Sustainability Report 2017

ASSA ABLOY

The global leader in door opening solutions

The R.W. Kern Center is constructed to the criteria of the Living Building Challenge, the built environment's most rigorous sustainability performance standard.

Sustainability Report 2017

About the report

This report, along with additional information available online, describes the Group's sustainability initiatives and performance in 2017, 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 2017. This report has been prepared in accordance with the GRI Standards: Core option (see pages 30–31 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 32.

B

This icon means more information at assaabloy.com/sustainability

Contents

Highlights 2017	1
CEO statement	2
Business context	3
Business model	4
Strategy	6
Performance in 2017	8
Customer value and sustainable innovation	9
Supply chain	12
Manufacturing	15
People	20
Statement from investors	24
Governance	25
GRI content index	30
Reporting principles	32
Auditor's report	32
Glossary	33
Contacts	33



External 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 2017, 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.









ASSA ABLOY in brief

WHO ARE WE?

ASSA ABLOY is the global leader in door opening solutions with sales of SEK 76 billion and 47,500 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.

76 47,500 SEK bn employees



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 2017

EUROPE	38%	(38)
AFRICA	1%	(1)
NORTH AMERICA	40%	(40)
SOUTH AMERICA	3%	(3)
ASIA	14%	(15)
OCEANIA	4%	(3)

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, safe, secure and convenient, 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 2017

- The Group had a positive development across a majority of the reporting areas.
- The increased focus on Health and Safety has paid off and led to a decrease of the injury rate by 20 percent.
- The Group's total greenhouse gas emissions decreased by 6,2 percent during 2017 driven by new production technologies and efficiency improvements.
- The water intensity have decreased by 12 percent during the year.
- The number of entities covered by ISO 14001 or other certifiable environmental management systems increased from 124 to 131, which means that the system covers 79 percent of employees in the Group's factories.
- By the end of 2017 the Group had 276 Environmental Product Declarations verified and published.
- The Business Partner Code of Conduct roll out continued and is now available in 20 languages.

"Sustainability creates business value for ASSA ABLOY and its customers."

Johan Molin President and CEO







Energy efficient door opening solutions

2017 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 on a broad basis turning to sustainable security solutions, particularly on account of energy savings and the health aspects for the habitants of the building. During the year we became an official regional partner in the World Green Building Council's Europe Regional Network to promote the development of sustainability and innovation in the building sector.





"ASSA ABLOY remains committed to the principles of the UN Global Compact in the areas of human rights, labor, the environment and anti-corruption. This report contains our annual communication on progress." ASSA ABLOY's five-year sustainability program is making good progress, with many new green products on the market, improved energy and water efficiency, increased use of environmental management systems (ISO14001) and improved 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 costefficiency. 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.

A major innovation focus during 2017 has been on energy efficiency during use phase, this includes smart software algorithms for activation of functions in the products and databases for connected products. We have also further developed tools and processes for the selection of material with reduced environmental impact.

The Group has a growing number of Environmental Product Declarations, Health Product Declarations and other transparency documents to meet our customers' need for information and to achieve certifications. All 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 27 percent of sales. 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 2016 we launched our second five-year sustainability program, which runs until 2020. The program applies to the consumption of materials, water and energy, health and safety, supplier compliance and to the environmental impact in the form of emissions and waste. Ambitions have been raised in all these areas and the results are showing good progress.

The sustainability program is supported by improvements in our reporting systems to ensure faster and more frequently updated information. 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, 5 February 2018

NMN

Johan Molin President and CEO

ASSA ABLOY's business context

ASSA ABLOY is the global leader in total door opening solutions. With a global presence 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

As the global economy grows, 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, with at least 1 billion people expected to make this journey in the next 10 years. These trends of rising prosperity and urbanization are leading to greater investments in advanced doors and door opening solutions in homes, workplaces, and shopping centers.

At the same time, growing 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 also 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 the 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 demonstrated its ability to identify focus areas for long-term profitable growth. Emerging markets, innovation, and product development with a focus on electronics, as well as increasing sustainability performance of ASSA ABLOY products and solutions, provide great opportunities. With good cost control and the ongoing streamlining of its processes, the Group is promoting resource efficiency to further enhance profitability while reducing its environmental footprint.

The UN Sustainable Development Goals (SDGs)

The UN SDGs provide the global community with a roadmap for how to combat global challenges related to economic, social and environmental sustainability. As the global leader in door opening solutions, ASSA ABLOY's sustainability work is aligned with the objectives of the SDGs – with a focus on six SDGs in particular.

Urbanization and the role of sustainable cities is an important opportunity for 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. ASSA ABLOY's products themselves can reduce customer climate impacts through innovative solutions, particularly in buildings. Continuous efficiency improvements in 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 its operations, ASSA ABLOY has a strong focus on efficiency, which is related to SDG 12 on responsible production, through a focus on resource efficiency and waste reduction. The Group's goal is to reduce water intensity, which supports 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.

Engaging with stakeholders

Stakeholder engagement is 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 the company interacts directly and actively in its day-to-day business – including 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 for particular stakeholder groups. For example, customers are involved in the product development process through the 'Voice of the Customer' customer assessment tools; suppliers are engaged through the sustainability audit program; employees through day-to-day operations, training, the employee survey, and the work council; and the investment community through dialogue on sustainability together with traditional investor relations activities.

Read more about stakeholder engagement on page 29.



Value creation for all stakeholders

Business and value-creation model

OVERALL STRATEGY

The Group's overall strategic direction is to spearhead the trend toward increased safety and security with a product-driven offering centered on the customer.

The strategy is based on:

Market presence Product leadership Cost-efficiency

RESOURCES

Financial capital

47,500 employees in over 70 countries

Strong common processes in a decentralized customerfocused organization

Sustainability is an integrated part of all business processes within the Group

Efficient production and assembly facilities all over the world

Strategic and cost-effective suppliers

Strong brands, patents and well-diversified product portfolio that meets local regulations and standards

Customers all over the world with a large installed base





EXTERNAL FACTORS

- Growing security needs
- Urbanization
- Digitization
- Automation
- Sustainability

ASSA ABLOY'S MOST IMPORTANT ACTIVITIES

Marketing, sales, advisory, service and support

Innovation and product development

Sourcing, manufacturing and streamlining of processes

Acquisitions and integration

STAKEHOLDERS

- Customers
- Suppliers and partners
- Owners and investors
- Employee:
- Society

RESULT

Products, services and support

Electromechanical products and automatic solutions account for 55 percent of sales

Products launched in the past three years account for 28 percent of sales







VALUE FOR STAKEHOLDERS

Customers

- Security, safety and convenience
- Retained market and product leade
- Sustainable products with environmenta product declaration

Suppliers and partners:

- Technological development
- Stable partner
- Earnings and employment

Shareholders and investors:

Dividends and capital appreciatio

Employees:

- Safe workplace
- Professional development and income
- Ethically, stable and long-term business

Society

- Growth
- Employment
- Sustainability
- Increased safety and security

OVERALL VALUE CREATION

Security

Safety

Convenience

.

Profitable growth

Strategic direction

Our Road to the Future – the Group's strategic direction, guides ASSA ABLOY toward a world-leading market presence, product leadership, and cost-efficiency, and forms the basis for the company's sustainability work.

As the global leader in door opening solutions, sustainability is becoming increasingly important in identifying and managing business opportunities and fully exploiting ASSA ABLOY's brand portfolio across diverse segments. The company's expansion is facilitated by a strong brand and good reputation, which are supported by acting responsibly.

ASSA ABLOY can reduce production costs by considering the lifecycle environmental impacts of a product through more efficient resource use, and by applying the reducereuse-recycle principle. ASSA ABLOY can reduce its environmental impact and increase cost-efficiency by systematically exploring ways to reduce production materials, optimize product components, and streamline production as well as transport methods. Relevant sustainability aspects are considered in business plans, decision-making processes, and business principles.

Sustainability risk management

ASSA ABLOY's long-term risk-management strategy covers sustainability aspects throughout its the value chain. The company's supplier audit program helps to manage risks related to suppliers with a particular focus on high-risk suppliers. When incorporating new acquisitions, ASSA ABLOY has established an efficient process that comprehensively reviews sustainability-related issues in order to mitigate the risks associated with incorporating new companies and their supply chains.

Risk mitigation in ASSA ABLOY's own operations, includes work to ensure that all factories with significant environmental impact are ISO 14001 certified. Ongoing activities are also in place to optimize resource use, including energy, water and waste. In 2017, a new Group-wide Health and Safety Management System was launched to mitigate operational risks by implementing a set of standardized metrics and tools.

The use of the ASSA ABLOY Sustainability Compass is also crucial to mitigate product-related risks through sustainability innovation and embedding sustainability into product development. The Compass is ensuring that ASSA ABLOY's next generation of products are more sustainable than the previous generation, which mitigates risks for both ASSA ABLOY and its customers.

Sustainability in the value chain

Sustainability is a driver throughout ASSA ABLOY's value chain. It is an important element in innovation, sourcing, production, employee development, applying ASSA ABLOY's products and solutions, and in maintaining 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.

Market presence ASSA ABLOY is present in more than 70 countries, more than two-thirds of which are in North America and Europe. Wherever 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 highquality 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.

Turning vision into operation

Each Division has identified its greatest sustainability impacts, and developed an action plan to mitigate these impacts as part of Group-wide 2020 targets. 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.
- Conduct 80–100 workshops for value analysis and value engineering (VA/VE) to develop a product optimization model 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.
- Sales of the portfolio of sustainable products.

Every quarter, ASSA ABLOY reports on, follows up, and evaluates its defined Sustainability KPIs, and a progress update is provided 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 – including some KPIs that are now followed up on a monthly basis.

Strategic partnerships

ASSA ABLOY is a member of various national Green Building Councils around the world, and became a member of the World Green Building Council's Europe regional network in 2017. Green Building Council partnerships around the world allow ASSA ABLOY to further promote the sustainability agenda in the built environment. Working together with industry-leading companies, the EU commission and the World Green Building Council, ASSA ABLOY aims to help all stakeholders to reduce the environmental footprint of all building types globally.

Materiality analysis & sustainability priorities

In 2017, ASSA ABLOY's Sustainability Council reviewed the company's materiality analysis in accordance with the GRI framework. The review concluded that the materiality analysis is still valid and relevant, and did not require updating.

Materiality analysis provides a clear understanding of which aspects are the most important to ASSA ABLOY's stakeholders and its sustainability work. The materiality analysis led to the development of a list of material priorities related to sustainability, which also shape the content of this report. Many of the material priorities have KPIs that are reported on a quarterly basis.

Material priorities:

- Strengthen anti-corruption measures > Read more on page 26
- Ensure responsible acquisitions > Read more on page 27
- Reduce resource and energy consumption > Read more on page 16
- Reduce emissions with global warming potential, both related to energy consumption and chemicals used in industrial processes > Read more on page 16,19
- Increase the portion of renewable energy > Read more on page 16
- Improve water and waste management
 Read more on page 17
- Improve health and safety performance > Read more on page 22,23
- Improve sustainability performance within the supply chain
 Read more on page 12–14
- Include environmental management systems in all relevant sites > Read more on page 15
- Improve diversity in managerial positions > Read more on page 21

Material opportunities to manage:

- Enhance the sustainability performance in ASSA ABLOY's supply of products and solutions > Read more on page 9-11
- Create products that fulfill customer demands > Read more on page 11
- Create products that customers want to buy
 Read more on page 11
- Increase knowledge of future customer demands > Read more on page 11
- Increase efficiency in production
 Read more on page 15–19

See page 29 for a complete list of the material topics and a description of the materiality analysis process.

