

# Our business

## Contents

---

14 This is ABB

---

16 Trends influencing ABB

---

18 Products and services

---

22 Achievements and innovations in 2015

---

24 Governance and integrity

---

27 Sustainability governance

---

28 Material issues

# This is ABB

## Shaping a global leader in power and automation

As a global leader in power and automation, we serve utility, industry, and transport and infrastructure customers in a combined market worth more than \$600 billion per year. In all three customer segments, our combined offering of power and automation provides a unique value proposition for customers as we provide solutions for secure, energy-efficient generation, transmission and distribution of electricity, and for increasing productivity in industrial, commercial and utility operations.

To enable us to deliver value for our customers and to provide sustainable, profitable growth for our shareholders, ABB interacts with a wide range of business partners along our value chain. We aim to build long-lasting partnerships to create shared value - with suppliers, customers, business partners, employees and the communities in which we operate.

Sustainability principles are embedded in our business values and ABB's Code of Conduct, which guide how we conduct our relationships with all stakeholders.

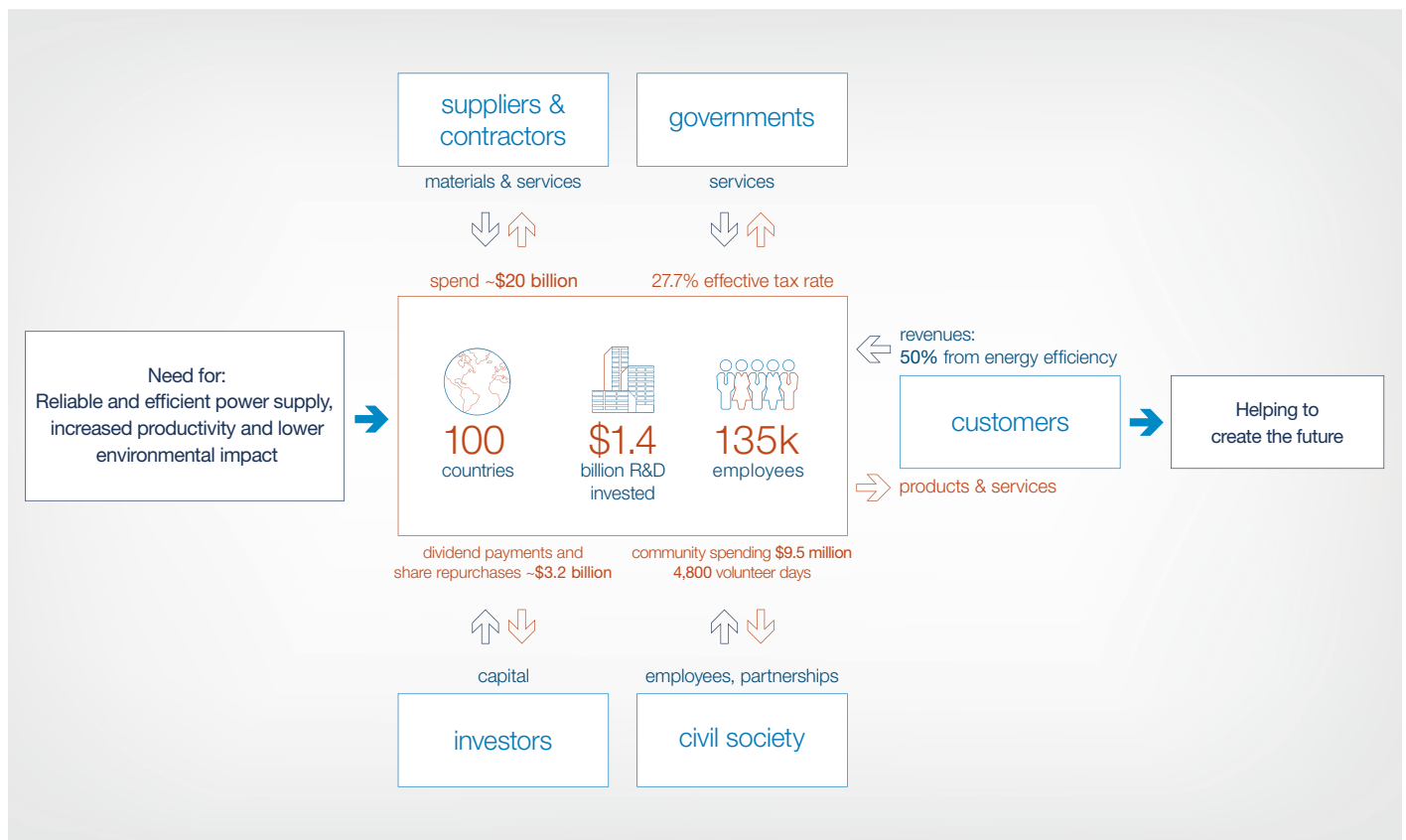
When we source the raw materials, components and services for our operations, our [strategy](#) is to partner with best-in-class suppliers who adhere to similar standards of quality, operational excellence, business ethics, and social and envi-

ronmental responsibility. ABB's Supplier Sustainability Development Program further supports performance improvement for selected suppliers, creating value for the suppliers, their employees and their local community.

When we design and manufacture products, our processes are designed to ensure appropriate consideration of legal, strategic, customer, environmental, and health and safety requirements. Dialogue with our customers, external experts in universities and other organizations, our suppliers and government authorities helps us to respond to our changing environment and to retain our innovative edge, helping to create value for our customers and society.

Governments provide the regulatory frameworks for our business, including the determination of corporate income and other taxes. These taxes are a significant source of funding for public services by government institutions worldwide. The planning of ABB's tax position reflects our corporate strategy and is consistent with applicable tax laws and international best practice guidelines such as the OECD Guidelines for Multinational Enterprises.

### ABB value chain



Central to our ability to maintain technology leadership and create value is our need to attract, develop and retain the right people in the right jobs. Our interaction with different parts of society helps us to attract the best employees and secure our standing in the communities where we operate.

It is these relationships that help us to create mutual value and to contribute to a better world.

### Next Level strategy

In 2014, we launched the Next Level strategy, designed to accelerate sustainable value creation. The strategy is built on the three focus areas of profitable growth, relentless execution and business-led collaboration.

We have been increasing profitable growth by strengthening our competitiveness, driving organic growth and lowering our risk profile, as well as launching new partnerships in different markets, such as data centers with Ericsson.

