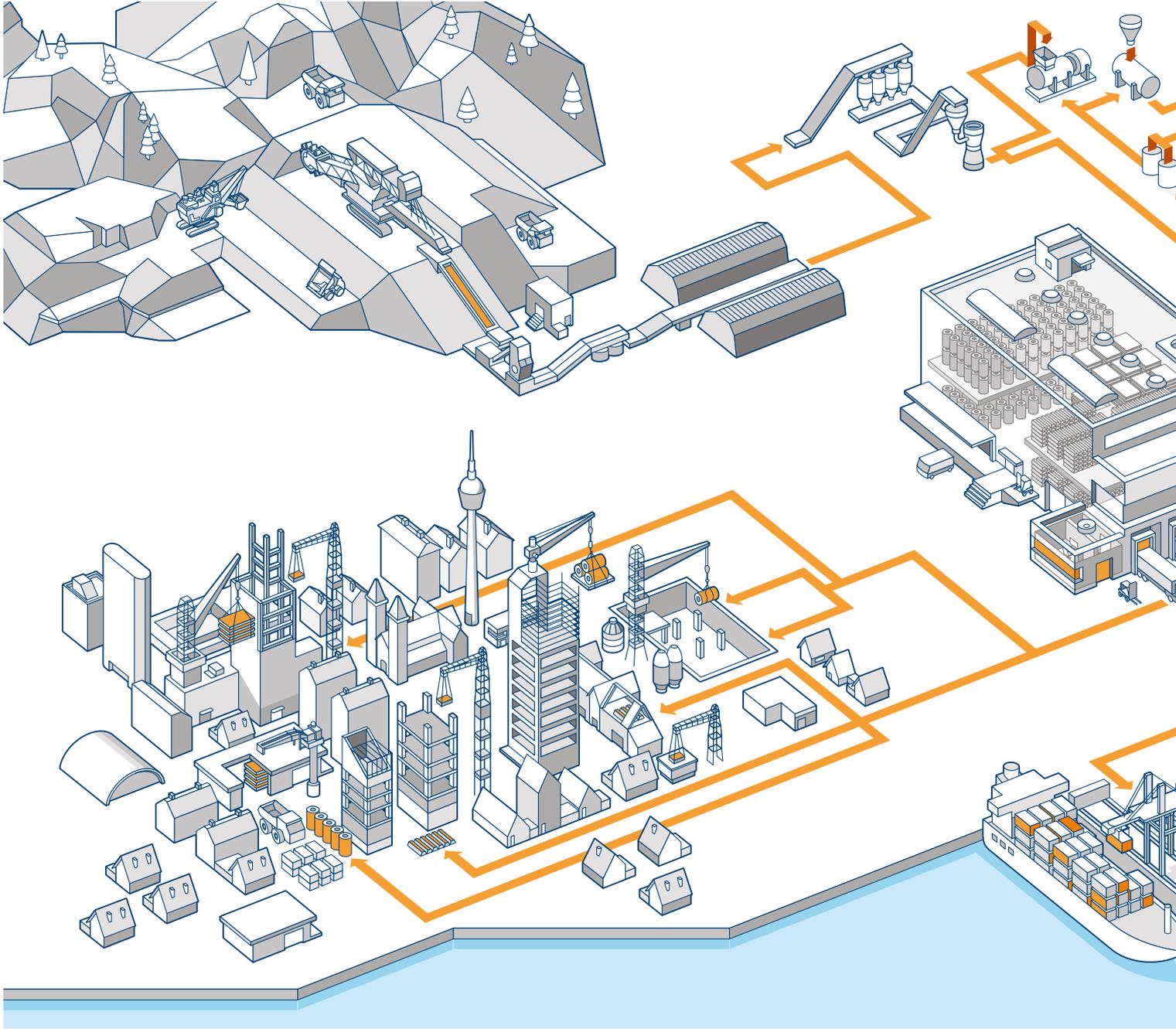
### Products across the power value chain

ABB's product offering across voltage levels includes circuit breakers, switchgear, capacitors, instrument transformers, power, distribution and traction transformers as well as a complete range of high- and medium-voltage products – enhancing reliability, improving energy efficiency and lowering environmental impact.

### Services

With a global installed base and unparalleled domain expertise, ABB's service offering encompasses the entire energy value chain, from consulting, repair, refurbishment and maintenance-related services to complete asset management solutions. ABB's knowledge of installed electrical systems and equipment is unsurpassed, enabling us to design and build new power products and systems, or repair and modernize older ones.

Automation ABB is a leading provider of energy efficient motors and drives, and automation technologies to industry. Our solutions range from the electrification of manufacturing and processing plants to automation systems and robots that improve industrial productivity and control of production processes. We are also key suppliers of building automation systems and power solutions for infrastructure and transport.



#### Plant electrification and energy management

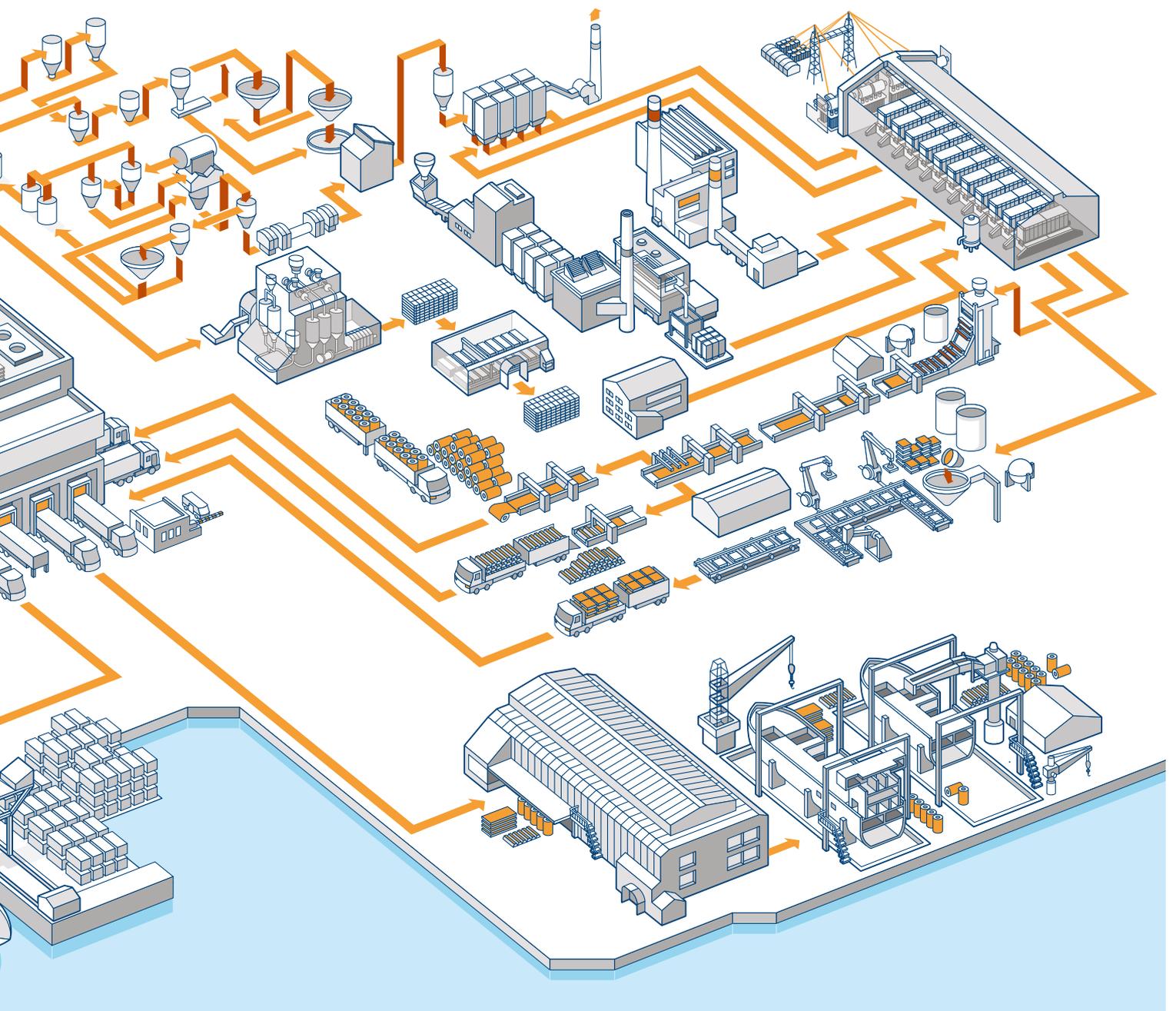
ABB electrification solutions deliver and distribute electricity safely and efficiently throughout manufacturing and processing plants. ABB energy management systems help customers reduce energy bills and carbon emissions by up to 20 percent by lowering energy consumption, minimizing distribution losses and improving generation efficiency.

#### Process automation

ABB automation systems increase productivity, improve energy efficiency, and keep workplaces safe. PLC and control systems reduce production costs with better scheduling, execution and management of industrial processes, improving customer service and product quality. Measurement products read essential parameters in real time, including pressure, temperature and flow. Online analyzers monitor critical processes to help manage production quality and emissions.

#### Material handling and robotics

ABB motors drive key equipment, and frequency converters deliver precise and dependable motor control while helping to reduce energy consumption. Together, motors and drives increase energy efficiency in fans, pumps, compressors, conveyors, kilns, centrifuges, mixers, extruders, hoists and cranes. Fast, cost-effective crane systems control lifting and handling for shipping and industrial applications. Since 1974, ABB has delivered 250,000 robots for a wide variety of industries.



### Building automation and control

Low-voltage circuit breakers, switches and control products protect people, buildings and equipment from electrical overloads. Line protection products, wiring accessories, enclosures and cable systems control and protect building installations. When integrated with ABB intelligent building automation systems, energy consumption is optimized and controlled through automated adjustment of blinds, lighting, heating, and ventilation.

### Services

ABB services help customers improve the performance of automated systems and equipment. Life-cycle services provide preventive, predictive, and corrective maintenance and continual evolution of installed automation equipment. Consulting services help customers use less energy, ensuring process efficiency and reliability. Full service contracts put ABB in charge of engineering, planning, and managing plant maintenance activities.

### Transportation and shipping

ABB enables fast and efficient electric mobility while minimizing environmental impact. It provides reliable, energy efficient electrical systems for high-speed trains and powerful DC charging technology that can charge electric vehicles and buses at roadside stops. It supplies flexible marine power and propulsion systems for ships and its turbocharging solutions improve gas and diesel engine performance while lowering fuel consumption and NOx emissions.

# New horizons

ABB launched a new set of sustainability objectives towards the end of 2013, covering the Group's development over the next few years. These objectives are part of an overall review, called Sustainability Strategy 2015+, and chart the path we have decided to take to further embed sustainability values and considerations in our business.

The development of our sustainability goals – for the period 2014–2020 – follows extensive internal and external stakeholder consultation designed to identify which sustainability issues are material to the company's future success. Endorsed by executive management, the nine goals reflect the company's levels of ambition and show how ABB can and does contribute to a more sustainable world.

The goals, described in more detail later in this report, fall into four main categories: Innovating and improving resource-efficient products, systems and services that we offer customers; building responsible operations and maintaining responsible relationships with our many different stakeholders; and what we call "right materials" – ensuring the materials we use are sustainable, and reducing waste through better design of product and processes. This report has been laid out accordingly to highlight these four categories.

We believe that ABB Group's focus on the objectives will help us reach our overall goal: to become – and be recognized as – a leading contributor to a more sustainable world. As part of this work, individual targets and key performance indicators are being developed and rolled out in the company. Progress will be reported in the annual Group Sustainability Performance Report in coming years.

## Stakeholder engagement to shape our priorities

How did we reach the conclusions behind the new objectives? By listening to the views of internal and external stakeholders, weighing the different input we received, and working with our business heads on what is practicable and how to move forward.

Building on the results of consultations undertaken in 2010 and 2011, we surveyed 40 internal and external stakeholders to refine which issues are seen as material to our business and what improvements ABB could make in how we report what we do. We updated our materiality matrix, published [elsewhere](#) in this report, on the basis of these consultations.

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## 9 Group-wide sustainability objectives announced for 2014–2020

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This work was complemented by focused consultations within ABB around the sustainability objectives and our overall sustainability ambitions. Among those interviewed were senior managers at Group and regional levels, business leaders in most parts of the world who had varied opinions and different cultural priorities and perspectives, and representatives of key functions such as supply chain, quality, legal and integrity, communications and sustainability.

As well as helping us to prioritize certain areas for improvement, our engagement with stakeholders also demonstrates the value of an "outside-in" perspective of our performance. This is further reinforced by our participation in international organizations like the World Business Council for Sustainable Development and the Global Reporting Initiative, where we also gain valuable insights into changing trends and expectations of business behavior and reporting, which are important to ABB's development.

## Reporting on our performance

In this report, we describe our approaches to governance and our role in society – both of which are central to our ability to carry out successful business. Good governance underpins everything we are seeking to achieve in the company. How we attract and develop people, our efforts to ensure their safety and security, and how we seek to be welcome in the communities where we operate, all determine whether we can continue to operate successfully.

While progress was made in several areas in 2013, our performance on health and safety was not acceptable. The considerable work undertaken in our journey towards a target of zero incidents received a severe setback. Seven people – all of them contractors – died and 69 people were seriously injured during the course of their working activities.

Considerable work is ongoing to strengthen training, improve monitoring of working conditions at customer sites, and to drive line-management responsibility for health and safety.

Turning to our portfolio, resource efficiency is built in to the products, systems and services we develop and deliver to customers, cutting their energy use and emissions. Our products and systems increasingly support the generation and transmission of power from renewable sources, including wind farms and solar installations around the world. More than 50 percent of ABB's revenues are now generated by products and solutions related to renewable energy, energy efficiency and reduced environmental impact.

Within the company, progress was made in several areas identified as sustainability objectives for 2013. Our ongoing campaign to reduce energy consumption resulted in a 3.5 percent year on year improvement. We have also seen a 14 percent reduction in the use of water over the past two years at ABB facilities which implemented water action plans. Our supply chain sustainability program continues to expand, with new countries included in the program, strengthened efforts to build capacity and real improvements in supplier sustainability performance.

Sustainability experts worked with business colleagues in many ways in 2013: with sales teams to present to customers; with business units to carry out social, environmental and security due diligence on potential projects and sites; with suppliers to ensure they meet ABB's required standards; with investors answering a variety of questions, and with our mergers and acquisitions team carrying out due diligence on targeted companies.

In short, we took further tangible steps to ensure that sustainability values and considerations increasingly become part of our daily business. We believe the new sustainability objectives will cement that process in the years to come.

Sustainability objectives 2013

Overview of progress

Status of completion

1. Improve ABB's environmental performance

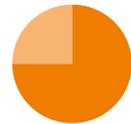
All sites to reduce use of energy by 2.5% annually

- Energy use was reduced by 3.5% for continuing operations.
- More than 180 energy efficiency projects were undertaken, most commonly: switching to energy efficient lighting solutions, implementing or updating heat recuperation from machines and processes, and optimizing heating, ventilation and cooling systems, often using ABB's own technology.



Action plans for improved risk management and performance at facilities in water stressed regions

- 35 facilities developed action plans covering a total of 92 activities, consisting mostly of behavioral and technical solutions.
- The use of water at ABB facilities which introduced water action plans fell by almost 14% from 2011 to 2013.



Develop action plans to reduce the environmental impact of business air travel

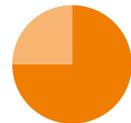
- Emissions from air travel fell by 7.7% year on year.
- Strong increase in number of virtual meetings supported by internal communications campaigns.



2. Provide a healthy, safe, secure and responsible workplace

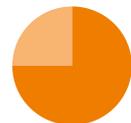
Maintain and improve crisis management, security and human rights capability through training and exercises

- About 500 senior managers in 25 countries were given training to help them ensure the safety and security of employees and contractors in a time of crisis.
- Human rights courses covered about 170 managers in several parts of East Asia and the Middle East. Special training was also provided at a workshop for newly-appointed country managers.



Implement improvement programs through Group and Country consolidated Health Safety and Environment (HSE) plans, training and Business Unit-specific activities

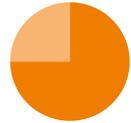
- Further training courses for higher-risk businesses involving use of electricity and working at height driven through businesses and regions.
- Program of safety training and audits across the Service business.
- Workshops on exposure to chemicals, noise, dust, vibration etc.
- Training sessions for travelers to better understand health and safety risks.



**3. Drive sustainability performance in the supply chain**

Improve sustainability performance in the supply chain through the Supplier Sustainability Development Program (SSDP)

- 150 suppliers audited.
- 19 auditors achieved SSDP lead auditor certification by third party – twice as many as in 2012. More than 400 people trained on Supply Chain Management sustainability awareness program.
- 630 suppliers trained in 2013. Other suppliers benefited from receipt of new supplier sustainability handbook.





# Governance

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# Sustainability governance

## Embedding in the day-to-day

ABB's vision is to provide "Power and productivity for a better world." Our technologies help to make the world a better place by contributing to the economic success of our customers, the development of society and the reduction of environmental impact.

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.

Our sustainability strategy is aligned with corporate strategy and is supported by objectives that address ABB's activities and impacts along the value chain. Progress towards our objectives is driven through all levels the business, from Executive Committee endorsement, through operational review and target setting in business units and countries to local training and execution at site, supported by sustainability specialists at Group, country and local level.