Performance in 2017 and targets for 2020

During the year, the Group saw a positive trend across the reporting areas – including strong improvements in the injury rate and the injury lost day rate, and for water and energy efficiency. The Group's total greenhouse gas emissions decreased as a result of new production technologies and efficiency improvements.

The current Group 5-year targets will continue until the end of 2020, and the Group reports its sustainability performance (certain KPIs) every quarter. With 360 (347) reporting units, it is important to ensure good awareness of the Group's sustainability priorities throughout the organization and to share information and best practice between entities. The ASSA ABLOY sustainability reporting system, sustainability database and analysis tool are key elements for tracking performance, identifying improvement areas and enabling the smooth integration of new units.

Taxaat

Material KPI

Material KPI							Target	Change
Area	2012	2013	2014	2015	2016	2017 ¹	2015-202	2015-2017
Environmental KPI								
Number of entities covered by ISO 14001 certificates and other certifiable management systems	100	101	111	121	124	131	135 ●	+10 ²
Intensity of greenhouse gas emissions related to energy consumption (tons/SEK M) $^{\rm 5}$	12.9	11.9	10.3	9.8	8.6	8.4	-20%	-14%
Intensity of greenhouse gas emissions related to chemicals in industrial processes (tons/SEK M)	9.4	9.0	10.5	6.7	3.2	2.3	-85%	-66%
Energy intensity (MWh/SEK M) ⁵	36.3	33.8	31.7	28.2	25.0	23.4	-20%	-17%
Water intensity (m ³ /SEK M) ⁵	148.5	129.6	119.1	100.8	76.9	67.4	-20%	-33%
Hazardous waste intensity (kg/SEK M)	181.4	130.9	125.7	129.4	124.3	128.0	-20% 🛛	-1%
Non-hazardous waste intensity (kg/SEK M)	872	814	990	959	876	840	-20%	-12%
Consumption of chlorinated organic solvents (PER and TRI) (tons)	20.1	14.4	1.7	19.0	16.8	19.5	-85% 🔴	+3%
Consumption of other types of organic solvents (tons)	933	949	1,033	1,255	1,160	944	-50%	-25%
Portion of renewable energy	8.7%	6.9%	7.8%	9.1%	11.7%	12.0%	20% 😑	+2.9 p.p.
Social KPI								
Injury rate (number of injuries per million hours worked) ⁵	9.1	7.5	6.4	6.7	5.1	4.1	-55% 🛛	-39%
Injury lost day rate (number of lost days related to injuries per million hours worked) ⁵	187.4	168.2	135.7	136.0	89.2	73.9	-64%	-46%
Portion of spend in low-cost countries represented by sustainability audited suppliers	90% ³	89% ⁴	90% ⁴	90% ⁴	93% ⁴	93% ⁴	90% ⁴ ●	+3 p.p.
Number of sustainability audits of suppliers in low-cost countries	795 ³	885 ⁴	8124	8904	8654	919 ⁴		+54
Gender equality ⁶ Portion of females in management positions	Level 2: 18% Level 3: 16% Level 4: 18% Level 5: 23% Level 5: 22%	27% 12% 21% 24% 23%	27% 16% 20% 23% 22%	27% 17% 16% 25% 23%	27% 18% 16% 24% 22%	27% 17% 16% 25% 23%	30% 😑	0 p.p. 0 p.p. 0 p.p. 0 p.p. 0 p.p. 0 p.p.

• KPI is on track to being met by the end of 2020

Additional work is required to achieve KPI

KPI is off track and risks not being met

¹ For comparable units in 2017.

² The development is a combination of an increased number of certified entities and recently acquired companies with ISO 14001 certification.

³ Countries and territories 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 2012–2013. ⁶ The definition of management positions have been revised during 2014. 2012 and 2013 have been restated to be compar-

able with 2014.

Sustainable innovation

ASSA ABLOYs customers are rapidly turning to sustainable door opening solutions, particularly on account of energy savings and the health aspects for the habitants of the building. Sustainable innovation is essential to meet customer demands and to meet this need, ASSA ABLOY uses its Sustainable Innovation Practices to promote sustainabilityrelated design criteria in product development.

Progress in 2017

- Continued ASSA ABLOY Sustainability Compass roll-out Our Sustainability Compass is used to gauge a variety of environmental attributes of new products. Additional training was provided to product managers, R&D teams and operations employees to make sustainability an integrated part of new product development.
- Updated internal list of non-desirable materials ASSA ABLOY's restricted materials list for new products was updated by ensuring alignment with the latest global standards, such as European Union Standards Reach and RoHS.
- 'Materials Reference Sheet' Approved
 The Materials Reference Sheet, to help designers make better environmental choices in new product development was approved and will be implemented in 2018.
 The updated list helps to favor conscious environmental choses and strengthen the usability of our Sustainability Compass.
- Continued internal sustainability awareness raising New material to promote sustainability knowledge and understanding throughout the Group included the publication of 'The very green book' and the 'Green Team Playbook'.

The growing market for more sustainable and resilient products

The demand for more sustainable and resilient ASSA ABLOY products, including environmental and materiality transparency, 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 building sustainability certification schemes, such as LEED and BREEAM.

By 2018, the world is expected to see its number of green certified buildings double. More and more developments across the world will receive certification such as BREEAM or LEED, so 2018 should be a busy year for the globe's ecominded builders.

Sustainable innovation - a key differentiator

Markets where LEED and BREEAM are being used continue to be markets where sustainable innovation is a key differentiator – particularly in terms of objectives for zero energy buildings, chemical use and recyclable solutions. ASSA ABLOY continues to win projects by being compliant with the highest Green building criteria, for example a LEED and Living Building Challenge. For the Google office in Chicago, ASSA ABLOY was the only compliant supplier in terms of environmental transparency.

Replacing brass with stainless steel results in increased durability and reduced environmental footprint

■ CHALLENGE: For durability and esthetic reasons, many lock components have traditionally been made out of brass. However, when using brass, an additional surface treatment process (electroplating) is required to protect the metal and accomplish a decorative finish. Electroplating involves the use of hazardous substances as well as the consumption of a significant amount of energy. It is a complicated production process which include long lead times and less flexibility for the customers.

SOLUTION: For these reasons, ASSA ABLOY Hospitality has substituted brass for stainless steel when producing handles for electronic hotel locks. Over the past couple of years, ASSA ABLOY Hospitality made the same transition for stamped parts, with good results. In 2016 and 2017, half of the annual volume transitioned from brass to stainless steel and in 2018 work will start to convert the remaining volume. The use of stainless steel eliminates the need for electroplating. The switch to stainless steel has reduced the use of materials by 5 percent, cut electricity consump-



tion and carbon dioxide emissions in a life cycle perspective by more than 28 percent and 9 percent, respectively, while boosting quality and durability.

■ **RESULT**: From a customer perspective, the use of stainless steel shortens the delivery process, allows for more flexibility and ultimately results in a more sustainable and durable product.

From an ASSA ABLOY perspective, the new approach eliminates a production process, reduces resource consumption, shortens lead times, and results in high-quality deliveries from a smaller number of suppliers, in a safer workplace. In summary, it creates a more attractive product that meets all technical requirements while minimizing the environmental footprint. ASSA ABLOY drive sales of sustainable products by continuously increasing awareness among the Groups Sales and Marketing teams on how to reduce customer environmental footprint by promoting 'Green attributes' within the company's product portfolio.

ASSA ABLOY's Sustainability Compass

In 2017, the Sustainability Compass was integrated into ASSA ABLOY's product development process. The Compass provides a better understanding of sustainability-related design criteria during the development of new products. The goal is to improve the sustainable attributes in ASSA ABLOY products.

The compass includes eight lifecycle dimensions or focus areas: raw materials, water, virgin material, end-of-life reusability, recyclability, in-life energy consumption, carbon footprint, and financial cost. These areas are tracked and communicated among internal and external stakeholders involved in product innovation and development.

The Sustainability Compass is generated from input from ASSA ABLOY Sustainability Products Scorecard. The Compass has also been integrated into ASSA ABLOY standard product design tools, which now include sustainability material data to support the tool.

A key challenge for sustainable product innovation is identifying the best solution overall. For example, a solution might have excellent green attributes from one perspective, but may be less suitable from another perspective. The Sustainability Compass helps the design team understand which solutions are more sustainable from different perspectives, to help make informed decisions based on holistic and long-term sustainability.

Environmental & Health Product Declarations

Customers are increasingly assessing the environmental impact of building materials, and ASSA ABLOY continuously works to declare products both Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs) where applicable. In many cases the purchasing decision and path to achieve LEEDv4 and other certifications are based on information from EPDs. By the end of 2017, the Group had a total of 276 EPDs from all major product groups, representing about a third of the Group's total sales.

The most often information requested by customers involved: level of recycled content, origin of materials, level of chemical off-gassing, specific transparency documents and product ingredients.

ASSA ABLOY is leading the industry in establishing Product Category Rules (PCRs) which have resulted in the credible and uniform comparison of similar products. Through Life Cycle Assessments (LCAs), product environmental impact is mapped from raw material extraction to disposal or recycling – to make it easier for customers to compare products that fulfill the same function.

The next step is to expand the approach to optimize the selection of materials used when developing new products.

Internet of Things (IoT)

The IoT will play a key role in more sustainable solutions. Devices and systems that are able to talk to each other and report their status will provide opportunities to dramatically reduce energy consumption through smarter door solutions. For example, ASSA ABLOY door sensors that enable low-power standby modes, and can signal to switch off air conditioning and lighting when rooms are not in use, can be a key feature in smart homes and buildings of the future.

The Sustainability Compass in action: enhancing product performance

The ASSA ABLOY team used the Sustainability Compass to develop a door solution that combined the Trio-E door with Mercury Thermal Break Frames to improve life cycle energy performance and incorporate more sustainable materials.

■ CHALLENGE: The U.S. Department of Defense required an energy efficient door that would comply with the energy executive order for Federal facilities – designed to reduce energy use.

■ SOLUTION: The Sustainability Compass enabled the team to consider the product from a life cycle perspective with focus on how the product is designed, manufactured, packaged, transported, installed, used, maintained and recycled. This enabled energy efficiency to be optimized and potentially harmful substances to be phased out.

■ **RESULT**: The U.S. Department of Defense and third-party agency GreenCircle tests of various solutions at the Marine Corps Systems Command in Virginia, United States, demonstrated that ASSA ABLOY's Trio-E solution will make annual energy savings of \$124-\$129 per door, compared with typical solutions on the market. The ASSA ABLOY team eliminated freon as a blowing agent for the polyurethane foam fill during the product development process. Freon is on ASSA ABLOY's restricted materials list, and the replacement substance has a global warming potential (GWP) 99.9 percent less than current one.