We promote relentless execution by continuing to deliver on our ongoing cost savings program and the Power Systems 'step-change' program. To increase operational performance, we have rolled out a new compensation model to better incentivize management performance, using both company and individual key performance indicators.

In the business-led collaboration focus area, we are increasing operational efficiency by improving processes and organizational structures. We have simplified the organization and set clear roles and responsibilities throughout the Group.

Our Next Level Stage 1 actions have laid a solid foundation for our future development amid a tough market environment.

In 2015 we announced Stage 2 of the Next Level strategy to accelerate the shift towards higher organic growth, greater competitiveness and lower risk, while accelerating existing improvement projects.

### Profitable growth

Profitable growth continues to be a key focus area to accelerate sustainable value creation and is driven through the framework of penetration, innovation and expansion (PIE).

We continued to promote growth in 2015 through increased market penetration in targeted geographic and industry segments. For example, we have a pioneering track record in supporting the development of India's power infrastructure. We are also supporting the rapid urbanization in India through a range of initiatives including solar plants, microgrids and metro rail projects in fast growing cities.

Technology innovation remains a cornerstone of our competitive position and a key driver of profitable growth; we introduced several [ground-breaking offerings](#) in 2015. We also continue to focus on the opportunities brought by the Industrial Internet, the so-called "Internet of Things, Services and People" (IoTSP). More than 50 percent of our current portfolio is software-related.

Profitable growth is also being driven by expansion into new high-growth markets, such as microgrids and electric vehicle charging. We also plan to focus on value-creating acquisitions and partnerships to accelerate growth in attractive segments.

To better address customer needs and deliver operational efficiency, we realigned our organizational structure from the start of 2016. Our new streamlined structure is comprised of four operating divisions: Power Grids, Electrification Products, Discrete Automation and Motion, and Process Automation. More details can be found in the [ABB Group Annual Report 2015](#).

### Relentless execution and business-led collaboration

In Stage 2 of the Next Level strategy, we aim to close the gap in our operating performance compared with our best-in-class peers. The goal is to further transform our company towards a leading operating model with business processes more focused on customer needs, and an enhanced performance management system, including compensation tied more closely to performance, as well as the development of a world class people and true performance culture.

Our white collar productivity program is aimed at making us leaner, faster and more customer-focused. Business functions, support functions and organizational complexity are in the scope of this program. Productivity improvements include the rapid expansion of regional shared services and the streamlining of global operations and head office functions, with business units moving closer to key markets.

The long-term demand outlook in our three major customer sectors - utilities, industry and transport and infrastructure - remains positive. Key drivers are the big shift in the electricity value chain, industrial productivity improvements through the IoTSP, as well as rapid urbanization and the need for energy efficiency in transport and infrastructure.

We believe we are well positioned to tap these opportunities for long-term profitable growth with our strong market presence, broad geographic and business scope, technology leadership and financial strength.

# Trends influencing ABB



Power and automation, our core activities, are undergoing a transformation.

With the surge in demand for renewable energy, power grids are becoming increasingly complex. Wind and solar are unpredictable sources of power, and the proliferation of rooftop solar panels is turning millions of consumers into producers of electricity.

Furthermore, hundreds of millions of people are still without access to electricity, while the best sources of renewable energy – such as windy offshore sites, sunny deserts and steep valleys – are usually far from the cities and industries that use the power. In these conditions, new solutions are needed to improve the efficiency and reliability of the power supply that is so critical to the wellbeing of families and businesses alike.

In industry, the revolution in digital technology is opening up new possibilities to increase productivity. A new industrial era is beginning, in which machines are increasingly able to perceive their surroundings and interact with human beings, creating the Internet of Things, Services and People.

In the next stage, these developments will converge with advances in industrial artificial intelligence and machine learning. Machines will in future not only be able to perceive the world and communicate with each other but also to reason and make decisions, without the need for human intervention.

## The grid of the future

Rising demand for renewable energy is transforming the power grid and driving a new wave of innovation in the generation and distribution of electricity.

The power sector is undergoing change on a scale not seen since the era of mass electrification began over a century ago. The old model of power flowing in one direction, from generating plant to consumer, is being turned upside down, as rooftop solar turns consumers into producers of electricity. At the same time, electricity is being transmitted over longer distances as offshore wind farms and remote solar plants are integrated into the grid.

Managing this complexity is only possible with new technologies. These technologies can prevent intermittent wind and solar power from disrupting the grid, can handle multi-directional flows of power, and can balance supply and demand. Innovative solutions are managing the flow of electrons. But increasingly they also have to manage the flow of data needed to control the whole system.

With its unrivalled knowledge of electrical energy and industrial automation, and an innovation track record stretching back over a century, ABB is ideally positioned to drive the digital grid. Our offerings cover the entire electrical value chain – from generation, transmission and distribution, to electric mobility. We are at the forefront of technologies such as high-voltage direct current, grid automation and smart grids, as well as energy-efficient motors, drives and industrial automation technologies.



Among ABB's latest power technologies are ultrahigh-voltage direct current transmission, which reduces losses by around 30 percent over long distances compared with conventional power lines, as well as microgrid solutions which incorporate renewables to electrify off-grid communities in places such as Africa and India, where hundreds of millions of people lack access to electricity.

#### A new industrial era

The revolution in digital technology is ushering in a new industrial era, centered on the "Internet of Things, Services and People" (IoTSP).

Key drivers are the increased availability of data, ubiquitous connectivity, and the exponential growth in processing power. Thanks to these developments, the performance and health of machines can be tracked and monitored throughout their life cycle, boosting productivity and efficiency, for instance by enabling interventions before a service interruption.

At the same time, advances in robotics technology, exemplified by ABB's YuMi – one of the most advanced industrial robots in existence today – are enabling a new era in human-robot collaboration, notably in small-parts assembly.

The next stage in this new industrial era will be driven to a significant extent by advances in artificial intelligence, such as machine learning. Machines will be able to take decisions based on their own analyses of data and to learn from the outcomes of those decisions.

In the industry of the future, we will see factories, mines, mills and offshore platforms run entirely by machines and robots. Human beings will be alerted only when machines encounter problems or issues they cannot solve themselves. The outcome will be a dramatic increase in productivity, leading to new business models and the transformation of industry.

