Saint-Gobain and CertainTeed’s new state-of-the-art headquarters in North America has earned LEED 2009 Platinum certification by utilizing sustainable products. ASSA ABLOY collaborated with Saint-Gobain to provide six distinct door opening solutions, each of which has obtained an Environmental Product Declaration (EPD) for sustainability.

Photo © Jeffrey Totaro, 2015
About the report

This report, along with additional information available online, describes the Group’s sustainability initiatives and performance in 2016, and addresses issues that ASSA ABLOY has identified as the most important to its stakeholders.

As signatory to the UN Global Compact, ASSA ABLOY will submit this report to the UN Global Compact as its Communication on Progress report 2016. The report has been prepared in accordance with the Global Reporting Initiative’s (GRI’s) guidelines, G4 Core (see pages 26–27 for GRI content index).

The data presented in this report has been collected over the calendar year and includes all ASSA ABLOY operations. For further information regarding the Sustainability Report and its reporting principles, see page 28.

External recognition

ASSA ABLOY’s initiatives and results have gained recognition – ASSA ABLOY is included in FTSE4Good, the OMX GES Sustainability Sweden PI Index, and in the Kempen SNS SRI Universe. ASSA ABLOY has participated in the Carbon Disclosure Project (CDP) since 2007. For 2016, the Group received a score of C in the CDP climate change program, and a score of B in the CDP water program.

In January 2017 ASSA ABLOY became an official regional partner in the World Green Building Council’s Europe Regional Network. The Network represents a confederation of 24 Green Building Councils, eight Regional Partners and over 5,000 company members who work together to promote the development of sustainability and innovation in the European building sector.

The UN Sustainable Development Goals (SDGs)

The UN SDGs were launched in 2015, defining the global agenda for change in 17 overarching goals for a more sustainable society. Companies can play a role in contributing to progress, and much of ASSA ABLOY’s sustainability work is aligned with the objectives of the SDGs. Looking at ASSA ABLOY’s offering and operations, there are six goals in particular that highlight the value ASSA ABLOY strives to bring, and the responsibility the company takes.

Urbanization and the role of sustainable cities present an important opportunity to ASSA ABLOY. The business is contributing to SDG 11 on making cities and human settlements inclusive, safe, resilient and sustainable. Everywhere ASSA ABLOY operates, the company supports the intention of SDG 9 on resilient infrastructure, inclusive and sustainable industrialization and innovation. The products themselves can reduce customers’ climate impact through innovative solutions, for example buildings. Continuous efficiency improvements in the production processes reduces ASSA ABLOY’s climate impact and is linked to SDG 13 on urgent action to combat climate change and its impacts.

Taking responsibility in everyday operations, ASSA ABLOY has a strong focus on efficiency, like SDG 12 on responsible production through the constant focus on resource efficiency and waste reduction. The Group’s goal is to reduce the water intensity supporting SDG 6 on clean water and sanitation. Integrating sustainability into the sourcing processes also means ASSA ABLOY contributes to SDG 8 on inclusive and sustainable economic growth and decent work, where health and safety is a top priority.
ASSA ABLOY in brief

WHO ARE WE?

ASSA ABLOY is the global leader in door opening solutions with sales of SEK 71 billion and 47,000 employees. The strategies for profitable growth are market presence, product leadership and cost-efficiency.

WHAT DO WE DO?

ASSA ABLOY is the global leader in door opening solutions and offers mechanical and electromechanical locks, digital door locks, security doors, entrance automation, hotel security and secure identity solutions, primarily in identity and access management, as well as a number of other related products and services.

FOR WHOM?

ASSA ABLOY covers all needs for door opening solutions and service for institutional and commercial customers, as well as for the consumer market. The Group has the largest installed base of products in the world, with a large share of sales in the stable aftermarket.

WHERE ARE WE?

ASSA ABLOY has leading positions in most of Europe, North and South America, Asia and Oceania.

Share of Group sales by region 2016

<table>
<thead>
<tr>
<th>Region</th>
<th>Share</th>
<th>(2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROPE</td>
<td>38%</td>
<td>(37)</td>
</tr>
<tr>
<td>AFRICA</td>
<td>1%</td>
<td>(1)</td>
</tr>
<tr>
<td>NORTH AMERICA</td>
<td>40%</td>
<td>(39)</td>
</tr>
<tr>
<td>SOUTH AMERICA</td>
<td>3%</td>
<td>(2)</td>
</tr>
<tr>
<td>ASIA</td>
<td>15%</td>
<td>(17)</td>
</tr>
<tr>
<td>OCEANIA</td>
<td>3%</td>
<td>(4)</td>
</tr>
</tbody>
</table>
Value creation strategy

VISION
To be the true world leader, the most successful and innovative provider of total door opening solutions.
To lead in innovation and provide well-designed, convenient, safe and secure solutions that give true added value to our customers.
To offer an attractive company to our employees.

STRATEGY
Strategy and targets
Long-term and as an average over a business cycle
10% annual growth through a combination of organic and acquired growth
16–17% operating margin

Strategy for growth and profitability
The Group’s overall strategic direction is to spearhead the trend towards increased security with a product-driven offering centered on the customer.
The strategic action plans are focused on three areas: market presence, product leadership and cost-efficiency.

Market presence
Increasing growth in the core business and expanding into new markets and segments.

Product leadership
Continuously developing innovative products offering enhanced customer value and lower product costs.

Cost-efficiency
Reducing the cost base through improved processes, flexible final assembly close to the customer and production in low-cost countries.

Employees
Continuing professional development, capabilities and beliefs are the basis for the Group’s success.

Beliefs
are based on accountability, diversity and commitment for a focused, results-driven company with high business ethics.

Sustainability
is integrated in all Group processes: innovation, product development, manufacturing, logistics and sales.
Highlights 2016

- The Group had a positive development across all reporting areas.

- The range of sustainable solutions was expanded with many new products including the first solar-powered access control lock for the commercial market.

- The Code of Conduct for employees was updated and available in 28 languages and Code of Conduct for business partners was launched.

- The Group’s total greenhouse gas emissions decreased by 24 percent during 2016 driven by new production technologies and efficiency improvements.

- The number of entities covered by ISO 14001 or other certifiable environmental management systems increased from 121 to 124 which means that the system covers approximately 76 percent of employees in the Group’s factories.

- Development of a Group-wide Health and Safety Management System containing standardized metrics, including leading indicators to prevent injuries and help strengthen the Group’s safety culture.

“Sustainability creates business value for ASSA ABLOY and its customers.”

Johan Molin
President and CEO
Growing demand for energy efficient door opening solutions

2016 was a good year for ASSA ABLOY, with continued sales and earnings growth. Global demand for products with declared and improved sustainability performance is increasing in demand on the market. Our customers are quickly turning to sustainable security solutions, particularly on account of energy savings. ASSA ABLOY’s new five-year sustainability program is proceeding according to plan. During the year we expanded our portfolio of green products, improved energy and water efficiency, increased the use of environmental management systems and continued an ambitious plan to improve health and safety within the Group.

Sustainability is a win-win situation where we continuously do more with less resources. Focusing on resource efficiency and taking responsibility are fully integrated parts of ASSA ABLOY’s processes and make us a better and more sustainable business. We create more customer value at a lower cost on the basis of our three fundamental strategies of increased market presence, product leadership and cost-efficiency.

The door opening solution, our specialty, plays an important role here in making buildings more energy efficient. We have a global leading position with our strategies that drive products and solutions with increased customer value, and reduced resource consumption and environmental impact. The proportion of environmentally rated buildings are growing in all our markets. ASSA ABLOY has a complete range of total door opening solutions that are energy efficient, intelligent and some products even harvest the energy they need.

The Group continues to develop Environmental Product Declarations to meet our customers’ need to achieve certifications and to be transparent. Today all major product lines are covered by Environmental Product Declarations.

For many years, we have maintained a high innovation rate. Products launched in the past three years account for 30 percent of sales. The Group has also initiated a monitoring system for measurement of revenues from green products. Higher sustainability performance from a life cycle perspective is a prerequisite for our development work and is integrated into the product innovation process.

In the beginning of the year we launched our second five-year sustainability program, which runs until 2020. This applies to the consumption of materials, water and energy, health and safety and to the environmental impact in the form of emissions and waste. Ambitions have been raised in all these areas and the results from the first year of the program are positive and according to plan. The sustainability program is supported by improvements in our reporting systems to ensure faster information procurement. Furthermore, the number of supplier sustainability audits remains at a high level. I’m pleased to report that third-party auditors have confirmed high integrity and quality of these audits.

Our efficiency programs such as the Manufacturing Footprint and VA/VE (value analysis/value engineering) also give significant contribution to the overall sustainability improvements in terms of reduced energy consumption and materials.

In 2016 we evaluated our sustainability program in relation to the UN Sustainable Development Goals and concluded that our work are in line with UN’s SDG initiatives. Finally, I wish to thank all our employees and other stakeholders whose daily commitment makes ASSA ABLOY a better and more sustainable business.

Stockholm, 6 March 2017

Johan Molin
President and CEO
ASSA ABLOY’s business context

ASSA ABLOY is the global leader in total door opening solutions. With global reach comes global responsibility, and part of earning stakeholders’ trust is to manage the material aspects of sustainability throughout ASSA ABLOY’s value chain.

Globalization, urbanization, digitization and sustainability
ASSA ABLOY’s stable, value-creating capacity is rooted in a handful of long-term, global development trends. As the global economy is growing, more and more people are better off financially and have a greater need for safety and security to protect their homes and families. An increasing number of people are moving to cities to find work, and at least 1 billion people are expected to make this journey in the next 10 years. This means cities are growing to host homes and workplaces for the new inhabitants. Rising prosperity is leading to greater investments in advanced doors and door-opening solutions in homes, workplaces, and shopping centers.

At the same time, rising environmental concerns and resource consumption are placing a focus on energy savings. Locks, doors, and door-opening solutions have a key role to play in climate-smart buildings. Digitization provides enormous potential for smarter security, connected door-opening solutions, and management and control of access and energy consumption.

These trends provide ASSA ABLOY with conditions for good underlying, long-term growth. With the Group’s three main strategies of market presence, product leadership, and cost-efficiency, ASSA ABLOY has shown a good ability to identify focus areas for profitable growth over time. Emerging markets, innovation, and product development with a focus on electronics, as well as increasing sustainability performance in the use of products and solutions, provide great opportunities. With good cost control and constant streamlining of all processes, the Group is utilizing resources efficiently with increased profitability at the same time as we use fewer resources.

Engaging with stakeholders
Stakeholder engagement is the key to understanding society’s needs and expectations on ASSA ABLOY and how they can be met. ASSA ABLOY’s main stakeholder groups are those with a high level of influence, and with whom we interact directly and actively in our daily business: customers, investors and shareholders, employees, suppliers, non-governmental organizations, and local communities.

As stakeholder relationships differ greatly, so too does ASSA ABLOY’s engagement approach to particular stakeholder groups. For example, customers are involved in the product development process through Voice of the Customer; suppliers are engaged through the sustainability audit program; employees through daily operations as well as training, the employee survey, and the work council; and the investment community through targeted sustainability dialogue together with traditional investor relations activities.

Our value chain
Sustainability is a driver throughout ASSA ABLOY’s value chain; it is an important element in innovation, in sourcing, in production, in employee development, in applying ASSA ABLOY’s products and solutions, and in upholding good relations with external stakeholders.

Innovation New products are evaluated from a life cycle perspective. Many recently developed products save energy as a result of improved insulation and intelligent control of various door-opening solutions. Innovation is carried out either locally, divisionally, or shared between the divisions depending on the content and scope.

Sourcing Every year the Group purchases a considerable amount of material, components, and products from about 7,500 direct suppliers around the world at a value of more than SEK 25 billion. 53 percent of this value is sourced in low-cost countries. Suppliers in risk areas are evaluated from a sustainability perspective. China is by far the dominant low-cost country.

Manufacturing The manufacture of the Group’s products should be carried out safely and with the lowest possible environmental impact. ASSA ABLOY’s ambition is to supply high-quality products that fulfill customer requirements, have a long life, are manufactured with minimal use of resources, and have a minimal environmental impact throughout their life cycle. End users are large institutional and commercial customers (within health care, education, retail, hospitality, office buildings, and industry), small and medium-sized customers (offices, stores), and the residential market (apartments, houses). Examples of distribution channels: security systems integrators, locksmiths, security installers, building and lock wholesalers, retailers, DIY, hardware and security stores, original equipment manufacturers, and door and window manufacturers.

Market presence ASSA ABLOY is present in more than 70 countries, more than two-thirds of which are in North America and Europe. Whatever ASSA ABLOY does business, it follows the Code of Conduct, respects the laws and regulations governing business ethics in the countries in which it operates, and it requires all of its partners to do the same.