ASSA ABLOY Sustainable Product Scorecard

		Reference product	New product
Reuse	Reusability	ref	7
	Recycled Content	ref	7
Recycle	Recyclability	ref	7
	Carbon Footprint	ref	3
	Energy in use	ref	3
Reduce	Water	ref	3
	Raw Material	ref	3
	Cost	ref	1
NO	Restricted Material	ref	NO

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 customer value. The ASSA ABLOY Innovation and Management system, and the Global Sustainable Product Council, are key components of the company's product innovation work.

SALES BY PRODUCT GROUP



Mechanical products, 27%
 Electromechanical products, 27%
 Security doors, 18%
 Entrance automation, 28%

There is a fast growing demand for electromechanical products and electronic and digital solutions. Since 2007 these have sharply increased from 33 percent to 55 percent of Group sales. Mechanical products continue to increase, but electromechnical products are growing considerably faster.

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, generation planning and optimization projects. The system ensures that new product concepts are fully evaluated against customer needs and sustainability requirements before moving onto the engineering design phase.

The Global Sustainable Product Council

ASSA ABLOY's Global Sustainable Product Council leads and coordinates activities in all divisions to promote more sustainable product development. The council shares best practice and technology, and provides second opinions and reviews on tools and methods of working.

The NEW ASSA ABLOY OH1042S reduces energy consumption

Much heat and air conditioning are lost during door openings. The speed of the new ASSA ABLOY OH1042S helps to maintain indoor temperature which reduces energy expenses by 12 percent (compared to a regular overhead sectional door). Using less energy reduces CO₂ emissions and helps customers on the path to becoming energy neutral. It also creates a more comfortable working environment for employees. It comes equipped with a protective light grid that stops the door from closing if there is an obstruction in the opening. The speed of the OH1042S generates a safer and more comfortable workspace for employees by reducing the risk of collisions and unwelcome drafts.





The key that takes locking and sustainability aspects to a new level ABLOY PULSE ecosystem takes both locking and sustainability aspects to a totally new level. The cylinder harvests its power from the insertion of the key, without any door cables or batteries. PULSE key can also be re-used for different locking systems which reduces the amount of waste. A mechanical cylinder can easily be replaced by a PULSE cylinder, all you need to change is the core of the lock – the existing cylinder hardware can be reused.

Secure Issuance "Wasteless" Lamination

The HID Global Secure Issuance team introduced new FARGO® PolyGuard™ LMX Overlaminates for use on the FARGO® DTC5500LMX ID Card Printer and Laminator. These overlaminates are applied to card credentials to create a more durable and longer lasting credential.

The unique feature of the new product is the "wasteless" approach. The previous generation overlaminate used a plastic-film carrier and two spools for handling the patches. The new generation product utilizes a "tear-off" method so the carrier film is completely eliminated.

This significant design change has resulted in a 92 percent reduction in post-consumer waste for HID customers! "This is an exciting new product for HID Global and our customers. We estimate that over 5 years, this product will have a landfill avoidance of over 50 tons of material," stated Josh Nippoldt, Director, Product Marketing, Consumables. "It also represents a significant cost reduction that will allow us to be very competitive in the marketplace."

This "wasteless lamination" adds to the already "green" product in the FARGO® DTC5500LMX ID Card Printer and Laminator. This Secure Issuance printer product has also been GreenCircle certified for a 66 percent reduction in energy consumption and has a 10x improvement in heat-up time response.



Supply chain management

The long-term objective of Group supply chain management is to reduce business risk by further enhancing sustainability performance throughout the value chain. During the year, ASSA ABLOY continued to roll out its Code of Conduct specifically for Business Partners and increased the proportion of Group spend reported through its business intelligence system.

Progress in 2017

- Continued Business Partner Code of Conduct roll out 70 percent of direct material supplier sites from low-cost countries and 40 percent of all direct material supplier sites were covered by ASSA ABLOY's Code of Conduct for Business Partners at the end of 2017 - with the objective to cover over 95 percent of all direct material supplier sites by 2020. The Code applies to all partners that provide products or services to the company, such as suppliers, consultants, distributors, agents and other representatives, and provides a structured approach to integrating new acquisitions.
- Increased Business Intelligence System coverage Data collection is becoming increasingly important as ASSA ABLOY continues to grow. Consequently, the Group has intensified its efforts in this area and 90 percent (<80 in 2016) of Group spend is now reported through ASSA ABLOY's Business Intelligence System. Importantly in 2017, newly acquired businesses were more quickly introduced to ASSA ABLOY's Business Intelligence System through streamlined processes.

Supply chain risks and challenges

Ensuring that suppliers fulfill ASSA ABLOY's requirements involves ongoing risks and challenges. ASSA ABLOY's lowcost country suppliers continue to pose the greatest supply chain risks - particularly related to human rights and the environment. The company's pace of acquisitions and expansion into emerging markets is another significant supply chain management challenge and risk area.

Additional challenges and risk management work include ongoing efforts to examine supplier environmental management systems and encouraging suppliers to perform EPDs, which are increasingly requested by customers.

PLANTS IN LOW-COST COUNTRIES



SHARE OF PURCHASES IN LOW-COST COUNTRIES





10

%

60 50

40

30

20

12 13 14 15 16 17

The share of the Group's total purchases of raw materials, components and finished goods from low-cost countries was 48 percent 2017.

DISTRIBUTION OF SUPPLIER SPEND



In 2017. ASSA ABLOY conducted

919 (865) sustainability audits.

NUMBER OF SUPPLIERS



Reducing the number of suppliers is important for reducing costs and improving quality. Active efforts have reduced the total number of suppliers by 28 percent over the past five years.

Supply chain risk management

ASSA ABLOY manages supply chain risks and challenges by continuing to roll out its Business Partner Code of Conduct to improve the monitoring of supplier compliance. The Code ensures a consistent approach to supply chain management, and helps to bring new suppliers – particularly in low-cost countries – up to the company's standards.

During the year, the processes to improve supplier performance and phase out non-compliant 'new-business hold' suppliers were enhanced – to support the risk management of low-cost country suppliers. Furthermore, as ASSA ABLOY continues to phase out hazardous substances, the Group also audits the supplier use of such chemicals.

Going forward, the use of third-party auditors will be increased to complement internal auditing capabilities and help manage supply chain risks.

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 the greatest risk regions for not complying with ASSA ABLOY's Business Partner Code of Conduct. The Business Partner Code of Conduct communicates ASSA ABLOY's policies and principles on business ethics, human rights and labor standards, health and safety, and the environment to suppliers. ASSA ABLOY conducts its own supplier audits and due diligence processes to verify compliance.

The Business Partner Code of Conduct clearly states that ASSA ABLOY does not accept child labor in its own operations nor at a business partner. Should however a child be found working in its supply chain, ASSA ABLOY requires that the supplier acts in the overall best interest of the child. The Business Partner Code of Conduct does not accept any form of forced or bonded labor, prisoners or illegal workers. 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 2017

- ASSA ABLOY has around 8,000 direct external material suppliers – including 3,200 in low-cost countries and regarded as higher risk.
- By the end of 2017, 1,230 of the 1,262 low-cost country suppliers audited had satisfied the company's minimum sustainability requirements equivalent to 93 percent of ASSA ABLOY's total spend in low-cost countries. During 2017 the Group got 1,324 new suppliers in high- and low-cost-countries. During the year, 6.6 percent of those new suppliers were audited, the share of new audits in low-cost countries were 12.1 percent.
- Two suppliers in low-cost countries were blacklisted and prevented from doing business with ASSA ABLOY, and 20 put on 'new-business hold' by the Group, meaning they were not eligible for new business from any ASSA ABLOY entity.

According to ASSA ABLOY's Business Intelligence audit data, the most common reasons for blacklisting suppliers are Health and Safety, and environmental issues. Examples of Health and Safety issues are unsatisfactory risk documentation, evacuation drills or information on how to act in emergency situations. Inadequate accident statistics, security objectives or machine safety instructions are also common deficiencies. Blacklisted suppliers with environmental issues may have missing environmental permits, inadequate documentation on hazardous waste, or non-existing environmental risk assessments and improvement action plans.

Supply chain management governance

Group supply chain management is led by the Sustainability Supply Council, which includes representatives from each division. The council sets supplier sustainability targets, coordinates activities and follows up on progress. Each division is responsible for ensuring its suppliers meet ASSA ABLOY requirements.

Reduced pressure saves energy

■ CHALLENGE: Compressors are one of the biggest consumers of electricity in ASSA ABLOY's Manufacturing plant in Romania. One challenge is to control losses of pressurized air during non-working hours. The other challenge is to reduce the pressure in the system while maintaining required capacity and force where needed.

■ SOLUTION: ASSA ABLOY Romania identified the machines which needed high pressure and installed booster regulators at these machines. The general pressure levelwas reduced by one bar. Each business unit in the factory has a separate main valve for the air system. A routine to switch off the valves after each shift has been established.

■ **RESULT**: The measures were implemented in January 2017 and have reduced the electricity consumption for the compressors by 30 percent, leading to annual savings of 120 000 kWh. The same actions will be implemented in other production lines during 2018.



Supply chain auditing

ASSA ABLOY rates the performance of its suppliers and how they conform to the company's Business Partner Code of Conduct.

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', for example child labor. If a supplier fails to comply with these important standards, they are automatically rated as 'red' and put on 'new-business hold'. If the supplier fails to improve within an agreed time frame, they are blacklisted and their relationship with ASSA ABLOY terminated. There are many reasons why suppliers are blacklisted, but the main reason is an unwillingness to improve and meet ASSA ABLOY's demands for improvements.

The same ASSA ABLOY audit process is always followed, 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 supplier audit reports to the Group's Business Intelligence Supply Management System, which allows ASSA ABLOY to assess 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 KPIs.

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 ASSA ABLOY BUSINESS PARTNER CODE OF CONDUCT

All suppliers are required to comply with the ASSA ABLOY Business Partner Code of Conduct, which is based on the following international standards:

- UN Universal Declaration of Human Rights and related 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 Business Partners Code of Conduct is available in 20 languages.



AUDIT PROCESS AND TRAFFIC-LIGHT SYSTEM

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 the issues identified in a recent audit within an agreed time frame. Yellow signifies the fewest number of non-conformities and purple the most. A follow-up audit is typically done after one year.

Red – the supplier is not approved. The supplier is put on 'new-business hold', and a follow-up audit will be conducted within 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 is rated 'red' for longer than six months.

Enhancing environmental performance in operations

Improving environmental performance in operations is important for ASSA ABLOY. There is a clear ambition to continuously reduce the environmental impact and enhance performance while expanding the Group. Good progress was made during the year, particularly with ongoing projects to further enhance operational efficiency.

Progress in 2017

- Operational efficiency projects
- Progress was made with various ongoing projects throughout the Group to optimize energy, water and waste.
- Increased ISO 14001 coverage A net of 5 entities were ISO 14001 certified during the year, which increased the portion of factory employees working in factories with ISO14001 from 76 percent to 79 percent.
- Continued phase-out of substances with significant global warming impact

One production line in the US switched from freon to use more environmentally friendly technology. The remaining production lines using freon are located in China and United States and will phase out their consumption of freon in 2018 and 2019, respectively.

Environmental risks and challenges

ASSA ABLOY's continued growth presents significant opportunities for the Group. At the same time, growth in regions with greater fossil fuel intensive energy mixes as well as water scarcity pose potential risks and challenges that must be managed. Energy consumption, carbon emissions and water consumption are ASSA ABLOY's most significant environmental impacts. Geographic expansion also requires that environmental risks and challenges associated with transportation must be managed.