As a world leader in industrial automation and robotics, ABB is leading the way to this new era through the IoTSP, not only with our hardware and engineering expertise, but also with our consulting, service and software solutions.

With our in-depth understanding of industries and their applications, and of the IoTSP, ABB has the knowledge and expertise to deploy the optimum mix between artificial intelligence and classical model-based technologies to bring safety, productivity, and energy efficiency in industry to the next level.

# Products and services

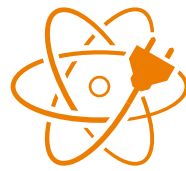
## Contributing to a better world

Many of the benefits of the modern world, from electricity at the touch of a switch to the consistent high quality of industrial goods, are made possible by technology that was pioneered, improved and adapted by ABB over more than a century of innovation.

Technological innovation remains a cornerstone of ABB's competitiveness and a key driver of profitable organic growth. In 2015, we invested \$1.4 billion, or 4 percent of revenues, in research and development by our 8,200 technologists. In this way, we create and support a comprehensive range of products, systems and services that increase energy efficiency, reliability and productivity for our industrial, utility, and transport and infrastructure customers.

It is through this comprehensive offering that ABB makes a key contribution to a 'better world.' Our energy efficient and renewable energy portfolio directly contributes to the reduction of greenhouse gas emissions, while our technologies also facilitate access to reliable, modern energy, contributing to economic growth and improved quality of life for communities.

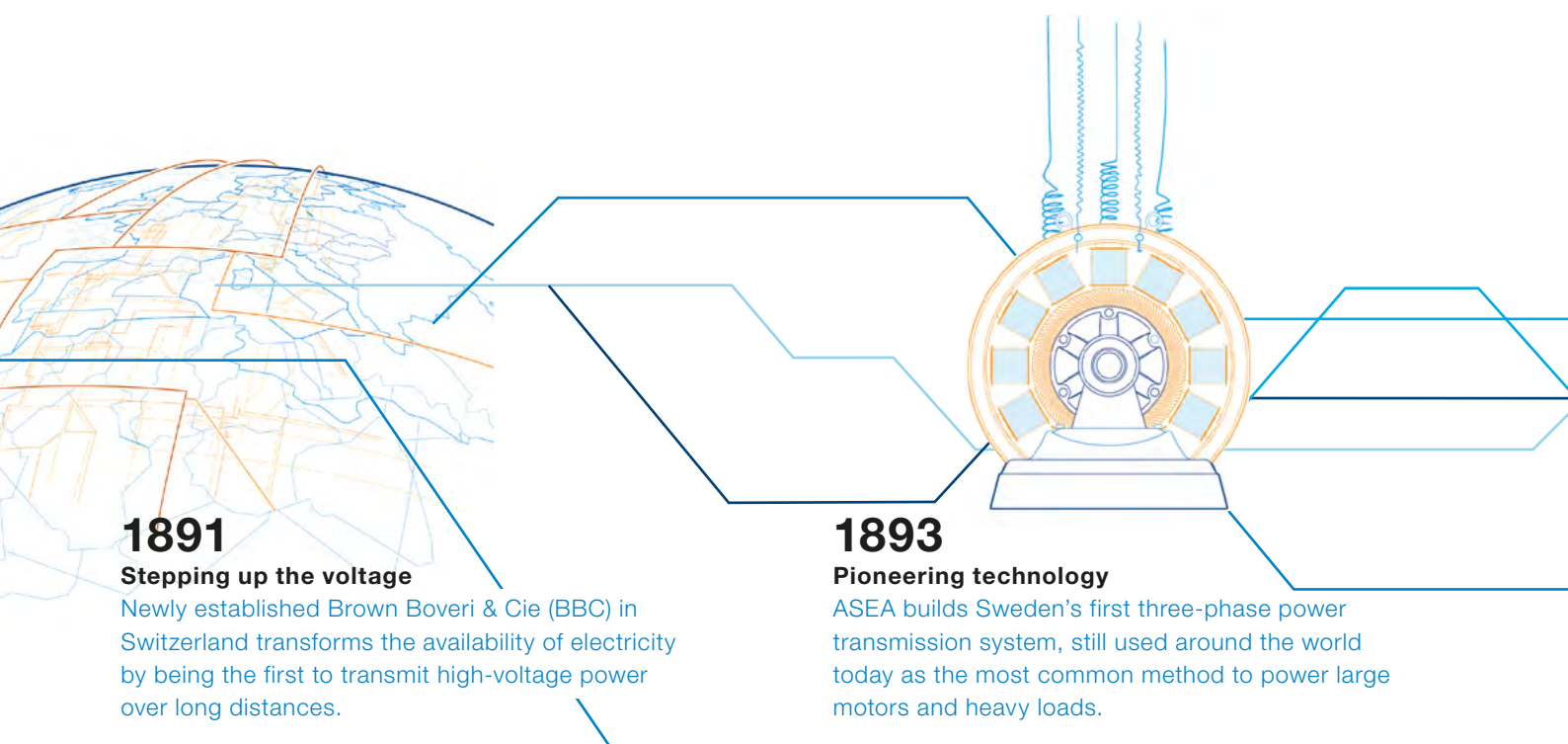
As part of our sustainability objectives, ABB is committed to increase revenue from our portfolio of energy efficiency-related products, systems and services by 20 percent by 2020, from a 2013 baseline. In 2015, these portfolio revenues declined slightly to 50 percent of total sales (51 percent in 2014), against a background of lower full-year earnings.



**490** of electric power  
**TWh** saved by our  
variable speed  
drives

The criteria defining the ABB energy efficiency portfolio were developed in 2011, based on current technology standards and ABB's business scope. Given the subsequent technology improvements, significant organic and inorganic changes to ABB's business portfolio, and the launch of our Next Level strategy in 2014, we decided to review the basis of the energy efficiency portfolio during 2015 to ensure relevance in the coming years.

After extensive consultation throughout our business and with the help of external reviewers, we developed an expanded "eco-efficiency" portfolio that now includes energy efficiency, renewable energy and resource efficiency criteria. To improve transparency and consistency, we have established more stringent selection criteria and detailed guidelines, and have defined a regular portfolio review process. We expect to finalize and roll out this strengthened methodology during 2016.