Customers ASSA ABLOY’s ambition is to supply high-quality products that fulfill customer requirements, have a long life, are manufactured with minimal use of resources, and have a minimal environmental impact throughout their life cycle. End users are large institutional and commercial customers (within health care, education, retail, hospitality, office buildings, and industry), small and medium-sized customers (offices, stores), and the residential market (apartments, houses). Examples of distribution channels: security systems integrators, locksmiths, security installers, building and lock wholesalers, retailers, DIY, hardware and security stores, original equipment manufacturers, and door and window manufacturers.
Our Road to the Future – the Group’s strategic direction is a world-leading market presence, product leadership, and cost-efficiency. This forms the basis for ASSA ABLOY’s sustainability priorities and work.

ASSA ABLOY is the global leader in door opening solutions. Sustainability parameters are increasingly becoming a part of identifying and managing business opportunities and fully exploiting the brand portfolio across diverse segments. ASSA ABLOY’s expansion is facilitated by a strong brand and a good reputation, which is supported by acting in a responsible way.

ASSA ABLOY can reduce production costs by considering the environmental impact of a product from its conception phase onwards, by using resources more efficiently, and by applying the reduce-reuse-recycle principle. ASSA ABLOY can reduce its environmental impact and increase cost-efficiency by being systematic, exploring various means of reducing production materials, optimizing product components, and streamlining production as well as transport methods. Relevant sustainability factors are considered in business plans, decision-making processes, and business principles. In keeping with the Group’s long-term risk-management strategy, sustainability parameters are integral parts of the value chain – from conception to recycling.

Turning vision into operation
The management of prioritized aspects improved in 2016, as each division had identified its greatest environmental impact and presented an action plan. The results were aggregated and presented in a plan for 2020, with targets set at Group level. Monitoring impact and ensuring adequate management is an everyday responsibility. ASSA ABLOY’s sustainability management has set the following priorities:

- Targets for all sustainability KPIs, covering all entities and the Group
- Coordinated implementation of environmental management systems and systematic follow-up, currently 76 percent of the Group’s employees working in factories, are covered with environmental management systems
- Conduct 80–100 workshops for value analysis and value engineering to develop a model for product optimization that reduces environmental impact
- Increased capabilities for data analysis and benchmarking
- Continued focus on sustainable products
- Health and safety – implementation of Group approach and start monitoring additional KPIs
- Improved system support to automatically calculate audited spend in low-cost countries
- Each division has started to measure the sales of the portfolio of sustainable products in 2016

Each quarter, ASSA ABLOY reports on, follows up, and evaluates its defined KPIs. The result is distributed to management at different levels in the organization. This process has resulted in regularly updated and more ambitious targets for the majority of the follow-up areas. In recent years, the reporting process has been increased to four times per year, and some KPIs are followed up on a monthly basis.

Sustainability agenda 2020
Increasing efficiency in production as well as elevating innovation in products and processes are essential to the Group’s ability to grow and be profitable. The sustainability agenda places an emphasis on the following, in accordance with our materiality analysis:

Material priorities:
- Strengthen anti-corruption measures
- Ensure responsible acquisitions*
- Reduce resource and energy consumption
- Reduce emissions with global warming potential, both related to energy consumption and chemicals used in industrial processes
- Increase the portion of renewable energy
- Improve water and waste management
- Improve health and safety performance
- Improve sustainability performance within the supply chain*
- Include environmental management systems in all relevant sites
- Improve diversity in managerial positions
- Include environmental management systems in all relevant sites
- Improve diversity in managerial positions

Material opportunities to manage:
- Enhance the sustainability performance in ASSA ABLOY’s supply of products and solutions*
- Create products that fulfill our customers’ demands
- Create products that our customers want to buy
- Increase knowledge of customers’ future demands
- Increase efficiency in production

* The aspect is material also outside the organization.
Performance in 2016 and targets for 2020

The Group had a positive development across the reporting areas. Strong improvements were noted regarding the injury rate and the injury lost day rate, as well as for water and energy efficiency. The Group’s total greenhouse emissions decreased as a result of new production technologies and efficiency improvement.

The target scheme that the Group is reporting on today was set in 2015 and runs until the end of 2020. The Group reports its sustainability performance (certain KPIs) every six months. With 347 (338) reporting units, it is important to ensure a high level of awareness of the Group’s sustainability priorities in all parts of the organization and to share information and best practices between entities. The ASSA ABLOY sustainability database and analysis tool are key elements for tracking performance and identifying areas where improvements can be made. The Group has had a new sustainability reporting system since 2013. This has provided an increase in the quality of data and enabled a smoother integration of new units.

In relation to the program set for 2020, the Group has identified four additional KPIs:

- Generation of non-hazardous waste
- Portion of renewable energy
- Consumption of other types of organic solvents
- Generation of greenhouse gas emissions related to chemicals used in industrial processes

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</tr>
</thead>
<tbody>
<tr>
<td>Environmental KPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of entities covered by ISO 14001 certificates and other certifiable management systems</td>
<td>75</td>
<td>100</td>
<td>101</td>
<td>111</td>
<td>121</td>
<td>124</td>
<td>125</td>
<td>+3²</td>
</tr>
<tr>
<td>Intensity of greenhouse gas emissions related to energy consumption (tons/SEK M)³</td>
<td>14.8</td>
<td>12.9</td>
<td>11.9</td>
<td>10.3</td>
<td>9.8</td>
<td>8.7</td>
<td>-20%</td>
<td>-11%</td>
</tr>
<tr>
<td>Energy intensity (MWh/SEK M)³</td>
<td>36.9</td>
<td>36.3</td>
<td>33.8</td>
<td>31.7</td>
<td>28.2</td>
<td>24.9</td>
<td>-20%</td>
<td>-12%</td>
</tr>
<tr>
<td>Water intensity (m³/SEK M)³</td>
<td>138.8</td>
<td>148.5</td>
<td>129.6</td>
<td>119.1</td>
<td>100.8</td>
<td>76.4</td>
<td>-20%</td>
<td>-24%</td>
</tr>
<tr>
<td>Hazardous waste intensity (kg/SEK M)</td>
<td>186.0</td>
<td>181.4</td>
<td>130.9</td>
<td>125.7</td>
<td>129.4</td>
<td>119.4</td>
<td>-20%</td>
<td>-8%</td>
</tr>
<tr>
<td>Consumption of chlorinated organic solvents (PER and TRI) (tons)</td>
<td>21.6</td>
<td>20.1</td>
<td>14.4</td>
<td>1.7</td>
<td>19.0</td>
<td>16.8</td>
<td>-85%</td>
<td>-12%</td>
</tr>
<tr>
<td>Non-hazardous waste intensity (kg/SEK M)⁴</td>
<td>853</td>
<td>872</td>
<td>814</td>
<td>990</td>
<td>959</td>
<td>878</td>
<td>-20%</td>
<td>-8%</td>
</tr>
<tr>
<td>Portion of renewable energy⁵</td>
<td>10.0%</td>
<td>8.7%</td>
<td>6.9%</td>
<td>7.8%</td>
<td>9.1%</td>
<td>10.8%</td>
<td>20%</td>
<td>+1.7 p.p.</td>
</tr>
<tr>
<td>Consumption of other types of organic solvents (tons)⁶</td>
<td>804</td>
<td>933</td>
<td>949</td>
<td>1,033</td>
<td>1,255</td>
<td>1,123</td>
<td>-50%</td>
<td>-11%</td>
</tr>
<tr>
<td>Intensity of greenhouse gas emissions related to chemicals in industrial processes (tons/SEK M)⁴</td>
<td>N/A</td>
<td>9.4</td>
<td>9.0</td>
<td>10.5</td>
<td>6.7</td>
<td>3.3</td>
<td>-85%</td>
<td>-51%</td>
</tr>
<tr>
<td>Social KPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury rate (number of injuries per million hours worked)³</td>
<td>9.2</td>
<td>9.1</td>
<td>7.5</td>
<td>6.4</td>
<td>6.7</td>
<td>5.2</td>
<td>-40%</td>
<td>-22%</td>
</tr>
<tr>
<td>Injury lost day rate (number of lost days related to injuries per million hours worked)³</td>
<td>182.4</td>
<td>187.4</td>
<td>168.2</td>
<td>135.7</td>
<td>136.0</td>
<td>90.9</td>
<td>-64%</td>
<td>-33%</td>
</tr>
<tr>
<td>Portion of spend in low-cost countries represented by sustainability audited suppliers</td>
<td>90%³</td>
<td>90%³</td>
<td>89%⁴</td>
<td>90%⁴</td>
<td>90%⁴</td>
<td>93%⁴</td>
<td>90%⁴</td>
<td>+3 p.p.</td>
</tr>
<tr>
<td>Number of sustainability audits of suppliers in low-cost countries</td>
<td>493³</td>
<td>795³</td>
<td>885⁴</td>
<td>812⁴</td>
<td>890⁴</td>
<td>865⁴</td>
<td>-25</td>
<td></td>
</tr>
<tr>
<td>Gender equality⁶</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portion of females in management positions</td>
<td>Level 2: 0%</td>
<td>18%</td>
<td>27%</td>
<td>27%</td>
<td>27%</td>
<td>27%</td>
<td>+0 p.p.</td>
<td>+0 p.p.</td>
</tr>
<tr>
<td>Level 3:</td>
<td>15%</td>
<td>16%</td>
<td>12%</td>
<td>16%</td>
<td>17%</td>
<td>21%</td>
<td>+4 p.p.</td>
<td>+4 p.p.</td>
</tr>
<tr>
<td>Level 4:</td>
<td>19%</td>
<td>18%</td>
<td>21%</td>
<td>20%</td>
<td>16%</td>
<td>17%</td>
<td>+1 p.p.</td>
<td>+1 p.p.</td>
</tr>
</tbody>
</table>

1 For comparable units in 2016.
2 The development is a combination of an increased number of certified entities and recently acquired companies with ISO 14001 certification.
3 Countries covered: China, Macau, Hong Kong, Taiwan, India, Malaysia, Vietnam, Thailand and Philippines.
4 Countries covered: All low-cost countries.
5 The historical numbers have been adjusted with proforma data for the years 2011–2013.
6 The definition of management positions have been revised during 2014. 2012 and 2013 have been restated to be comparable with 2014.
7 New KPIs from 2015.
Sustainable innovation

ASSA ABLOY sees rapidly growing opportunities in all markets, based on the Group’s proven track record within sustainable innovation. Key components to unleashing the market potential and meeting customer demands are life-cycle-based Environmental Product Declarations (EPDs), applying sustainability-related design criteria and using the ASSA ABLOY Sustainability Compass.

Progress in 2016

- ASSA ABLOY Sustainability Compass launched and implemented in all divisions. Training conducted with internal key stakeholders, and continued roll-out across the organization is planned for 2017. This vouches for sustainability being an integral part in the initial stages of development.
- Implementation of internal list of non-desirable materials for new product process designs.
- Initiated development of a "Materials Cheat Sheet", describing the environmental effect of the materials to favor conscious environmental choices in new product development.
- Continued internal awareness and training programs, including certifications and EPDs, to promote sustainability knowledge and understanding throughout the Group.
- Initiated an awareness program for ASSA ABLOY sales and marketing organization’s emphasizing sale of products with ‘Green Attributes’.

Growing market for more sustainable and resilient products

The demand for more sustainable and resilient ASSA ABLOY products is fueled by the strong growth in green buildings and more sustainable urban environments around the world. This trend is manifested by the growing use of certified systems and sustainability certification schemes for buildings, such as LEED and BREEAM.

According to the U.S. Green Building Council (USGBC), LEED is referenced in project specifications for 71% of projects valued at USD50 million or more. According to a report from Dodge Data & Analytics, the numbers of green buildings worldwide are expected to double by 2018 and more than 60% of the U.S. construction projects will be green by 2018.

EPDs

Customers are increasingly assessing the environmental impact of building materials. In many cases the purchasing decision and path to achieve LEED v4 and other certifications is based on the information from EPDs. ASSA ABLOY is leading the industry in establishing product category rules (PCRs) which have resulted in a credible and uniform comparison of similar products.

Through Life Cycle Assessments (LCAs) the environmental impact is mapped from raw material extraction to disposal or recycling and this fundamental work ultimately made it easier for the customers to compare products that fulfill the same function.

In 2016, Health Product Declarations (HPDs) for 21 door and hardware products were issued. The next step is to expand the approach to optimize the materials used when developing new products. This will further increase the visibility of the Group’s expanding product listings and strengthen the leadership in innovative thermal and energy conserving products.

ASSA ABLOY’s Sustainability Compass

The ASSA ABLOY Sustainability Compass is raising the profile of sustainability-related design criteria during the development of new products. The compass is used to outline the sustainability vision for individual products and includes eight life-cycle dimensions or focus areas: raw materials, water, virgin material, end-of-life reusability, recyclability, in-life energy consumption, carbon footprint, and financial cost. It is used to track performance and to communicate the importance of sustainability-related design criteria among internal and external stakeholders involved in product innovation and development.

Emphasizing sales with green attributes

Important work during the year includes increasing awareness within the Sales and Marketing teams of how to improve customers’ environmental footprint by promoting “green attributes” within ASSA ABLOY’s product portfolio. By explaining the environmental improvements and customer value that a reduced environmental footprint brings, ASSA ABLOY seeks to promote the portfolio of more sustainable products and increase their share of sales.