Environmental risk management ISO 14001

ASSA ABLOY mitigates environmental risks by certifying all factories with significant environmental impact to the ISO 14001 environmental management system. In 2017, all entities were analyzed to establish which need to be ISO 14001 certified, and most of the relevant remaining entities will be certified in 2018 and 2019. A variety of ongoing programs also work to optimize the use of resources, and mitigate the associated risks. The Group has also further developed its restricted materials list that contains materials and substances that should be avoided in manufacturing processes and products.

Supply chain

Environmental performance within the supply chain is essential to ASSA ABLOY's overall risk management. The Group has a comprehensive platform to monitor individual supplier risks and performance, in particular through audits of low-cost country suppliers. 919 such audits were conducted in 2017. Additionally, 15 EMEA Division manufacturing sites have been certified as zero-waste to landfill by the organization Carbon Trust, and similar initiatives are being implemented in other parts of the Group.

Products

Risks associated with product impacts and resource consumption throughout the life-cycle of the product are also important to ASSA ABLOY. When developing new products, ASSA ABLOY uses a tool – the ASSA ABLOY Sustainability Compass – to measure several sustainability aspects. Read more about how the ASSA ABLOY Sustainability compass is used to mitigate impacts on page 10. Recyclability, is one of eight life-cycle focus areas measured by the Sustainability Compass, which ensures that the end-of-life impacts and risks are managed in a structured manner. For example, ASSA ABLOY Americas offer customers the possibility to return used products for reuse or recycling in order to avoid products being sent to landfill.

Environmental priorities

ASSA ABLOY's environmental priorities are to:

- coordinate the implementation of environmental management systems
- enhance data analysis and benchmarking
- improve water and waste management
- reduce energy consumption and increase the proportion of renewable energy
- phase out organic solvents

These priorities are all interlinked and closely related to production and resource efficiency. During 2017, notable progress has been made on all priorities.

ASSA ABLOY's sustainability reporting system collects high quality data to track and analyze the performance of individual entities and divisions. As a decentralized Group – with strategic and operational responsibility at divisional level – this systematic approach and the ability to allocate and oversee the performance of individual entities is essential. The belief at ASSA ABLOY is that benchmarking and best practice sharing within the Group drive progress.

Environmental compliance

Ensuring environmental compliance is essential to maintain ASSA ABLOY's reputation and the company's license to operate. Non-compliance could result in issues with the Group's stakeholders – including employees, customers, shareholders and the authorities. No significant fines or nonmonetary sanctions for non-compliance with environmental laws and regulations occurred during 2017.

Energy consumption and carbon emissions

Reducing energy consumption is important to ASSA ABLOY in order to become more sustainable, reduce emissions, cost-effective, and ensure compliance with local regulations. For ASSA ABLOY, carbon emissions are related to energy consumption and materials used in the Group's manufacturing processes.

Performance in 2017

Operational efficiency activities during the year have:

- reduced total energy consumption by 3.3 (5.2) percent for comparable units.
- reduced energy consumption by 23,524 MWh for comparable units.
- reduced energy intensity by 6.3 (11.7) percent for comparable units.
- increased the proportion of energy sourced from renewable resources primarily from hydropower, wind and solar – from 11.7 percent in 2016 to 12.0 percent in 2017. The target is to increase the ratio to 20 percent by the end of 2020.

Energy efficiency at production units

As much as 50 percent of energy consumption in large manufacturing units is related to factors independent of production volume. The company has reduced its total energy consumption by implementing various efficiency projects including control systems or technologies for heating, ventilation and pressure systems. For example, modern LED-lighting with occupancy sensors has also been introduced in a large number of factories and sales companies. Some initiatives can realize significant savings with minimal investment, such as encouraging employees to switch off machines, equipment and PCs when they are not in use.

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 allows ASSA ABLOY's production facilities to work at full capacity, while supporting efficient working practices and high standards. When old machines and processes are replaced due to age, the new machines typically not only require less space but also use energy more efficiently.

Efficiency projects

ASSA ABLOY continued to use the energy Kaizen concept in its EMEA division to promote continuous improvements in energy efficiency. In 2017, there were 6 Kaizen workshops. In general the Kaizen workshops generate annual energy savings of 5-8 percent of the total energy consumption.

Another efficiency initiative is the ongoing manufacturing footprint program. The program consolidates operations – to ultimately provide economies of scale and decrease the company's footprint.

Phasing out substances with global warming impact

The total calculated CO_2 -emissions amounted to 317,401 tons in 2017 of which emissions related to direct and indirect energy consumption in the Group's factories and sales companies correspond to 79 percent of the total emissions. The remaining part of the calculated CO_2 -emissions is related to different types of chemicals. More than 98 percent of these emissions are related to the use of blowing agents in three factories when producing doors with foam insulation. These production lines will phase out its use in 2018 and 2019, respectively. Quality issues have delayed the phase out in one of the factories. During 2017, one production line in the US switched from freon to a more environmentally friendly technology. ASSA ABLOY complies with the Montreal Protocol and with country-specific legislation on ozone-depleting substances.

Intelligent logistics

30.3

20.8

8.1

4.8²

ASSA ABLOY has been able to reduce the environmental impact of transportation as the Group has expanded. Locating assembly facilities close to the customer for example has enabled a more flexible and efficient supply of goods.

The Group uses a database to assess and identify smart transport solutions with the lowest environmental impact. The database includes suppliers as well as ASSA ABLOY factories and sales companies, and is connected to ASSA ABLOY's central purchasing database.

				North	South	
Geographical split of energy and water consumption	Africa	Asia	Europe	America	America	Pacific
Energy consumption (%)	0.4%	24.3%	27.0%	41.5%	4.5%	2.3%
Water withdrawal (%)	1.1%	64.2%	11.6%	15.3%	6.5%	1.3%
Ozone-depleting substances	2012	2013	2014	2015	2016	2017

Ozone-depleting substances in tons of R11 equivalent¹(tons) 27.0 27.7

¹R11 equivalence measures ozone-depleting potential. The calculation is based on the consumption of HCFC-141b.

² For comparable units. Total amount of ozone depleting substances in tons of R11 equivalent amounted to 4.8 tons, including units acquired during the year.

Energy consumption and related CO2 emissions	2012	2013	2014	2015	2016	2017 ¹
Direct energy – Scope 1						
– oil (MWh)	34,942	31,179	29,231	23,177	23,911	23,662
– gas (MWh)	192,733	200,393	244,785	251,997	251,402	248,064
– coal (MWh)	96,533	86,493	77,695	88,226	48,884	30,711
– biofuel/biomass (MWh)		3,480	2,201	1,958	3,119	3,706
– Total	324,208	321,545	353,912	365,358	327,316	306,143
Indirect energy – Scope 2 – electricity (MWh)	334,331	321,824	347,306	358,983	360,618	351,770
– district heat (MWh)	32,935	47,493	30,877	30,981	28,069	34,567
– Total	367,266	369,317	378,183	389,964	388,687	386,337
TOTAL ENERGY CONSUMPTION ²	691,475	690,862	732,095	755,322	716,003	692,479
KPI, Energy intensity ³ (MWh/SEK M)	36.3	33.8	31.7	28.2	25.0	23.44
CO ₂ emissions related to direct energy consumption – Scope 1 (tons)	81,536	79,674	84,711	87,994	75,033	67,329
CO_2 emissions related to indirect energy consumption – Scope 2 (tons)	163,605	163,204	170,460	174,847	171,067	181,966
Total greenhouse gas emission related to energy consumption $CO_2(tons)$	245,141	242,878	255,171	262,841	246,101	249,2955
KPI, Greenhouse gas emissions intensity ⁶ (tons/SEK M)	12.9	11.9	10.3	9.8	8.6	8.47
Greenhouse gas emission related to substances in industrial processes – Calculated CO ₂ -emissions ⁸ (tons) – Scope 1	178,288	184,552	241,783	179,395	92,385	68,106 ⁹
– Total CO ₂ emissions – Scope 1 and 2	423,429	427,430	496,954	442,236	338,486	317,401
KPI, Portion of renewable energy	8.7%	6.9%	7.8%	9.1%	11.7%	12.0%

- ¹ For comparable units. Total energy consumption amounted to 729,788 MWh, including units acquired during the year.
- ² The historical numbers have been adjusted with proforma data.
- ³ Total energy use/value added.
 ⁴ For comparable units. Total energy use/value added amounted to 24.3 MWh/SEK M, including units acquired during the year.
 ⁵ For comparable units. Total greenhouse gas emission related to
- energy consumption amounted to 267,798 tons, including units acquired during the year.
- ⁶ Greenhouse gas emission related to energy consumption CO₂/value added.
- ⁷ For comparable units. Total greenhouse gas emission related to energy consumption/valued added amounted to 8.9 tons/SEK M, including units acquired during the year.
- ⁸ Emission factors are based on data published by the United Nations Intergovernmental Panel on Climate Change (IPCC, 2007).
- ⁹ For comparable units. Total calculated CO₂-emissions related to substances in industrial processes amounted to 68, 106 tons, including units acquired during the year.

Water and waste management

Efforts to reduce water consumption and improve waste management are key parts of reducing ASSA ABLOY's environmental impact, increasing efficiency and making financial savings. ASSA ABLOY has improved the tracking and management of both water and waste in recent years.

Water management

Water shortage is an increasing concern in many parts of the world, and ASSA ABLOY's ambition is to minimize its water footprint. The company is implementing water recycling systems, and even closed loop systems, to promote water efficiency.

During 2017, water withdrawal decreased by 9.6 percent and water intensity by 12.4 percent as a result of improvement activities and changed production mix. Water is primarily consumed through painting, plating and cleaning processes. Twenty such entities, located mainly in the United States and China, account for more than 70 percent of the Group's total water consumption. In 2017, the Group's total water withdrawal amounted to 1,992,135 m³, of which 85 percent was sent to municipal treatment plants after use. Water recirculation in wastewater treatment plants improves efficiency, and in 2017 the total amount of recycled water equated to 20.0 percent of the total water consumption. All discharges are monitored in accordance with local regulations, and all units that manage chemicals are properly licensed and registered with the local authorities.

Water withdrawal and discharges are being managed in accordance with local rules and regulations. In factories with electroplating facilities, the water is used in the different process baths as well as for cleaning.

In factories producing doors, the water is typically used for cleaning and removal of protective paper. An increasing portion of the used water is being recirculated and used again after different water purification methods have been applied. A wide range of technologies are being used across the Group, technologies such as filtration, sedimentation, flocculation, ion exchange and reverse osmosis.

Water performance	2012	2013	2014	2015	2016	2017
Purchased water (1,000 m ³)	1,756	1,575	1,600	1,565	1,508	1,371
Water from on-site wells (1,000 m ³)	1,070	1,063	1,144	1,127	684	616
Rainwater (1,000 m ³)	NA	4	1	7	9	5
Surface water (1,000 m ³)	NA	10	6	3	2	0
Total water withdrawal (1,000 m ³) ³	2,827	2,652	2,752	2,702	2,203	1,992 ¹
KPI, Water intensity (m ³ /SEK M) ³	149	130	119	101	77	67 ²

¹For comparable units. Total water withdrawal (1,000 m³) was 2,012, including units acquired during the year.