## Research and development

Historically, the core of ABB's innovation success has been the close proximity to customers that has allowed us to understand their needs, as well as the collaboration between the Corporate Research organization that serves the entire company and the research and development (R&D) teams in the businesses. These partnerships have provided the foundation for many of our pioneering technologies and are driving the transformation of power and automation.

With research centers in China, Germany, India, Poland, Sweden, Switzerland and the US, we are well positioned to access local talent, evaluate ideas emerging from academia all over the world, test the commercial viability of new products and solutions and, most critically, share technology to make it accessible throughout the entire group.

ABB follows a Group-wide approach to product and technology development, known as the ABB Gate Model. Sustainability aspects are built into this process, including a handbook to guide consideration of health, safety and environmental (HSE) aspects, an HSE Checklist and material selection guidelines. Read more about our design processes in the [Resource efficiency](#) chapter.

## Internet of Things, Services and People

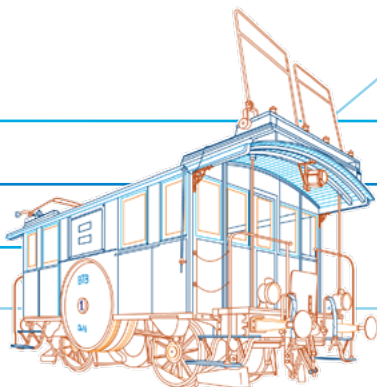
One core area of R&D for ABB is the [Internet of Things, Services and People](#) (IoTSP) that enables web-based automation and control solutions to improve productivity and quality. For

more than a decade we have been working to develop and enhance process control systems, communications solutions, sensors and software for the IoTSP.

The technologies that enable ABB's IoTSP strategy also allow the development of entirely new service offerings. To support this development, service requirements are now included in ABB's standard R&D process, and product developers are required to work with our service organization to ensure the required service capabilities and resources are available at product launch.

One of the recent successes of our service R&D approach is the development of several [smartphone applications](#) to ease and enhance the use of ABB drives. These tools provide an easy-to-use approach for the commissioning, servicing and use of ABB drives. As well as reducing cost and complexity for our customers, the wireless connections also mean that engineers don't need to enter hazardous or difficult-to-reach work areas to access information needed to help them commission and tune a new drive.

ABB has also developed [ServicePort™](#), a secure, remote-enabled service delivery platform that allows customers and ABB experts to view, scan and track key performance indicators to ensure maximum performance of equipment and processes. The platform helps users make better informed decisions resulting in higher operational efficiency while reducing raw material use and energy costs.



**1899**

### European first

Europe's first electric standard-gauge locomotive with two motors ushers in a new era in railway electrification, improving acceleration and passenger comfort.

**1944**

### Railway efficiency

BBC develops the first high-speed locomotive with a direct-drive system, improving efficiency and reliability.

**1954**

### ABB pioneers HVDC

First project delivered in Sweden using high-voltage direct current (HVDC), today's technology of choice for transmitting power efficiently and reliably over long distances.

As opportunities of the IoTSP evolve, so too does the need to be protected from cybersecurity threats. For ABB, protection of the IoTSP's interwoven systems of information technology and operational technology is central to our strategy and we work with customers to create a defense-in-depth approach where multiple security layers detect and deter threats in all of our products, systems and services.

The technical possibilities and business advantages that accompany the IoTSP rely on a safe, reliable supply of electricity. With increasing generation from renewable sources, often in remote locations, utilities face the challenge to transmit large amounts of power over long distances, efficiently and reliably, and to integrate this more dynamic and intermittent power into the grid. High-voltage direct current (HVDC) is the technology of choice for the efficient transmission of electricity over long distances and to create cross-border interconnections to strengthen grids. ABB pioneered HVDC technology over 60 years ago and accounts for about half of the global installed capacity.

ABB is also pioneering an innovative method to allow greater access to affordable electricity. Small communities often have no access to electricity, not because they are remote from the grid, but due to the cost of installing the substation that is needed to tap the high-voltage transmission lines. ABB has now developed a micro-substation that enables local power supply with a small capital outlay and low maintenance requirements.

We are also actively driving our technology development by working with leading institutions. Our investments in research initiatives, fellowships and strategic partnerships with over 70 universities and research institutions around the world continue to enhance the ABB portfolio and lead to international and cross-industrial cooperation in almost every ABB business.

### Start-ups and partnerships

The pace of innovation required today is increasing due to societal changes and environmental concerns, as well as to the

rapid development of technologies such as those related to the IoTSP. For these reasons, we are also pursuing new ways of driving innovation.

ABB Technology Ventures (ATV) was set up as the strategic venture capital investment arm of ABB five years ago to invest in high-potential industrial technology and energy companies aligned with our mission.

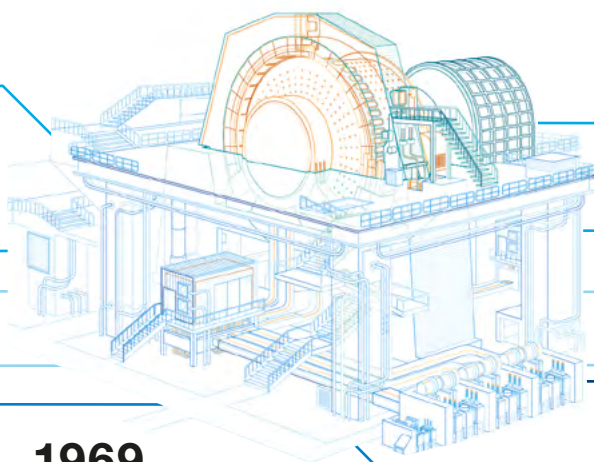
The unit's most recent investments are in businesses with disruptive technology in areas such as artificial intelligence and 3-D printing. ATV has acquired a stake in Vicarious, for example, which is building a unified algorithmic architecture that will take us closer to achieve human-level intelligence in vision, language and motor control, and could be applied to select applications in ABB's portfolio.

We are also establishing partnerships with strong global or local players who can help us penetrate new markets and develop new offerings. A recent example is the electric vehicle fast-charging services platform launched with Microsoft, which combines our charging stations with Microsoft's cloud-based services. The collaboration will take advantage of machine learning and predictive analytic capabilities to drive future innovations.

ABB has also established a global commercial alliance with Samsung SDI to develop and market modular and scalable microgrid solutions, utilizing lithium-ion batteries for energy storage. Effective microgrid solutions will promote and broaden access to electricity in emerging markets and remote areas while providing power reliability, resilience and security to developed markets.