### Sustainability Board

Our Sustainability Board, comprising the ABB Executive Committee, oversees sustainability policies and programs, reviews developments and monitors progress towards our targets on an annual basis. Executive Committee Member Jean-Christophe Deslarzes is responsible for the ABB Sustainability Affairs organization. He succeeded Gary Steel who held this position since 2003 and under whose watch many improvements – including ABB's global health and safety program – were initiated.

In 2013, the Sustainability Board reviewed and approved new Group sustainability objectives for 2014–2020. The objectives were developed as a result of extensive consultations about sustainability expectations across our businesses and with a range of external stakeholders. This process and the objectives are described in [more detail](#) later in this report.

### Group sustainability team

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. The team coordinates internal reporting across these disciplines and is responsible for the development of the Group Sustainability Performance Report.

During 2013 we continued our work to enhance career development and to strengthen the capability of our sustainability network. Our comprehensive sustainability competency man-

360+ locations certified to ISO 14001 and OHSAS 18001

agement program, covering the fields of environment, occupational health and safety, security and corporate responsibility, was successfully piloted in several countries and global roll out is scheduled during 2014. We also worked to reinforce the sustainability governance framework at all levels of our business, with the goal to ensure sustainability responsibilities are simple, effective, well understood and embedded in day-to-day business.

### Global sustainability network

A network of sustainability specialists worldwide reports to – and supports – 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, to implement our sustainability objectives and gather the data consolidated in this report. All eight regions where ABB operates have regional 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 900 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 assessments and development), Internal Audit and ABB's bid evaluation committee (customer and project risk assessments).

### Sustainability policies, principles and external initiatives

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.



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.

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

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. We have also taken note of ISO 26000 on Social Responsibility.

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 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, health and safety and quality issues, with more than 350 sites and offices now using integrated systems. Globally, we have achieved external certification for environmental management systems at 360 sites and offices and for health and safety management systems at 362 locations.

### Approach to sustainability reporting

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. Thomas & Betts (T&B), a company acquired in May 2012, is now integrated into this system. Integration of companies acquired during 2013 is continuing and data collection for environmental parameters, health and safety and corporate responsibility will be implemented during 2014.

Data in this report relating to social performance covers 94 percent of ABB employees, whereas data relating to environmental performance was sourced from more than 550 ABB sites and offices, covering 88 percent of employees. The environmental performance of the remaining employees, located in non-manufacturing entities without significant impacts, is covered by estimated data.

We use three online 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 which consolidates inputs from all entities in the respective country.

# Risk management

## Managing different challenges

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

We have implemented a comprehensive top-down and bottom-up approach to Enterprise Risk Management (ERM) and are committed to further develop and improve the process through regular reviews and the incorporation of best in class practices. The process directly involves all ABB Group functions, regions, divisions and the majority of our country organizations and global business units.

The process is designed to support ABB's business needs. Management of the risks that have been identified is clearly material to the company's business success.

The ERM process is supported by a common ABB risk catalogue and training sessions for the participating entities. The number of participating entities increased in 2013 to more than 100 units around the world.

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### 500 senior managers trained in crisis response in 2013

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The common risk catalogue covers a wide range of issues including external, financial, organizational, operational, employee and cultural risks, as well as the legislative environment and topics related to climate change.

Participating entities are expected to organize ERM roundtables where top risks are identified, assessed and reported along with a detailed risk description, the likelihood of such risks occurring, the potential impact on profitability, and mitigation plans. 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 roundtable 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.

#### Training to mitigate risk

As far as sustainability risks are concerned, ABB has made considerable efforts in recent years to strengthen proactive management of areas such as health and safety, environmental and social impacts, human rights and security challenges. Failure to understand and manage such risk can lead to legal consequences, missed opportunities, negative impacts to society and the environment, potential additional costs to the company, and damage to reputation.

To support good risk management, ABB carries out dozens of training sessions each year designed to improve the company's ability to understand and mitigate risks to our people and assets, and to ensure business continuity.

In health and safety, where ABB continues to face significant risks, training continued throughout the company in 2013 to try to ensure that employees and contractors recognize potential dangers and follow the rules in high-risk areas such as working with electricity, working at height and road travel. The training takes many forms and is targeted to meet the specific needs of different cultures, while taking into consideration the maturity of health and safety capability in a given country. Risk-specific training was, for example, carried out in the Power Products division in Russia, Thailand and China in 2013.

Emphasis is also placed upon occupational health. Annual vaccination projects and dietary checks are run for the benefit of employees in a number of countries; there are programs to combat stress at ABB units, particularly in Europe; occupational hygiene workshops were held in 2013 in many parts of South America and Southeast Asia; and wellness opportunities were provided in a number of countries, including the United States, and parts of the Middle East and Asia.

The aims of such programs are clear: to minimize operational risks and improve health and well-being in the workforce.

ABB faces some of its greatest risks to our people and business when we work in hostile environments, and a highly-developed security capability has been built up to support our employees and contractors. Training and processes, as well as providing the right kind of security infrastructure and information, are key to the ability to work in such environments.



In 2013 alone, about 500 senior managers in 25 countries were given training to help them ensure the safety and security of employees and contractors in a time of crisis and the ability of ABB to continue carrying out business.

A global human rights training program, launched in 2010, was extended in 2013 to improve understanding of potential risks in the business of complicity in human rights abuses. Training sessions were held with senior managers in China, several parts of Southeast Asia and the Middle East. A new capacity building program, designed to ensure sustainability professionals can work more effectively in their countries on human rights issues, is being launched in 2014.

As part of our efforts to ensure sustainability risk management is embedded 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.

Our due diligence processes also include core sustainability issues: In 2013, 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.

These are all areas where we will maintain and strengthen focus. We know the ability to identify, mitigate and manage risk in all its forms is vital for our employees and for business success.

# Material issues

## Refining our priorities

We have undertaken considerable work in recent years to understand what internal and external stakeholders expect of ABB's sustainability performance and where they consider that we should focus our strategy and improvement goals.

In 2010/2011, we conducted the widest-ever sustainability stakeholder survey undertaken by ABB. We sought input from nearly 600 people, including senior ABB executives and employees from all parts of the business in different countries, as well as from our customers and external stakeholders specialized in key sustainability areas – the environment, climate change, human rights, health and safety, and security.

We also benchmarked key sustainability focus areas of peer companies and mapped regulatory risks and macro trends to help us establish a comprehensive sustainability issues landscape. We then scored the relevance to stakeholders of the key issues that had been identified and mapped ABB's material sustainability-related issues, as shown in the materiality matrix on page 21.

Most of these issues were already priorities for ABB, namely energy efficiency, climate change, managing environmental impacts, product innovation, health and safety, human rights, sustainability in our supply chain and working in the community. This materiality matrix then shaped the development of our sustainability strategy.

In 2013, we undertook a further review with our stakeholders to update our assessment of material aspects and to seek their views on how best to report on our sustainability strategy, performance and progress.

We engaged a third party to interview a total of 40 stakeholders from four broad categories: ABB employees, investors, customers and sustainability experts. All external interviewees had an existing relationship with ABB and, for continuity, 35 percent of these stakeholders had already participated in the stakeholder survey undertaken in 2011. We aimed for a regional and gender balance, with 12 countries across North America, Europe, Asia and Africa represented and 15 women included among the interviewees.

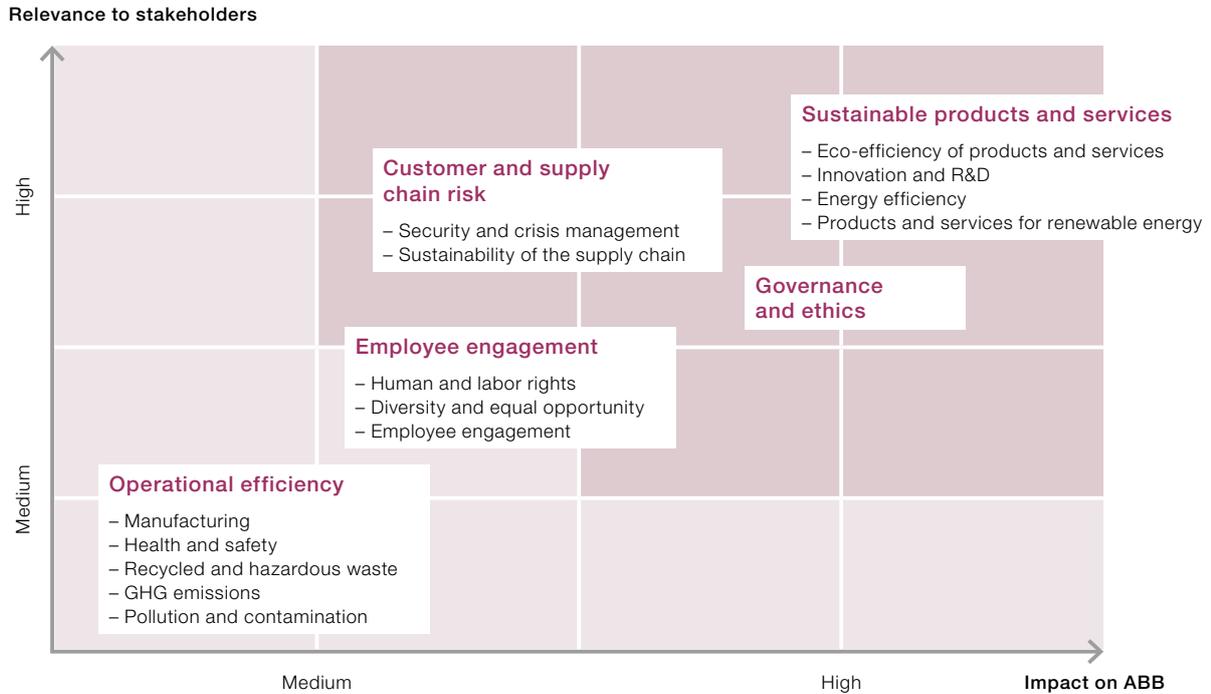
Interviewees were asked to prioritize the material topics identified by ABB as well as any additional topics or trends they believe ABB should address. The results, in the main, confirmed the conclusions from our 2011 consultation. Energy efficiency, governance and integrity, sustainability in the supply chain, health and safety, security, and innovation continue to be considered of high significance for ABB and of high interest to stakeholders.

Other issues showed a broader spread of views. We have placed these issues in the materiality matrix based on further review and validation.

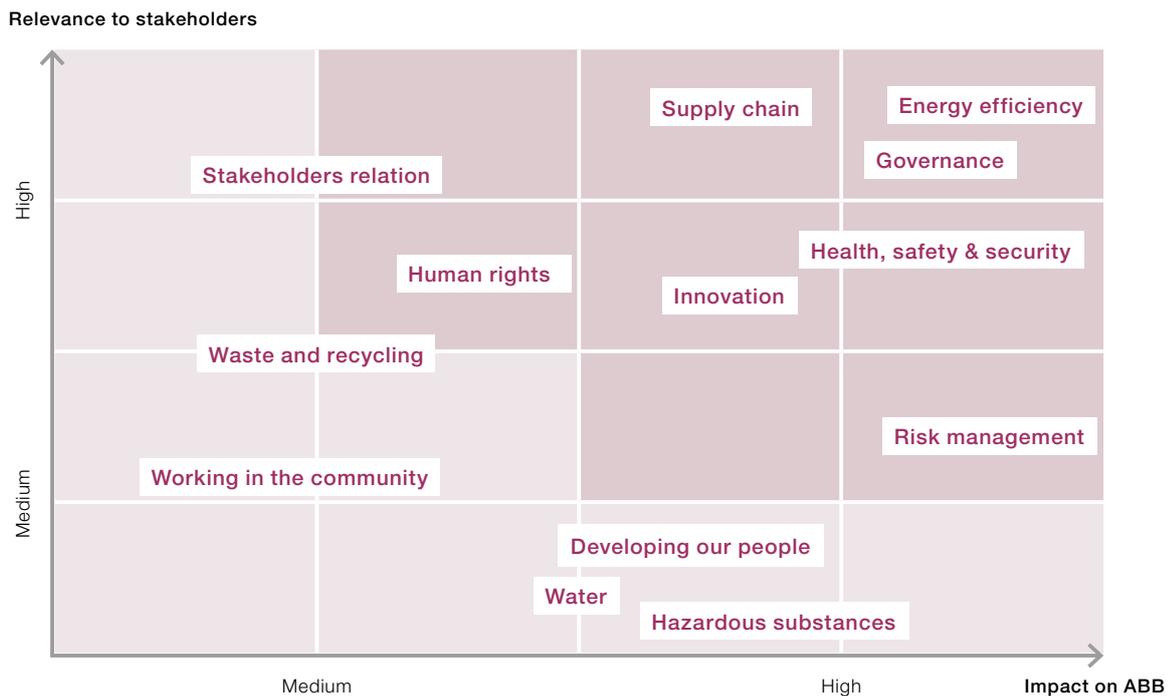
In addition to the material aspects identified by ABB, stakeholders indicated that they expect more detailed information about ABB's energy efficiency solutions for cities, holistic solutions towards decentralized energy, and how ABB is providing access to electricity in rural areas. Other areas of increasing interest are how we create value and measure our impacts in the communities where ABB and our customers operate.

These stakeholder views have helped us to shape our Sustainability Objectives 2014–2020, which in turn have determined the structure and content of this report. We will continue to review these issues with our stakeholders at regular intervals and will use this input to inform our improvement goals and reporting activities.

## 2011 materiality matrix



## 2013 materiality matrix



# Sustainability objectives 2014–2020

## Planning for the future

ABB's new sustainability objectives, designed to guide our improvement efforts through to 2020, are the result of a thorough review of existing programs and challenges, and extensive stakeholder consultation both inside the company and externally.

We analyzed our stakeholders' input regarding issues material to ABB and their expectations of how we could improve performance. As a next step, we worked with external sustainability experts to develop a framework for the content of the objectives and reviewed the challenges we had received from stakeholders on our levels of ambition.

We concluded that the five sustainability focus areas we had selected for 2013 had evolved, and our new objectives should cover a broader range of material issues. These conclusions were then discussed and refined with senior business, region, country and function heads within ABB.

The outcome is a series of nine focused objectives which apply to the whole ABB Group and impact all areas of our value chain.

As part of ongoing work, individual targets and key performance indicators are being developed and rolled out in the company. Progress will be reported in the annual Group Sustainability Performance Report in coming years.

### Products & services

### Responsible relationships

- Integrity
- People and society
- Human rights

### Responsible operations

- Energy efficiency and climate change
- Responsible sourcing
- Safe and secure operations

### Right resources

- Resource efficiency
- Right materials

**Products and services for a**

**better world:** ABB is a world leading supplier of innovative, safe and resource efficient products, systems and services that help customers increase productivity while lowering environmental impact

**Integrity:** ABB has a strong and consistent reputation as a world leader in integrity and ethical business practices

**People and society:** ABB attracts, retains and develops dedicated and skilled people from diverse backgrounds, and engages with a wide range of stakeholders, including communities, to maximize benefits for our business and society

**Human rights:** Human rights issues are well understood and managed in all ABB operations along the value chain

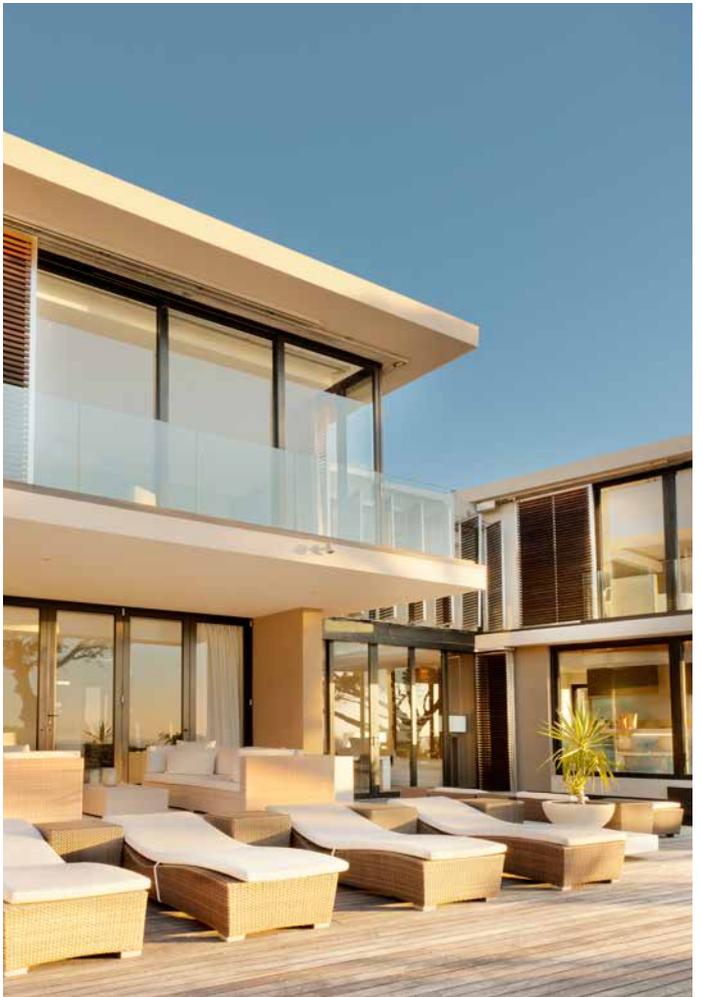
**Energy efficiency and climate change:** ABB is an industry leader in energy efficiency, use of low-carbon fuels and renewable energy. We cut greenhouse gas emissions. ABB to reduce its energy use by 20% by 2020

**Responsible sourcing:** Social and environmental risks and impacts of sourcing practices are well understood and managed

**Safe and secure operations:** Safety is a core value. All ABB operations have an excellent health, safety and security culture embedded in day-to-day business, targeting zero incidents

**Resource efficiency:** Materials and water use is optimized. Facilities in water stressed regions to reduce water use by 25% by 2020. We target zero waste

**Right materials:** We aim for materials that are sustainable. Hazardous substances are used in closed loops or not at all



# Products and services

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Our stakeholders have confirmed to us that resource efficiency, products and systems which strengthen renewable sources of power, and our efforts to limit both customers' and our own environmental footprint, are important issues for them. These issues are also material to ABB's business success. More than 50 percent of ABB's revenues stem from energy efficient products, systems and solutions that we provide to our customers to increase their productivity while lowering environmental impact. Driving innovation in these areas is key to our future success.