² For comparable units. Total water intensity amounted to 67m³/SEK M, including units acquired during the year.

³ The historical numbers have been adjusted with proforma data.



Know your flow – Abloy Joensuu Factory saves water

■ CHALLENGE: At the Abloy Joensuu factory, surface treatment is a major factor in water consumption. The process is modern, and it is already built to use the best available technology.

Water efficiency has been improved by technical means, e.g. by changing to waterless urinals and by increasing awareness of water efficiency among the personnel.

Can any further improvement be achieved?

■ SOLUTION: On site, there are 100 water taps in total. The water flow of each tap was measured. The highest flows found were over 30 l/minute. The flows were set to a limit of 6 l/minute on the sink taps, and 12 l/minute for the kitchen taps and showers.

RESULT: Abloy Joensuu Factory water consumption has been reduced by 8 percent, which corresponds to 1,200 cubic meters per annum.



Water discharges are being measured, calculated or estimated depending on available sources of information and requirements. Out of the total reported volume, 44 percent is measured based on continuous sensor readings, another 33 percent of the volume is calculated for the full reporting period based on a smaller number of readings at certain points in time. Around 23 percent of the total volume is estimated due to lack of sensors for measurement.

Accidental discharges

There were no major spill incidents in 2017, and three minor spill incidents were reported. The cases did not cause ASSA ABLOY to exceed permitted levels and were managed in accordance with national legislation. ASSA ABLOY has improved its relevant internal processes to avoid future incidents.

CDP Water

ASSA ABLOY achieved the B'Management' level on the CDP Water program in 2017.

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.

ASSA ABLOY works to minimize waste from its manufacturing processes and packaging materials. Several companies within the Group generate revenue from selling paper, cardboard and plastic for recycling rather than paying for the disposal of these materials.

In 2017, the Group's total waste generated amounted to 84,595 (85 003) tons, and the amount of hazardous waste increased by 6.2 percent for comparable units. During 2017 more waste is categorized as hazardous waste due to implementation of stricter national rules, e.g. in China. Cutting oil is extensively filtered and cleaned, to allow it to be reused in manufacturing, and hazardous waste that cannot be reused is properly disposed of. The intensity value for non-hazardous waste decreased by 4.1 percent for comparable units.

Several companies have reduced their use of packaging materials, switched to less harmful packaging materials and introduced reusable or recyclable containers. Increasing the use of electronic orders and integrating information flows across systems has reduced the use of printed documents.

Various metals are sorted by type to promote recycling, and the ambition is to further reduce the amount of metal waste by optimizing the dimensions of raw materials used.

The Group has a high focus on increasing the portion of non hazardous waste being sent for either recycling or energy recovery through incineration. The portion of non hazardous waste sent to landfill has decreased from 54 percent to 50 percent in 2017. Hazardous waste is being sent to authorized companies for proper processing, recycling and disposal. Available data indicate that at least 11 percent of the hazardous waste was recycled in 2017.

Recycled metal	2012	2013	2014	2015	2016	2017 ¹		
Waste metal for recycling (tons)	45,972	49,000	54,025	57,632	56,338	55,981		

¹ For comparable units. Total amount of waste metal for recycling amounted to 58,316 tons, including units acquired during the year.

Hazardous waste	2012	2013	2014	2015	2016	2017
Metal sludge (tons)	650	537	563	805	873	838
Oil for recycling (tons)	579	295	370	360	421	433
Other types of toxic waste (tons)	2,225	1,846	1,971	2,304	2,266	2511
Total hazardous waste (tons)	3,454	2,678	2,904	3,469	3,560	3,7821
KPI, Hazardous waste intensity (kg/SEK M)	181	131	126	129	124	128 ²

¹ For comparable units. Total amount of hazardous waste was 3,785 tons, including units acquired during the year.

² For comparable units. Total amount of hazardous waste/value added amounted to 126 kg/SEK M, including units acquired during the year.

Non-hazardous waste	2012	2013	2014	2015	2016	2017
Household incinerated/recycled (tons)	2,442	1,938	1,955	1,766	1,838	1,918
Household deposited (tons)	6,049	7,308	9,531	11,208	11,355	10,724
Paper and cardboard for recycling (tons)	3,766	3,833	4,329	4,803	4,447	4,629
Plastic waste for recycling (tons)	584	550	1,051	879	768	783
Wood waste for recycling (tons)	NA	NA	4,224	4,277	4,426	4,820
Glass for recycling (tons)	NA	NA	NA	NA	NA	184
Other types of waste (tons)	3,758	3,013	1,774	2,787	2,270	1,774
Total (tons)	16,599	16,642	22,865	25,720	25,105	24,8321
KPI, Non-hazardous waste intensity (kg/SEK M)	872	814	990	959	876	840 ²

¹ For comparable units. Total amount of non-hazardous waste was 25,471 tons, including units acquired during the year.

² For comparable units. Total amount of non-hazardous waste/value added amounted to 847 kg/SEK M, including units acquired during the year.

NON-HAZARDOUS WASTE - DISPOSAL METHOD



HAZARDOUS WASTE - DISPOSAL METHOD



Environmental management systems

The Group's objective is for all units with significant environmental impact to have an ISO 14001 certified environmental management system. As new companies are acquired, such systems are gradually introduced if they are not already in place. A total of 134 units had environmental management systems at the end of the year, covering 79 percent of employees in the Group's factories.

In 2017, the number of entities covered by ISO 14001 environmental management systems increased by 5 to 115, primarily by certifying entities that previously had other certifiable environmental management systems.

Number of entities covered by ISO 14001 certificates and other certifiable environmental management systems

	2012 ¹	2013	2014	2015	2016	2017
ISO 14001	71	75	85	98	110	115
Certifiable systems	29	26	26	23	14	16
Total	100	101	111	121	124	131 ²
Factory employees cov-						

ered by environmental

management systems, %

N/A N/A N/A 73 76 79 ¹ From 2012, sales companies are included in the reporting of environmental management systems. A part of the change is related to the increased number of certified entities as well as closing of units in the restructuring program. ² The total number of entities covered by ISO 14001 and other certifiable management systems amounted to 134, including units acquired during the year.

Organic solvents and surface treatment

ASSA ABLOY has reduced the consumption of chlorinated organic solvents through investments in new cleaning technologies, as part of a gradual phase out of such chemicals. ASSA ABLOY uses chlorinated organic solvents such as perchloroethylene (PER) and trichloroethylene (TRI) for the 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, and most entities have already replaced PER and TRI with less harmful alternatives, such as ultrasonic cleaning and water- or steam-based processes.

The total consumption of chlorinated organic solvents increased by 16 percent during 2017. The majority of the use of chlorinated organic solvents is related to acquisitions in recent years. The target is to reduce the consumption of chlorinated organic solvents by 85 percent between 2015 and 2020

The Group also uses other types of organic solvents, primarily for paint. The total consumption of other types of organic solvents for comparable units decreased by 19 percent to 945 tons in 2017. Compared to 2015 the consumption has been reduced by 25 percent. The target is to reduce consumption by 50 percent between 2015 and 2020, primarily by switching to water or powder-based paint applications.

CONSUMPTION OF CHLORINATED ORGANIC SOLVENTS



Switch to water-based paint has multiple benefits

Oil-based paint was replaced with water-based paint in door closer manufacturing process and the use of organic solvents was reduced. This initiative significantly helps minimizing the exhaust gas emission and improve the air quality.

CHALLENGE: Shenfei Liyi Security Products, a China-based door closer company, was using oilbased paint, mixed with organic solvents such as thinner, to paint door closers. The fumes emitted from oil-based paint and volatile organic compounds (VOCs) in thinner are harmful. Fumes from VOCs also cause ozone pollution.

SOLUTION: Shenfei Liyi carried out tests using water-based paints to ensure they would work with the existing production process. After finding a suitable supplier, Shenfei Liyi replaced oil-based paint with water-based paint for its door closer production. The paint uses water as a solvent – which is odorless, non-toxic and minimizes harmful effects on people and the environment.

RESULT: Shenfei Liyi replaced all oil-based paint with water-based paint by the end of 2016. As a result, the annual consumption of organic solvents decreased by 60,000 kg in 2017. This initiative helps minimize the environmental footprint, reduces the risk of fire and enhances the health and safety of employees.



People make it all happen

People are the foundation for realizing ASSA ABLOY's ambition to be a preferred employer by 2020. Transparency, accountability, performance and personal growth, together with an agile and dynamic culture of innovation are crucial to the Group's role as a preferred employer.

In 2017, ASSA ABLOY continued to work with its employeerelated focus areas of internal Mobility, Diversity, and Health and Safety toward its ambition to be a preferred employer. Particularly good progress was made on Health and Safety, with a new Health and Safety Management System designed to support a Group-wide systematic approach to both identify and reduce workplace hazards.

Opening doors – together

ASSA ABLOY includes 47,500 employees in over 70 countries – all working together to make the company a true world leader in door opening solutions. ASSA ABLOY's vision is to be an attractive employer by providing a workplace culture that gives employees the authority to act, and opportunities for professional development. Every employee should also feel that they are able to make a difference.

ASSA ABLOY strives to attract and retain people with the right competencies and attitude needed for the company's continued success. Local accountability is also a key part of ASSA ABLOY's strategy, and the Group has a nurtured culture of local ownership and decentralized decision-making.

Promoting internal mobility

ASSA ABLOY strives to promote continuous employee development to realize and develop the potential of its internal talent pool. Employees are actively encouraged to seek out opportunities to develop their own career. Groupwide job vacancies on the company's intranet inform employees of career opportunities throughout ASSA ABLOY.

Internal candidates are given priority consideration for positions that arise, provided that their qualifications are comparable with those of external candidates. During 2017, 36 (37) percent of the management positions throughout the Group were filled by internal candidates.

Ongoing professional development

To continue to meet local business needs, and to lead and grow through innovation, the majority of ASSA ABLOY's training and development initiatives are implemented and managed on a divisional-level. On a Group level, ASSA ABLOY runs two global development programs each year for selected senior managers: the internally managed MMT (Management Training) development program, and the IMD 'Boosting Market Leadership Program'.

In 2017, 85 (60) ASSA ABLOY managers participated in one of these two programs. MMT creates an international cross-business network of colleagues to promote best practice sharing, and facilitate the integration of new employees following acquisitions. In addition, the Group also supports several short-term initiatives and projects that enable the exchange of competence among employees and teams.

Promoting employee ethics

As 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 responsible practices. Ethical employee conduct is central to this, and ethical behavior among employees is promoted through the Group-wide ASSA ABLOY Code of Conduct. The Code is a key component of the ASSA ABLOY code of Conduct. The Code is a key component of the ASSA ABLOY induction program, and all employees are expected to abide by it from day one. The Code of Conduct, which was updated in 2016, underlines ASSA ABLOY's commitment to fair employment conditions and labor rights, and takes a clear stand against human rights abuses, child labor and forced labor of any kind.

Employee Survey

ASSA ABLOY conducts a Group-wide Employee Survey every second year, with the next one planned for 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.

In 2017, ASSA ABLOY focused on the two areas that were identified as areas for improvement in the 2016 employee survey – professional development for individual employees and physical working conditions. In response, the company worked to promote the sharing of good practice, and increased Health and Safety awareness throughout the Group.