### Shaping the future

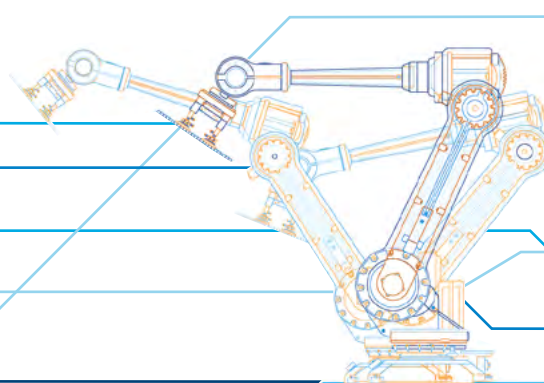
With roots in power and automation that go back to the 19th century, ABB innovations have helped to build the world we know today and are helping to fashion the world we will live in tomorrow.



**1969**

#### Pioneering automation technology for industry

BBC creates the world's first gearless mill drive, transforming the crushing process for the mining and cement industries globally.



**1974**

#### Robots enter the workforce

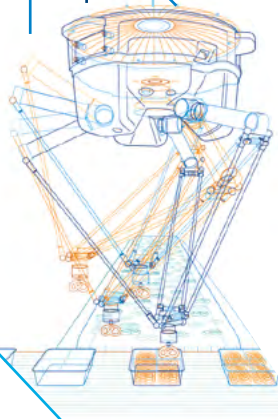
First industrial robots controlled by microprocessors introduced to the market. Since then ABB has sold more than 250,000 robots.



**2004**

**Improving industrial automation**

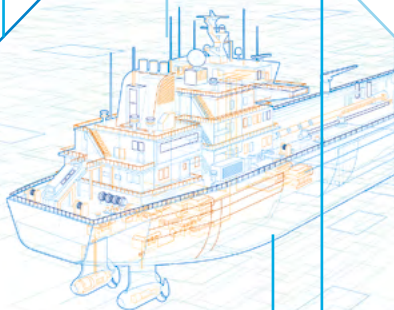
Introduction of the first industrial automation system that integrates automation and information systems within a single entity, enabling more cost-efficient and safer operations.



**1998**

**Robots get picky**

Launch of revolutionary parallel arm robot for high-speed picking and packing in food and pharma, optimizing their value chain



**1990**

**Ruling the waves**

ABB transforms ship maneuverability and energy efficiency with a new propulsion system fixed outside the hull.

**1975**

**Energy-efficient motor control**

Launch of groundbreaking device to control electric motors, enabling reductions in power consumption of around 50 percent in many applications.

**2008**

**Connecting power grids**

ABB commissions the world's longest submarine high-voltage cable, strengthening the reliability of the power supply in Norway and the Netherlands.

**2012**

**Shaping the grid of the future**

Development of world's first HVDC circuit breaker, solving a 100-year-old electrical engineering puzzle and paving the way for a more efficient and reliable electricity supply system.