# Products and services

## Innovating for a better world

Technology is one of ABB's key differentiators and is crucial to our long-term competitiveness. Through continuous development of our portfolio of products, systems and services, ABB helps our customers improve their operating performance, grid reliability and productivity while saving energy and resources, and lowering environmental impact.

Innovation is at the heart of ABB's growth strategy, and research and development (R&D) is a critical strategic resource for the Group. To support our R&D effort, we maintain seven corporate research centers, employ some 8,000 researchers and developers and collaborate with more than 70 universities across the world. ABB's R&D investments in 2013 totaled \$1.5 billion, representing 3.5 percent of revenues.

These investments bring results. In 2013, ABB filed more patent applications in Europe than any other Swiss-based company, a confirmation of our efforts to serve the market with innovative products and solutions. This was further underlined in 2013 when Thomson Reuters and the MIT Technology Review recognized ABB as one of the world's top innovators.

ABB is also committed to the localization of technology research and we have been increasing our capacity for local research and innovation in growing markets such as China and India, as well as in the United States. In China, for example, we now employ over 2,000 researchers and engineers in 20 cities across the country.

### Helping to shape a better world

ABB has identified mitigation of climate change, renewable energy, energy and resource efficiency and increasing urbanization as key drivers and growth opportunities for our business. About 51 percent of our revenues are already related to products and services in our energy efficiency portfolio that help customers save energy and reduce greenhouse gas emissions.

Our technologies are used along the entire energy value chain from the extraction of primary resources, the liquefaction of natural gas or refinement of petroleum products, to their transformation into electricity and their efficient use in industry, transportation and infrastructure.

**Utilities:** Power plants consume five percent of the electricity they generate. This can be cut by 10 to 30 percent by optimizing operations and auxiliary systems through the use of sophisticated control systems and energy efficient equipment. In transmission and distribution, ABB technologies enable more power to travel over existing networks and reduce power losses.

In the 1950s, ABB pioneered high-voltage direct current (HVDC) technology, enabling the efficient transmission of electricity over large distances. We have now developed the world's first direct current (DC) circuit breaker for HVDC systems, solving a longstanding engineering puzzle and paving the way for a new generation of highly efficient, interconnected and reliable power transmission grids.

.....  
**400 TWh of electric power saved by our installed base of variable-speed drives**  
.....

In addition to efficiency efforts, governments around the world are focusing on reducing CO<sub>2</sub> emissions by increasing the use of renewable energy in the power chain. However, integration of renewable energy into existing grids presents significant challenges: generating sites are often located in remote areas and can depend on intermittent primary energy sources such as wind and sun. ABB's HVDC technology facilitates the efficient, long distance transfer of power from hydro, solar and wind power projects and is a key enabler in a future energy system based on renewables.

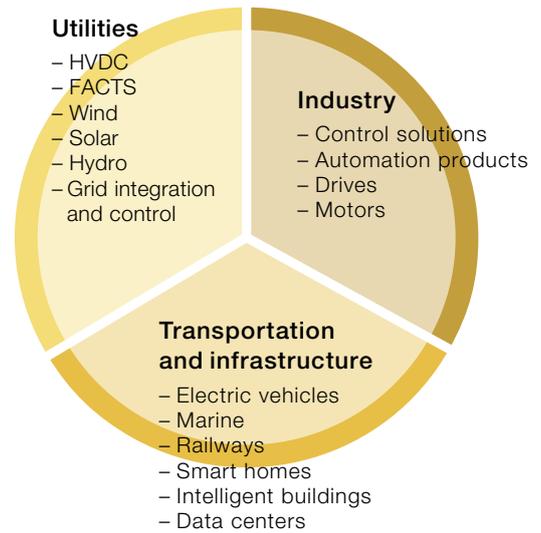
We are also a leading supplier of technology solutions to solar, wind and hydropower customers. ABB has been developing solutions for the hydropower industry for more than 125 years and provides the market's most comprehensive range of power and automation products and systems. With our expertise in power electronics, ABB is also a key player in the solar industry, providing solar inverters, low-voltage and grid connection products as well as PV power plants. We are a leading supplier of electrical products and solutions to the wind power industry.

**Industry:** The industry sector accounts for around one third of the world's energy demand. ABB can improve industrial energy efficiency at facilities ranging from the most energy-intensive process plants to factories engaged in discrete manufacturing. We provide modern control solutions, automation products and electrical equipment.

Motors, used to power fans, pumps and compressors in a wide range of industries, account for an estimated 65 percent of all industrial energy use. ABB's variable-speed drives control the speed of electric motors to match the task in hand, reducing energy consumption by 30 to 50 percent and improving performance.

Our continued development of drives technology has reduced their size and cost, improved reliability and broadened their

## Solutions for a better world



applications. In 2013, ABB's installed base of low-voltage drives saved an estimated 400 terawatt-hours of electric power, the equivalent of more than 100 million households' annual usage in the European Union, and reduced global carbon dioxide emissions by some 340 million tons.

**Transportation and infrastructure:** Urbanization – especially in developing economies – will result in about 1.5 billion more people living in cities over the next 20 years. The challenge will be to support such growth with minimal environmental impact.

An effective way to support these city goals is to use technology to monitor, optimize and control key systems and infrastructure in a more intelligent way. ABB products and solutions are at the heart of a city's critical infrastructure, relied upon for everything from the supply of power, water and heat, to the automation of the buildings we live and work in. We offer smart solutions in the areas of city communication platforms, electricity and water networks, transport, buildings, and district heating and cooling.

The transport sector represents 23 percent of overall global carbon emissions generated by fossil fuel combustion and is expected to grow by approximately 40 percent between 2007 and 2030. ABB technology can help lower energy losses and reduce carbon emissions in transportation on both land and sea.

In electric mobility, ABB is a world leader in DC fast-charging technology, providing a unique multi-standard design that supports all fast-charging standards and protocols. This is critical to maintain compatibility between rapidly evolving cars and chargers in the years to come. In 2013, we won a landmark contract to supply a nationwide fast-charging network for electric vehicles in the Netherlands, having already constructed a similar network in Estonia.

In rail transport, ABB offers solutions for transferring power efficiently from grids to trains and, on board, supplies a range of traction solutions to help public transport operators provide efficient, less carbon-intensive transport.

ABB is a leading solutions provider for electric power and propulsion systems for ships at sea and has introduced DC – instead of alternating current – electrical infrastructure to run propulsion rotors. This enables more efficient variable-speed operation of the main engine generator sets, cutting up to 20 percent in energy and fuel consumption, and reducing emissions. ABB commissioned the world's first application of this high-efficiency innovation in 2013.

### Increasing impact through collaboration

As well as conducting research in our own laboratories, ABB collaborates with over 70 universities and research institutions across the world. Our investments in research initiatives, fellowships and strategic partnerships continue to enhance the ABB portfolio and lead to international and cross-industrial cooperation in almost every ABB business.

We also continue to invest in the ABB Research Grant Program, initiated in 2012 and intended to support promising graduate students and senior researchers working on projects with industrial applications in power and automation. Grants typically range from \$50,000 to \$80,000 per year, initially for one year, but with the goal to continue over multiple years.

### Investing in technology leadership

Additional key components of ABB's innovation strategy are investments around inorganic growth (mergers and acquisitions) and venture capital investment. ABB has executed more than \$10 billion of strategic acquisitions since 2010, and in 2013 we continued to expand our portfolio. The most significant acquisition was solar inverter maker, Power-One, which makes ABB the number two global player in the most intelligent part of the solar photovoltaic value chain.

Our corporate venture capital unit, ABB Technology Ventures, makes early- and growth-stage investments in novel companies introducing new technologies or improvements to existing technologies. The goal is to build technology leadership and drive growth, to both complement and add to the activities of our existing R&D programs. In 2013, we made key investments in renewable energy technologies, including Romo Wind, which improves the performance and energy generation of wind farms, and Scotrenewables, a Scottish tidal turbine company.

ABB's investments, along with recognition by MIT Technology Review and other innovation awards, reaffirm our commitment to innovation and the future success of ABB and our customers. Examples of achievements and innovations announced in 2013 are shown on the following pages.

# Achievements and innovations in 2013



## A world first in low voltage

Low-voltage circuit breakers are ubiquitous, but the new Emax 2 is the only device that can both protect electrical circuits and adapt energy consumption within user specified limits on peak power use. Replacing existing traditional breakers with the Emax 2 breaker has the potential to achieve annual savings of 5.8 million MWh, energy savings that would reduce CO<sub>2</sub> emissions by 4 million tons. Breakers like Emax 2 are deployed where protection and control of large amounts of energy are used in a low-voltage environment such as industrial and commercial buildings, data centers or ships.



## Irish and Welsh grids connected

ABB has connected the power grids of Ireland and Wales with an undersea HVDC transmission link. Currently the highest-rated HVDC Light<sup>®</sup> connection at 500 MW, the link enables cross-border power flow, enhancing grid reliability and facilitating power trading between the two countries. The link also facilitates the integration of renewable energy; as Ireland expands its wind power capacity, it can export surplus electricity to the United Kingdom and can import power when required. Additionally, HVDC Light's "black start" capability can help restore power quickly in the event of an outage, without the aid of external energy sources.



## Wind of change

ABB has designed and tested a new approach to selecting the electrical drivetrains for wind turbines, providing a solution that is compact, lightweight and of the highest efficiency, compared to all other concepts. The drivetrain is the main electrical production system of the turbine and influences the weight, size and maintenance needs of the turbine. Selection of the appropriate drivetrain requires care and must take into account all of the requirements and lifetime costs, including turbine power, grid requirements, availability, material and maintenance costs.



## Switchgear for smarter grids

A new disconnecting circuit breaker with a fiber-optic current sensor (FOCS) simplifies substation design while adding to the intelligence of the device. For many decades, current measurement in high-voltage equipment has relied on often bulky transformers that could weigh up to several tons. These measurement transformers can now be replaced by ABB's FOCS, whose small size allows it to be integrated into primary equipment such as circuit breakers, saving on space and installation costs. The FOCS also saves on material – e.g. aluminum, copper, insulation materials and transformer oil – that are contained in a functionally-equivalent conventional current transformer.

### New electric bus tested in Geneva

With no overhead lines and ultrafast charging times, the bus enables new opportunities for silent, flexible, zero-emission urban mass transportation. The system delivers a 15-second charge at bus stops, providing enough power for the bus to reach the next charging stop, allowing for traffic and detours. The fast-charging technology and the onboard traction equipment used in this project were developed by ABB and optimized for high-frequency bus routes in key urban areas. Thanks to an innovative electrical drive system, energy from the roof-mounted charging equipment can be stored in compact batteries, along with recuperated energy due to vehicle braking, powering both the bus and its auxiliary services, such as interior lighting.



### Greening the microgrid

Faial, one of the Azores islands in the mid-Atlantic ocean, has deployed ABB software that will allow it to meet its goal of generating 75 percent of its electricity from renewable sources by 2018 without destabilizing the network. The microgrid control solution – based on ABB’s Microgrid Plus – controls and monitors all the wind turbines and oil-fired generators on the island, calculates the most economical configuration, ensures balance between supply and demand, maximizes the system’s use of wind power and, crucially, optimizes the generators so that the entire system performs at the peak of its potential.



### An intelligent solution for universities and colleges

ABB has launched a data center infrastructure management (DCIM) solution specifically for academic institutions, to help them reduce data center energy costs while increasing reliability of online services. With the proliferation of online courses and services in higher education, institutions depend increasingly on reliable and affordable management systems for energy-hungry data centers. The DCIM “Education Edition” provides special pricing on deployment for accredited academic institutions, real-time power monitoring for both power and cooling systems and specific reporting to increase visibility of energy savings and forecasting.



### Meeting demand for energy efficiency

New technology for the capture and reuse of regenerative braking energy in trains boosts the energy efficiency of traction systems. Rail vehicles regenerate braking energy through their traction motors. Most of the time, a small portion of this kinetic energy powers onboard loads, while the remaining energy is sent back to the network and reused if a nearby vehicle is accelerating. If this is not possible, the surplus is usually dissipated. With ABB’s Enviline™ Energy Recovery System, this waste can now be minimized and overall energy consumption reduced by 10 to 30 percent – without the need to invest in new rolling stock or network control systems.





# Responsible relationships

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ABB recognizes that business is part of society. How we interact with our stakeholders, both within and outside the company, will help determine our success as a business and determines how welcome we are in the communities where we seek to carry out projects. Our social license to operate – our ability to build sustainable business throughout the value chain – depends on our people acting with integrity and respect towards all our stakeholders. Acting responsibly towards our many stakeholders strengthens our bottom line, builds value and partnerships, and enhances reputation.

# Integrity

## A prerequisite for doing business

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

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.

The Code of Conduct is underpinned by a strong set of internal standards and policies that provide specific guidelines for implementing 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.

A series of anti-trust guidance notes complement these directives. These guidance notes, along with the key elements of our integrity standards and policies, are publicly available on our [website](#).

### Educating and empowering our employees

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

In January 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. By the end of April 2013, a total of 147,000 employees had completed the training, representing approximately 99 percent of all ABB employees worldwide.

99% of employees worldwide received face-to-face integrity training

We also delivered a new face-to-face anti-trust training program for targeted employees from June 2012 until the end of September 2013. More than 25,000 employees were trained on competitive intelligence gathering versus commercially sensitive information exchanges, and nearly 22,000 employees received training related to trade associations.

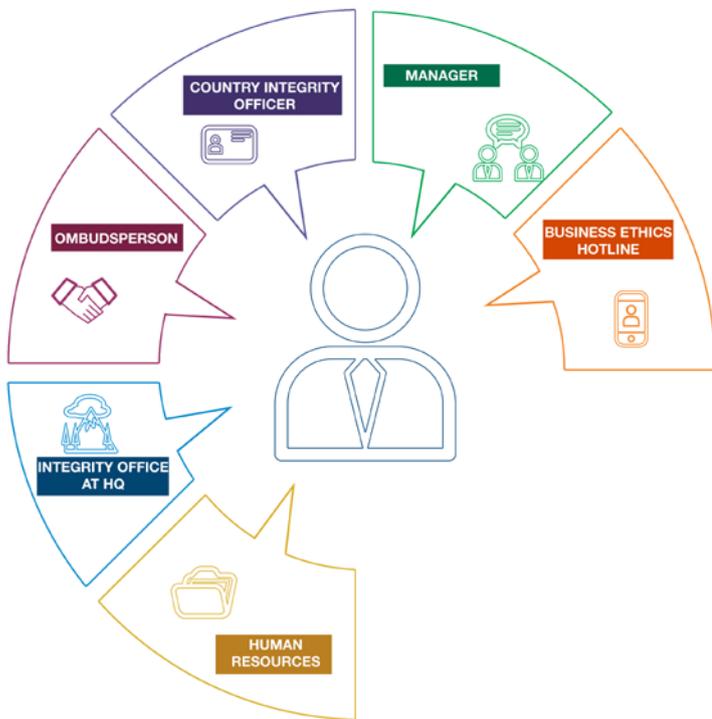
### Prevention and detection

ABB also maintains additional programs to prevent non-compliant behavior and to detect integrity concerns. Anti-bribery reviews of business units and countries are conducted throughout the year by ABB's internal audit department. In these reviews, the auditors review business processes, accounts and balances, and test transactions to assess the robustness of controls and identify possible violations of ABB's anti-bribery procedures.

We also conduct internal surveys to understand employee attitudes, awareness and perceptions of integrity at ABB, and develop enhanced integrity processes to address certain areas with greater compliance risk.



During July 2013 a global Integrity Culture and Risk Survey was conducted by the professional services firm KPMG AG. Over 24,000 employees responded to the survey, which measured integrity on eight dimensions: clarity, role modeling, enabling environment, support of employees for Integrity, transparency, openness to discuss dilemmas, comfort to report misconduct, and enforcement. The outcome confirmed that ABB has a strong ethical culture, that our communication and training efforts have resonated in the organization, and that the vast majority of employees would report if they saw a concern.



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. More details on our reporting channels are available on our [website](#).

ABB also has an Ombuds program as an additional route for integrity reporting. This program was expanded during 2013, with over 75 trained Ombuds persons now available in just over 50 countries. The ABB Ombuds persons are respected, experienced business colleagues who agree to fulfil this additional role to their daily work, and who are available for discussion and to provide confidential guidance.

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.

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.