Future outlook

Demand for sustainable products and green buildings is gaining more momentum around the world. ASSA ABLOY continuously works to further improve the Group’s sustainability practices.

The Internet of Things (IoT) will play a key role in sustainable solutions. IoT will have devices and systems constantly talking to each other and reporting their status. ASSA ABLOY recognizes the opportunity to utilize this technology. Energy consumption can be dramatically reduced with smarter door solutions at times when they are not in use. With the use of sensors and low power standby modes, certain parts of a system can be turned off when un-used. For example, ASSA ABLOY door sensors can inform operators when hotel rooms are unoccupied. As a result, supporting systems such as air conditioning and lighting can be switched off. All these play a big part in the smart and green building infrastructure. There are door sensors that can detect if a person is walking by or intends to enter. The doors don’t open if a person only walks by. Every small decision makes a big impact.
Creating customer value through product innovation

ASSA ABLOY’s commitment to promoting sustainability-related design criteria in product development reduces life-cycle costs and creates value for its customers.

Product management and innovation
The ASSA ABLOY Innovation Management system, which is based on lean innovation principles, consists of several modules, including product management, customer insight, long-term trending, and generation planning and projects. The system ensures that new product concepts are fully evaluated against customer needs and sustainability requirements before moving into the engineering design phase.

The Global Sustainable Product Council
ASSA ABLOY’s Global Sustainable Product Council represents functions within sustainability with a focus on new products and solutions. The council leads and coordinates activities in all divisions with the purpose of enhancing the sustainability performance of new products. It works with target setting and develops policies and guidelines for more sustainable product development. The council is a forum for group-wide development and the sharing of best practices and technology, and it provides second opinions and reviews on tools and methods of working.

Regenerative door operator
The 5800 Series ADAEZ PRO is a compact electromechanical door operator that is simple to install and use. This heavy-duty, low energy operator is intended for high-traffic manual opening applications that occasionally require automatic operation like retail outlets, banks, schools or universities. The ADAEZ PRO utilizes a Regenerative Drive System to charge an onboard battery pack eliminating the need for electrical power. When used 25% or less in automatic mode the ADAEZ PRO will self-generate all the power it needs to keep its field replaceable, onboard, battery pack charged for up to 12 years and in some cases longer.

Energy harvesting lock
The IN120 WiFi lock with energy harvesting technology demonstrates how a battery-powered lock can utilize light (sunlight or interior lighting) to reduce dependence on batteries. This new technology affirms our commitment to providing sustainable access control solutions that help our customers reduce their environmental footprint.

Green certification confirms energy-saving advantages
HID Global is discovering how achieving third-party certification for its products and services offers a powerful communication tool to customers seeking “green” solutions. With customers placing increasing importance on the environmental attributes of products, companies such as HID Global need third-party proof to instill consumer confidence in their energy-savings claims.

To reinforce its messaging and provide value to its brands, HID Global has partnered with GreenCircle to provide independent third-party validation, assuring its sustainability claims and reinforcing its position as a market leader. GreenCircle certification has been awarded to HID Global’s secure issuance ID printers as well as to its physical access control iCLASS readers. Tests have shown that HID Global’s direct-to-card printers have energy savings of between 53 and 69 percent compared with similar products, while its iCLASS readers have shown energy savings of 59 percent when operating in intelligent power mode versus the baseline of standard mode.

Brandon Arcement, director of Product Marketing at HID Global, says: “GreenCircle certification provides a powerful communication tool for HID Global’s commitment to green innovation. It enables our customers to invest in our platforms with confidence.”
Supply chain management

The long-term objective of Group supply chain management is to reduce business risk by improving sustainability performance throughout the value chain. During the year, ASSA ABLOY introduced a Code of Conduct specifically for Business Partners and conducted a third-party assessment of ASSA ABLOY’s internal supplier audit system to verify the robustness of the processes.

Supply chain challenges
Ensuring that suppliers fulfill ASSA ABLOY’s requirements is an ongoing challenge, which during the year has involved phasing out suppliers that fail to meet the company’s standards. At the same time, ASSA ABLOY’s pace of acquisitions is a supply chain management challenge, and integrating acquired companies’ supply chains into ASSA ABLOY’s value chain is always a priority. This is particularly the case as the Group expands into emerging markets and further develops its supplier base in low-cost countries, which makes it increasingly important to ensure a consistent approach to supply chain management.

Additional challenges include continued efforts to examine suppliers’ environmental management systems and encouraging suppliers to perform Environmental Product Declarations, which are increasingly requested by customers. Furthermore, as ASSA ABLOY phases out hazardous substances, the Group also audits the suppliers’ use of these chemicals. ASSA ABLOY plans to overcome some of these challenges by increasing the use of third-party auditors to complement internal auditing capabilities.

Progress in 2016
• Business Partner Code of Conduct released
In April 2016 a Code of Conduct for Business Partners was released, in which the text has been updated to be specially adapted to the needs and challenges of business partners. The Business Partner Code of Conduct applies to all partners that provide products or services to ASSA ABLOY or that are engaged or instructed to act for or on behalf of ASSA ABLOY, such as suppliers, consultants, distributors, agents and other representatives.

• Improved version of the Business Intelligence System
An improved version of the Business Intelligence System was launched in October 2016. The system, which incorporates information on spend per ASSA ABLOY entity, supplier, category, supplier segment, whether the Business Partner Code of Conduct is signed or not and audit results, is an important tool for measuring and follow up of progress being made. Examples of improvements in the new version is improved measurements for measuring suppliers signed the Business Partner Code of Conduct, or suppliers not having resolved any non-conformances in conducted audits. The definition of the sustainability audit indicator has also been tougher. Audits overdue according to the audit follow up rules no longer are counted in the measurements.

In 2016, ASSA ABLOY conducted 865 (890) sustainability audits.

The share of the Group’s total purchases of raw materials, components and finished goods from low-cost countries was 53 percent 2016.

Reducing the number of suppliers is important for reducing costs and improving quality. Active efforts have reduced the total number of suppliers by 29 percent over the past five years.
Assessment of ASSA ABLOY’s internal supplier auditing systems
The assessment of ASSA ABLOY’s internal audit internal program continued in 2016, where an external audit company audited suppliers previously audited following ASSA ABLOY standard process. In total 865 audits were conducted during the year and the results have given good information on how to improve ASSA ABLOY’s internal auditing capabilities.

Supplier sustainability audit program
The supplier sustainability audit program focuses on direct material suppliers in low-cost countries in South and Central America, Eastern Europe, Africa and Asia, as these are perceived as greatest risk for not being compliant with ASSA ABLOY’s Business Partner Code of Conduct. In the new Business Partner Code of Conduct ASSA ABLOY’s policies and principles are communicated regarding business ethics, human rights & labor standards, health and safety and environment.

ASSA ABLOY conducts its own supplier audits and due diligence processes. The Business Partner Code of Conduct sets out clearly that ASSA ABLOY does not accept child labor in its own operations nor at a business partner. Recognizing the complexity of this matter, should however a child be found in the production chain, ASSA ABLOY requires that the employer acts in accordance with the overall best interest of the child. Neither does ASSA ABLOY accept any form of forced or bonded labor, prisoners or illegal workers, and the Code specifies unacceptable conditions of modern slavery. In addition, the Code reinforces ASSA ABLOY’s support for the right to freedom of association and collective bargaining, as well as other working conditions such as contracts, hours and compensation.

Key audit findings in 2016
In total, ASSA ABLOY has about 7 500 external direct material suppliers, of which 2 700 are located in low-cost countries and regarded as higher risk. At the end of 2016, 1034 active suppliers were audited and of these 1 011 had satisfied the minimum sustainability requirements, which corresponds to an audited spend in excess of 93 percent. The company audited 12 percent of its new suppliers in low cost countries in 2016. At the year-end, two suppliers in low cost countries were blacklisted and 36 put on new-business hold by the Group, meaning they were not eligible for new business from any ASSA ABLOY entity.

Based on audit data reported in the new Business Intelligence system the most frequent areas with non-conformities as well as the areas with biggest improvements made have been analyzed. The analyses showed that business ethics and human rights and labor standards were areas where most suppliers were excellent or satisfactory, and health and safety in areas such as personal protective equipment (PPE) and management of hazardous chemicals were the most frequent area where suppliers were rated poor or rejected. The analyses also showed that the areas of environmental improvement plans has been adhered to in the follow up audits.

Supply chain management governance
Group Management sets supplier sustainability targets and manages the overall framework, and each division is responsible for ensuring its suppliers meet ASSA ABLOY requirements. Group Supply Management is led by the Sustainability Supply Council, which is made up of representatives from each division. The Council coordinates activities and follows up on progress. All divisions apply the same guidelines and processes provided by Group Supply Management.

Renewable energy replacement brings cost savings
Replacing fossil-fuel energy with renewable energy plays an important part in ASSA ABLOY’s aim to become more sustainable.

**CHALLENGE**: Efforts are being made throughout ASSA ABLOY to reduce its carbon footprint and lower its fixed-energy costs by using more renewable energy. “Many people have a misconception that it costs more to purchase electricity from renewable resources like solar and wind power,” says Charles Robinson, sustainability manager ASSA ABLOY EMEA. “But buying electricity from renewables is often on a par with fossil-fuel-generated electricity.”

**SOLUTION**: The measures taken by the company have had a major effect. In EMEA, for example, more than half of the electricity consumption now comes from renewable energy, and this is expected to increase in the coming years. And some centers already procure their electricity strictly from renewable resources, including Abloy in Finland, the company’s operations in Spain and some UK facilities.

**RESULT**: “Spain saved EUR 95,000 in 2016 compared with the cost level before switching to renewable resources in 2014,” Charles says, adding that the key to being cost-effective lies in negotiating electricity costs. “Each of the 11 regions in EMEA is responsible for handling the negotiations for electricity locally and requesting a mix that includes renewable resources.”
Supply chain auditing

Supplier audits
ASSA ABLOY’s audits are designed to assess if suppliers comply with the company’s Business Partner Code of Conduct in terms of business ethics, human rights and labor standards, health and safety and environmental criteria. Some criteria in the audit checklist are of such significance that they are known as “stoppers”. If a supplier fails to comply with these important standards they are rated “red”, and put on new business hold. If the suppliers fails to improve the supplier will be blacklisted and their relationship with ASSA ABLOY terminated. There are many reasons why suppliers are blacklisted, but the main issue encountered is an unwillingness to meet ASSA ABLOY’s demands for improvements.

The ASSA ABLOY audit process is always the same, regardless of supplier or auditor, and includes self-assessments, on-site initial audits and on-site follow up audits to verify that the supplier has implemented the agreed action plan.

Business Intelligence Supply Management System
Divisions submit their audit reports to the Group’s supplier Business Intelligence Supply Management System, which allows ASSA ABLOY to grade and analyze the performance of its suppliers. The system is used as a basis for procurement decisions to identify preferred suppliers and enables ASSA ABLOY to monitor several supply chain key performance indicators.

Supplier contractual expectations
ASSA ABLOY ensures that new suppliers fully understand what is contractually expected of them to help avoid risks associated with business ethics, human rights, workers’ rights, health and safety and the environment.

The traffic-light system
ASSA ABLOY uses a traffic-light system to rate individual suppliers on how they conform to ASSA ABLOY’s Business Partner Code of Conduct. Suppliers are rated on the following five color-coded system:

- **Green** – the supplier is approved. A follow-up audit is done after three years to verify compliance.
- **Yellow, orange, and purple** – the supplier is approved on the condition that it resolves outstanding issues within an agreed time frame. Yellow signifies the fewest number of non-conformities and purple the most. A follow-up audit is done after one year.
- **Red** – the supplier is not approved. The supplier is put on new business hold, and a follow-up audit must be done within a maximum of six months.

Red, yellow, orange, and purple statuses can be revised based on evidence of a corrective action plan, well-documented progress, and firm commitment from the supplier. Contracts with suppliers may be terminated in the case of a non-compliance that is not remedied within an agreed time frame. The contract is automatically terminated if a supplier scores “red” for longer than six months.

THE ASSA ABLOY BUSINESS PARTNER CODE OF CONDUCT
All suppliers are required to comply with the ASSA ABLOY Code of Conduct for Business Partners. The Code of Conduct is based on the following international standards:

- UN Universal Declaration of Human Rights and connected UN Conventions
- ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy
- OECD Guidelines for Multinational Enterprises
- UN Global Compact
- ISO 14001

The ASSA ABLOY Code of Conduct for Business Partners is available in 17 languages.
Enhancing our environmental performance in operations

ASSA ABLOY’s environmental performance improved in several respects in 2016. There is a clear ambition to continuously reduce the environmental impact and enhance performance while expanding the Group.

The commercial importance of sustainability performance has increased during recent years. ASSA ABLOY offers products and solutions that help the customer enhance its sustainability performance, it is therefore important that the Group improves the environmental performance across the value chain. This includes the phases before the product is used by the customer: innovation, supply chain, production and logistics. ASSA ABLOY has been successful in excluding certain hazardous substances, replacing energy-intensive materials, increasing resource efficiency and improving waste management. These factors all add value to the Group’s premium offering.