**2013**

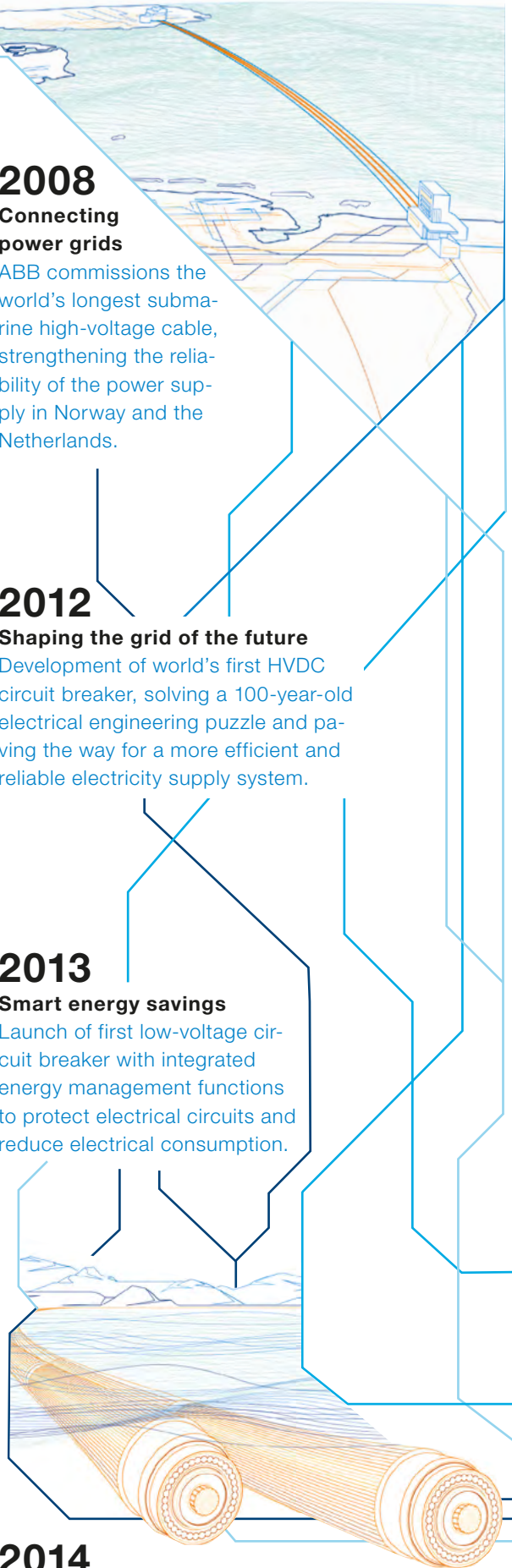
**Smart energy savings**

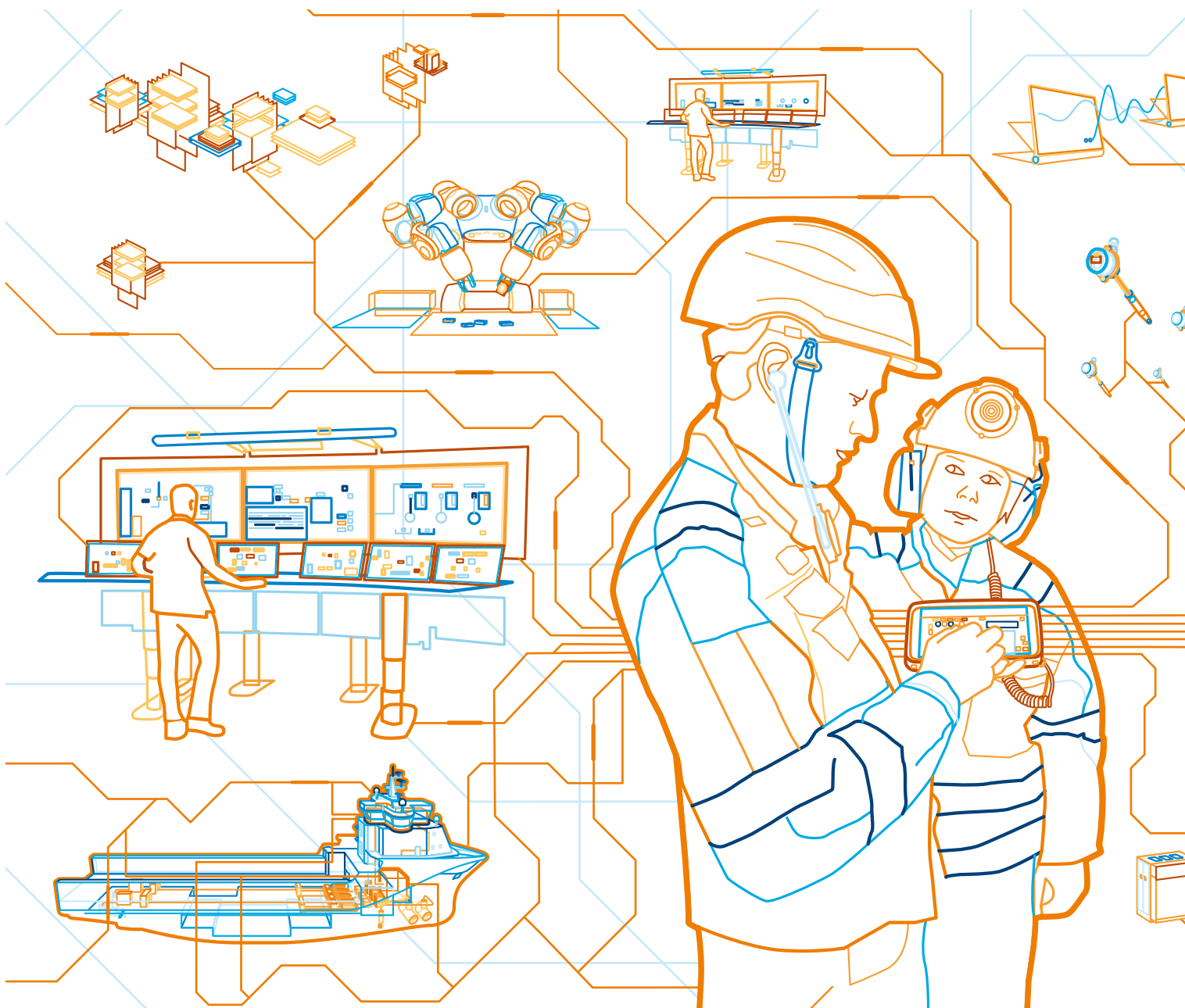
Launch of first low-voltage circuit breaker with integrated energy management functions to protect electrical circuits and reduce electrical consumption.

**2014**

**High-voltage breakthrough**

Introduction of world's most powerful cable system, making renewable energy installations more efficient and cost effective.





## Achievements and innovations in 2015

### Utilities

#### Lower environmental impact

ABB commissioned the world's first gas-insulated switchgear with a new eco-efficient gas developed as an alternative to sulfur hexafluoride (SF<sub>6</sub>). The new gas mixture, which has a global warming potential almost 100 percent lower than that of SF<sub>6</sub>, was developed with 3M.

#### Software improves asset management

Ellipse Select is a new enterprise software solution that helps customers to manage their assets more effectively through the life cycle and make better operational decisions, boosting both their performance and productivity. The solution illustrates ABB's unique ability to facilitate the convergence of operational and information technologies.