### External recognition

In March 2013 ABB was named by the Ethisphere Institute, a leading international organization dedicated to best practices in business ethics, to its 2013 list of the world's most ethical companies. ABB was recognized because of its demonstrated leadership in ethical business practices according to the Ethisphere Institute. Ethisphere also awarded ABB with two seals: Compliance Leader Verification and Anti-Corruption Program Verification.

Ethisphere recognizes organizations that have made the decision to proactively invest in compliance, thereby sending a clear signal to key stakeholders that their company takes its commitment to compliance and ethics seriously. Ethisphere's Anti-Corruption Program Verification offers objective, independent verification of a company's anti-corruption program and initiatives, including a comprehensive review of policies, procedures, training, communication, controls, and enforcement. Anti-Corruption Program Verification can only be earned by companies that are able to prove they have designed, implemented, and enforced a robust, best-in-class anti-corruption program that is capable of reasonably detecting and preventing bribery and corruption.



# Our people

## Key to business success

ABB has systematic approaches in place to recruit, engage and develop people who can help us to meet our business needs and customer requirements. Our aim – the key to our business success – is to have the right people in the right places at the right time.

With 150,000 employees worldwide and several thousand on the move at any one time, we need to be sure that we have the appropriate processes to support our employees' performance, behaviors and development, and give the company a competitive advantage in different countries and cultures.

Our approach is to ensure we plan and resource appropriately to meet divisional, global and local business needs; to improve skills and competence in key operational areas; to focus on attracting and retaining dedicated and skilled employees; and to integrate newly acquired companies successfully into the ABB fold. We are also working hard to broaden diversity, recognizing this contributes to our business success.

### Multicultural benefits

ABB is a truly international company with a strong multicultural environment. We are headquartered in Switzerland and have strong historical ties there and in Sweden, but this is a company not tied to a particular country or national identity. Having a multicultural workforce improves our ability to respond to customer demands in different parts of the world, and strengthens the spirit of collaboration and innovation across the Group.

Of the 750 people based at corporate headquarters in Zurich, there are people from 54 countries. It's a diversity – and strength – that is mirrored in many of the 100-plus countries where ABB has business operations.

In 2013, we received online recruitment applications from 318,000 people in 69 countries – a sure sign of our global reach and ability to attract people who want the opportunity to develop and contribute to business success through their core skills.

### Systematic training and development

The level of support, career development and opportunities that our employees enjoy is among the best in the business world. We strive to make sure that they receive the right support to realize their full potential, relying on a mix of structured talent management and learning offerings.

Our programs include:

- A Talent Management process which has been improved and embedded in all regions. Around 89,000 formal personal performance and development assessments were conducted in 76 countries in 2013. 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 – one of the most highly rated globally - in the Swiss city of Lausanne. The Middle Manager and First Line Manager global programs covered a further 380 middle managers and nearly 1,500 first line managers in 2013.
- The three-day Leadership Challenge program, offered to all employees and delivered in 14 languages focuses on taking personal leadership, irrespective of the position or role in the company. Another 5,800 employees completed the course in 2013, bringing the overall total to about 60,000 since it started in 2004.

### Diversity and inclusiveness

A diverse and talented workforce, recruited globally, provides a broader range of qualities and skills that support innovation and help us to meet some of our biggest challenges. Our diversity program, based on a number of local and corporate-level initiatives, is currently focused mainly on gender.

- As part of our efforts to support women at ABB and encourage more women to become engineers, we have partnered with [The Women's Forum](#) since 2012. It brings together leaders from business and government all over the world to share new perspectives on key commercial, political and social questions. ABB's participation raises our profile among female leaders and enables us to contribute to and learn from best practices in other leading businesses.
- We launched the [women's mentoring program](#) in the United States in 2013 to support female employees in becoming more effective leaders by accelerating their learning and development.
- In Sweden, ABB seeks to encourage and [attract female engineers from universities](#) as part of attempts to create a more diverse workforce. Several have taken internships or been hired.
- In India, there are a number of ongoing programs to strengthen the presence of women in executive, functional and factory roles. These include workshops for line managers to strengthen understanding of the business value of diversity and inclusiveness, as well as efforts to increase the number of women in the interview pipeline, and to raise the number of women on the shop floor.

## WEB

We also work on other issues of diversity and inclusiveness. In Australia, for example, ABB joined a three-year Reconciliation Action Plan in 2013 to create social, employment and business opportunities for indigenous Australians.

In the United Arab Emirates, where young Emiratis traditionally join the public sector, we have been encouraging them to join ABB by publicizing our training and the flexible, long-term career opportunities available. We have been able to engage more young Emiratis – people who are well positioned to support the business.

In other countries, diversity efforts also involve integrating people with disabilities into the workforce. A team has been set up at ABB in Italy to improve the employment opportunities for people with disabilities. The emphasis in South Africa is different: all employees receive training to promote greater understanding of disabilities and ways of integrating disabled people into the workforce.

### Mobility supports business success

Employee mobility creates value for ABB, our customers and our people. We encourage interested employees with the right level of experience and knowledge to transfer to projects or locations where they can both contribute to business development and gain further experience.

Nearly 960 people were on long-term international assignments in 2013 – a slight increase on 2012. The most common assignment duration is between one and two years. 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. India, Brazil and China are now among the top ten exporting countries for talent within ABB.

### Attracting young people

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

ABB already has a good reputation in several parts of Europe where engineering students again voted ABB an employer of choice in 2013. Our strong reputation as a technology innovator and a responsible company is attractive but competition for top talent is fierce.

In employer branding research we found that ABB is not as well known among electrical engineering students in some countries as we would like. Internal initiatives have been started, backed by key performance indicators, to achieve the state

of recognition that we would like in the coming years. We have also redesigned the ABB careers portal based on the results of the research, with a better focus on differentiation factors that ABB offers and expects from employees.

One of the ways in which we attract talented graduates is through our two-year global trainee scheme which involves different assignments around the world and across multiple disciplines. A total of 24 global trainees – one third of them women – joined ABB in 2013. They come from 16 countries and have taken on a variety of roles in areas such as information services, finance, human resources and sustainability.

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318,000 online applications  
to join ABB in 2013

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Another way in which 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 holders 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 380 young employees and new recruits went through the global program in 2013.

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 166 mentors and mentees participated in the program in 2013. Mentees benefit from advice and guidance; mentors also learn and appreciate the opportunity to pass on their knowledge and experience.

English is the common language in ABB and, as part of other efforts to improve language skills, ABB offers a Standard English training course free of charge to employees and their family members. About 39,000 people 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 pursue further business opportunities, we know our employees are our greatest asset.

# Stakeholder relations

## Engaging to create business value

Engagement with stakeholders has a clear business value. We learn more about stakeholders' requirements, what we need to prioritize and how we can improve our business and sustainability performance.

In the past year we have seen further evidence that a wide range of stakeholders want to know more about our sustainability performance and are basing their decisions and – in some cases, public ratings of ABB – on the evidence we provide. Customers, for example, increasingly require us to provide information on a raft of issues, ranging from our health and safety record and the resource efficiency of our products through to our sourcing policies and our processes for ensuring compliance with legal frameworks around materials we use in our products.

Other stakeholders, such as some investors, export credit agencies and ratings agencies increasingly ask for evidence that ABB is managing potential social and environmental risks, and factor these issues into their decision-making models. Representatives of civil society and the media are also watching ABB closely, monitoring whether we meet the high standards we have set ourselves.

In 2013, we also carried out two surveys with stakeholders which will have an important bearing on our future and success. Extensive consultations were carried out with both internal and external stakeholders as part of the process of developing new [ABB Group Sustainability Objectives](#), applicable to the entire company, for the years to come. A second survey, which focused on customers and external specialists, increased our understanding of the [materiality](#) of particular sustainability issues to ABB's business ambitions.

### Working with customers and investors

Sustainability experts were integrated into business meetings on numerous occasions in 2013 to support potential business opportunities and answer customer inquiries.

The type of engagement varies considerably: Our energy efficiency experts, for example, met customers at the main fairs and key customer events; health and safety specialists briefed companies in the oil and gas industry on the ways ABB is seeking to improve performance; we briefed government officials on resource efficiency on numerous occasions, including during trade visits; and other specialists provided support on potential business project risks through social and environmental due diligence.

ABB has seen a gradual increase in investor interest in environmental, social and governance (ESG) issues, and how we manage our risks. There were regular sessions during 2013 with investors – mainly socially responsible investors but also some mainstream funds – on a series of issues related to ESG performance.

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## 20 awards for good corporate citizenship worldwide

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### Measuring outcomes

Gauging customers' levels of satisfaction with our performance is central to our overall success. For the fourth consecutive year, ABB employed a customer satisfaction initiative called the "net promoter score" program to measure customer feedback to help us improve our business performance. The results for 2013 show that customers are increasingly satisfied working with us; the number saying they would recommend ABB to a colleague rose to 35 percent in 2013 compared to 29 percent in 2012.

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 to resolve problems quickly and efficiently. This system – the Customer Complaints Resolution Process – also provides valuable pointers for improvement.

### Engagement

The most frequent discussions in 2013 involved customers and suppliers, as well as ABB employees. There were also meetings at a national and corporate level with government representatives, unions, NGOs, media representatives and academics.

Stakeholder engagement on sustainability-related issues takes many forms, and the subject matter is wide:

- In many countries, our engagement with suppliers focuses on improving their performance. This can take the form of [supplier assessments](#), as in Brazil, China, Czech Republic, India and Mexico in 2013 or discussions with suppliers about environmental, health, safety and labor requirements.



- The issue of students leaving college without the skills needed by industrial companies was discussed at an ABB round table in South Africa and resulted in concrete proposals for training schemes.

- Meetings with representatives of different European unions resulted in renewed commitments to support efforts to improve health and safety performance at ABB. A series of meetings with unions in France reviewed contractual issues such as conditions for working abroad, health costs and working hours.
- ABB engages with a number of non-governmental organizations in several countries on individual issues or in partnerships such as rural electrification projects, or by speaking at NGO-organized meetings
- ABB in Finland uses its convening power in Vaasa where we are a major employer to raise core issues. In 2013, ABB organized a top management seminar, attended by 60 CEOs, to review issues related to competitiveness, leadership and the work-life balance. In addition, company managers and key figures from the community meet on an annual basis to discuss the use of land, infrastructure, the employment situation and future perspectives.



ABB is also active in the public policy arena in different regions. We continue to engage in the European Union, for example, for decisive and common political action on energy policy, and other areas of importance to ABB's technology interests, including smart transmission and distribution infrastructure, clean transport and energy efficient industrial processes. These issues are also central to discussions in other countries. In the United States, ABB seeks to help regulators and policy makers understand the benefits of energy efficient technologies, while in China ABB has been supporting government activities on energy conservation and environmental protection in line with the country's 12th Five-Year Plan.

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 gains value by being actively involved in a number of multi-stakeholder organizations, participating in key meetings of the UN Global Compact and the World Business Council for Sustainable Development.

### Awards

In recognition of our social, environmental and community engagement activities, ABB won 20 awards worldwide in 2013. These awards build brand value in the countries where they are awarded, and strengthen employee commitment both to the causes that ABB supports, and to the company as a whole.

The awards include recognition by the Ethisphere Institute, a leading international organization dedicated to best practices in business ethics, which included ABB in its 2013 list of the world's most ethical companies.

ABB's environmental performance was recognized in China where we received three awards, including one from the China Entrepreneur Club which named ABB as one of the top three green companies. In Vietnam, ABB received a National Environment Award for our waste and water management at our Bac Ninh site.

Despite a very difficult year from a safety perspective, our efforts to improve performance in this area led to awards in the United States and the United Arab Emirates. And our contributions to safety in the oil and gas industry in Argentina and to the mining industry in Chile were also recognized.

ABB's work with disadvantaged people was appreciated in several countries. In Germany, for example, ABB received a special award for our commitment to and engagement in the Special Olympics organized each year for people with mental disabilities. In Oman, ABB was recognized for the second year running as one of the top corporate social responsibility practitioners in the Middle East and North Africa.

# Working in the community

## Supporting education and health

ABB has two main focus areas when carrying out community work: supporting education and health. We have about 300 projects worldwide which seek both to help people and to strengthen ABB's place in the community.

Our approach is both global and local. We enter into strategic corporate partnerships with targeted impacts, and also decide at a country level which projects to support based on their likely effectiveness and potential benefits to ABB.

300 community projects  
are supported worldwide by ABB

The schemes are highly varied, ranging from improving the infrastructure of schools, developing students' technical skills and helping disabled people enjoy sports activities, to partnering with international and non-governmental organizations, and supporting disaster relief efforts.

There is a long tradition of community involvement and volunteering at ABB. In 2013, employees and companies donated approximately \$8.5 million and provided nearly 5,000 man-days in volunteering time.

### Contributing to business success

Our community work is part of ABB's business success. We know we can make a difference, and it is good for our business and reputation to be welcome in the areas where we operate. We also know that such initiatives improve our ability to attract and retain talented employees.

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, including our employees, suppliers and customers, as well as the communities around our facilities.

ABB developed and introduced its own assessment tool in 2013 to help measure the impacts and overall value of our investments in community schemes. The results will help us to evaluate the return on investment and achievement of project objectives, and to streamline our efforts towards the projects which provide most benefit for the targeted stakeholders.

### Education



ABB works with students, schools and colleges in a variety of ways. One of the most innovative is in Brazil where young children from impoverished neighborhoods come to ABB factories for additional schooling and preparation for a working life. About 400 of them have taken part so far with impressive results: 75 percent go on to get jobs – some of them at ABB – and about one third of the children qualify to study at university.

Here are some of our projects:

- In Finland and the United States, ABB provides both funding and equipment for colleges and universities in areas where we have operations to support those institutions and attract successful graduates.
- A vocational summer school at ABB in Saudi Arabia which introduces students to the world of work and ABB's standards.
- A long-term scheme near five ABB manufacturing sites in India to re-build and furnish government schools, and provide a mid-day meal scheme for children. More than 4,000 children benefit.
- Volunteers from ABB Sweden take part in a program to teach mathematics to young people out of school hours.
- In Colombia, ABB provides equipment and helps to re-build bathrooms at a school in Bogota for children who have been displaced by violence.

ABB also has a focus on helping disadvantaged students. ABB's Group-level foundation to support talented but disadvantaged engineering students extended its partnership into a ninth country, Indonesia, in 2013, and is set to expand further. Several of the student scholars in the scheme are now pursuing careers at ABB.

## Health

Many of the projects that ABB supports involve helping the less abled. Our projects include:

- ABB in Germany received an award in 2013 in recognition of our long standing support for summer and winter Special Olympics for people with mental disabilities. Similar games are supported in Italy and the United Kingdom.
- In the Czech Republic, employees are given a day off work every year to work on a range of programs, mainly focused on sports such as skiing, for people with mental and physical disabilities.
- ABB employees in many parts of the world support health causes such as cancer trusts with a variety of activities – from fun runs and sponsored golf tournaments in Canada and the US, to sponsored football matches and mountain hikes in the United Kingdom.
- In Egypt, ABB helped to build a water pipe network to a village, ensuring about 500 under-privileged people receive a regular water supply.

## Relief efforts

Partly as a result of our decentralized structure, ABB is able to respond quickly to humanitarian or natural disasters. Most of our efforts in 2013 were concentrated on the Philippines after the devastation caused by Typhoon Haiyan. ABB companies and employees raised about \$500,000 in an operation coordinated by ABB in Southeast Asia.

ABB also responded to a number of other disasters in 2013. ABB joined other organizations in providing support and funds to people whose homes were damaged by floods in Germany and the Czech Republic; contributions were also made to support the victims of natural disasters in Mexico and Vietnam.

At Group level, ABB takes a strategic approach to humanitarian aid through the ongoing partnership with the International Committee of the Red Cross (ICRC). Our annual contribution to the ICRC – ABB Group's largest and longest-running single corporate sponsorship agreement – is used to support access to clean water in areas of humanitarian need in Iraq and the Democratic Republic of Congo.

## Access to electricity

We believe we can make a significant and lasting impact on the social and economic development of communities through our rural electrification program, known as [Access to Electricity](#).

There are three main projects under way, highlighting the value of public-private partnerships. Two of these are in India: a distributed solar solution for desert hamlets in Rajasthan and a solar-power battery charging station in a coastal region of West Bengal. The third project is a diesel-powered mini-grid set up in a remote area of southern Tanzania.

As part of our efforts in Rajasthan, an impact assessment was carried out in 2012 which resulted in replacement batteries being provided where appropriate, and a clearer understanding of which sections of the community were benefiting most from the electricity. This will help to inform the next steps in the project.

All these projects are delivering social progress, with students benefiting from schools staying open after dark, health clinics being able to preserve medication in fridges and remaining open longer, and the positive health impacts of using electricity instead of biomass or kerosene for light in the home. The provision of electricity has also provided a fillip to local employment with some new businesses being started, and shops remaining open for longer periods.

# Human rights

## Work in progress

Stakeholder expectations of a company's responsibility to respect human rights have increased rapidly in recent years, with the UN Guiding Principles on Business and Human Rights, as well as other standards, calling on business to improve performance.

ABB has been working hard to raise awareness among managers of potential human rights risks, embed human rights due diligence in business decision-making processes, and build capacity within the company. It is hard work because of the size and complexity of ABB and the challenges in ensuring coherence of approach in many activities around the world.

We have long understood the materiality of human rights, knowing that violations can have human, legal, financial and reputational consequences – all of which are bad for business and inconsistent with company standards.