ASSA ABLOY faces challenges when growing its operations and doing so in regions with more fossil intensive energy mixes as well as water scarcity. Furthermore, when expanding geographically, the transportation footprint must be managed carefully. Energy consumption, carbon emissions and water consumption are the most significant contributors to ASSA ABLOY’s environmental impact. Several initiatives have been taken across the Group during the year to address these issues.

Environmental priorities

ASSA ABLOY has a set of environmental priorities. These include:

- Coordinated implementation of environmental management systems
- Increased capabilities for data analysis and benchmarking
- Increased efforts in water and waste management
- Efforts to reduce energy consumption and increase portion of renewable energy
- Efforts to phase out organic solvents

They are all interlinked and closely connected to production and resource efficiency. Notable progress has been made within all areas. In 2016, there was a continued increase in the number of units covered by certified management systems (ISO 14001). In 2013, a new sustainability reporting system was implemented. Since 2014, the system has enabled ASSA ABLOY to collect more data of higher quality and more frequently. This in turn has improved the tracking and analysis of performance. As the Group is decentralized – with strategic and operational responsibility at divisional level – a systematic approach and the ability to allocate and oversee performance are important components in driving progress at Group level. The new system also provides better tools to visualize and benchmark the development of individual entities and divisions. The belief at ASSA ABLOY is that benchmarking and best practice sharing within the Group drive progress.

Environmental performance within the supply chain is of high relevance to ASSA ABLOY’s overall performance. The Group has an upgraded platform to monitor individual suppliers’ risks, risk management and performance. During 2015, the Group started an initiative with the ambition that no waste should end up in a landfill. In Division EMEA 15 manufacturing sites have been certified as zero-waste to landfill by the organization Carbon Trust. Similar initiatives are under implementation in other parts of the Group.

Environmental management systems

All entities with significant environmental risk should have an environmental management system. The system gives a systematic approach to environmental risks and how to continuously reduce environmental impact over time. The Group has developed a list containing materials and substances that should be avoided in manufacturing processes and products. When it comes to development of new products, ASSA ABLOY’s sustainability compass guides on eight life-cycle dimensions. Two aspects are related to hazardous materials and whether the product contributes to the building’s energy efficiency or an improved indoor health environment.

Environmental compliance

Environmental compliance is critical to maintain the reputation of ASSA ABLOY and its brands, and it gives a license to operate. Non-compliance could result in issues with the Group’s stakeholders ranging from employees, customers, shareholders and authorities. No significant fines or non-monetary sanctions for non-compliance with environmental laws and regulations occurred during 2016.
Energy consumption and carbon emissions

Reducing energy consumption is important to ASSA ABLOY in order to be a more sustainable organization and to save costs. In many countries where ASSA ABLOY operates, there are, or will be, regulations to decrease energy consumption and emissions. For ASSA ABLOY, the emissions are related to energy consumption and substances used in the Group’s manufacturing processes. More effective energy consumption will reduce both emissions and cost.

The company has reduced its total energy consumption by, for instance, implementing improved control systems or technologies for heating, ventilation and pressure systems. Modern LED-lighting with occupational sensors has also been introduced in large number of factories and sales companies. When old machines and processes are replaced by new ones due to age, in most cases they not only require a smaller footprint but also use energy more efficiently. Improving energy performance also requires a cultural change, where employees for instance should switch off machines, equipment and PCs when they are not in use.

Improved overall energy performance is the result of many improvement projects of different types. Most of the projects generate significant energy savings, without any major investments.

**Performance in 2016**

The Group’s total energy consumption decreased by 2.4 percent in 2016 for comparable units as a result of improvement activities. Specific energy reduction projects have reduced the energy consumption by 5,324 MWh. Improved energy efficiency and increased volumes have reduced energy intensity by 11.7 (6.2) percent for comparable units.

The portion of energy coming from renewable resources increased from 9.1% in 2015 to 10.8 percent in 2016. The target is to increase the ratio to 20 percent by the end of 2020. Purchased electricity generated by hydropower, wind and solar accounts for the vast majority of the renewable energy used by ASSA ABLOY. To reach the target a higher portion of the electricity will have to come from renewable resources. Direct energy consumption such as burning of oil and coal will gradually be reduced in favor of purchased electricity.

**Phasing out substances that impact global warming**

There are two units in particular that use substances with significant global warming impact. The main consumption of Freon takes place in China. In 2015, the first production line in China was converted to use environmentally friendly technology, and the remaining lines in China were then scheduled to be converted in 2016 and 2017. ASSA ABLOY complies with the Montreal Protocol and with country-specific legislation on ozone-depleting substances.

**Cutting energy consumption at production units**

As much as about 50 percent of the energy consumption in large manufacturing units is related to factors independent of production volume; for example, heating, ventilation and lighting. ASSA ABLOY takes steps to streamline and specialize production of certain products with the purpose of increasing efficiency in terms of utilization of machines, equipment and floor space, as well as allocation of competence. This will allow ASSA ABLOY’s production facilities to work at full capacity, while supporting efficient working practices and high standards of quality.

**Intelligent logistics**

ASSA ABLOY has been able to reduce the environmental impact of transportation while the Group expands. Locating assembly close to the customer has enabled a more flexible and efficient supply of goods.

The Group has a database of the geographical locations of all suppliers of direct materials, as well as all ASSA ABLOY factories and sales companies. The database is connected to ASSA ABLOY’s central purchasing database, which enables transportation impact estimations to be made based on purchased value, weight of purchased goods and mode of transportation.

**Energy consumption and related CO₂ emissions**

<table>
<thead>
<tr>
<th>Energy consumption and related CO₂ emissions</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct energy – Scope 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– oil (MWh)</td>
<td>30,324</td>
<td>34,942</td>
<td>31,179</td>
<td>29,231</td>
<td>23,177</td>
<td>23,911</td>
</tr>
<tr>
<td>– gas (MWh)</td>
<td>178,069</td>
<td>192,733</td>
<td>200,393</td>
<td>244,785</td>
<td>251,997</td>
<td>246,978</td>
</tr>
<tr>
<td>– coal (MWh)</td>
<td>75,756</td>
<td>96,533</td>
<td>86,493</td>
<td>77,695</td>
<td>88,226</td>
<td>48,884</td>
</tr>
<tr>
<td>– biofuel/biomass (MWh)</td>
<td>3,480</td>
<td>2,201</td>
<td>1,958</td>
<td>3,119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Total</td>
<td>284,149</td>
<td>324,208</td>
<td>321,545</td>
<td>353,912</td>
<td>365,358</td>
<td>322,892</td>
</tr>
</tbody>
</table>

| Indirect energy – Scope 2                   |      |      |      |      |      |       |
| – electricity (MWh)                         | 313,966 | 334,331 | 321,824 | 347,306 | 358,983 | 349,516 |
| – district heat (MWh)                       | 29,138 | 32,935 | 47,493 | 30,877 | 30,981 | 28,069 |
| – Total                                     | 343,104 | 367,266 | 369,317 | 378,183 | 389,964 | 377,585 |

**Total energy consumption**

<table>
<thead>
<tr>
<th>Energy consumption and related CO₂ emissions</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct energy – Scope 1</td>
<td>627,254</td>
<td>691,475</td>
<td>690,862</td>
<td>732,095</td>
<td>775,322</td>
<td>700,476</td>
</tr>
<tr>
<td>KPI, Energy intensity² (MWh/SEK M)</td>
<td>36.9</td>
<td>36.3</td>
<td>33.8</td>
<td>31.7</td>
<td>28.2</td>
<td>24.9⁴</td>
</tr>
<tr>
<td>CO₂ emissions related to direct energy consumption – Scope 1 (tons)</td>
<td>70,121</td>
<td>81,536</td>
<td>79,674</td>
<td>84,711</td>
<td>87,994</td>
<td>74,140</td>
</tr>
<tr>
<td>CO₂ emissions related to indirect energy consumption – Scope 2 (tons)</td>
<td>204,068</td>
<td>163,605</td>
<td>163,204</td>
<td>170,460</td>
<td>174,847</td>
<td>169,420</td>
</tr>
<tr>
<td>Total greenhouse gas emission related to energy consumption CO₂ (tons)</td>
<td>274,280</td>
<td>245,141</td>
<td>242,878</td>
<td>255,171</td>
<td>262,841</td>
<td>243,560⁵</td>
</tr>
<tr>
<td>KPI, Greenhouse gas emissions intensity (tons/SEK M)</td>
<td>14.8</td>
<td>12.9</td>
<td>11.9</td>
<td>10.3</td>
<td>9.8</td>
<td>8.7⁷</td>
</tr>
</tbody>
</table>

**CO₂ emissions related to substances in industrial processes**

<table>
<thead>
<tr>
<th>Energy consumption and related CO₂ emissions</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emission related to substances in industrial processes</td>
<td>N/A</td>
<td>178,288</td>
<td>184,552</td>
<td>241,783</td>
<td>358,983</td>
<td>349,516</td>
</tr>
<tr>
<td>– Calculated CO₂-emissions² (tons) – Scope 1</td>
<td>N/A</td>
<td>423,429</td>
<td>427,430</td>
<td>496,954</td>
<td>442,236</td>
<td>335,733</td>
</tr>
</tbody>
</table>

¹ For comparable units. Total energy consumption amounted to 716,003 MWh, including units acquired during the year.
² The historical numbers have been adjusted with proforma data.
³ Total energy use added.
⁴ For comparable units. Total energy use added amounted to 25.0 MWh/SEK M, including units acquired during the year.
⁵ For comparable units. Total greenhouse gas emission related to energy consumption amounted to 246,101 tons, including units acquired during the year.
⁶ Greenhouse gas emission related to energy consumption CO₂ added.
⁷ For comparable units. Total amount of ozone-depleting substances in tons of R11 equivalent amounted to 8.1 tons, including units acquired during the year.
Water and waste management

Efforts to reduce water consumption and improve waste management have increased at ASSA ABLOY. They are key parts of reducing environmental impact, increasing efficiency and cutting costs. ASSA ABLOY has improved tracking and management of both water and waste.

Water management
Water shortage is an increasing concern in many parts of the world. It is the Group’s ambition to minimize the water footprint and to implement efficient recycling systems or even closed loop systems to ensure sustainable operations.

During 2016, the water withdrawal decreased by 20.5 percent and the water intensity decreased by 24.3 percent for comparable units as a result of improvement activities and changed production mix in China. The Group’s water consumption primarily relates to painting, plating and cleaning processes. Twenty such entities, located mainly in the US and China, account for more than 70 percent of the Group’s total water consumption. Water recirculation in wastewater treatment plants is important to improve efficiency. In 2016 the total amount of water recycled corresponded to 19.3 (12.0) percent of the total water consumption. Emissions to water are monitored in accordance with local regulations. In 2016 the Group’s total water withdrawal amounted to 2,203,000 m³, of which 84.8 percent were sent to municipal treatment plants after use. The ASSA ABLOY units that manage chemicals are properly licensed and registered with the local authorities. Acquisitions in China in recent years have added processes with high water consumption. The Group is working intensively to find more efficient alternatives.

Relocating electroplating line improves sustainability and production

**CHALLENGE**: One of the Group’s largest manufacturing sites in China, ASSA ABLOY Zhongshan used to process the wastewater from the electroplating process in its own facility. However, this treatment was far from efficient, as the process created up to 70 tons of electroplating sludge each year – all in close proximity to populous areas.

**SOLUTION**: ASSA ABLOY Zhongshan has relocated its electroplating line to an industrial estate 13 km from its original site and upgraded the machinery. Wastewater is now collected and treated by a centralized treatment facility managed by the industrial estate. To improve safety, a new sprinkler system has also been installed that fits the Group’s insurance company’s requirements.

**RESULT**: Using the new facility has made the rinsing process more efficient, reducing water use by 45 percent and increasing the water reuse rate to over 85 percent, which far exceeds the 60 percent standard set by the local government. The upgraded electroplating line has also shortened the production lead time and improved product quality.

### Water performance

<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased water (1,000 m³)</td>
<td>1,777</td>
<td>1,756</td>
<td>1,575</td>
<td>1,600</td>
<td>1,565</td>
<td>1,488</td>
</tr>
<tr>
<td>Water from on-site wells (1,000 m³)</td>
<td>526</td>
<td>1,070</td>
<td>1,063</td>
<td>1,144</td>
<td>1,127</td>
<td>647</td>
</tr>
<tr>
<td>Rainwater (1,000 m³)</td>
<td>NA</td>
<td>NA</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Surface water (1,000 m³)</td>
<td>NA</td>
<td>NA</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>**Total water withdrawal (1,000 m³)**¹</td>
<td>2,303</td>
<td>2,827</td>
<td>2,652</td>
<td>2,752</td>
<td>2,702</td>
<td>2,146¹</td>
</tr>
<tr>
<td>KPI, Water/ Value added (m³/SEK M)²</td>
<td>139</td>
<td>149</td>
<td>130</td>
<td>119</td>
<td>101</td>
<td>76²</td>
</tr>
</tbody>
</table>

¹ For comparable units. Total water withdrawal was 2,203 (1,000 m³), including units acquired during the year.
² For comparable units. Total water intensity amounted to 77 m³/SEK M, including units acquired during the year.
³ The historical numbers have been adjusted with proforma data.
Waste management

Waste represents a substantial cost both in terms of the resources needed to generate the waste and the cost to handle the waste in a proper way. The demand on resources is expected to increase in the future as a result of economic and population growth. To minimize resource consumption and waste generation, and to increase recirculation of used material are important for a long term sustainable business.