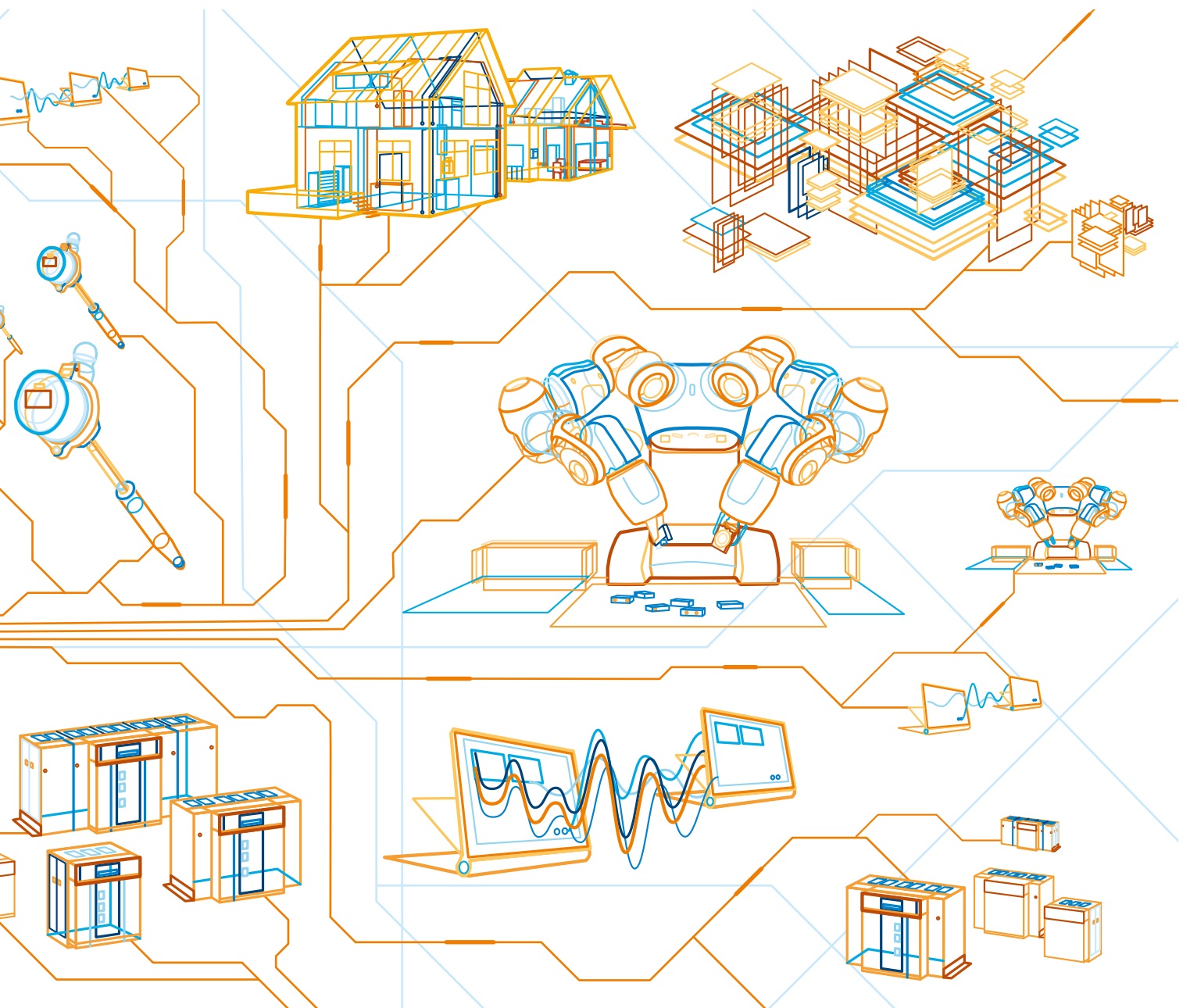
### Industry

#### Mine of the future

ABB deployed its System 800xA automation platform to transform Boliden AB's Garpenberg lead, silver and zinc mine in central Sweden into one of the world's most efficient and productive mines. Autonomous processes stretching a kilometer underground are unified in a single system driving efficiency and productivity to the next level.

#### First truly collaborative robot

YuMi, the first truly collaborative robot, was introduced to the market at Hanover Fair. Designed for a new era in manufacturing, where robots and humans work side-by-side on the same tasks, YuMi is flexible and dexterous. It can be integrated into production lines without the need to redesign the space.



## Transport

### Automated fast charging for electric buses

A new automated fast charging system removes the main hurdles to the more widespread use of electric buses. With a typical charging time of 4-6 minutes, the system speeds up the charging process and is easily integrated in existing bus lines thanks to its automated rooftop connection.

### Software for marine efficiency

ABB is collaborating with Dutch weather forecasting specialist, MeteoGroup, to equip 140 container ships from Maersk Line with advisory software to optimize routes, boost maritime safety and avoid conditions that could be harmful to the ship, its crew or its cargo.

## Infrastructure

### Voice-operated smart homes

ABB presented its voice-operated smart home automation system, ABB-free@home, at the IFA consumer electronics fair in Berlin. The system allows users to control over 60 smart-home automation functions, such as lighting, heating, blind control and door communication, with voice commands.

# Governance and integrity

## Embedded in our business values

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

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

### Standards of business conduct

ABB's approach to integrity is based on a clear set of values and strong communication from top leadership – to our employees and also to our business partners. These values and expectations are described in our Code of Conduct and Supplier Code of Conduct, which are underpinned by a robust set of internal standards and policies.

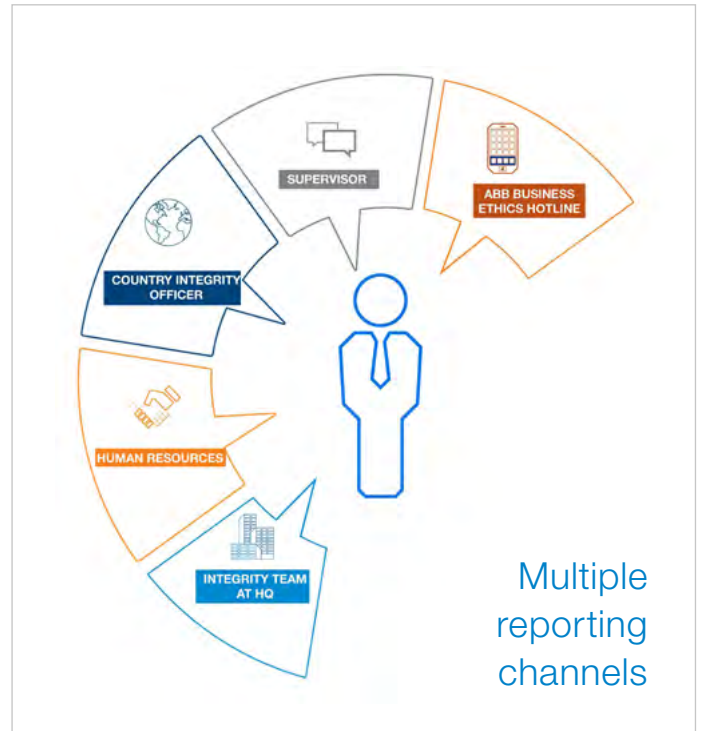
Our integrity policies reflect the importance of individual accountability, oversight, integrity leadership and transparency. These policies include the prohibition of facilitation payments, zero tolerance of any involvement in bribery or corruption, robust policies on gifts, entertainment, and expenses, political and charitable contributions and external representatives, and measures to ensure ethical supply chains. The key elements of our integrity standards and policies are available on our [website](#).

To take account of changes in the external environment and our own organization, ABB regularly reviews these standards to ensure continued relevance and effectiveness.

### Prevention: educating and empowering our employees

ABB's integrity program is based on three pillars: prevention, detection and resolution. Our primary focus for all employees is on training and communication, which are key to ensure that ABB's values are understood and to prevent non-compliant behavior.

Within three months of joining, every new ABB employee must complete online e-learning and face-to-face training on the ABB Code of Conduct. This training is refreshed / updated for



all employees on a two-year cycle. In addition, employees in sensitive roles receive specialized online and face-to-face trainings for specific integrity risk subjects.

Country integrity training plans are developed annually, based on the global ABB Group requirements, as well as local integrity risk topics. Local risks are identified through audits, investigations and integrity program implementation reviews. Country Integrity Officers are required to conduct these implementation reviews every six months to assess their status related to a defined set of risk subjects. Results of these reviews provide input to the further development of both local and Group integrity initiatives.