ABB carried out a first analysis in the mid-2000s on whether human rights impacts had been taken into account in internal processes. One of the initial steps afterwards was the adoption of the Group Human Rights policy in 2007. We also saw the need to introduce or strengthen human rights due diligence in three key areas – the divisional risk review process which all major project tenders have to go through, supply chain procedures, and the mergers and acquisitions process.

After the UN Guiding Principles on Business and Human Rights were endorsed in 2011, we carried out a further review of the most immediate challenges, focusing mainly on the need to strengthen due diligence. In addition, ABB knows that stakeholders' expectations of business behavior and issues such as access to remedy have been developing rapidly in recent years and can have an impact on a company's social license to operate.

### Training

The Guiding Principles – and what is expected of companies – are a cornerstone of our training programs. A global awareness-raising program, designed for senior managers in our main manufacturing and exporting countries started in 2010 and continued in 2013 in several parts of East Asia and the Middle East. Special training was also provided to newly-appointed country managers. More than 400 managers have so far been trained worldwide in face-to-face sessions.



The training focuses on understanding how ABB can potentially impact human rights, positively and negatively, and highlights issues through company case studies from different countries.

A program of internal capacity building, designed to increase the number of people who are able to advise managers at a local level on business and human rights issues, was initially launched in 2012 and will continue in 2014 in different parts of the world. The training involves study of the legal and normative framework relating to the corporate responsibility to respect human rights, as well as how to identify and avoid risks, based on examples from the business.

### Due diligence

ABB has been working on some of the substantive issues contained in the UN Guiding Principles for several years. 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.

Through due diligence we seek to identify and avoid negative impacts. We also receive regular communications from stakeholders asking about our due diligence and decision-making processes: customers who require us, as a supplier, to detail our processes including those with our own suppliers; export credit agencies, which want to be satisfied ABB has researched potential social and environmental consequences of major infrastructure projects as a condition for financing them; and some investors and ratings agencies are also increasingly asking about the processes behind ABB's social and human rights performance, as well as details of our activities in sensitive countries.

In 2013, due diligence activities covered a wide variety of areas, including projects, the resolution of individual issues, and the improvement of processes.

- Research was carried out for a number of business units on issues such as potential product sales to mining and hydropower projects.
- The ABB Supplier Code of Conduct, which includes human and labor rights requirements, was strengthened, and the Supplier Sustainability Development Program which focuses on environmental and social issues, continues to be extended in different countries.
- Supplier audits revealed two instances of our suppliers retaining identity documents of migrant workers. ABB intervened to ensure employees could get back their documents or, in future, access them when wanted.
- Labor conditions were investigated at a company that was targeted for acquisition. Following its acquisition, two cases of child labor were found at a sub-contractor. Remedial action was taken immediately and no evidence of child labor was found during subsequent un-announced visits to the sub-contractor.
- An NGO expressed concern that ABB might be complicit in the violation of indigenous people's rights by supplying equipment for some dam projects. ABB has taken seriously the concerns expressed and is looking into the issues.

### Access to remedy

ABB is continuing to look at a number of additional issues: the third pillar of the UN Guiding Principles – the issue of access to remedy for victims of human rights abuses; how to embed human rights more effectively in certain business-decision making processes and strengthen coherence, and how to strengthen adherence of security providers to human rights principles.

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400+ managers trained on global awareness-raising program

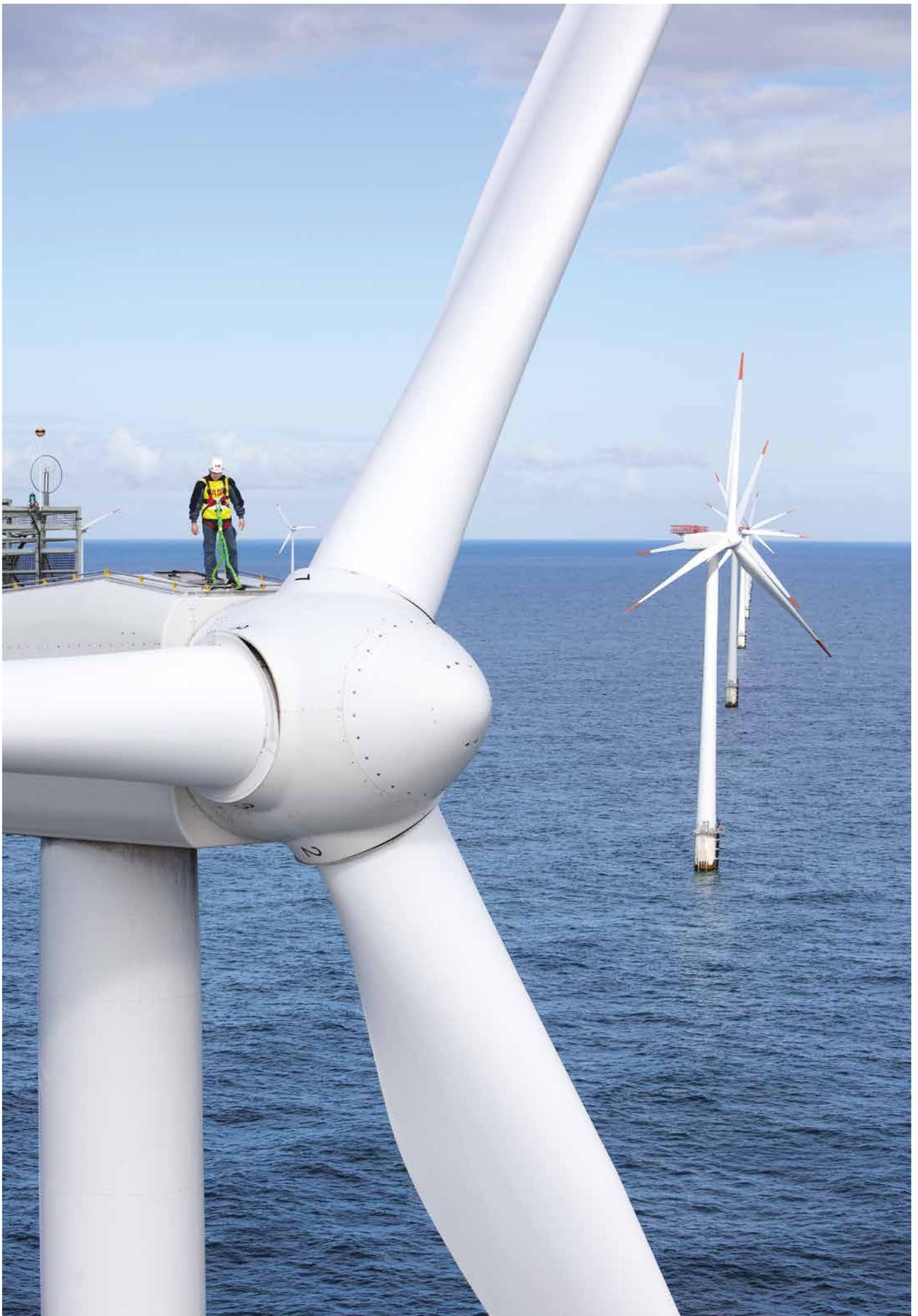
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As far as access to remedy is concerned, ABB has a Business Ethics Hotline, which was introduced in 2006 to provide all ABB employees and stakeholders worldwide with a means to report suspected violations of the ABB Code of Conduct or applicable laws. Contact details are published on ABB's internal and external website.

### Engagement

While we are relatively modest about speaking of our progress, our experts have been involved in international efforts to promote the corporate responsibility to respect human rights. In 2013, our external activities included speaking at a number of international meetings, taking part in podium discussions, and working with university students in Switzerland and Sweden.

ABB works with and supports a number of organizations, including the UN Global Compact and some of its local networks, the Institute for Human Rights and Business, and the Global Business Initiative on Human Rights.



# Responsible operations

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Responsible operations take many forms: our ability to manufacture in a resource efficient way and to limit our carbon footprint is good both for our business and for society. Responsible operations also means ensuring our employees and contractors can work in a safe and secure manner – even in a crisis – and maintain the resilience of our business. The relationship we develop with our suppliers is also crucial. Sourcing is key to our operations, and that partnership depends on our suppliers being committed to the social and environmental standards we set for ourselves and our business partners.

# Energy efficiency, renewable energy and climate

## Improving performance and reducing emissions

Just as we target mitigation of climate change, and energy and resource efficiency for ABB's customers through our product and solution portfolio, we have also been working for many years to manage and reduce the impacts of our own operations. At our plants and offices, and along our value chain, actions to reduce energy consumption and greenhouse gas emissions take many forms.

### Energy efficiency in operations

ABB has a relatively light energy impact within our own operations, but as part of our goal to increase progressively the efficiency of our own operations, we set ourselves the target of reducing energy use by 2.5 percent per employee per year through to the end of 2013. This includes both direct and indirect energy use, for manufacturing processes and to operate buildings. To implement the objective, our most energy-intensive sites were required to undertake energy audits and all sites were required to develop an energy saving program.

For continuing operations – those included in the 2012 energy baseline – we achieved our 2013 objective, reducing our energy consumption per employee by 3.5 percent. However, inclusion of 2013 energy data from Thomas & Betts, a company acquired during 2012, increased our energy intensity result. This is due to the more energy-intensive nature of manufacturing processes undertaken by some of the Thomas & Betts facilities, such as galvanizing and electroplating.

With the release of ABB's new Sustainability Objectives 2014–2020, we continue our commitment to energy efficiency improvement. We now target a 20 percent improvement in energy efficiency by 2020, from a 2013 baseline that includes Thomas & Betts operations.

A wide variety of energy savings projects were implemented across the company to achieve our 2013 result. Most commonly – and cost effectively – facilities implemented energy efficient lighting solutions. Other activities included investigating and enhancing compressed air systems, optimizing heating, ventilation and cooling processes, and implementing or updating heat recuperation from machines and processes, often using our own technology.

For example, our plant at South Boston in the United States, one of our top ten energy intensive facilities, undertook a systematic review of energy consumption, including lighting, motors, fans, pumps, insulation and control processes and technologies. In 2013, it began a step by step improvement plan and is already seeing results. The replacement of over-size DC motors with Baldor AC motors and ABB drives and control systems is saving energy and maintenance costs and

has significantly improved productivity. We expect a payback on the more than \$600,000 investment in less than two years.

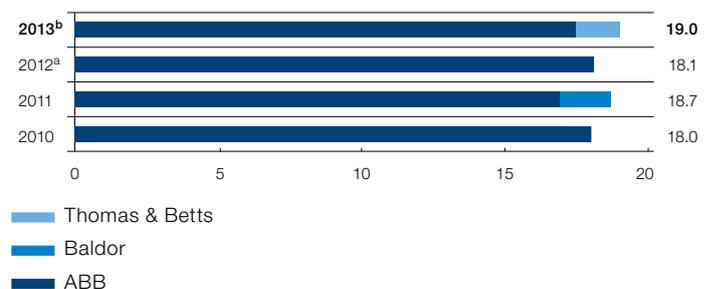
### Building an efficient real estate portfolio

With a portfolio of around 8.8 million square meters of building space worldwide, ABB's corporate real estate management also plays a key role in our energy efficiency performance. The ABB Green Building Policy, introduced in 2008, sets out criteria for all new buildings, including site selection, building design and the choice of materials to optimize resources. It also details policies required for new development, refurbishment, and selection and management of rented space.



As a further step to improve the sustainability of our buildings, ABB is now implementing a focused corporate real estate energy efficiency program across Europe as a precursor to extending the project across the globe. The project is based on the highly successful Green Corporate Real Estate Management (Green CREM) strategy developed by ABB in Germany. Launched in 2007, the Green CREM program has reduced energy consumption in our German real estate by 35,000 MWh and CO<sub>2</sub> emissions by 8,000 tons.

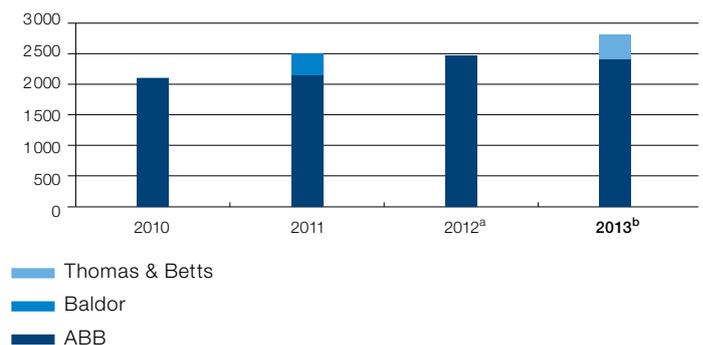
### Megawatt-hours (MWh) per employee



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

<sup>b</sup> Baldor and Thomas & Betts facilities included

### Total energy use (Gigawatt-hours – GWh)



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

<sup>b</sup> Baldor and Thomas & Betts facilities included

### Reducing carbon intensity of energy

As well as working to improve the efficiency of our energy consumption, ABB also seeks to reduce the carbon intensity of our energy sources. Around five percent, or 85 GWh, of ABB's 2013 electricity was purchased as certified "green" electricity, saving more than 18,000 tons of CO<sub>2</sub> emissions.

Additionally, more ABB facilities are installing on-site photovoltaic (PV) power plants to reduce environmental impacts as well as to demonstrate ABB's solar capabilities. PV plants are installed at 21 sites in 16 countries across Asia-Pacific, Latin America and Europe. Although the installations contribute only a small proportion of our global electricity needs, PV plants in Japan, Hungary and Mexico can contribute 50 percent or more of the installation's electricity needs.

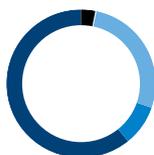
During 2013, ABB in Mexico was awarded the prestigious Mexican International Renewable Energy Congress (MIREC) Award 2012 for excellence in the development of clean energy. The award recognized ABB's leadership in clean energy, demonstrated by the photovoltaic solar field at our San Luis Potosi facility. ABB was the first private company in Mexico to invest in a photovoltaic solar field of utility-type dimensions. The solar field, commissioned in 2012, generates 1.2 megawatts (MW) and prevents annual emissions of around 1,700 tons of CO<sub>2</sub>.

### Greenhouse gas emissions

ABB's direct greenhouse gases (GHG) emissions are mainly from fuel used in our operations, as well as from SF<sub>6</sub> emissions during production processes and gas handling on site. Thanks to product and process re-design, as well on-going programs to improve handling, leak detection and storage, our SF<sub>6</sub> emissions declined by almost 20 percent in our ongoing operations. However, ABB's total direct GHG emissions remained relatively stable from 2012 to 2013, mainly due to the higher proportion of gas used as fuel at Thomas & Betts facilities. ABB's total GHG emissions (direct + indirect) increased slightly from 1.85 million tons in 2012 to 1.87 million tons in 2013.

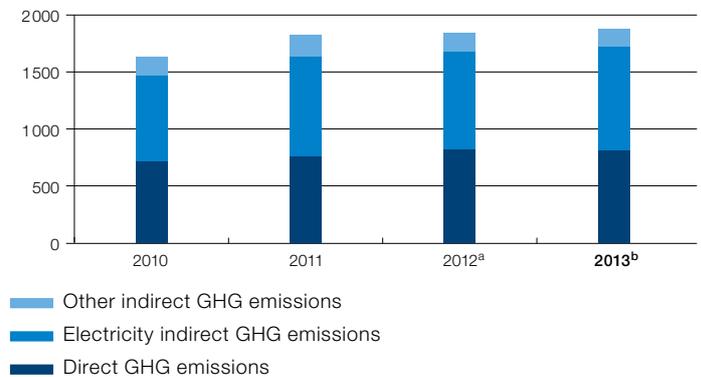
#### Direct and indirect energy use by type for 2013<sup>a</sup> (2012<sup>b</sup>)

- Oil **3.3%** (4%)
- Coal **0.1%** (0%)
- Gas **26.9%** (23%)
- District heat<sup>c</sup> **8.9%** (9%)
- Electricity<sup>c</sup> **60.7%** (65%)



<sup>a</sup> Thomas & Betts facilities included  
<sup>b</sup> Thomas & Betts facilities not included  
<sup>c</sup> Not including losses at utilities

#### Greenhouse gas (GHG) emissions (kilotons CO<sub>2</sub> equivalents)



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

### Logistics and travel

Programs to optimize logistics continued during 2013, resulting in cost savings, improved quality and reduced emissions. The largest program under way is the Transportation Management Center project in China. In the regions of Xiamen, Beijing and Shanghai, transport management for the local business units has been combined into a single operation and team. The regional teams integrate all domestic transportation needs, coordinating vendor, transport management center and factory through a unified operational process. The program will expand in 2014 to include international service from Shanghai and pilot projects at locations in India and Switzerland.

## 3.5% improvement in energy efficiency in 2013

We have also made significant progress with our global packaging optimization project. More than 70 facilities have now systematically reviewed their packaging needs and are assessing the potential to optimize packaging type, size and weight. Improved packaging and loading can increase transport efficiency, thus reducing emissions, cut material consumption, improve ergonomics and provide better product protection.

Greenhouse gas emissions from business air travel decreased by almost eight percent during 2013, not including Thomas & Betts activities. To support both emissions and cost reduction targets, many locations have implemented local improvement goals to replace a certain number of internal, face-to-face meetings with virtual meetings. This has been supported by investment in improved facilities and technologies for virtual meetings.