ASSA ABLOY works to minimize waste from its manufacturing processes as well as the waste related to packing. Several companies within the Group generate revenue from selling paper, cardboard and plastic for recycling rather than having to pay for disposal of those materials.

In 2016, the total amount of waste for comparable units was 83,115 (86,821) tons. The intensity value for hazardous waste decreased by 7.7 percent for comparable units. Cutting oil is extensively filtered and cleaned, so that it can be reused in manufacturing. Certified companies appropriately dispose of any hazardous waste that cannot be reused.

Several companies have reduced the use of packaging materials, switched to less harmful packaging materials and introduced reusable/recyclable containers. By using electronic orders and integrating information flows across systems, the number of printed documents has been reduced. The intensity value for non hazardous waste decreased by 8.4 percent for comparable units.

Various metals are sorted by type to assist in the recycling of their content. The ambition is to further reduce the amount of metal waste by optimizing the dimensions of the raw materials being used. Two minor incidents of spills were reported in 2016. The cases did not cause ASSA ABLOY to exceed permitted levels and was managed in accordance with national legislation. ASSA ABLOY has improved its relevant internal processes to avoid future incidents.

Recycled metal

<table>
<thead>
<tr>
<th>Tons</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste metal for recycling (tons)</td>
<td>42,710</td>
<td>45,972</td>
<td>49,000</td>
<td>54,025</td>
<td>57,632</td>
<td>55,075</td>
</tr>
</tbody>
</table>

¹ For comparable units. Total amount of waste metal for recycling amounted to 56,338 tons, including units acquired during the year.

Hazardous waste

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal sludge (tons)</td>
<td>661</td>
<td>650</td>
<td>537</td>
<td>563</td>
<td>805</td>
</tr>
<tr>
<td>Oil for recycling (tons)</td>
<td>490</td>
<td>579</td>
<td>295</td>
<td>370</td>
<td>360</td>
</tr>
<tr>
<td>Other types of toxic waste (tons)</td>
<td>1,934</td>
<td>2,225</td>
<td>1,846</td>
<td>1,971</td>
<td>2,304</td>
</tr>
<tr>
<td>Total hazardous waste (tons)</td>
<td>3,085</td>
<td>3,454</td>
<td>2,678</td>
<td>2,904</td>
<td>3,469</td>
</tr>
<tr>
<td>KPI, Hazardous waste/Value added (kg/SEK M)</td>
<td>186</td>
<td>181</td>
<td>131</td>
<td>126</td>
<td>129</td>
</tr>
</tbody>
</table>

¹ For comparable units. Total amount of hazardous waste was 3,560 (tons), including units acquired during the year.

² For comparable units. Total amount of hazardous waste/value added amounted to 124 kg/SEK M, including units acquired during the year.

Non-hazardous waste

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household incinerated/recycled (tons)</td>
<td>1,975</td>
<td>2,442</td>
<td>1,938</td>
<td>1,955</td>
<td>1,766</td>
</tr>
<tr>
<td>Household deposited (tons)</td>
<td>6,364</td>
<td>6,049</td>
<td>7,308</td>
<td>9,531</td>
<td>11,208</td>
</tr>
<tr>
<td>Paper and cardboard for recycling (tons)</td>
<td>2,621</td>
<td>3,766</td>
<td>3,833</td>
<td>4,329</td>
<td>4,803</td>
</tr>
<tr>
<td>Plastic waste for recycling (tons)</td>
<td>382</td>
<td>584</td>
<td>550</td>
<td>1,051</td>
<td>879</td>
</tr>
<tr>
<td>Wood waste (tons)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>4,224</td>
<td>4,277</td>
</tr>
<tr>
<td>Other types of waste (tons)</td>
<td>2,811</td>
<td>3,758</td>
<td>3,013</td>
<td>1,774</td>
<td>2,787</td>
</tr>
<tr>
<td>Total (tons)</td>
<td>14,153</td>
<td>16,599</td>
<td>16,642</td>
<td>22,865</td>
<td>25,720</td>
</tr>
<tr>
<td>KPI, Non-hazardous waste/Value added (kg/SEK M)</td>
<td>853</td>
<td>872</td>
<td>814</td>
<td>990</td>
<td>959</td>
</tr>
</tbody>
</table>

¹ For comparable units. Total amount of non-hazardous waste was 25,105 (tons), including units acquired during the year.

² For comparable units. Total amount of non-hazardous waste/value added amounted to 876 kg/SEK M, including units acquired during the year.

Eco-friendly packaging brings benefits to ASSA ABLOY South Korea

**CHALLENGE:** Packaged products at iRevo, ASSA ABLOY South Korea, used to come in a range of shapes and sizes and the printed contents on the boxes and the materials used vastly differed. The packaging gave the products a unique feel, but the vast array of packages caused difficulties for factory staff and suppliers. Furthermore, the boxes were not environmentally friendly and brand identity suffered due to the inconsistent packaging.

**SOLUTION:** By categorizing its products into groups, iRevo has reduced the quantities and variations of the packaging. Pictures of the products and the specific contents are now printed separately on stickers and attached to the redesigned common boxes. Packing boxes and printing inks have also been replaced with eco-friendly materials.

**RESULT:** Hundreds of different box designs have now been unified into fewer than 10, leading to cost savings of around 20 percent. All packaging is made from 100 percent recyclable cardboard and the stickers showing the contents of the boxes are printed using soy-based ink. The new packaging has also strengthened its brand identity among customers by attaining an environmentally friendly image.
Organic solvents and surface treatment

ASSA ABLOY has reduced the consumption of chlorinated organic solvents through investments in new cleaning technologies. A gradual phase out of those chemicals is in place. ASSA ABLOY uses chlorinated organic solvents such as perchloroethylene (PER) and trichloroethylene (TRI) for surface treatment of metals, including degreasing, cleaning and pretreatment before plating. Surface treatment is needed to meet high standards of durability, corrosion resistance, quality and finishing. The Group works systematically toward eliminating the use of PER and TRI. Most entities have already replaced PER and TRI with less harmful alternatives like ultrasonic cleaning and water- or steam-based processes.

The total consumption of chlorinated organic solvents was reduced by 12 percent compared with 2015. The majority of the consumption of chlorinated organic solvents in 2016 is related to companies acquired during 2014–2016. The target is to reduce the consumption of chlorinated organic solvents by 85% between 2015 and 2020.

The Group is also using other types of organic solvents primarily as solvents for paint. The total consumption of other types of organic solvents for comparable units decreased by 10.5 percent to 1,123 tons in 2016. The target is to reduce the consumption by 50 percent between 2015 and 2020, primarily by switching to water or powder based paint applications.

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Detergent switch cuts consumption of organic solvents

Changing the type of detergent and cleaning tables used to degrease product parts has significantly reduced the consumption of organic solvents at ASSA ABLOY’s manufacturing plant in Rychnov nad Kněžnou in the Czech Republic.

■ CHALLENGE: Eighteen cleaning tables used for cleaning machine tools and components at the plant were using a detergent that contained organic solvents. A decision was therefore made to replace the degreaser with a product that caused less harm to the environment.

■ SOLUTION: Several suppliers of cleaning tables were contacted and various detergents were tested at the plant, including water-based alkaline cleaners and detergents containing natural organisms. When evaluating the products, the team at the plant focused on the level of safety of the detergent, its impact on the environment, the cleanliness of the cleaning components, the corrosion protection tools and the operating costs.

■ RESULT: By using the new cleaning preparation, the consumption of organic solvents at the plant in Rychnov nad Kněžnou has been reduced by about 30 percent.
People – leading the future

Employees are the foundation for ASSA ABLOY’s future success. A strong and clear strategy linking overall objectives to individual targets and development opportunities helps attract the right competencies. Our employer brand is characterized by our commitment to innovation.

Accountability and ownership at the core
The Group’s 47,000 employees, working in over 70 countries, strive to earn ASSA ABLOY the position as a true world leader in door-opening solutions. While the Group is global, there is a nurtured culture of local ownership and decentralized decision-making.

The company’s vision is to be an attractive employer by instilling a workplace culture that gives employees authority to act, opportunities for professional development and a sense that every individual is able to make a difference. ASSA ABLOY strives to attract and retain the people with the right competencies needed for the company’s continued success.

High level of participation
Every second year ASSA ABLOY conducts a Group-wide employee survey. In 2016 the response rate was 92 percent which in itself is an accomplishment. Overall, there were continued improvements across the spread of areas, but with notably high scores for meaningful and challenging professional opportunities and fair treatment, as well as an open and supportive climate. The view is shared among men and women, of different ages. For ASSA ABLOY this is significant proof of the performance on the performance management within the Group, providing employees with clear roles and responsibilities, with the authority to act and a climate that allows for sharing of ideas and innovation.

While showing overall positive development, one area for continued focus relates to the individual’s professional development. Another area was physical working conditions, which has been one of ASSA ABLOY’s strategic focus areas during 2016. ASSA ABLOY will carry out its next employee survey in 2018. The survey is an important tool to understand how employees feel about their workplace, as well as issues such as professional development, diversity and equality.

Keeping track of internal mobility
It is ASSA ABLOY’s responsibility to create the necessary structures and offer the right tools for continuous employee development to unleash the potential of the internal talent pool. Employees are actively encouraged to utilize these structures and tools to seek out opportunities to develop their own career. A Group-wide intranet portal listing job vacancies keeps employees informed of career opportunities across the Group. Internal candidates are given priority consideration for positions that arise, provided that their qualifications are comparable to those of any external candidates. During 2016, 37 percent of the management positions across the Group were filled by internal candidates, and there has been a positive development in terms of internal job applicants for job vacancies.

Actions to improve health and safety pay off

■ CHALLENGE: A service engineer servicing industrial door and docking installations works alone with large and heavy products and attends multiple customer sites in a day to perform maintenance activities. Their workplaces are not under ASSA ABLOY supervision and there is no way to directly control the working environment.

■ SOLUTION: Several actions were identified in 2013 to reduce the lost time injury frequency and to further reinforce a culture of health and safety. For example, management team members attend training courses, place health and safety at the top of the agenda in each meeting and are made aware of their responsibilities as employers. In the Health and Safety Council, injuries are tracked as they happen and corrective actions followed up. The council also shares best practices from countries or manufacturing sites, so these can be spread and lessons learned. Regular safety bulletins and on-the-road campaigns are also used to spread health and safety messages and to raise awareness among service engineers.

■ RESULT: Since these actions began being put into place three years ago, the lost time accident rate has fallen by 40 percent. ASSA ABLOY will continue to reinforce a culture of safety at all levels of its organization, as there is a firm belief that all accidents are preventable.
Maarit Karhumaa contacted ASSA ABLOY Group company Abloy to write her master’s thesis in 2011. Now, she is production development manager.

The production processes at Abloy have long been familiar to Maarit, who studied these for her master’s thesis. However, the encounter with Abloy came out of the blue, as she had almost decided to write her thesis at a Finnish steel manufacturer. “Then one day, I noticed Abloy was searching for a thesis worker, and both the subject and the industry were perfect for me,” Maarit says.

The subject was production control and visual management on the shop floor. “The aim was to reduce inventories and the work in progress related to key component manufacturing processes by developing visual shop floor production control systems,” she says.

After completing her M.Sc. in technology, Maarit joined Abloy as a graduate intake, working as a production development engineer at business unit level. Then in 2013, Maarit spent three months at ASSA ABLOY in Germany, as part of the graduate program. It was at this time she found out about a vacancy as production development manager within her business unit at Abloy.

In 2016, Maarit became production development manager for the whole of Abloy, where she enjoys trying to maintain a level of creativity and remembering to think out-of-the-box. “Those features and a positive attitude are needed for continuous improvement,” she says. “Another challenge is how to successfully combine project deadlines with daily management, as we need to support production to meet customer needs. One hundred percent customer value is our aim. That’s why we’re all here.”

Training and development – local and global
In line with the strategy of local ownership and autonomy, the majority of ASSA ABLOY’s training and development initiatives are implemented and managed on a divisional level based on local needs. Meanwhile, on a Group level, ASSA ABLOY runs two global development programs each year for selected senior managers: the MMT-training, an internal orientation and development program; and the IMD Business School (IMD) Leading the Future. In 2016, 60 (93) ASSA ABLOY managers participated in one of these two programs. The idea of MMT is to create an international cross-business network of colleagues to promote best practice sharing and increase the knowledge and awareness of the organization and our business. It also facilitates integration of new employees following acquisitions. The IMD program was updated in 2016, and extended with a particular focus on future challenges. As a complement, the Group also supports several short-term initiatives and projects that enable exchange of competence among employees and teams.