Additionally, all agents and representatives acting on behalf of ABB must participate in mandatory e-learning or face-to-face integrity training.

In 2014 and 2015, more than 96,000 ABB white collar employees (97 percent) completed the Global Anti-Bribery: Don't Look the Other Way online training, while approximately 97 percent of blue collar employees completed face-to-face training on ABB's Code of Conduct. A new two year anti-bribery training campaign will be launched in 2016.

During the year, we piloted a new cloud-based tool for pre-approval of gifts, entertainment and expenses that will enable us to provide globally consistent review and transparent ad-



97% employees trained on anti-bribery principles in 2014 and 2015

vice for our employees. Roll-out will commence in 2016, supported by on-demand training and standard documentation.

### Detection

ABB also maintains additional initiatives 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. Our anti-fraud program is also monitored by internal audit who regularly evaluate fraud risk exposure and developing trends.

Multiple channels are available to all employees to report integrity concerns, including a multi-lingual business ethics hotline run by a third party, which is available 24 hours a day, seven days a week. The different reporting channels are advertised through a hotline poster campaign, which was updated at the beginning of 2015. Whistleblowers are promised protection from retaliation. A stakeholder hotline is available to our external business partners, with details available on our [website](#).

### Resolution: zero tolerance for violations

ABB enforces a strict zero tolerance policy for violations of the law or the ABB Code of Conduct, and we take the appropriate disciplinary action – including termination of employment – against employees who violate them.

The Office of Special Investigations (OSI), part of ABB's Legal and Integrity team, is responsible for conducting investigations globally. Reported integrity concerns are handled by OSI and are brought to closure through investigation and remediation. Where disciplinary action is required, the process is governed by ABB's Human Resources Disciplinary Protocol and administered by Human Resources Disciplinary Committees at headquarters and in the regions.

While we are confident of the robustness of our integrity training and processes, we continuously consider ongoing improvements. During 2015, there were not any substantiated corruption cases. The company did not face any significant fines or sanctions for non-compliance with laws and regulations in 2015. 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.



### Engagement and external recognition

ABB also supports international efforts such as collective action and projects aimed at promoting integrity in the industries where we work and in the public sector. We are a founding member of the Partnering Against Corruption Initiative and also became a founding member in 2014 of Ethics and Compliance Switzerland. This engagement enables ABB to develop and contribute to the overall development of systematic values and integrity in various organizations throughout Switzerland and abroad.

ABB's integrity program has been benchmarked and recognized externally. In 2015, we received the Ethisphere Compliance Leader Verification and Anti-Corruption Program Verification seals based on a review of our integrity program by NYSE Governance Services. For the third consecutive year, we were also recognized as one of the World's Most Ethical Companies.

### Risk management

In addition to the risk identification processes conducted by the Internal Audit and the Legal and Integrity departments, ABB maintains 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.

ABB takes a comprehensive top-down and bottom-up approach to Enterprise Risk Management (ERM), which directly involves all ABB Group functions, regions, divisions and the majority of ABB's country organizations and global business units.

The ERM process is supported by a common ABB risk catalogue and training sessions for the participating entities. The common risk catalogue covers a wide range of issues including external, finance, organizational, people, cultural and operational risks, as well as issues related to the legislative environment, climate change and cyber security.

The participating entities 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 respective 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 current 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.

ABB is now integrating in one platform all financial, non-financial and internal audit risks and risk-mitigating actions to enable closer monitoring of all risk-mitigating actions in the countries and business units.

In addition to the ERM process, ABB's Insurance Risk Management function works closely with our global insurance providers to identify global risks and to assess the relative

Power and productivity™ **ABB**  
for a better world™

**Don't look the other way.  
Distance yourself from inappropriate conduct.**

If you see a red flag, don't look the other way  
Integrity is everyone's responsibility. Contact your manager, I&D representative, local and Business ethics hotline: +41 43 517 53 66

risks to our assets and operations. All facilities are required to develop, implement and test business continuity and crisis preparedness plans, and [security and crisis management exercises](#) are carried out in all regions.

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.


# Sustainability governance

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

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 of the business, from Executive Committee endorsement, through operational review and target setting in business units and countries to local training and execution at sites, supported by sustainability specialists at Group, country and local level. We rely on every employee to take responsibility to help us achieve our goal: a better world.

## 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.

All ABB facilities are encouraged to implement management systems for environmental, health and safety and quality issues, while manufacturing and service locations are required to implement such systems. Globally, we have achieved external certification for environmental management systems at 418 sites and offices and for health and safety management systems at 421 locations and have made significant progress in implementing these systems at our recently-acquired operations. 

As a founder member of the United Nations Global Compact, ABB has been closely involved in its development. We have also been working to implement the UN Guiding Principles on Business and Human Rights and use the recommendations to assess expectations of corporate behavior.

## 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.

During 2015, the Sustainability Board reviewed the Group sustainability strategy and objectives and confirmed the proposed 2016 focus activities and performance metrics. The Board critically reviewed progress against targets, noted slow progress on some targets, such as energy efficiency, and requested the development of Group-level roadmaps to enable better tracking and forecasting of performance.



# 415+

locations certified to  
ISO 14001 and OHSAS 18001

## Group sustainability team and global network

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. Sustainability Affairs reports directly to Executive Committee member and Chief Human Resources Officer, Jean-Christophe Deslarzes.

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 health, safety and environment (HSE) managers and country security managers responsible for ABB's sustainability management program and for gathering the data consolidated in this report. All regions where ABB operates have region HSE managers and corporate security managers.

The country and regional specialists are supported by local HSE officers. Overall, the sustainability network is supported by a team of some 950 employees, full-time and part-time, at headquarters and around the world.

During 2015, we completed a comprehensive workforce mapping and skills inventory to ensure that we have the right sustainability resources and structures in place to support our businesses with the implementation of the corporate Next Level strategy. We are using the results to ensure appropriate allocation of resources at different levels in our businesses and to guide the design of development programs, such as HSE leadership training.

The sustainability network operating model is now being refined to reflect the required resource allocations and the recent changes in ABB Group structure. Group sustainability instructions and standards are being adapted to reflect the organizational changes.

As part of our continuing work to strengthen the capability of our sustainability network, we also launched seven e-learning modules in 2015 covering different aspects of sustainability management.