# Safe and secure operations

## Working to improve outcomes

The health and safety of our employees, contractors, customers and others affected by our activities is a top priority for ABB. We are committed to achieving excellence in Occupational Health and Safety (OHS) and are working to achieve this through both strategic, Group-led programs and business-specific initiatives.

The engagement and participation of people at all levels of our organization is critical to achieving our OHS goal of zero incidents. However, the diversity of our operations in many different locations also presents significant challenges.

Although many processes and best practices have been put in place in recent years to improve OHS performance, and progress has been made, our performance in 2013 was not acceptable. Seven people – all of them contractors – died during the year and 69 people were seriously injured while working for ABB.

The contractor fatalities were a tragic reminder that our safety work is never done. We are reinforcing our efforts to strengthen training in particular business areas, improve monitoring of working conditions at customer sites and ensure appropriate levels of responsibility and accountability within the company. At the same time, we continue with the long-term development and continuous improvement of our existing programs.

### Competence development and OHS behaviors

Requirements for health and safety competence are embedded in ABB's OHS policy and procedures. The ABB OHS functional competency program underpins the policy, providing detailed definitions of the competency levels for all such jobs in ABB.

In 2013, we began an update of the OHS functional competency program – in line with a revised Group approach to competency development – to ensure the program continues to support ABB's business needs and requirements. The site management functional competency model was also updated during the year, strengthening health and safety requirements.

To ensure consistency of approach to health and safety and to reinforce accountability within the company, we have developed an OHS behavior standard. These behaviors represent universal, not job-specific requirements. We started to roll out the standard in 2013, holding workshops in South Africa and the United Arab Emirates to train assessors on how to evaluate baseline behaviors.

Beginning in 2014, all ABB employees will be required to include a health and safety behavioral goal in their annual objectives. The aim is to further embed positive OHS behaviors at all levels and to ensure that formal discussions of these behaviors occur across the company.

### Programs and tools to support our strategy

During 2013, we introduced hazard reporting as a leading indicator throughout the Group to supplement the existing near miss reporting. By reporting and investigating near misses and hazards we are better able to address the risks in our business, understand the related root causes and reduce the chances of more serious incidents.

Business-led OHS programs continued to focus on the particular needs and activities of the different business units (BUs). For example, the Medium Voltage Products BU undertook OHS-specific risks training, running workshops for a total of 90 employees in Russia, China and Thailand. Thomas & Betts continued their integration activities, starting a program to implement OHSAS 18001 management systems at all facilities and training OHS advisors on global incident reporting procedures.

Development of the OHS strategy, standards and competency program for ABB's global Service organization progressed significantly during 2013, driven by a dedicated Group Service OHS Advisor. The Advisor is responsible for aligning Service OHS with ABB Group standards and coordinating activities throughout regional, country and BU service organizations.

In recognition of the value ABB's service customers place on strong OHS performance, we again acknowledged OHS leadership with our internal Global Service Award for Safety. The award-winning team created a learning zone on operational and service safety for service engineers in the United Arab Emirates. The learning zone is based on the findings of Service audits and accident investigations in various ABB business units, and consists of a practical training for service engineers and a standardized service safety kit.

At country level, OHS improvement programs are organized according to formal country OHS strategic plans prepared within our global priorities and framework. The country plans 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.

## Occupational hygiene

Launched in 2012, the Group occupational hygiene program continued to develop during 2013. Regional training workshops for North America, South America and Asia-Pacific helped to build competency in our network of OHS Advisors. The Occupational Doctors Team, comprising eight doctors from all regions, continued to support the network by identifying and communicating good practices and developing a process for managing occupational diseases.

## Injuries, lost days, diseases and fatalities

	2013 <sup>a</sup>	2012 <sup>b</sup>	2011	2010
Employee work-related fatalities	0	1	0	1
Incident rate	0	0.01	0	0.01
Employee work-related serious injuries	40	22	22	15
Incident rate	0.27	0.16	0.18	0.13
Employee business travel fatalities	0	1	0	2
Incident rate	0	0.01	0	0.02
Employee business travel serious injuries	4	0	3	5
Incident rate	0	0	0.02	0.04
Contractor work-related fatalities	7	2	0	2
Contractor work-related serious injuries	29	20	16	16
Contractor business travel fatalities	0	0	0	0
Members of the public fatalities	1	0	0	0
Employee lost days due to industrial incidents <sup>c</sup>	10,591	10,345	9,478	8,362
Employee occupational health diseases	10	10	7	13
Employee total recordable incident rate <sup>c</sup>	10.94	13.04	13.17	13.48
Employee lost time incident rate <sup>c</sup>	4.70	4.80	5.70	6.80

<sup>a</sup> The indicators Employee work-related fatalities, Employee work-related serious injuries and incident rate, Employee lost days due to industrial incidents, Employee total recordable incident rate and Employee lost time incident rate include data from Thomas & Betts, a company acquired by ABB during 2012.

<sup>b</sup> These data do not include incidents from Thomas & Betts, a company acquired by ABB during 2012.

<sup>c</sup> Data includes incidents that happened at workplace (ABB facility, customer site, project site).

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.

## Secure operations

Our concern for the health and safety of our employees and contractors includes their security, particularly in high-risk countries or during crises.

In recent years, ABB has built up a security capability around the world designed to safeguard our people, protect our assets and meet our customers' needs - even in some of the most hostile environments.

Training people to know how to act and react under exceptional circumstances is key. Regular and mandatory security training sessions are held to ensure that teams of people at Group, regional and national level know how to behave in the event of a natural or man-made crisis.

Management teams in countries where ABB has operations and major projects receive crisis training every three years. Complementing these sessions is ongoing training on a wide range of other security tools and processes.

The nature of a crisis varies considerably and includes political unrest, terrorism, crime and natural catastrophes.



ABB experienced a number of crises in 2013. For example, as the political unrest unfolded in Egypt in mid-year, local managers and security specialists implemented established processes to assess rapidly-changing risks and developments, plan for the potential movement or evacuation of people, and review existing security requirements around ABB offices and production sites.

The ability to analyze fast-moving scenarios and, where possible, predict likely events is part of the capability of our corporate security staff. In an increasingly volatile world, such skills are essential to help protect our people and strengthen our business resilience.

# Responsible sourcing

## Learning from experience

ABB currently has thousands of active direct material and project service suppliers all over the world who represent an extension of our own enterprise. These suppliers are expected to follow the same standards as ABB with respect to fair and legal labor conditions, occupational health and safety, environmental responsibility and business ethics. These standards are defined in the ABB Supplier Code of Conduct.

The ABB Supplier Sustainability Development Program (SSDP) helps suppliers to live up to our Supplier Code of Conduct by raising awareness, helping them to comply with sustainability principles and incentivizing them to improve performance continuously. The program also builds our capacity to ensure that appropriate assistance can be provided to suppliers. Together, this moves us towards our goal to provide our customers with a competitive and sustainable supply chain.

We prioritize suppliers to participate in the program according to a risk matrix, which includes criticality of the supplier, country risk, commodity risk based on operations characteristics, and spend volume. The selected suppliers receive training about ABB's global requirements regarding sustainability standards and on practical ways to improve their performance. We then conduct sustainability assessments at the suppliers' premises to identify remaining gaps, and help suppliers to develop improvement plans. After that we assess the timely implementation of these plans. Read more about the program on our [website](#).

### Strengthening processes

In 2013, we worked to strengthen support for our suppliers. The Supplier Code of Conduct was updated to provide more specific requirements around material compliance and procurement practices by our suppliers, as well as a new section to describe the channels through which suppliers can report any misconduct by ABB. We also released a detailed [Supplier Sustainability Implementation Guide](#), providing advice on best practices along with country-level information about relevant laws and standards.

Internally, a dashboard of SSDP key performance indicators was developed, implemented and is regularly updated, allowing performance tracking and analysis across business units, divisions and countries in all levels of our organization. This is helping us to identify geographies, businesses or elements of the program that need extra focus or support.

We also made good progress in rolling out our strengthened supplier pre-qualification process. Through a common platform, each direct material or project supplier must provide basic company information, while critical suppliers must complete a second stage, providing comprehensive informa-

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## 150 supply chain sustainability assessments in 2013

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tion covering finance, compliance, quality, corporate responsibility, environment and health and safety issues. During 2013, roll out commenced in Europe, North Asia, India and the Americas. About 30,000 suppliers are participating in this program worldwide. Full global coverage is scheduled by end of 2014.

### Improving performance

Over the last three years we have trained around 1,800 ABB supply chain and quality experts (408 in 2013) and over 1,800 critical suppliers (630 in 2013). Our internal assessor training program, launched in Mexico in 2012, was extended to China in 2013 where 19 participants achieved third-party certification as supplier sustainability assessors.

Over the course of the year, we conducted 150 supplier sustainability assessments, focusing mainly on Brazil, China, India and Mexico. These assessments, on average, resulted in 14 corrective actions per supplier.

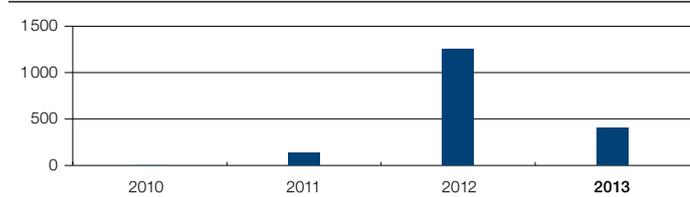
Twelve of the assessments were conducted in the Czech Republic to evaluate ABB's risk exposure with our main Eastern European suppliers. These assessments, however, did not reveal any critical findings and resulted in an average of only three corrective actions. Based on these encouraging results, the Czech Republic will no longer be in the focus of the SSDP moving forward.

Although supplier training programs are resulting in improved supplier performance, assessments continue to reveal situations where ABB's standards are not met. The most frequently identified root cause includes lack of knowledge of applicable labor, health, safety and environmental regulations, which can then result in unsafe working conditions, poor environmental practices and excessive overtime. The 10 most frequently identified non-compliance issues are shown at this [link](#).

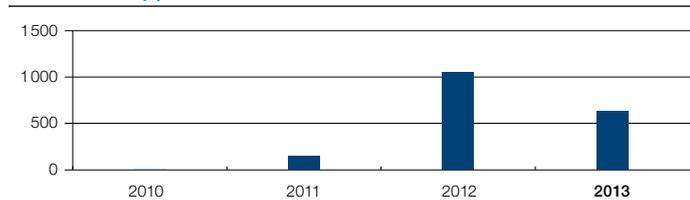
During the year, 14 suppliers were blocked due to unsatisfactory progress with their corrective action plans. One of the four suppliers blocked during 2012 closed their action plan and was allowed to return as an active supplier, bringing the total number of blocked suppliers to 17. We actively monitor global ABB spend with blocked suppliers to ensure that their blocked status is respected across divisions and geographies.

ABB supply chain staff also visited suppliers to our recently-

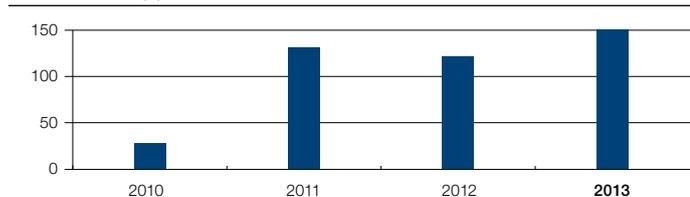
#### Number of ABB employees trained



#### Number of suppliers trained



#### Number of suppliers assessed



acquired companies. At one location, two cases of child labor were detected. Remedial action was taken immediately and no evidence of child labor was found during subsequent unannounced visits.

In addition to the SSDP, ABB's global sustainability network conducts environmental audits of suppliers, as part of our own facilities' ISO 14001 management systems. More than 1,100 documented environmental audits of suppliers were performed during 2013. Overall, 50 percent of more than 2,000 key suppliers are externally certified to ISO 14001 and a further 13 percent have implemented "self-declared" environmental management systems.

#### Challenges and different approaches

Now that the SSDP has been running and evolving for several years, we took the opportunity to review it during 2013 to see what lessons we have learned and what we could further improve.

From an internal perspective, we realized that the program is most effective in countries where there is strong local ownership of training, assessment and continual improvement processes and communication, rather than a strong reliance on the corporate offices. Therefore, we have taken action to strengthen and empower local supply chain sustainability teams, to formalize common Group standards and pro-

cesses that can be applied at local level and to provide common tools to assist in tracking program performance locally. Training programs have been diversified and customized, depending on needs.

We are also aware that some of the issues that surface during supplier assessments cannot simply be fixed by supplier training and improving management processes; they require real partnership between ABB and our suppliers to understand the root causes and it can take time to develop lasting solutions.

One such issue is excessive overtime. We have found that some suppliers consider extended working hours to be normal business practice, a necessity to meet production deadlines. In certain regions, suppliers' employees often rely on overtime pay as a necessary supplement to their normal wages and will move to another employer if their total working hours are reduced.

#### W E B

Through close work with our suppliers, we have found that redesign of work processes and workforce deployment can result in greater process efficiency, improved labor productivity and better allocation of skilled labor, improving business performance and reducing overtime requirements. For example, suppliers in India and Mexico have found that looking at their businesses with fresh eyes can change mindsets and help them to a safer, more equitable and more profitable future.

We are now focusing on preventive actions: engaging and training suppliers on this topic, communicating about the benefits of effective overtime control and also sharing supplier success stories.

#### Moving forward in 2014

The SSDP will continue to expand and develop in 2014. New focus countries, South Africa and Malaysia, will be added to the program, and we will also put a special focus on contractor safety development in Saudi Arabia. The internal SSDP assessor certification program, already operating in Mexico and China, will be launched in Brazil, India and South Africa. Communication of successes and challenges will increase and supplier support materials will be translated into local languages.

Our Supplier Sustainability Development Program is helping us to embed sustainability principles along our value chain. The results are encouraging, with many of our suppliers finding real business benefits in the program while improving their sustainability performance. However, new challenges arise and we will continue work on addressing them.



# Right resources

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What we call “Right resources” covers both complying with regulations as a minimum, as well as our own improvement efforts to cut down on our use of natural resources, and reduce waste and the use of hazardous substances. Both are material to our success and are of significant interest to our stakeholders. Governments and customers are increasingly seeking information on how we source our resources as a condition for continued business; and the more we can reduce our use of natural resources like water and limit the use of hazardous substances in our manufacturing processes, the greater the benefit to our business, employees and society as a whole.

# Resource efficiency

## Reducing impacts

Our stakeholders have confirmed that ABB's operational efficiency – optimizing the use of resources and minimizing waste – is of significant interest to them. Addressing these issues also contributes to our business success by reducing costs and risks, improving the work environment for our employees and helping to maintain our license to operate.

**14%** cut in water use in water-scarce areas since 2011

### Reducing impacts where it's most needed

Although our manufacturing processes do not consume significant amounts of water, ABB is nonetheless committed to reducing our impact on local water resources. In order to better understand the potential impacts, we have employed the World Business Council for Sustainable Development's Global Water Tool to map our water use relative to the renewable water resource availability in the countries and watersheds where we operate.

We have taken this analysis one step further and developed an in-house water tool for mapping and analysis of water flows at our facilities. The tool was rolled out during 2012 in a program targeting our manufacturing facilities in water-scarce and extremely water-scarce watersheds<sup>1</sup>. These facilities, located in 15 countries across five continents, were required to systematically review water flows, analyze water-related opportunities and threats to their operations, and develop water action plans to minimize risks and to leverage opportunities.

**W E B**

The resulting action plans identified a wide range of opportunities to reduce impacts, including both behavioral and technical solutions. The most frequently described actions were the installation of aerators and low flow taps, identification of reuse opportunities for water from cooling systems and domestic uses, as well as awareness-raising and training programs. Many facilities have now installed flow meters to enable measurement of water use at key points and detection of leaks. This more detailed data helps to track performance improvement and to identify further improvement opportunities.

The program is already showing concrete results. Water use at facilities in water-scarce and extremely-scarce watersheds was reduced by 14 percent from 2011 to 2013. This delivers multiple "wins" – reducing water reduces both demand on a precious resource and the use of power to move water to and from our facilities – and it saves us money.

We have now also included Baldor and Thomas & Betts facilities in our mapping of ABB activities by watershed status. A total of 41 ABB sites are located in extremely water-scarce watersheds (of these, 6 are offices only) and 60 sites in water-scarce watersheds (of these, 13 are offices only). However, these sites account for less than 10 percent of ABB's global water withdrawals.

We will continue to monitor and support the implementation and periodic update of the water action plans and track performance via our environmental reporting process. As part of our activities to integrate acquired companies, we will work to introduce the ABB Water Tool and develop improvement plans at the relevant facilities.

### Water in our global operations

Looking at ABB's global operations in 2013, nearly half of our water withdrawals (47 percent) were used for cooling processes, about a third used for domestic purposes such as sanitation, cooking or garden maintenance (32 percent) and the remainder for manufacturing processes (21 percent). None of our extractions caused significant changes to water sources during 2013.

Of those sites that use water for process purposes, more than 30 percent use closed-loop systems. Excluding cooling water returned to the source of extraction, the use of closed-loop processes and the reuse of water in other ways saved approximately 5.9 million tons of water in 2013. Without this recycling and reuse, ABB's water withdrawals would have been more than 50 percent higher.

About half of our water discharge was to public sewers (48 percent), with almost 25 percent of that volume first processed at our own treatment plants. Another 45 percent was discharged to surface or ground water, with 75 percent of that volume pre-treated. The remainder was handled by hazardous waste water treatment companies.