Shared values and a strong foundation
Being the world leader in door-opening solutions with a global presence, ASSA ABLOY must manage social and ethical issues and observe a high standard of integrity and fair practices. The Group-wide Code of Conduct is available in 28 languages, and is, together with our way of doing business, a key component of the ASSA ABLOY introduction program. The Code of Conduct underlines ASSA ABLOY’s commitment to fair employment conditions and labor rights, and is a clear stand against human rights abuses, child labor and forced labor of any form. During 2016 the Code of Conduct was updated following a review.

From thesis project to managerial position

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Gender balance and diversity

ASSA ABLOY aims to make the most of the entire workforce available to the company, drawing on individual dynamics, local knowledge and expertise. Promoting a gender balance and diversity strengthens ASSA ABLOY’s competitiveness and performance.

Gender balance
With ASSA ABLOY’s Code of Conduct and gender diversity policy as a foundation, the organization systematically works with gender balance at all levels throughout the Group. Discrimination is simply not tolerated, and ASSA ABLOY works proactively against discrimination. The target for 2020 is to have 30 percent female managers in senior positions. The development is monitored every six months. Group-wide gender diversity objectives are set, and the actions taken to achieve them are managed and implemented by the various divisions.

One of the challenges to speeding up the development towards the Group’s gender balance objectives, is the frequency of ASSA ABLOY’s acquisitions, as women have been the clear minority in several of the companies that the Group has acquired in the past few years.

Employee diversity
As an organization working around the world and across cultures, ASSA ABLOY promotes diversity to draw fully on the local expertise and dynamics of individuals available to the company. With extensive experience of working with more diverse teams at ASSA ABLOY, it has been noted that they often provide a more holistic approach and better end results – particularly in terms of product development and business processes.

Consequently, we strive to achieve an employee structure based on diversity at all levels of the organization. For example, 28 nationalities are currently represented at the highest management levels. An understanding of the local market is key to ASSA ABLOY’s success, which has been proven by the geographical expansion of the Group and new market development.

The recruitment process is an important element in achieving a better diversity and gender balance. Managers are expected to examine their organizations to ensure that diversity and qualified females are considered for high-profile projects, employee development and leadership opportunities. The objective is also to have at least one candidate from the underrepresented gender on the shortlist in every recruitment situation. In addition, gender balance and diversity are considered when selecting candidates for the Group’s talent management programs.

### People – Facts and Figures

#### Number of employees by employment contract, employment type and gender

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>% of total</th>
<th>Female, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>44,421</td>
<td>95</td>
<td>31</td>
</tr>
<tr>
<td>Temporary</td>
<td>2,507</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46,928</td>
<td>100</td>
<td>31</td>
</tr>
</tbody>
</table>

At the end of 2016, 35 percent of ASSA ABLOY employees were covered by collective bargaining.

#### Women at different levels of the organization

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage of women</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – reports to CEO</td>
<td>0</td>
</tr>
<tr>
<td>3 – reports to level 2</td>
<td>15</td>
</tr>
<tr>
<td>4 – reports to level 3</td>
<td>19</td>
</tr>
<tr>
<td>5 – reports to level 4</td>
<td>26</td>
</tr>
<tr>
<td><strong>Level 2–5</strong></td>
<td>24</td>
</tr>
<tr>
<td>All employees</td>
<td>35</td>
</tr>
</tbody>
</table>

1 The definition of management positions was revised in 2014. 2012 and 2013 have been restated to be comparable with 2014.

### Average Number of Employees by Region

- Europe, 16,496, 27% women
- North America, 11,924, 27% women
- South America, 2,237, 38% women
- Africa, 587, 42% women
- Asia, 14,684, 43% women
- Oceania, 1,000, 31% women

### Nationalities – ASSA ABLOY’s Management Teams

- Europe excl. Sweden, 34%
- Sweden, 21%
- North America, 19%
- Asia, 16%
- Africa och Middle East, 5%
- South America, 4%
- Pacific, 1%
Engaging in safety is a shared responsibility

ASSA ABLOY is working towards an injury-free workplace, everywhere the Group operates. ASSA ABLOY is introducing a global management system for health and safety, providing consistent standards across the Group. Safety is viewed as everyone’s responsibility, and ASSA ABLOY strives to promote a culture where everyone is engaged in his or her own and their colleagues’ safety. Only then can ASSA ABLOY can reach the objective.

Developments in 2016
- Development of a Group-wide Health and Safety Management System, to be implemented in 2017
- Implementing a set of standardized metrics, including leading indicators to prevent injuries and help strengthen the Group’s safety culture
- There was in general a good development of safety performance during the year

Injuries

<table>
<thead>
<tr>
<th>Year</th>
<th>Injury lost day rate¹</th>
<th>Injury rate²</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

¹ Injury lost day rate in lost days per million hours worked.
² Injury rate in injuries per million hours worked.

The high number of acquisitions is a challenge for ASSA ABLOY’s safety performance as it can take time for a new unit to be fully integrated into the Group’s safety procedures and reporting. To enable this transition, and to ensure a robust and cohesive approach across the Group, a working group with representatives from the ASSA ABLOY divisions has launched a Group-wide Health and Management System. Implementation is planned for the beginning of 2017. The standardized approach focuses on four main areas, which will enable a more consistent and systematic way of working across the Group:
- Health and safety policy manual
- Communications material
- Training
- Metrics and reporting

Health and safety policy manual
Building on experiences and best practices from across the Group, the Health & Safety Policy Manual was developed to support a systematic approach to identifying and reducing workplace hazards, and to provide a framework for implementing, reviewing and continually improving controls that provide a consistent approach across the organization.

The system builds on ASSA ABLOY’s beliefs that safety is a top priority that is everyone’s responsibility, and that all injuries are preventable. Safety incidents are opportunities to learn, improve and take preventive measures. One key component of the manual is to identify safety risks, and ASSA ABLOY has developed an identification and risk assessment model that can be used in the operations as a first step.

Communications to promote awareness
As part of the Group-wide approach, each ASSA ABLOY facility needs to create visual safety communications for all employees. Content will include safety performance metrics, notices of updates, lessons learned or best practice sharing, thematic focus topics or results from safety improvement actions.

Units are encouraged to use physical or digital content that is visible and present in the display at the facility, to be a constant reminder of the importance of safety.

Training
The safety training is applicable to all current employees, new employees, visitors and on-site subcontractors and field service work. Training is mandatory also when new processes or changes to processes are introduced. To help facilitate training, ASSA ABLOY has developed a training: a Health-package with a Safety awareness video and a presentation with guidance for implementation and use of the tools. As a complement there are a number of topic specific trainings to meet assessed needs. Each unit is to have a plan for safety training needs and records of training completion.

Metrics and reporting
Each site will report on an additional number of metrics to identify focus areas for improvement and to measure progress. Some indicators serve to measure actual performance, and are called lagging indicators as they record injuries that have occurred. As part of the Group-wide approach, each site will also report on leading indicators that help identify areas for improvements and preventive actions. ASSA ABLOY units will now report consistently on the following indicators as a minimum:
- Injury rate
- Injury lost day rate
- Lost days per injury
- Safety improvements identified
- Safety improvements implemented

To nurture a safety culture it is important to follow up on each incident or accident to learn from it in order to prevent reoccurrence. ASSA ABLOY has introduced a standardized format to record, investigate and analyze incidents. This record contains detailed descriptions of the incident, specifies type of injury, determines root cause and what corrective actions have been implemented. Mandatory requirements for all ASSA ABLOY sites:
- Develop emergency evacuation and shelter plans and related training drills
- Provide available basic first aid supplies
- Provide fire safety and extinguisher use training
- Assess site hazards and risks
- Perform incident investigations and reporting
- Comply with applicable local safety regulations

Safety culture
To prevent accidents and injuries, ASSA ABLOY is promoting a culture where employees are engaged in proactive safety measures, teaming up to eliminate potential safety risks. To support the work, all units with more than 50 employees will have their own health and safety committees, which will operate on a divisional level and include union representa-tives where applicable.

Absenteeism and Occupational diseases
Absenteeism and Occupational diseases are measured by standard Group KPIs on local entity level, where activities are implemented evaluated. The primary focus is that each local entity has a positive development.
Statement from investors

"ASSA ABLOY manages to combine profitability and sustainability"

“In our view, a particularly strong point in ASSA ABLOY’s sustainability strategy is its integration into product innovation. We see that ASSA ABLOY manages to combine profitability and sustainability in its efforts to consistently improve product sustainability performance and increase efficiency (thus lowering costs) in the production process.

Going forward, ASSA ABLOY could improve the markets’ understanding of its approach to ESG excellence by providing more detailed and specific reporting on how it manages and audits its supply chain. We believe that ASSA ABLOY’s preparedness in this area needs to be clarified or further developed to move towards best in class performance.

ASSA ABLOY’s strategy of acquisitive growth requires comprehensive and robust due diligence of ESG issues in order to avoid costly surprises or liabilities, for instance relating to negative environmental impacts or unethical business practices. In cases of such incidents, we encourage ASSA ABLOY to be open about consequences in terms of how pre-acquisition processes or routines have been reevaluated to prevent the recurrence of similar incidents. One opportunity could be to ensure that acquisition teams have access to center of expertise and knowledge that leads this aspect of due diligence.”

“Green buildings globally is constantly on the rise”

“Due to climate considerations the share of green buildings globally is constantly on the rise. This provides an excellent opportunity for ASSA ABLOY’s products that help reduce energy use, such as electronic locks and parallel windows which can be implemented already in the design phase.

In terms of environmental and social footprint, we would like to see measures to further reduce the water consumption as a result of more efficient production processes, the same for the new KPI on hazardous waste enabling a more comprehensive follow-up. For health and safety we seek more detailed reporting, mainly ‘near misses’ which is an important measure to help identify and prevent risks.

ASSA ABLOY’s presence in high risk countries poses challenges in the own organization and in relation to suppliers. We encourage more information on ASSA ABLOY’s efforts to implement policies and Code of Conduct internally, in particular regarding business ethics and anti-corruption.”

“It’s important for a company to challenge itself”

“During the years, we have seen ASSA ABLOY making progress, in terms of management commitment as well. This is absolutely imperative to enable a company to make significant progress towards sustainability. The business case for sustainability, which for ASSA ABLOY’s offering is highly relevant, can help spur development across all sustainability aspects of the operations, for instance health & safety.

In order to continue to make progress, it is important for a company to challenge itself. We commend ASSA ABLOY for reviewing and updating their targets for the next five years, adding new aspects, for instance waste.

With regard to water management and health and safety there is still room for continued improvement. This is also true for equal opportunities and diversity, there have been few concrete examples of how the company is working to increase diversity. It seems that there is time to do a new take on this, and to show more initiative.”
Sustainability governance

ASSA ABLOY AB is listed on the Nasdaq Stockholm stock exchange, Large Cap. The Swedish Code of Corporate Governance, together with the ASSA ABLOY Code of Conduct form the basis for the Group’s actions, behavior, and external communication. The Code of Conduct was reviewed and updated in 2016, and complemented with a Business Partner Code of Conduct.

Frameworks and responsibilities
ASSA ABLOY has been a signatory to the UN Global Compact since 2008. Its affiliation with the UN Global Compact means that the Group supports and commits to actively promoting and respecting the 10 principles on human rights, labor standards, environment, and anti-corruption in the Group’s operations and in dealings with external stakeholders. As a signatory, ASSA ABLOY is obligated to issue a Communication on Progress report annually to the UN Global Compact. We fulfill this obligation by issuing an annual Sustainability Report, which is communicated to the UN Global Compact.

The Board of Directors has the overall responsibility for identifying and managing existing and emerging risks. The Executive Team is responsible for sustainability risk management relating to the Group’s strategy, the Code of Conduct, and other sustainability policies. The divisions have the operational responsibility as well as the responsibility of integrating the principles of sustainability into the daily operations.

Updated Code of Conduct for employees in 28 languages
The Group-wide Code of Conduct covers business ethics, communication, human rights and labor standards, environment and health and safety. It provides the framework for ASSA ABLOY’s daily operations and dealings with external stakeholders.

During 2016 the Code of Conduct was reviewed and strengthened in a number of areas including health and safety, diversity and compliance. In response to increased stakeholder expectations, the updated code also contains a section on ASSA ABLOY’s position on conflict minerals. The Code of Conduct is based on the United Nations Universal Declaration of Human Rights and associated UN conventions, the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the United Nations Global Compact, the OECD Guidelines for Multinational Enterprises, and the ISO 14001 environmental management standard.

The ASSA ABLOY Code of Conduct is available in its full version in English, French, German, Spanish, and Chinese, while a shortened version is available in 28 languages at: www.assaabloy.com/code.

The full version of the Code of Conduct is given to all managers, employees with exposed positions, and union representatives. A short version is communicated and made available to all employees. New employees are required to read the Code of Conduct and agree to abide by it and any related policies within three months of joining the Group. As part of the implementation of the updated Code of Conduct, ASSA ABLOY will during 2017 launch an updated e-learning module and a digital quiz to promote dialogue and discussion.