HID Global hosts Habitat for Humanity Building Day

In January HID Global continued its mission of being a good corporate citizen by sponsoring an Austin Habitat for Humanity building day. HID's 60 volunteers from its Corporate Office in Austin, Texas spent the day building the interior and exterior wall panels for an Austin Habitat home. This building day gave HID employees the opportunity to work side by side to build panel walls that will be the fundamental structure of a future home. HID already secures places for thousands of customers through trusted identity solutions every day, and now they are helping a local charity create a secure place for a family that has been struggling. A well-respected, charitable organization, Austin Habitat for Humanity builds new houses for people who are caught up in a cycle of poverty. Working together, HID and Austin Habitat for Humanity offer hope and gain trust in the local community. "HID Global is proud to support the volunteerism and community outreach projects of its employees," said Michele DeWitt, Vice President Human Resources with HID Global. "We are delighted to help Habitat for Humanity not only build a safe home for a deserving family, but continuing to help them in their mission of building a strong, stable and selfreliant community."

Diversity and gender balance

Promoting a gender balance and diversity strengthens ASSA ABLOY's competitiveness and performance.

Diversity allows ASSA ABLOY to make the most of its available workforce. Promoting a gender balance and diversity strengthens ASSA ABLOY's competitiveness and performance, by drawing on individual expertise and local knowledge.

ASSA ABLOY's Code of Conduct states that gender, nationality, social or ethnic background, age, religion, physical disability, sexual orientation or political opinion must not be the basis for discrimination. Key concept is 'diversity of perspective' which promote an open mindset and broader perspectives that can drive creativity and positive change in the business. ASSA ABLOY works on all levels to promote diversity.

Gender balance

With its Code of Conduct and Gender Diversity Policy as a foundation, ASSA ABLOY systematically works with gender balance at all levels throughout the Group. Discrimination is not tolerated, and ASSA ABLOY works proactively against all forms of discrimination. The target for 2020 is to have 30 percent female managers in senior positions. Progress is measured and the proportion of female managers was 23 percent at the end of 2017. Group-wide gender diversity objectives are set, and the actions taken to achieve them are managed and implemented at division level.

One of the challenges facing 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 recent years.

Number

44,825

2,661

47,486

% of total

94

6

100

Female,%

30

35

30

Number of employees by employment contract,

employment type and gender

Employee diversity

As a company working around the world and in various cultures, ASSA ABLOY promotes diversity to fully draw on the local expertise and dynamics of the individuals available to the company. ASSA ABLOY's extensive experience of working with more diverse teams has shown that they often provide a more holistic approach and better end results – particularly in terms of product development and business processes.

Consequently, the Group promotes diversity throughout the organization. For example, 28 nationalities are currently represented at the highest management levels. A diverse workforce that has a good understanding of local markets is also key to ASSA ABLOY's success, which has been proven by the continued geographical expansion of the Group and the development of new markets.

Diversity in recruitment

The recruitment process has an important role to play in achieving greater diversity and a gender balance. Managers are expected to examine their organizations to ensure that diversity is considered in high-profile projects, employee development and leadership opportunities. Managers are expected to prioritize the underrepresented gender with equivalent qualifications, provided that local legislation is followed, and to have at least one person from the underrepresented gender among the final candidates. Gender balance and diversity are also considered when selecting candidates for the Group's talent management programs.

PEOPLE – FACTS AND FIGURES

20.000

10,000

> 12 13 14 15 16 17 ■ Women ■ Men



At the end of 2017, 35 percent of ASSA ABLOY employees were covered by collective bargaining. During 2017 the total employee turnover among permanent employees amounted to 19.1 percent. The labor turnover is influenced by the ongoing manufacturing footprint restructuring activities. Consolidated information regarding employment type is not available, however information covering Sweden, Germany and the UK, indicate that an average of 94 percent of the employees work full time.

Women at different levels of the organization

	Percentage of women							
Level	2012 ¹	2013 ¹	2014	2015	2016	2017		
2 – reports to CEO	18	27	27	27	27	27		
3 – reports to level 2	16	12	16	17	18	17		
4 – reports to level 3	18	21	20	16	16	16		
5 – reports to level 4	23	24	23	25	24	25		
Level 2–5	22	23	22	23	22	23		
All employees	35	31	31	31	31	30		

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

AVERAGE NUMBER OF EMPLOYEES BY REGION

Europe, 17,115, 27% women South America, 2,022, 46% women North America, 12,521, 27% women Pacific, 963, 32% women Africa, 700, 43% women Asia, 14,106, 40% women

NATIONALITIES – ASSA ABLOY'S MANAGEMENT TEAMS



Safety

ASSA ABLOY works toward an injury-free workplace in all its operations. A safety culture is nurtured to promote safe behavior, reduce workplace hazards and reduce risk taking.

Progress in 2017

- A new Group-wide Health and Safety Management System based on a set of standardized metrics and tools was launched to provide consistency throughout the Group.
- A new Health and Safety policy manual was published.
- Progress on safety performance was demonstrated across the Group.

ASSA ABLOY Health and Safety Management System

The new Group-wide Health and Safety system was launched in 2017 for all units. The system includes indicators to identify hazards and follow up training to prevent injuries, and will ultimately help to improve the working environment and strengthen the Group's safety culture.

It includes the following tools and processes to promote a more consistent and systematic way of working across the Group:

- Safety communications
- Training Employee Health and Safety awareness
- Safety metrics and reporting
- Hazard identification and risk assessment
- Incident investigation

Health and Safety Policy Manual

The manual has been developed to provide a framework for implementing, reviewing and promoting a consistent approach to the Health and Safety system throughout the Group. The manual builds on the Group's experience and best practice, and supports a systematic approach to identifying and reducing workplace hazards.

The manual also builds on ASSA ABLOY's belief that safety is a top priority that is everyone's responsibility, that all injuries are preventable, and that safety incidents are opportunities to learn from and improve on. 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 operations.

Safety communications

As part of the Group-wide approach, every ASSA ABLOY facility must create visual safety information for all employees. Content should 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 display physical or digital content at facilities – to be a constant reminder of the importance of safety.

Training - employee Health and Safety awareness

Safety training is applicable to all employees, visitors, on-site subcontractors and field service workers, and is mandatory when new processes or changes to processes are introduced. To facilitate training, ASSA ABLOY has developed a Health and Safety training package with specific modules, an awareness video, and a presentation with guidance for the implementation and use of company tools. Topic-specific training also meets identified needs, and each unit has a plan for safety training needs and records of training completion.

Safety metrics and reporting

Every unit reports on additional metrics to identify focus areas for improvement and to measure progress. Some indicators serve to measure actual performance, known as lagging indicators as they record injuries that have occurred. As part of the Group-wide approach, each unit also reports on leading indicators that help identify areas for improvements and preventive actions.

Group-wide Health and Safety Management System

■ CHALLENGE: In 2016, ASSA ABLOY was not satisfied with its injury rate, and the Group's safety programs were fragmented across the organization with a lot of variability from site to site. This resulted in inconsistent application of the safety values and processes.

■ SOLUTION: ASSA ABLOY set up a working group with representatives from each division and constructed the ASSA ABLOY Health & Safety Management System using the OHSAS 18000 standard as the basis. This system includes a policy manual, hazard identification and improvement worksheet, incident investigation and response process, and a safety inspection checklist to identify common hazards.

The system was deployed throughout the organization to provide a consistent structure to build the Group-wide approach to safety. ASSA ABLOY is now building on the system in place to instill a safety culture among the employees – to promote safe behavior, reduce workplace hazards and reduce risk taking. Communication is a key part of this journey and a steady stream of safety content in the form of blogs, videos and stories have been created to make people familiar with the increased focus on Health and Safety.

RESULT: The new system has been deployed to Group's largest sites and the to roll-out of the program continues across the Group. The injury rate has decreased by 20 percent between 2016 to 2017. The Group now has a consistent set of tools

to enhance the safety culture – and further drive safety performance throughout the organization.



Hazard identification and risk assessment

ASSA ABLOY employees that face the greatest safety risks are maintenance and service personnel – particularly when working at non-standardized workplaces such as customer sites. The main safety risks faced within the Group have been identified as heavy lifting, traffic accidents, cutting and crushing injuries. These risks are mitigated through the hazard assessment tool, which uses the traditional probability and impact assessment methodology to prioritize risk, before driving the associated improvement actions.

The high number of acquisitions is also 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. The scalability of the new Group-wide Health and Management System helps to mitigate these risks by providing a framework to quickly incorporate acquisitions and ensure a cohesive approach across the Group.

Incident investigation

INJURIES

200

150

100

50

123 13

Injury rate²

Injury lost day rate¹

ASSA ABLOY has established a standardized process for the timely investigation and analysis of safety incidents in order

10

to prevent reoccurrence, this includes immediate safety containment actions, determination of root cause, and the implementation of corrective actions.

Safety culture

To prevent accidents and injuries, ASSA ABLOY promotes a culture where employees are engaged in proactive safety measures and work together to eliminate potential safety risks. To encourage a safety culture, all units have site safety representatives, and all units with more than 50 employees have their own Health and Safety committees. In 2017 these entities represent 94 percent of all employees in the Group.

A safety culture is nurtured through safety improvement activities that identify and resolve hazards before they become safety incidents. Safety improvements are tracked to ensure each site has a high level of engagement in the program and that the identified ideas are put into action.

Ultimately, ASSA ABLOY strives for a forward-looking safety culture that embeds safety into everyday workplace behavior habits through greater employee safety awareness and by adopting best practices.

LOST DAYS PER INJURY¹



- ¹ Lost days per injury calculated as total number of lost days in relation to total number of injuries..
- ² For comparable units. The total lost days per injury was 18.1 including units acquired during the year.

Ceco Door Achieves Impressive Safety Milestone

Ceco Door Products in Tennessee, US celebrated a significant safety milestone of several millions of hours without a lost time injury.

■ CHALLENGE: While this is a noteworthy accomplishment for employees of any company, it is especially so within a vertically integrated, metal fabrication facility like Ceco Door Products. Add to that the daily challenge of handling weighty and bulky doors and door frame parts, and it's clear that safety has to be a conscious daily priority so the prevention of injuries is an ongoing challenge.

■ SOLUTION: The team believes that managing the process yields the results. While it's hard to pinpoint exactly the factors contributing to this impressive number, it's a team effort, spearheaded by a number of dedicated employees who each have a specialty.

One of the keys to success, surely, is that the executive team starts weekly calls with the safety scorecard, reinforcing how vital and valuable safety is to the company's culture.

Injury lost day rate in lost days per

Injury rate in injuries per million

The historical numbers have been

adjusted with proforma data.

For comparable units. The total injury lost day rate was 75, includ-

ing units acquired during the year

From 2012, the reporting of inju-

ries and days lost due to injuries includes data from ASSA ABLOY entities performing service or

installation. Total injury rate was 4.1 including units acquired during

million hours worked

hours worked

the year.

Everyone is held accountable for following safety guidelines, which is underscored by frequent walkthroughs, and consistent improvement comes from examining any incidents and determining how they can be prevented in the future.

Finally, the expectation is set from the top down that the plant is a "no excuses" environment: Safety always comes first, even when it's inconvenient.