### Waste and recycling

ABB products contain mostly steel, copper, aluminum, oil and plastics. The majority of this material is reclaimable at the end of the product's life and we enhance the ability to recycle by designing products that can be dismantled more easily and by providing users with recycling instructions.

<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.

Consequently, the main waste streams at ABB facilities are metal, oil and plastic, as well as wood and cardboard from packaging materials and paper from office activities. We aim to optimize material use, increase the share of waste that is reused or recycled and reduce the absolute amount of waste sent for final disposal.

Compared with 2012, there was no significant change in the total volume of waste generated at ABB's ongoing operations in 2013, despite increased business volumes and plant refurbishments and consolidation.

Considering all of our businesses, in 2013 ABB sent 81 percent of total waste for recycling, compared with 82 percent in 2012. However, the absolute volume of waste sent for final disposal increased, due to the first-time incorporation of newly acquired businesses in our 2013 results.

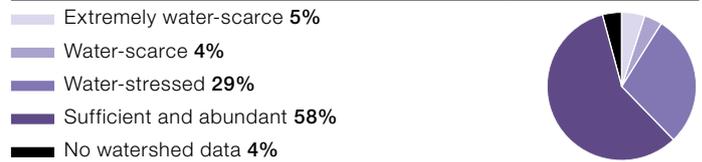
In-house recycling, mainly of packaging materials and thermoplastics, reduced the amount of waste by 3,900 tons. In total, we generated about 12,000 tons of hazardous waste in 2013, but sent almost 40 percent of that amount for recycling rather than disposal.

ABB operations undertake a wide range of waste reduction and recycling initiatives, bringing both environmental and cost benefits for the business. The nature of the improvement activities generally depends on the characteristics of the production processes and the local waste infrastructure. However, common themes emerge.

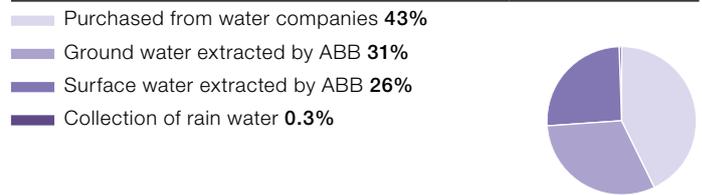
As a first step, many locations focus on awareness building and on ensuring processes are designed to support material efficiency and appropriate waste sorting for recycling. Process improvements can range from changing purchasing practices to encourage the supply of goods in bulk containers, thus reducing packaging waste, to improving inventory management of perishable goods, thus minimizing the disposal of expired materials. These good practices are also being implemented in many of our canteens where the focus is on reducing the supply of water in plastic bottles, better management of food waste and increased recycling.

During 2013, a number of our operations invested in novel processes to reduce or reuse waste. For example, a plant in the Czech Republic created a new type of compression mold to enable production of a component from recycled plastic. Our drives repair business in France implemented a new "biological fountain" to clean the electrical equipment. The new process uses micro-organisms rather than chemicals as cleaning agents, reducing hazardous waste generation by more than four tons in 2013.

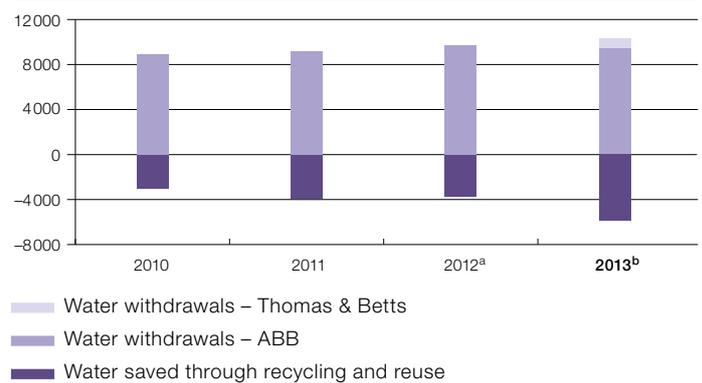
#### Water withdrawal 2013 per watershed status



#### Sources of water withdrawals in 2013



#### Water with drawals and water reused/recycled (kilotons)



<sup>a</sup> Baldor facilities are included; Thomas & Betts not included.  
<sup>b</sup> Baldor and Thomas & Betts facilities included.

#### Waste and recycling (kilotons)



<sup>a</sup> Baldor facilities are included; Thomas & Betts not included.  
<sup>b</sup> Baldor and Thomas & Betts facilities included. New category introduced – "Hazardous waste sorted and sent for recycling". Previously included in "Hazardous waste sent for disposal".

# Right materials

## Promoting responsibility along the value chain

ABB is committed to minimizing our environmental impacts and to ensuring the health, safety and protection of people who come into contact with our products and business. This requires attention to product design and manufacturing processes, as well to our supply chain, to ensure that the materials and components we use and the products we produce comply with our own and our stakeholders' standards.

### Improvement by design

When it comes to product and technology development in any part of the ABB Group, we use a process we call the ABB Gate Model. This decision model defines a series of gates, or decision points, to determine whether or not the project should continue. The intention is to ensure appropriate consideration of all aspects needed to satisfy the project's defined objectives. These include consideration of legal, technical, strategic, manufacturing, customer and other requirements.

Sustainability aspects are built into the Gate Model and include a standardized Life Cycle Assessment (LCA) procedure and a handbook to guide consideration of environmental, and health and safety aspects during design. These aspects include how to:

- reduce the use of hazardous substances,
- assure compliance with relevant laws and regulations,
- avoid environmental and health risks during product manufacturing and operation,
- minimize consumption of resources,
- design for recycling and easy end-of-life treatment.

We have developed support materials such as checklists and training packages for our research technologists to improve understanding and ensure sustainability aspects are incorporated into design.



In 2013, ABB's Corporate Research Center (CRC) in Sweden decided to take this a step further and established an award for "Green Project of the Year". The award was established to increase awareness at the CRC of the breadth of environmental aspects that technologists can influence through product and process design and elicited entries covering a wide range of technologies.

LCA is not only required as part of a product's research and development phase, it is also used in the concept development phase for next generation products. 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](#).

11% reduction in Volatile Organic Compounds (VOC) emissions in 2013

### Reduction of hazardous substances

ABB continues to phase out hazardous substances in products and processes, where technically and economically feasible. We have compiled lists of prohibited and restricted substances to guide this process and update them regularly, in line with international regulations. These lists help our engineers, our suppliers and other partners like OEMs to comply with regulatory requirements, ensure a high level of protection for human health and the environment, and manage risks encountered by chemicals present in various products.

Our suppliers are requested to comply with these regulations, which are also part of ABB's Global Terms and Conditions and Supplier Code of Conduct. We have developed a [Guide for Suppliers to the ABB List of Prohibited and Restricted Substances](#) to support our suppliers to understand and implement the ABB List and to provide guidance on our suppliers' obligations.

ABB facilities are required to ensure compliance with the ABB List and to work to phase out hazardous substances in their processes and products. These programs are showing results, with significant reductions in the use of substances such as phthalates, used as a softener in PVC, and almost complete elimination of organic lead in polymers. Other activities are targeting, for example, elimination of solder containing lead and the substitution of various chemicals used in metal cleaning processes.

With the integration of our recent acquisitions, Baldor Electric Company and Thomas & Betts, we are seeing changes in the profiles of hazardous substances used on sites and in products due to different processes and product ranges. In particular, we have seen an increase in lead and cadmium in batteries delivered to customers and in polybrominated flame retardants used in polymers. We are working together to ensure implementation of the ABB List and to develop improvement programs.

Alongside plant-specific schemes, global Business Unit (BU) focus programs continue. The most extensive of these programs is an initiative to reduce Volatile Organic Compounds (VOCs) in the Transformers BU of our Power Products division. The goal of the initiative is to reduce the solvent emissions from painting across the complete manufacturing spectrum of the BU.



The program involves 62 factories in 27 countries and targets the reduction of VOC emissions by almost 300 tons, equivalent to the yearly VOC emission of 25,000 cars. Besides reducing emissions, this program has helped standardize paint operations and improve paint quality – benefits for our customers, our business and the environment.

### Promoting material compliance

Stricter legal frameworks have been put in place worldwide, which means ABB is required to monitor the source of certain minerals more closely, as well as to phase out the use of hazardous substances in our products and processes.

ABB is aware of and concerned by the conflicts occurring in the Democratic Republic of the Congo. We are actively working to identify which products and material from suppliers may contain conflict minerals and are engaging with our customers regarding their disclosure obligations.

Like many other companies tracing conflict minerals, it will take time for a company of our size and complexity to collect the information needed for us to fully understand our use of conflict minerals and therefore be able to address related customer concerns.

### Use of hazardous substances (tons)

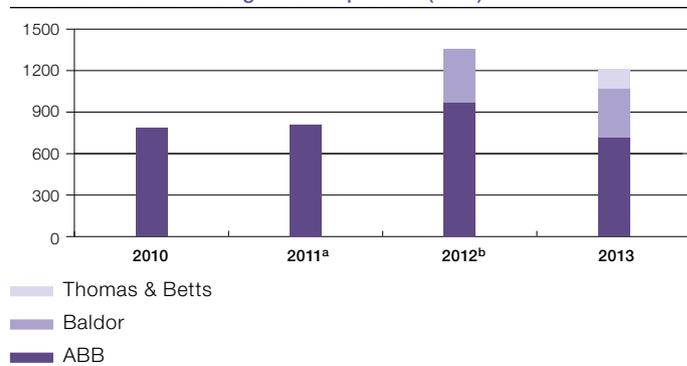
	2013 <sup>a</sup>	2012 <sup>b</sup>	2011 <sup>c</sup>
Phthalates – softener for PVC	21	28	47
PBB and PBDE – flame retardants	2.9	~0	~0
Lead in submarine cables	7,236	5,633	5,725
Organic lead in polymers	0.6	0.9	1.3
Lead in other products, e.g. backup batteries and counter-weights in robots	2,601	363	227
Cadmium in industrial batteries delivered to customers	4.4	5.6	1.6
Cadmium in rechargeable batteries	67.6	6.3	10
Cadmium in lead alloy and other uses	5.7	4.5	4.3
Mercury in products delivered to customers	0.012	0.011	0.030
SF <sub>6</sub> insulation gas (inflow to ABB)	1,438	1,139	1,052
SF <sub>6</sub> insulation gas (outflow from ABB)	1,425	1,118	1,040

<sup>a</sup> Baldor and Thomas & Betts facilities included

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

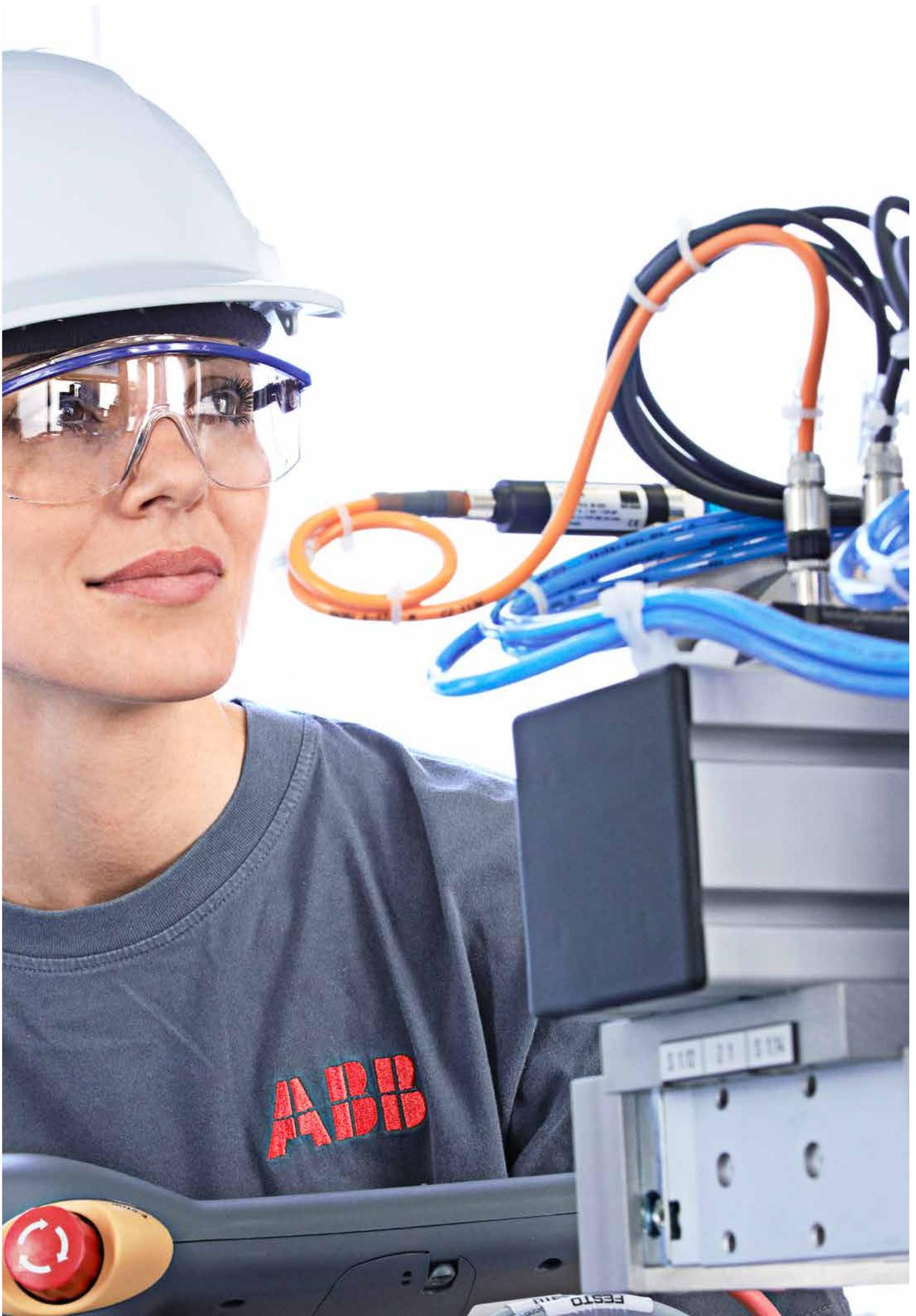
<sup>c</sup> Baldor facilities not included

### Emissions of volatile organic compounds (tons)



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

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



# Performance summary

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We report our sustainability performance annually, with our reporting period encompassing a calendar year. In this report, we include for the first time sustainability performance data for Thomas & Betts, a company acquired during 2012. ABB completed a number of strategic acquisitions during 2013, the most significant of which was solar inverter maker, Power-One. Other acquisitions included Newron (building automation), ELBI Elektrik (low-voltage products), Los Gatos (measurement products) and Dynamotive (service for drives and motors). Sustainability reporting for these entities will be included in our 2014 report. There were no significant changes during 2013 in the scope, boundary or measurement methods applied in the report.

## INDEPENDENT VERIFICATION OF MAIN PERFORMANCE INDICATORS 2013

### Scope and method of work

DNV GL 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 data boundary for the verification was ABB's employees and global operations as specified by ABB in their 2013 group sustainability report.

The verification is limited to the numerical values presented on pages 59–62 in the pdf version and in the interactive version on internet presented at [this link](#). The verification was conducted in January and February 2014.

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 aggregated numerical values of the environmental indicators, DNV GL carried out telephone interviews with Local Sustainability Officers (LSO). Totally, 24 out of 407 LSOs were interviewed. This included a substantial number of Thomas & Betts sites acquired in 2012.

To verify the process for collecting information for the social indicators DNV GL carried out telephone interviews with Country Sustainability Controllers (CSC) and Country Occupational Health and Safety Advisors (COHSA) from five out of the 62 countries covered by CSC reporting. DNV GL 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 GL

- 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 & COHSA: Australia, Chile, Germany, India, Vietnam  
LSO: Brazil, Canada, China, Finland, Hungary, Indonesia, Italy, Mexico, Norway, Pakistan, Peru, Saudi Arabia, Spain, Switzerland, Thailand, Turkey, UAE, UK, USA

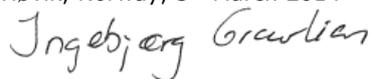
### Conclusions

It is the opinion of DNV GL that ABB has a well-established web-based internal reporting system. However, DNV GL observed that at site level there appear to be some cultural differences with respect to reporting of minor OHS incidents, which in one case indicated underreporting of Lost Time Incidents.

Some minor reporting inconsistencies in the reported data were discovered and highlighted to ABB. Identified errors were corrected, and the Table that is presented in this review includes the updated numbers.

Based on the findings, DNV GL considers the numbers published in the Table to be reasonably fair and accurate.