ASSA ABLOY respects the laws and regulations of the countries in which it operates. The Code of Conduct does not replace legislation and if the two are in conflict, legislation takes precedence. If the Code of Conduct sets a higher standard than the existing legislation, the reverse applies.

New Business Partner Code of Conduct
The new Code of Conduct for Business Partners is based on the pillars and frameworks applied for the ASSA ABLOY Code of Conduct, but is more concise and adjusted to external partners. The policy sets forth principles that apply globally to suppliers, business partners and other stakeholders such as a third party acting on behalf of ASSA ABLOY. The Code is available in 17 languages.

The compliance committee
ASSA ABLOY has a Code of Conduct compliance committee, which is chaired by the Group Senior Vice President of Human Resources. Its members include the Group Head of Environmental Sustainability, Group Head of Compliance and two employee representatives, who are also members of the ASSA ABLOY Board of Directors. Among other things, the committee receives information from whistle-blowers and ensures that such matters are handled in an appropriate way and followed through. The committee meets twice a year.

Growing with care
ASSA ABLOY grows organically and through acquisitions. Relocation of production is part of creating a more efficient manufacturing structure. Growing the business in new regions, often in emerging markets, will remain an important part of the strategy for the foreseeable future. It is important to understand the new context when moving into new regions and integrating new units. At the same time, the Group works to ensure that the business is run in line with ASSA ABLOY’s Code of Conduct and values. The ability to grow in a responsible way impacts ASSA ABLOY’s performance.

The Code of Conduct includes a mechanism for whistle-blowing. The objective is for cases to be resolved on a local level, however in 2016, the Group handled 46 (35) cases reported through the whistle-blowing function. The cases represent a variety of issues, and signals that the mechanism is known across the organization.

To uphold the ASSA ABLOY standard across the organization, the internal Code of Conduct compliance reviews are complemented with third-party audits. These audits focus on working and social conditions, such as human rights, labor rights, health and safety, and compliance. The Code of Conduct clearly honors international labor rights, including the right to freedom of association and collective bargaining, and promotes diversity. It also underlines ASSA ABLOY’s commitment to human rights, taking a firm stand against child labor and any form of forced labor or discrimination.

In 2016, external audits were performed in ASSA ABLOY’s operations in China and Mexico. Since 2009, 16 sites have been subject to internal audits. The Group carries out two audits per year with a focus on the Group’s manufacturing sites in Africa, Asia, Eastern Europe and South America. Based on the audit results, the units will take specific actions for improvement.
Anti-corruption and other compliance programs

ASSA ABLOY has implemented specific compliance programs within the areas of anti-corruption, antitrust, and export control, which supplement and expand on the Code of Conduct in respect of these areas. In 2016, ASSA ABLOY continued to review the process for screening potential sales partners to ensure its robustness.

ASSA ABLOY approach to compliance

All the compliance programs are built up in a similar way. The policies and requirements are set by the Group, which also provides supporting tools, while each division is responsible for implementing the programs. Each division has a compliance officer responsible for overseeing the implementation.

Employees are expected to report concerns. Reports can be made to the nearest manager, the divisional compliance officer, Group Legal, or through the Code of Conduct whistleblowing function. The implementation of the programs is reviewed through the Group’s established process for internal control, including self-assessment in all operating companies and internal audits.

As further described under the Acquisitions section on page 23, ASSA ABLOY also has a mergers and acquisitions compliance process as part of the acquisition process, which includes the areas of anti-corruption, antitrust, and export control. The aim of this process is to put any potential issues on the agenda at the outset of the acquisition to be able to determine the level of risk at an early stage, as well as to mitigate specific areas of concern.

The implementation and further development of the programs is an ongoing process, and ASSA ABLOY is working continuously to find methods that can be used to further develop and evaluate their effectiveness.

Anti-corruption compliance program

Corruption increases inequality and the cost of doing business, and reduces efficiency. ASSA ABLOY works actively to prevent corruption in its business. The anti-corruption compliance program adheres to the strictest international standards with the objective of preventing, detecting, and responding to potential corruption and it is constantly evaluated. Risk assessments, employee training, third-party compliance, and reporting are essential components of the anti-corruption compliance program. The anti-corruption policy is available on the external Group website, together with the Code of Conduct and the Business Partner Code of Conduct. All ASSA ABLOY employees have received information on the anti-corruption policy.

ASSA ABLOY conducts business worldwide and consequently operates in many countries where corruption risks are perceived to be high, according to the Corruption Perceptions Index published by Transparency International. A large part of ASSA ABLOY’s sales are handled through third parties, such as distributors, and a great part of the Group’s anti-corruption efforts are directed to ensure that such third parties acting on behalf of ASSA ABLOY comply with ASSA ABLOY’s standards. This is particularly the case where such sales are made to governments in markets that are perceived to have a higher level of corruption risk exposure, which is identified through our assessments and the Corruption Perceptions Index published by Transparency International.

Focus in 2016

The work to implement and further strengthen the third-party due diligence process within each division continues. The process is used to evaluate whether or not to engage a third party to make sales on ASSA ABLOY’s behalf, based on an adequate assessment and screening. The focus of such a process is to identify and prioritize our efforts toward instances where the corruption risk exposure is perceived to be high.

In 2016, the review of selected arrangements within certain business operations continued. The purpose of the review is to evaluate existing processes and to identify improvement areas in order to further define and develop the third-party due diligence process and procedures adjusted to the business and risk. During 2016 the Business Partner Code of Conduct, which expands on ASSA ABLOY’s expectations on its Business Partners, was launched. There was also an update of the anti-trust program during the year.

ASSA ABLOY has conducted preparation work for the General Data Protection Regulation that will come into force on the 25th of May 2018.

Training

ASSA ABLOY’s training guidelines stipulate that all relevant new employees should receive training on the compliance programs, as applicable, within three months, and receive further training every three years thereafter. Training is conducted either through e-learning programs (available for antitrust and anti-corruption), webinars, or face-to-face.

The anti-corruption e-learning program is global and available in 22 languages. The target group for the anti-corruption training includes managers as well as sales, purchasing, and sourcing personnel.

At year-end 2016, 79 percent (86) of relevant employees in the scope 2016 had participated in anti-corruption training. The implementation of a new e-learning program resulted in a 80 percent of relevant employees in the scope 2016 had participated in antitrust training and 95 percent of relevant employees in the scope 2016 had participated in export control training.

In 2016, local antitrust e-learning programs for Hong Kong, India, Malaysia and New Zealand were added to the already existing antitrust e-learning programs.
Acquisitions – to capture opportunities

Acquisitions are important to ASSA ABLOY’s growth strategy. They strengthen the Group’s offerings, accelerate innovation, and take the Group to new geographic markets – enabling ASSA ABLOY to meet customer demands more rapidly.

With 148 acquisitions since 2006, ASSA ABLOY has established an efficient process for bringing new companies into the Group. This includes reviewing sustainability-related issues and taking steps to help newly acquired companies raise their standards where necessary. The successful integration of acquired companies is an important part of reducing risks.

ASSA ABLOY prefers to acquire sound companies that share the Group’s values and business practices. Ensuring that acquired companies are smoothly integrated into the Group helps to reduce risk and contributes to development. Before an acquisition is completed, ASSA ABLOY shares its way of doing business with the new company; including introducing the Group’s Code of Conduct, among other things. Both parties benefit from knowing as much as possible about each other at an early stage.

The acquisition processes: before and after

The Group-wide acquisition process is divided into four phases: strategy, assessment, implementation, and integration. Each phase has its own predefined activities, decision points, and documentation requirements. Within these phases there are three main due diligence processes: financial and tax; legal; and operational. The legal and operational phases include several sustainability elements.

The operational due diligence phase not only helps ASSA ABLOY to decide whether to pursue the acquisition, but also to understand and plan the work that needs to be conducted if the acquisition is completed. Operational due diligence includes elements such as site visits and a comprehensive review of all aspects of the operational, commercial, and administrative activities. The major findings are recorded and evaluated from a risk perspective. This evaluation will determine whether there are any issues that need to be resolved, or whether the process should be terminated altogether.

Potential issues that are identified in the pre-acquisition due diligence include the use of chemicals, applications for permissions, and compliance. ASSA ABLOY brings in external advisors when called for.

Aspects that are covered by the legal due diligence phase include employment contracts, payment processes and wages, insurance, and taxes.

The supplier base is of relevance in connection to an acquisition, and ASSA ABLOY performs a desktop analysis of the target company’s supplier base before the acquisition is completed. Two supplier categories are mapped, large suppliers and critical components. This mapping involves Group Supply Management and aims to identify risks and potential synergies. Post-acquisition, associated suppliers are automatically included in the Group’s supplier database, which is continuously assessed and audited on sustainability parameters.

As part of the acquisition process ASSA ABLOY is obliged in certain cases to file for antitrust approval. During 2016, the company did this in a number of cases when it was deemed necessary.

Typical risks

ASSA ABLOY has identified the main areas of potential risks related to acquisitions. All of these are covered by the operational and legal due diligence. ASSA ABLOY’s Group-wide sustainability management program – including targets, semi-annual reporting, Group-wide policies including training, and supply chain management – captures the areas listed below and mitigates identified risks. In addition, dedicated action plans are set up when called for. The sustainability management program covers:

- Significant environmental pollution (soil, ground water, and air)
- Manufacturing processes that use hazardous substances
- Supplier base in low-cost countries
- Poor business ethics, including possible Code of Conduct abuses (labor rights, human rights etc.)
- Proper permissions

Compliance in the merger and acquisition processes

There is increased importance, and thereby focus, on compliance issues in connection with acquisitions. This is, in part, due to increased mergers and acquisitions (M&A) activity in emerging markets. For this reason, ASSA ABLOY has implemented additional M&A compliance guidelines as part of the acquisition process.

The M&A compliance process has been designed to give an overall background and guidance, as well as being a practical toolkit for the people involved in the actual acquisition. It covers the five areas of:

- Anti-corruption
- Antitrust
- Export control
- Environmental health and safety
- Tax

The aim of the process is to supplement the due diligence already performed and to expand and include additional areas. The main objective is to get all potential issues on the agenda at the outset of the acquisition to enable a correct risk appreciation at an early stage. With this support, the due diligence process can be even more focused and tailored to specific areas of concern.

Post-completion, a thorough program for addressing any identified compliance issues, as well as any Code of Conduct related aspects such as human rights, is to be put in place and implemented. The post-completion review is especially important if insufficient information has been obtained during the acquisition phase. The M&A compliance guidelines also offer guidance on this process.
Organizational responsibility

The divisions have operational responsibility and their work is overseen by the Executive Team and ultimately the Board of Directors. The Group’s strategy, sustainability objectives and the Code of Conduct form the foundation for the sustainability work.

Managing the sustainability agenda

In the ASSA ABLOY Group, sustainability issues are managed in a systematic and consistent way, mostly at divisional level. The environmental sustainability managers, supply managers and innovation managers at the Group and divisional levels ensure that the necessary policies, processes and tools for managing environmental issues exist and are implemented. The Human Resource functions at the Group and divisional levels have the corresponding responsibility for managing social and ethical matters. To drive the agenda, five functional sustainability councils have been defined. The Group intranet includes two sites that are focused on sustainability. One site offers general information for all employees, while the other supports the sustainability managers and includes tools, best practices, and access to the sustainability reporting database. Statistical reports and scorecards enable all of the ASSA ABLOY companies to monitor their performance and to benchmark themselves with the Group.

Responsibilities

Each division has the responsibility for managing the Group’s sustainability agenda, identifying and addressing risks and opportunities in their context, as well as governing the Code of Conduct and related policies.

The divisional work and progress is overseen by the Executive Team. Each factory or business unit then has the operational responsibility within each division. The Group’s sustainability work and responsibility includes suppliers. Each division is further responsible for ensuring that current and new suppliers understand and comply with ASSA ABLOY’s requirements.

At Group level, performance is monitored via the sustainability reporting process, which includes each company’s reporting of material environmental risks and actions to mitigate the same. Divisional board meetings address risks, compliance, performance and other sustainability matters. The delegation of responsibility, implementation and follow-up is clearly communicated and the accountability of each person and function with a particular responsibility is defined.

ASSA ABLOY’s councils

The Group Sustainability Council has representatives from Operations, Research and Development and Human Resources, including the person responsible for sustainability in each division. The council meets three to four times per year to discuss various aspects of sustainability related to innovation and production, to define action plans and set targets. Each participant in the council is responsible for reporting back to their organization and for driving implementation. The council reports on performance every six months.

In addition to the Sustainability Council, there are councils for Innovation, Sourcing, Operations and Human Resources, whose members include representatives from the Group and all divisions managing sustainability issues related to their areas. A special council on Health and Safety was implemented during 2016.

Monitoring progress

The procedures put in place to manage the Group’s five functional sustainability areas have been successful. Sustainability targets and policies have been implemented across the Group. The units have identified material risks and taken actions to address them.