■ **RESULT**: As of end of 2017 they have 7,922,033 man hours without a loss time accident – and still counting.



Lifting equipment adjusts working height to a comfortable level to prevent the operator from having to bend over.

Investor statements

Anette Andersson



Portfolio Manager & ESG Investment Specialist, Investment Management, SEB Wealth Management

"I welcome ASSA ABLOY's renewed focus on Health and Safety"

"I appreciate the way ASSA ABLOY collaborates with clients to solve sustainability challenges together – such as using magnets instead of electricity to lock doors, and smart sensors to only open doors when people actually want to enter. They are also innovative in their production, for example by using ultrasonic cleaning instead of toxic cleaning substances, and working to develop closed production processes to significantly reduce water usage.

I welcome ASSA ABLOY's renewed focus on Health and Safety, which is already evident in their improved safety performance, and their efforts to secure more renewable energy supply as part of their climate work.

In terms of challenges ahead, I know that the company is working on gender equality, but more needs to be done at management levels. As tax transparency is a hot topic, I would also like to see a public tax policy.

Finally, I appreciate that we investors get invited to annual ASSA ABLOY sustainability discussions. This isn't a very common practice, and it clearly indicates that the company's management and the CEO take sustainability seriously."

Ulrika Danielson



Head of Communications and HR/Coordinator of Corporate Governance, Andra AP-fonden/ Second Swedish National Pension Fund

"We perceive sustainability to be an obvious and integral part of ASSA ABLOYs products and offerings"

"ASSA ABLOY has a long history of working structurally and strategically with sustainability. We perceive sustainability to be an obvious and integral part of their products and offerings. For many years, ASSA ABLOY has also invited investors to dialogue sessions where they present their sustainability work. These meetings are appreciated and clearly demonstrate the commitment to sustainability throughout the organization – from the CEO and down through the organization.

It is positive that ASSA ABLOY audits its suppliers to ensure they comply with their environmental and social requirements. Their focus on Health and Safety has contributed to a significantly lower proportion of accidents, despite a number of recent acquisitions.

To us, the integration of acquired companies and ensuring compliance with the ASSA ABLOY guidelines are of particular interest. Acquisitions also pose a challenge when it comes to the company's gender balance objectives.

Going forward, I would like to see a further development of the reporting around the UN Sustainability Development Goals and how the company is contributing to individual goals."

Nina Bönnelyche



Corporate Analyst, Responsible Investment, Folksam

"The Sustainability Compass remains a great asset for the company"

"ASSA ABLOY's 2020 sustainability objectives are more ambitious than its previous goals, which shows that the company continues to challenge itself in terms of sustainability. The Sustainability Compass remains a great asset for the company – that integrates sustainability into the business and guides more sustainable product development. The tool in turn helps to realize energy savings and more sustainable solutions for its customers.

ASSA ABLOY has improved the system to conduct audits in its supply chain against its Code of Conduct – including environmental and human rights compliance, and third-party verification. An increasing proportion of its suppliers are audited, which is very positive and we hope that this trend continues.

Gender balance is a key challenge for ASSA ABLOY, with women accounting for only 25% of top managers, and more needs to be done to attract women to the industry. Tax transparency is also an area for improvement, perhaps by making their tax policy public to gain greater legitimacy.

ASSA ABLOY has made great progress when it comes to sustainability. We look forward to following how the company will further integrate sustainability into its business in the future."

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 communications.



38 The Code of Conduct

includes a mechanism for whistle-blowing. In 2017, the Group handled 38 (46) cases reported through the whistle-blowing function.

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, the 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. This obligation is fulfilled by issuing this Sustainability Report 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 to integrate the sustainability principles into their daily operations.

Code of Conduct

The Group-wide Code of Conduct covers business ethics, communication, human rights and labor standards, the environment, and Health and Safety. It provides the framework for ASSA ABLOY's daily operations and dealings with external stakeholders.

The Code of Conduct is based on the following:

- United Nations Universal Declaration of Human Rights and associated UN conventions
- ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy
- United Nations Global Compact
- OECD Guidelines for Multinational Enterprises
- ISO 14001 environmental management standard

The full version of the ASSA ABLOY Code of Conduct is available in English, French, German, Spanish, and Chinese, while a short version is available in 28 languages at: www.assaabloy.com/code. The full version is given to all managers, relevant employees, and union representatives. The short version is communicated and made available to all employees. New employees are required to read the Code of Conduct within three months of joining the Group, and agree to abide by it and any related policies.

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 differ, legislation takes precedence. Although if the Code of Conduct sets a higher standard than the existing legislation, the reverse applies.

Business Partner Code of Conduct

ASSA ABLOY's Business Partner Code of Conduct is based on the pillars and frameworks of the Code of Conduct, but is adapted to external partners. The Code includes principles that apply globally to suppliers, business partners and other stakeholders such as third parties acting on behalf of ASSA ABLOY. The Business Partner Code of Conduct is available in 20 languages.

New Code of Conduct e-learning

During 2017, ASSA ABLOY developed the Code of Conduct e-learning module and a digital quiz to promote dialogue and raise awareness of the Code of Conduct among employees and what it expects of them. The e-learning will reach all employees in 2018.

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 members of the committee receives information from whistle-blowers and the committee ensures that such matters are dealt with appropriately and followed through. The committee meets twice a year.

Growing with care

As ASSA ABLOY grows organically and through acquisitions, the relocation of production is part of creating a more efficient manufacturing structure. Expanding the business in new regions, often in emerging markets, will remain an important part of the company's strategy for the foreseeable future. It is important to understand the business 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 beliefs. The ability to grow responsibly promotes ASSA ABLOY's performance.

Whistle-blowing

The Code of Conduct includes a whistle-blowing function. The objective is for cases to be resolved on a local level, however in 2017, 38 (46) cases were reported through the whistle-blowing function and dealt with on a Group-level. The range of cases demonstrates that the mechanism is used throughout the organization.

In 2017, the process for whistle-blowing was streamlined and made more efficient. The process has also been enhanced, and now gathers more detailed information on each reported case.

Compliance reviews

To maintain ASSA ABLOY's standards throughout the organization, internal Code of Conduct compliance reviews are complemented with third-party audits. These audits focus on working conditions, such as human rights, labor rights, Health and Safety, and compliance.

The Group carries out one-two audits every year with a focus on the Group's manufacturing sites in Africa, Asia, Eastern Europe and South America. The units are given specific improvement actions to fulfil, based on the audit results. In 2017, one external audit was performed on ASSA ABLOY's operations in Romania.

Anti-bribery and other compliance programs

ASSA ABLOY has specific compliance programs and policies within the areas of antibribery, antitrust, export control and data protection, which supplement and build on the Code of Conduct. In 2017, ASSA ABLOY introduced its new Data Protection Compliance Program, enhanced its Code of Conduct whistle-blowing process, and strengthened its due diligence processes.

Progress in 2017

• Data Protection Compliance Program launched The new global program is based on both the EU General Data Protection Regulation (GDPR) and the principles set out in the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. Following its launch in April 2017, ASSA ABLOY worked to implement its Data Protection Compliance Program throughout the company through dialogue with internal stakeholders.

- Code of Conduct whistle-blowing process enhanced The process was streamlined and made more comprehensive. Read more about the whistle-blowing process in the Sustainability Governance section on page 25.
- Further strengthening of divisional due diligence processes

During the year, ASSA ABLOY further strengthened its processes to evaluate and screen if third parties can make sales on ASSA ABLOY's behalf. Such processes identify where the corruption risk exposure is perceived to be high, and allows action to be prioritized.

• Continued roll out of the Business Partner Code of Conduct

The Business Partner Code of Conduct clearly defines ASSA ABLOY's expectations on its Business Partners.

Compliance overview

All compliance-related programs, policies and requirements are set by the Group, which also provides supporting tools. Each division is responsible for implementing the programs.

Employees are expected to report any concerns to either their nearest manager, the divisional compliance officer, Group Legal, or through the Code of Conduct whistleblowing function. In 2017, special focus has been made on employees in regions where the risk of corruption is perceived to be higher, such as emerging markets or countries with a low score on Transparency International's latest Corruption Perception Index.

The implementation of the programs is reviewed through the Group's established process for internal control in all operating companies and internal audits. In order to ensure compliance with GDPR when it comes into force, special focus has been given to following up the implementation of the Data Protection Compliance Program.

ASSA ABLOY also has a mergers and acquisitions compliance process as part of the acquisition process. The aim of this process is to put any potential issues on the agenda from 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. Read more in the Acquisitions section on page 27.

The implementation and further development of the compliance programs are ongoing, and ASSA ABLOY is working continuously to evaluate and further develop their effectiveness.

Anti-bribery Policy

Corruption increases inequality, the cost of doing business and reduces efficiency. ASSA ABLOY works actively to prevent corruption in its business. The anti-bribery compliance program adheres to the strictest international standards to prevent, detect and respond to potential corruption – and it is constantly evaluated. Risk assessments, employee training, third-party compliance, and reporting are essential components of the anti-bribery compliance program. The antibribery 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-bribery policy.

ASSA ABLOY conducts business worldwide and consequently operates in some 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 is handled through third parties, such as distributors, and the majority of the Group's anti-corruption efforts are used to ensure that such third parties acting on behalf of ASSA ABLOY comply with ASSA ABLOY's standards. This is particularly the case in markets that are perceived to have a higher level of corruption risk exposure, such as emerging markets or countries with a low score on Transparency International's latest Corruption

Compliance training

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

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

At the end of 2017, 83 percent (79) of relevant employees had participated in anti-bribery training, 81 percent (80) percent in the antitrust e-learning, and 90 percent (95) had participated in export control training.

Continued work in 2018

Third-party due diligence processes will be further strengthened in 2018 by applying a refined model for risk assessment at a divisional level. Special focus will also be given to implement the Data Protection Compliance Program to ensure that ASSA ABLOY is sufficiently ready for the GDPR when it comes into force in May 2018.

The anti-bribery e-learning program is global and available in 22 languages.



83 percent of relevant employees had participated in anti-bribery training.

Acquisitions

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



Progress in 2017

• New acquisitions

16 acquisitions were consolidated during the year. 20 percent of the acquisitions were in emerging markets.

Finance Integration guidelines Group-level Finance Integration guidelines were introduced as an additional check in the first 100 days of a new acquisition. The guidelines are an example of how ASSA ABLOY continuously improves the acquisition process.

With more than 170 acquisitions in the last 10 years, ASSA ABLOY has established an efficient process for bringing new companies into the Group. This includes reviewing sustainability-related issues, sharing the company's Code of Conduct and way of doing business with prospective companies, and taking steps to help newly acquired companies raise their standards where necessary.

Due to the decentralized nature of the ASSA ABLOY Group, divisions are responsible for the entire merger and acquisition process, and are resourced accordingly. The Group provides an overview of company-wide activities, and supports divisions with common compliance guidelines.

ASSA ABLOY prefers to acquire sound companies that share the Group's values and business practices, and the successful integration of acquired companies is an essential part of mitigating risks.

The acquisition process

The Group-wide acquisition process is divided into four phases: strategy, assessment, implementation, and integration. Each phase has its own predefined activities, decision processes and documentation requirements. Within these phases there are three main due diligence processes that help ASSA ABLOY decide whether to pursue the acquisition, and what action would need to be taken if the acquisition is completed:

- Financial and tax
- Legal including employment contracts, payment processes, wages and insurance
- Operational including the use of chemicals and compliance

An excessive number of red flags in the Legal and Operational due diligence processes related to sustainability may mean that the acquisition process is abandoned indefinitely.