Høvik, Norway, 3<sup>rd</sup> March 2014



Ingebjørg Gravlien  
Project manager  
DNV GL

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

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

GRI ref.	Indicator description	2013	2012	2011
<b>Environmental</b>				
<b>EN1</b>	<b>Materials</b>			
	Phthalates (tons)	21	28	47
	Brominated flame retardants (tons)	2.9	~0	~0
	Lead in submarine cables (tons)	7,236	5,633	5,725
	Organic lead in polymers (tons)	0.6	0.9	1.3
	Lead in other products (tons), e.g. backup batteries and counterweights in robots	2,601	363	227
	Cadmium in industrial batteries (tons)	4.4	5.6	1.6
	Cadmium in rechargeable batteries (tons)	67.6	6.3	10
	Cadmium in lead alloy and other uses (tons)	5.7	4.5	4.3
	Mercury in products (tons)	0.012	0.011	0.030
	SF <sub>6</sub> insulation gas (inflow to ABB facilities) (tons)	1,438	1,139	1,052
	SF <sub>6</sub> insulation gas (outflow to customers) (tons)	1,425	1,118	1,040
	No. of transformers with PCB oil in ABB facilities	1	1	2
	No. of capacitors with PCB oil in ABB facilities	60	32	0
	Mercury in instruments in ABB facilities (tons)	0.371	0.203	0.263
<b>EN3</b>	<b>Direct energy consumption (Gigawatt-hours – GWh)</b>			
	Oil (11.63 MWh/ton)	94	93	92
	Coal (7.56 MWh/ton)	4	0	0
	Gas	754	556	417
	<b>Total direct energy used</b>	<b>852</b>	<b>649</b>	<b>509</b>
<b>EN4</b>	<b>Indirect energy consumption (Gigawatt-hours – GWh)</b>			
	District heat consumption	251	219	195
	District heat: Losses at utilities	38	33	29
	Electricity consumption	1,705	1,599	1,447
	Electricity: Losses at utilities	2,355	2,208	1,999
	<b>Total indirect energy used</b>	<b>4,349</b>	<b>4,058</b>	<b>3,670</b>
	Megawatt-hours (MWh) per employee	19.0	18.1	16.9
<b>EN8</b>	<b>Water withdrawal (kilotons)</b>			
	Purchased from water companies	4,400	3,900	3,400
	Groundwater extracted by ABB	3,200	3,000	3,200
	Surface water extracted by ABB	2,700	2,800	2,600
	<b>Total water withdrawal</b>	<b>10,300</b>	<b>9,700</b>	<b>9,200</b>

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

GRI ref.	Indicator description	2013	2012	2011
<b>EN16</b>	<b>Greenhouse gas emissions (kilotons CO<sub>2</sub> equivalent)</b>			
	<b>Scope 1</b>			
	Energy	179	137	109
	SF <sub>6</sub> (in CO <sub>2</sub> equivalents)	280	332	263
	<b>Scope 2</b>			
	District heat consumption	55	48	43
	District heat: Losses at utilities	8	7	7
	Electricity consumption	357	337	309
	Electricity: Losses at utilities	493	465	427
	<b>Scope 3</b>			
	Air travel <sup>(2)(3)</sup>	152	171	185
<b>EN19</b>	<b>Emissions of volatile organic compounds (tons)</b>			
	Volatile organic compounds (VOC)	1,210	1,355	810
	Chlorinated volatile organic compounds (VOC-Cl)	20	12	13
<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	3	0	0
	SO <sub>x</sub> from burning oil	69	69	68
	NO <sub>x</sub> from burning coal	2	0	0
	NO <sub>x</sub> from burning oil	52	52	51
	NO <sub>x</sub> from burning gas	163	120	90
<b>EN22</b>	<b>Waste (kilotons)</b>			
	Scrap metal recycled	185	150	97
	Other waste recycled	52	41	39
	General waste sent for disposal	50	43	45
	Hazardous waste	14	12	9
<b>EN23</b>	<b>Significant spills</b>			
	Total number of significant spills	20	11	9

<sup>(2)</sup> 2013 data for air travel do not include Thomas & Betts.

<sup>(3)</sup> 2013 data for air travel are calculated using the emission factors published by UK Department of Environment, Food and Rural Affairs (DEFRA in its "2012 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. Data from 2012 and 2011 were calculated emissions factors provided by DEFRA in its 2009 Guidelines. Use of the 2012 factors gives a slightly lower total. For comparison, ABB's air travel emissions for 2012 calculated using the 2012 emission factors = 165 kton CO<sub>2</sub> equivalent.

GRI ref.	Indicator description	2013		2012		2011	
<b>Social</b>							
<b>LA1</b>	<b>Employment</b>						
	Total workforce by region (ABB employees)						
	Europe	65,000		64,000		60,300	
	The Americas	34,400		34,400		25,900	
	Asia	39,400		38,300		37,400	
	Middle East and Africa	8,900		9,400		10,000	
	<b>Total</b>	<b>147,700</b>		<b>146,100</b>		<b>133,600</b>	
	Total numbers of part-time employees included above						
	Europe	2,832	4%	2,835	5%	2,924	5%
	The Americas	330	1%	169	1%	108	<1%
	Asia	1,311	4%	1,391	4%	106	<1%
	Middle East and Africa	186	3%	4	<1%	1	<1%
	<b>Total</b>	<b>4,659</b>	<b>3%</b>	<b>4,399</b>	<b>3%</b>	<b>3,139</b>	<b>3%</b>
<b>LA2</b>	<b>Employee turnover</b>						
	Turnover of all employees, including part-time						
	Europe	5,387	9%	5,083	8%	5,712	10%
	The Americas	4,760	14%	3,689	14%	2,823	15%
	Asia	4,681	13%	4,149	12%	4,615	13%
	Middle East and Africa	853	14%	911	15%	854	14%
	<b>Total turnover for whole Group</b>	<b>15,681</b>	<b>11%</b>	<b>13,832</b>	<b>11%</b>	<b>14,004</b>	<b>12%</b>
	Turnover of all female employees, including part-time						
	Europe	1,217	2%	1,218	2%	1,364	2%
	The Americas	1,026	3%	676	3%	531	3%
	Asia	1,261	3%	1,023	3%	1,086	3%
	Middle East and Africa	97	2%	70	1%	184	3%
	<b>Total turnover for whole Group</b>	<b>3,601</b>	<b>3%</b>	<b>2,987</b>	<b>2%</b>	<b>3,165</b>	<b>3%</b>
<b>LA7</b>	<b>Occupational health and safety</b>						
	Fatalities, injuries, lost days, diseases						
	Employee work-related fatalities	0		1		0	
	Incident rate	0		0.01		0	
	Employee work-related serious injuries	40		22		22	
	Incident rate	0.27		0.16		0.18	
	Employee commuting/business travel fatalities	0		1		0	
	Incident rate	0		0.01		0	
	Employee commuting/business travel serious injuries	4		0		3	
	Incident rate	0		0		0.02	
	Contractor work-related fatalities	7		2		0	
	Contractor work-related serious injuries	29		20		16	
	Contractor business travel fatalities	0		0		0	
	Members of the public fatalities	1		0		0	
	Employee working days lost due to industrial incidents	10,591		10,345		9,478	
	Employee occupational health diseases (number of cases)	10		10		7	
	Employee total recordable incident rate	10.94		13.04		13.17	
	Employee lost time incident rate	4.70		4.80		5.70	

GRI ref.	Indicator description	2013	2012	2011
<b>HR4</b>	<b>Non-discrimination</b>			
	Total number of incidents of discrimination	1	2	5
	Total number of incidents of harassment	10	13	32
<b>SO6</b>	<b>Public policy</b>			
	Financial and in-kind political contributions	0	\$30,000	\$500
<b>LA10</b>	<b>Training and education</b>			
	Training per year per employee (average hours)			
	Brazil	25	27	25
	Canada	18	22	21
	China	27	31	34
	Finland	18	14	13
	Germany	16	16	16
	India	12	18	5
	Italy	19	16	17
	Sweden	12	12	12
	Switzerland	20	19	17
	USA	28	24	25
<b>LA13</b>	<b>Diversity and equal opportunity</b>			
	Women in senior management (percentage)			
	Brazil	15%	16%	7%
	Canada	15%	15%	17%
	China	28%	27%	25%
	Finland	17%	16%	15%
	Germany	7%	7%	7%
	India	2%	2%	2%
	Italy	8%	7%	7%
	Sweden	25%	24%	22%
	Switzerland	8%	7%	7%
	USA	15%	15%	16%

# Other GRI indicators

## Environment

Environmental performance data for 2013 was sourced from more than 550 ABB sites and offices, covering 88 percent of employees. The environmental performance of the remaining employees, located in non-manufacturing entities without significant impacts, is covered by estimated data for energy, water and waste parameters.

The estimation factors used for 2013 are as follows:

	Unit	Factor
Electricity consumption	MWh/employee	3.1
District heat consumption	MWh/employee	1.7
Gas consumption	MWh/employee	5.1
Water purchased from utilities	tons/employee	14.4
General waste sent for disposal	tons/employee	0.11
General waste sent for recycling	tons/employee	0.04

## EN11 and EN12 – activities in areas of high biodiversity value

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.

## EN16, EN17 Greenhouse gas emissions

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

## EN29 Significant environmental impacts of transportation

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

	2013 <sup>b</sup>	2012 <sup>a</sup>	2011 <sup>a</sup>	2010
<b>Scope 1</b>				
CO <sub>2</sub> from use of energy	179	137	144	117
SF <sub>6</sub>	280	332	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	55	48	43	49
District heat: Losses at utilities	8	7	7	8
Electricity consumption	357	337	348	293
Electricity: Losses at utilities	493	465	480	405
<b>Scope 3</b>				
Air travel <sup>d,e</sup>	152	171	185	160

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

<sup>b</sup> Baldor and Thomas & Betts facilities included

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

<sup>d</sup> 2013 data for air travel do not include Thomas & Betts

<sup>e</sup> 2013 data for air travel are calculated using the emission factors published by UK Department of Environment, Food and Rural Affairs (DEFRA) in its 2012 Guidelines to DEFRA/DECC's GHG Conversion Factors for Company Reporting. Data from 2012 and 2011 were calculated according to emissions factors provided by DEFRA in its 2009 Guidelines. Use of the 2012 factors gives a slightly lower total. For comparison, ABB's air travel emissions for 2012 were calculated using the 2012 emission factors = 165 kton CO<sub>2</sub> equivalent

## EN19 Emissions of Volatile Organic Compounds (tons)

	2013 <sup>c</sup>	2012 <sup>b</sup>	2011 <sup>a</sup>	2010
Volatile Organic Compounds (VOC)	1,210	1,355	810	786
Chlorinated Volatile Organic Compounds (VOC-Cl)	20	12	13	11

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

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

<sup>c</sup> Baldor and Thomas & Betts facilities 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>)

	2013 <sup>c</sup>	2012 <sup>b</sup>	2011 <sup>a</sup>	2010
SO <sub>x</sub> from burning coal	3	0	0	0
SO <sub>x</sub> from burning oil	69	69	68	84
NO <sub>x</sub> from burning coal	2	0	0	0
NO <sub>x</sub> from burning oil	52	52	51	63
NO <sub>x</sub> from burning gas	163	120	90	92

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

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

<sup>c</sup> Baldor and Thomas & Betts facilities included

These figures are for fossil fuels consumed in ABB premises for heating and process purposes. The significant increases in NO<sub>x</sub> from burning gas are due to the inclusion of Baldor facilities in 2012 and of Thomas & Betts facilities in 2013. Many of these facilities use higher quantities of gas than the existing ABB facilities.

## EN23 Numbers of significant spills

## EN28 Significant fines for non-compliance

Number of incidents	2013 <sup>c</sup>	2012 <sup>b</sup>	2011 <sup>a</sup>	2010
Oil spills	13	6	5	4
Chemical spills	0	0	0	0
Emissions to air	3	5	4	0
Others	4	0	0	3

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

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

<sup>c</sup> Baldor and Thomas & Betts facilities included

The emissions to air involved the accidental release of SF<sub>6</sub> gas in one incident, the release of HCFC-22 from an air conditioning system and a permit exceedance on the emission of toluene. The oil spills were contained and adequate decontamination procedures were implemented to prevent any permanent contamination of soil and water. Other incidents were related to exceedances on stormwater contaminants. 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. None of the incidents re-

sulted in significant environmental impact. Combined costs of remediation and corrective actions were approximately \$260,000.

During 2013, three facilities received fines from environmental authorities – two related to hazardous waste and one related to a permit exceedance on waste water. In total the fines amounted to approximately \$8,400.

## Human rights

### 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 10 substantiated cases of harassment and one of discrimination in 2013, 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 2013 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. Two cases of child labor were found at a sub-contractor of a newly-acquired company. Remedial action was taken immediately and no evidence of child labor was found during subsequent unannounced visits to the sub-contractor.

### 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.

### 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 2013.

### 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).

## Labor practices

### 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.

### LA4 Employees covered by collective bargaining agreements

The proportion of our employees that are represented by labor unions or are the subject of collective bargaining agreements varies based on the labor practices of each country in which we operate. 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.

#### **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.

#### **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.

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.

#### **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, 2013, ABB's Board of Directors had eight members – seven men and one woman – of seven nationalities, whereas the Group Executive Committee had 11 members, including one woman, of eight nationalities. In addition, of the 750-strong workforce based at the company's headquarters in Zurich, there are people from 54 countries.

#### **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**

Just over 2,600 employees took parental leave in 2013, two-thirds of whom were women. Following completion of parental leave, 84 employees – around 3 percent – did not return to work. Women accounted for 95 percent of those not returning.

### **Society**

#### **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 99 percent of all employees received training on anti-corruption procedures.

#### **SO4 Actions taken in response to corruption**

ABB applies a strict zero tolerance policy to combat corruption payments. Every incident is sanctioned, and may include termination of employment. In 2013 ABB identified four incidents of corruption of a government official. During the year nine employees were dismissed.

#### **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 2013 no contributions were made.

#### **S07 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.

#### **S08 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 2013. 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.

#### **Product responsibility**

##### **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. No incidents were reported for 2013.

##### **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.

##### **PR4 Non-compliance concerning product information and labeling**

During 2013, ABB received five related complaints related to product information or labeling. Three of these cases have been resolved with the payment of approximately \$1,000 in penalties. The remaining two cases are pending.

##### **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.

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

No complaints regarding breaches of customer privacy were received during 2013.

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

No significant fines were levied against the company during 2013 for non-compliance related to products and services.

#### **Economic**

##### **EC3 Benefit plan obligations**

##### **EC4 Government financial assistance**

##### **EC5 Wage level ratios**

##### **EC7 Local hiring procedures**

As a multinational organization with operations on approximately 550 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.

# GRI content index table

## GRI reference

### Economic performance indicators

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### Environmental performance indicators

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### Social performance indicators

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# UN Global Compact reporting for 2013

## 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 150,000 people.

## Statement of support

### Ulrich Spiesshofer, ABB Chief Executive Officer

“ABB is a founding member of the UN Global Compact, joining the organization in 2000, and we remain committed to its principles and goals. We work to ensure that its initiatives and ten principles reach a wider audience, both within the company and externally, and seek to embed the principles into our own business practice. As part of our ongoing commitment, we are involved in a number of focused initiatives and local networks.”

## 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. Statement updated in 2013.
- Further work to embed human rights into business decision-making processes, including risk review for projects. Human rights considerations integrated in supply chain questionnaire, the Supplier Code of Conduct which was updated in 2013, and the mergers and acquisitions process.
- Human rights considerations embedded in internal protocol for deciding where ABB should have business activities.
- Global human rights training program for senior managers continued in 2013 with several courses delivered in Asia and the Middle East, as well as a training briefing for newly-appointed country managers. The awareness-raising program has now been delivered in 12 countries; in some countries such as India and China it has been carried out in several locations. 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 will continue in 2014 with the focus on country sustainability specialists. The training combines face-to-face sessions and e-learning.
- Active participation in international meetings, organizations and workshops seeking to promote business awareness and respect for human rights. In 2013, ABB was an active participant or attended a series of events in Europe, the Middle East, Asia and North America.

### 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 2013 with internal training in Asia and the Middle East as well training for country managers. Target group as above in Principle 1. Central to all such trainings is the issue of potential complicity.
- Mapping work under way to understand and limit ABB exposure to Conflict Minerals, as defined by section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.
- In-depth due diligence carried out on several proposed projects and business partners to avoid potential complicity.
- An NGO expressed concern that ABB might be complicit in the violation of indigenous people’s rights by supplying equipment for dam projects in a country. ABB has taken seriously the concerns expressed and is looking into the issues.

## 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 2013.
- 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 2013.
- The principle of “no forced or compulsory labor” is included in ABB’s Supplier Code of Conduct, which was updated in 2013, and a 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 150 audits of suppliers were carried out in 2013. Two cases of child labor were found at a sub-contractor of a newly-acquired company. Remedial action was taken immediately and no evidence of child labor was found during subsequent un-announced visits to the sub-contractor.
- 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 10 substantiated cases of harassment and one of discrimination in 2013, resulting in two terminations, 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 and comply with national legislation.

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

- Environmental considerations mandatory in the ABB 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 and increase focus on resource efficiency (namely improve materials and water use, and reduce waste)
- Environmental experts at country and Group level provide 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 150 suppliers and training 650 suppliers during 2013.
- ABB’s ongoing Access to Electricity rural electrification programs in India and Tanzania.

#### **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.

**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.
- In 2013, ABB completed a global face-to-face Integrity training program for all employees, covering both anti-corruption and anti-trust risk areas. The program began in 2012 and covered nearly 147,000 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 about 70 Ombudspersons in 50 countries.
- As part of the anti-corruption program, ABB continued to carry out several additional training and communication initiatives in 2013, focusing on company leadership and middle management, and including new Code of Conduct and anti-bribery e-Learning, integrity films and case studies published on the intranet, and proactive action such as a global Integrity survey and anti-bribery compliance reviews of ABB units around the world.
- In 2013, ABB was named one of the World's Most Ethical Companies 2013 by Ethisphere and also received the Ethisphere Anti-Corruption Program and Compliance Leader seals.