ASSA ABLOY has a Group-wide database for sustainability indicator reporting. As of the end of 2013, a new reporting system has been in place, enabling improved quality and analysis of data. The database includes best practices and tools as well as details of measures taken by the various companies to reach the Group’s sustainability targets. All companies and divisions in the Group can access information from the database to compare progress and trends. In 2016, 347 (338) factories, sales units and offices reported.
Materiality analysis and stakeholder engagement

Materiality analysis
In 2013, ASSA ABLOY conducted its first materiality analysis in accordance with the GRI-framework. The analysis was reviewed in 2015, and the next review is scheduled for 2017. This report is based on the outcome of the 2015 materiality process. The main outcome of the refinement in 2015 was the addition of waste and diversity as Group materiality aspects.

The refined materiality aspects have contributed toward the company’s revised sustainability agenda and objectives, which were launched in December 2015. ASSA ABLOY’s refined materiality also forms the basis for defining the Sustainability Report content in the transition to Global Reporting Initiative’s G4 guidelines.

Materiality analysis provides a clear understanding of which aspects are the most important to ASSA ABLOY’s stakeholders and its sustainability agenda. ASSA ABLOY’s materiality analysis process consists of a three-to-five-year cycle, which involves a large internal workshop in the first year and stakeholder involvement later in the process. The materiality process is reviewed internally when needed by the head of Environmental Sustainability, the head of HR, the Product Innovation Process director, and the Group Supply Management director.

Stakeholder engagement
As a key to understanding societal expectations on ASSA ABLOY, stakeholder engagement involves engaging with a wide variety of actors. ASSA ABLOY’s main stakeholder groups are those with a high level of influence and interaction, and with whom the Group interacts directly and actively in its daily business.

Customers – transparency and products with improved sustainability performance are key issues in which ASSA ABLOY’s customers are increasingly becoming interested. Environmental and social supply chain transparency typically relates to where and how ASSA ABLOY’s products are manufactured, along with details of the materials contained in the products, and is addressed by the company’s work with its supply chain (read more on page 8). Customer interest in sustainable products has emerged from a growing interest in sustainable cities, buildings, and communities. One major focus area is energy efficiency and how ASSA ABLOY’s products can make a contribution. ASSA ABLOY responds to this interest by engaging and collaborating with customers in product innovation and at relevant conferences and events, as well as through its membership of green building organizations and initiatives.

Investors and shareholders – investors and shareholders have become increasingly interested in sustainability issues in recent years. ASSA ABLOY engages with investors and shareholders in both one-to-one meetings and roundtable discussions on a variety of issues, for example supply chain management, Code of Conduct compliance, M&A due diligence, phase out of hazardous materials, energy consumption and CO2-emissions, health and safety, market demand and profitability for sustainable products and solutions and type of whistle blowing cases.

Employees – ASSA ABLOY engages with its employees through annual appraisals, training and development initiatives, staff meetings, the internal magazine in 17 languages, and on the intranet. ASSA ABLOY works to improve employee satisfaction across a broad range of areas, and progress is measured in the employee survey.

Suppliers – key supplier issues are managed through supply chain audits and Business Partner Code of Conduct compliance.

Non-governmental organizations (NGOs) and local communities – ASSA ABLOY participates in local dialogue with the relevant NGOs and the communities in which it operates.
## GRI content index

ASSA ABLOY’s Sustainability Report 2016 applies the Global Reporting Initiative (GRI) G4 Core guidelines. The table below indicates where information can be found; Sustainability Report (unless otherwise stated), Annual Report (AR) or on the company website www.assaabloy.com

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<td></td>
<td>G4-EN33</td>
<td>Significant actual and potential negative environmental impacts in the supply chain and actions taken</td>
<td>8, 9</td>
<td></td>
<td></td>
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<tr>
<td><strong>Social</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Practices and Decent Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G4-OS1</td>
<td>Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs</td>
<td>19</td>
<td></td>
<td>Occupational health and safety</td>
</tr>
<tr>
<td></td>
<td>G4-OS6</td>
<td>Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities, by region and by gender</td>
<td>19</td>
<td>Data by type of injury, gender and region not available. Data of absenteeism and occupational diseases not available on Group level.</td>
<td></td>
</tr>
<tr>
<td>Diversity and Equal Opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>G4-OS8</td>
<td>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity</td>
<td>5, 18</td>
<td>Data by age group not available.</td>
<td>Diversity</td>
</tr>
<tr>
<td>Supplier Assessment for Labor Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G4-OS14</td>
<td>Percentage of new suppliers that were screened using labor practices criteria</td>
<td>9</td>
<td>Data presented is for total number of suppliers, not only for new suppliers. Percentage not available.</td>
<td>Procurement practices</td>
</tr>
<tr>
<td></td>
<td>G4-OS15</td>
<td>Significant actual and potential negative impacts for labor practices in the supply chain and actions taken</td>
<td>8, 9</td>
<td></td>
<td></td>
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<tr>
<td><strong>Human Rights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Investment</td>
<td>G4-HR1</td>
<td>Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening</td>
<td>23</td>
<td></td>
<td>Acquisitions</td>
</tr>
<tr>
<td>Supplier Human Rights Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>G4-HR10</td>
<td>Percentage of new suppliers that were screened using human rights criteria</td>
<td>9</td>
<td>Data presented is for total number of suppliers, not only for new suppliers. Percentage not available.</td>
<td>Procurement practices</td>
</tr>
<tr>
<td></td>
<td>G4-HR11</td>
<td>Significant actual and potential negative human rights impacts in the supply chain</td>
<td>8, 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Anti-Corruption</td>
<td>G4-SC1</td>
<td>Total number and percentage of operations assessed for risks related to corruption and the significant risks identified</td>
<td>22, 23</td>
<td></td>
<td>Anti-corruption</td>
</tr>
<tr>
<td></td>
<td>G4-SC4</td>
<td>Communication and training on anti-corruption policies and procedures</td>
<td>22</td>
<td>A business partner code of conduct will be launched in 2016.</td>
<td></td>
</tr>
<tr>
<td>Product Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Product and Service Labeling</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>G4-PS1</td>
<td>Percentage of product and service information required by the organization’s procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements</td>
<td>6</td>
<td></td>
<td>Sustainable innovation/sustainable products</td>
</tr>
</tbody>
</table>

ASSA ABLOY SUSTAINABILITY REPORT 2016
ASSA ABLOY continually works to improve the sustainability communication in terms of transparency, scope, quality and the frequency of information. This is the Group’s tenth Sustainability Report. ASSA ABLOY reports in accordance with the GRI guidelines, G4 core.

Reporting units
The number of entities reporting on sustainability in 2016 has increased from 338 to 347. The reporting units include sales units and offices. Units with fewer than 10 employees do not report on sustainability indicators. Joint ventures are included if ASSA ABLOY holds a majority of the shares. Sustainability indicators are reported by companies that have been part of the Group since at least the end of the first quarter of 2016.

Calculation principles
Reported normalized KPIs are based on currency-neutral monetary values and value added rather than sales, in order to minimize the effect of currency fluctuations and the ongoing restructuring of the Group. By using value added as a measure, the normalized values are also not affected by the outsourcing of manufacturing. We believe this provides a more accurate picture of what is going on in the Group.

As of 2010, ASSA ABLOY uses the same principle for calculating carbon emissions as in the annual Carbon Disclosure Project-report. The selected method gives a more relevant calculation on the actual carbon emissions since it takes into account how electricity is generated in different countries. In 2012 the CO2 emission factors were updated with respect to international standards.

- Electricity emission factors are based on data on electricity production for 2010, as published by the International Energy Agency (IEA, 2012).
- For district heat the emissions factors are calculated as a weighted average of energy sources for heat production per country, based on data from 2009 as published by the International Energy Agency (IEA, 2013).
- Emission factors for oil, coal and gas are based on data published by the United Nations Intergovernmental Panel on Climate Change (IPCC, 2006).

Changes in reporting management
ASSA ABLOY introduced a new sustainability reporting system in 2013. It has facilitated the collection of data as well as the quality of data. The reporting system has made the sustainability reporting structure more aligned with the Group financial reporting. It supports sustainability management in all areas of operations.

As part of continued efforts to improve the quality of internal sustainability reporting, an analysis of certain units’ reporting in 2014 has resulted in restatements of previously reported data. It concerns reporting of water consumption, energy consumption and carbon emissions.

Since 2015, all units report sustainability performance every quarter (internal reporting). Altogether ASSA ABLOY has improved analysis capabilities and consolidation of data.

Global Reporting Initiative (GRI), G4
This report covers the 2016 reporting year and has been developed with guidance from a number of standards and with substantial input from investors and available rating schemes, in particular the GRI Guidelines. The 2016 report adheres to GRI G4 guidelines at core level. Accordingly, the GRI indicators have been chosen to match the material issues disclosed on page 4. Omissions or incomplete data are commented on directly in the GRI index on pages 26–27.

ASSA ABLOY reports its sustainability performance annually. This is the eleventh Sustainability Report. The most recent Sustainability Report, for 2015, was issued in March 2016.

External assurance
ASSA ABLOY has not sought external assurance for the sustainability report of 2016. PwC Sweden has performed a GRI check and confirms that ASSA ABLOY reports on GRI G4 Core.

Communication
Internally, the Group intranet and sustainability reporting database are important tools for communication. Externally, the Group website www.assaabloy.com and the annual Sustainability Report communicate to a wider audience.

The Group also presents its sustainability approach to external audiences, such as analysts and investors.
Glossary

**BIM**  Building Information Modeling (BIM), is a method of drawing data-rich 3D objects that provide a wealth of information on product options and how the equipment integrates into a building.

**BREEAM**  BREEAM is a sustainability assessment method and rating system for buildings, measuring a building’s environmental performance during building design, construction and operation.

**Carbon Disclosure Project (CDP)**  The Carbon Disclosure Project, or CDP, is an independent non-profit organization compiling the world’s largest database of corporate climate change information. CDP harmonizes climate change data from local organizations from around the world to assist in the development of international carbon reporting standards.

**Carbon footprint**  A CO2 measurement of the impact of human activities on the environment, in terms of the amount of greenhouse gases produced.

**CO2**  Carbon dioxide.

**Direct energy**  Energy generated and utilized on site from oil, gas, etc.

**EBIT**  Earnings before interest and tax.

**Environmental Product Declaration (EPD)**  is a verified and registered document that communicates transparent and comparable information about the life-cycle environmental impact of products.

**Global Compact**  A UN initiative that encourages companies to apply sustainable and socially responsible principles.

**Global Reporting Initiative, GRI**  Global guidelines for sustainability reporting, version 3.0.

**Global-warming potential (GWP)**  is a relative measure of how much heat a greenhouse gas traps in the atmosphere.

**Greenhouse gas emissions**  Gases from the atmosphere that contribute to the greenhouse effect, for example CO2 and methane.

**Indirect energy**  Electricity and heating.

**Injury rate**  Measure of injuries per million hours worked.

**Injury lost day rate**  Measure of days lost due to injuries per million hours worked.

**ISO 14001**  A global, certifiable standard for environmental management systems created by the International Organization for Standardization.

**KPI**  Key Performance Indicator.

**Lean**  Lean production philosophy is about using as few resources as possible. The focus is on just-in-time production, which means that materials, parts and products are in the right place at the right time. Striving for continuous improvement is an integral part of the Lean philosophy.

**LEED**  Leadership in Energy and Environmental Design.

**NGO**  Non-governmental organization.

**Organic solvents**  Perchloroethylene and trichloroethylene.

**PER**  Perchloroethylene.

**SRI**  Socially Responsible Investment.

**TRI**  Trichloroethylene.

**Value added**  EBIT (earnings before income and tax) plus total cost for personnel.

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Saint-Gobain and CertainTeed’s new state-of-the-art headquarters in North America earns LEED 2009 Platinum certification by utilizing sustainable products

ASSA ABLOY provided a suite of six different door opening solutions, from four of its companies, for the construction of Saint-Gobain & CertainTeed North American Headquarters in Malvern, Pennsylvania.

**CUSTOMER:** Saint-Gobain, a French company which prides itself as “the reference in sustainable habitat,” remains eager to partner with other international companies which have also identified sustainability as a priority. This emphasis came into particular focus as Saint-Gobain spent several years planning its new headquarters for North America, a building which would house 800 employees of Saint-Gobain and one of its subsidiaries, CertainTeed.

**CHALLENGE:** The previous North American headquarters for Saint-Gobain was a structure suffering from “sick building syndrome” at the same time as the company was selling its customers on leading edge construction materials designed to make their buildings healthier for employees. The new facility was also targeted for a 2015 opening as part of Saint-Gobain’s 350th anniversary—and was intended to reinforce the company commitment to sustainability.

**SOLUTION:** ASSA ABLOY collaborated with Saint-Gobain to provide six distinct door opening solutions, each of which had obtained an Environmental Product Declaration (EPD) for sustainability. Because the ASSA ABLOY Group provides such a wide range of products, it was able to combine them to provide the project with complete and integrated door opening solutions. Using the ASSA ABLOY products, along with 15 other permanent building products from multiple companies, Saint-Gobain was able to meet and even surpass the requirements for LEED 2009 Platinum certification.