The supplier base of the potential company is also investigated – including two supplier categories: large suppliers and critical components. This mapping involves Group Supply Management and aims to identify risks and potential synergies. Post-acquisition, associated suppliers are added to the Group's supplier database, which is continuously assessed and audited. As part of the acquisition process, ASSA ABLOY is obliged in certain cases to file for antitrust approval. During 2017, the company did this in a number of cases when it was required.

The successful integration of acquired companies normally take between 6 and 12 months – depending on the type of acquisition and its specific circumstances.

Risk management

ASSA ABLOY has identified the main areas of potential risks related to acquisitions, all of which are covered by Legal and Operational due diligence. ASSA ABLOY's Group-wide sustainability management program – including targets, semiannual reporting, supply chain management, and Groupwide policies – manages risk in the following areas:

- 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 breaches (labor rights, human rights, corruption, etc.)
- Proper permissions
- Safety

In addition, dedicated action plans are set up when required.

Compliance process

ASSA ABLOY's mergers and acquisitions (M&A) compliance process aims to ensure that companies – particularly in emerging markets – comply with the company's standards. The M&A process includes a practical toolkit that provides ASSA ABLOY employees involved in the acquisition process with guidance. It covers the following areas:

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

The M&A process aims to put all potential issues on the agenda from the outset of the acquisition to enable an accurate risk appreciation at an early stage. This allows the due diligence process to be 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, are to be put in place and implemented. The post-completion review is particularly important if insufficient information has been obtained during the acquisition phase. The M&A compliance guide-lines also offer guidance on this process.

Organizational responsibility

The divisions have operational responsibility for their sustainability work. The work is overseen by the Executive Team and ultimately by 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. Managers for environmental sustainability, supply, and innovation at the Group and divisional levels ensure that the necessary policies, processes and tools for managing environmental issues exist and are implemented. The Human Resources (HR) 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 sections that focus on sustainability – one offering general information for all employees, while the other supports sustainability managers and includes tools, best practices, and access to the sustainability reporting database. Statistical reports and scorecards enable all ASSA ABLOY companies to monitor their performance and to benchmark themselves against the Group.

Responsibilities

Each division is responsible for managing the Group's sustainability agenda, identifying and addressing risks and opportunities in the context of their business, as well as governing the Code of Conduct and related policies.

Divisional work and progress is overseen by the Executive Team, and each factory or business unit has the operational responsibility within each division. Each division is also 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 them. 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 comprises of 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 each year to discuss various sustainability matters 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.

In addition to the Sustainability Council, there are councils for Innovation, Sourcing, Operations, Human Resources, and Health and Safety, whose members include representatives from the Group and all divisions, which manage sustainability issues related to their business.

Monitoring progress

ASSA ABLOY has a Group-wide database for sustainability indicator reporting, which enables data analysis. The database includes best practices and tools as well as details of measures taken by the various companies to achieve the Group's sustainability targets. All companies and divisions in the Group can access information from the database to compare progress and trends. In 2017, 360 (347) factories, sales units and offices reported their data in the database.

The review process is managed by the divisions on a quarterly basis – typically with detailed follow up discussions with the relevant sub-divisions. Overall Group performance is monitored by the Sustainability Council, which tracks the performance of individual KPIs, and the results are presented at Group Management meetings.



Stakeholder engagement and materiality analysis

Engagement with a wide variety of stakeholders helps ASSA ABLOY to be aware of societal expectations on the company. Stakeholder engagement also provides the basis for the materiality analysis, which provides a clear understanding of which aspects are the most important to ASSA ABLOY's stakeholders and its sustainability work.

Stakeholder engagement

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 day-to-day business:

Customers are becoming increasingly interested in transparency and products with improved sustainability performance. 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 products, and is addressed by the company's work with its supply chain. Customer interest in sustainable products has emerged from a growing importance of 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.

ASSA ABLOY's material sustainability topics

- Anti-corruption
- Acquisitions*
- Diversity
- Emissions
- Energy
- Environmental complianceEnvironmental management
- systems
 Occupational health and
- safety
- Organic solvents
- Procurement practices*
 Sustainable innovation/ sustainable products*
- Waste
- Water
- * The aspect is material also outside the organization.

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. These include 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 are engaged through annual appraisals, training and development initiatives, staff meetings, the internal magazine in 17 languages, and the intranet. ASSA ABLOY

works to improve employee satisfaction across a broad range of areas, and progress is measured in the employee survey.

Supplier and business partner issues are managed through supply chain audits and Business Partner Code of Conduct compliance.

Non-governmental organizations (NGOs) and local communities are engaged through local dialogue when relevant.

Materiality analysis

ASSA ABLOY conducted its first materiality analysis in 2013 in accordance with the GRI framework. The analysis was reviewed in 2015, and again in 2017. During the year, ASSA ABLOY's Sustainability Council reviewed the company's materiality analysis in accordance with GRI Standards. The review concluded that the materiality analysis is still valid and relevant, and did not require updating. The materiality analysis forms the basis for defining the Sustainability Report content.

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 Human Resources, the Product Innovation Process director, and the Group Supply Management director.

SUSTAINABILITY COUNCILS

	SUSTAINABLE INNOVATION	SUPPLY CHAIN INTEGRITY	ENVIRONMENTAL	SOCIAL AND ETHICAL	HEALTH AND SAFETY
ASSA ABLOY Group	Zeljka Svensson, Director Global Innovation Management	Stefan Calner, Director Supply Management	Stefan Tisell, Head of Environmental Sustainability	Maria Romberg Ewerth, SVP Human Resources	Maria Romberg Ewerth, SVP Human Resources
EMEA	David Moser, VP Product Innovation	Mauro Felice, VP Operations	Antonina Realmuto, Sustainability Manager	Allan Cooper Director Human Resources	Mauro Felice, VP Operations
Americas	Amy Vigneux, Director of Sustainable Building Solutions	Jody Paviglionite, VP Supply Management	Richard Hafersat, Director of Strategic Initiatives	Jack Dwyer, VP Human Resources and Administration	Kimberly Cummins, Human Resources Manager ASSA ABLOY Berlin
Asia Pacific	Allen Wong, VP Innovation	Michael Deng, Sustainability Manager	Michael Deng, Sustainability Manager	Dolores Shore, Global Director Human Resources	Dolores Shore, Global Director Human Resources
Entrance Systems	Mats Nordén, CTO Entrance Systems	Dan Gren, VP Operations	Tobias Svensson, Head of Process Excellence	Jessica Jonasson, VP Human Resources	Tobias Svensson, Head of Process Excellence
HID Global	Jeff Sasse, Director Global Sustainability	Joshua Freeman, VP Quality and Process Excellence	Jeff Sasse, Director Global Sustainability	Michele DeWitt, VP Human Resources	Jeff Sasse, Director Global Sustainability
Hospitality	Louise Wolfshagen Global Quality Assurance Manager	Julie Zhu, VP Operations	Louise Wolfshagen Global Quality Assurance Manager	Christophe Sut, Executive Vice President and Head of ASSA ABLOY Hospitality	Julie Zhu, VP Operations
Policies	Innovation Policy Policy for Intellectual Property	Business Partner Code of Conduct Supply Management Policy	Code of Conduct Environmental Sustainability Policy	Code of Conduct HR Policies and Guidelines Gender Diversity Policy Tax Policy Anti-bribery Policy	Code of Conduct Health and Safety Policy Manu

GRI content index

This report has been prepared in accordance with the GRI Standards: Core option. The table below indicates where information can be found: Sustainability Report (unless otherwise stated) or Annual Report (AR).

General Disclosures

		Page	Comment/Omission	
GRI 101: Foundation	1 2016			
GRI 102: General dis	closures 2016			
Organizational Pr	ofile			
1021	Name of the organization	25		
102-2	Activities, brands, products, and services	Flip cover inside, 4–5, 11		
102-3	Location of headquarters	Backcover		
102-4	Location of operations	6, AR 87		
102-5	Ownership and legal form	25, AR 104–105		
102-6	Markets served	Flip cover inside, 6, AR 10–11, 13, 74		
102-7	Scale of the organization	Flip cover inside, 21, AR 59 – 60, 74, 79, 87		
102-8	Information on employees and other workers	21,32		
102-9	Supply chain	Supply chain 6, 12–13		
102-10	Significant changes to the organization and its supply chain	AR 39, 84		
102-11	Precautionary Principle or approach	15		
102-12	External initiatives	3, 25		
102-13	Membership of associations	7		
Strategy				
102-14	Statement from senior decision-maker	2		
Ethics and Integrit	ty			
102-16	Values, principles, standards, and norms of behavior	Flip cover inside, 12, 25		
Governance				
102-18	Governance structure	25, 28		
Stakeholder Enga	gement			
102-40	List of stakeholder groups	29		
102-41	Collective bargaining agreements	21		
102-42	Identifying and selecting stakeholders	29		
102-43	Approach to stakeholder engagement	3,29		
102-44	Key topics and concerns raised	24, 29		
Reporting Practic	e			
102-45	Entities included in the consolidated financial statements	32, AR 79		
102-46	Defining report content and topic Boundaries	29,32		
102-47	List of material topics	29		
102-48	Restatements of information	32		
102-49	Changes in reporting	32		
102-50	Reporting period	32		
102-51	Date of most recent report	32		
102-52	Reporting cycle	32		
102-53	Contact point for questions regarding the report	33		
102-54	Claims of reporting in accordance with the GRI Standards	33		
102-55	GRI content index	30–31		
102-56	External assurance	32		

Topic-specific Disclosures

GRI Standard	Disclosure		Page	Comment/Omission	Topic in ASSA ABLOY's Materiality Analysis	
Economic						
Anti-corruption	103-1/2/3	Management Approach*	7, 25, 26, 28, 29		Anti-corruption	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	26, 27		_	
	205-2	Communication and training about anti-corruption policies and procedures	25, 26			
Environmental						
Energy	103-1/2/3	Management Approach*	6, 7, 8, 15, 16, 25, 28, 29		Energy	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	16, 32		_	
	302-3	Energy intensity	16		_	
	302-4	Reduction of energy consumption	16,32			
Water GRI 303: Water 2016	103-1/2/3	Management Approach*	6, 7, 8, 15, 17, 25, 28, 29		Water	
	303-3	Water recycled and reused	17		-	
Emissions	103-1/2/3	Management Approach*	6 7 8 15 16 25 28 29		Emissions	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	16.32		-	
	305-2	Energy indirect (Scope 2) GHG emissions	16,32		-	
	305-4	GHG emissions intensity	16		-	
	305-5	Reduction of GHG emissions	16,32		-	
	305-6	Emissions of ozone-depleting substances (ODS)	16		-	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	19		-	
Effluents and Waste	103-1/2/3	Management Approach*	6, 7, 8, 15, 18, 25, 28, 29		Water Waste	
Waste 2016	306-1	Water discharge by quality and destination	17–18		-	
	306-2	Waste by type and disposal method	18		-	
Environmontal	306-3	Significant spills	7 15 25 29 20		Environmontal	
Compliance GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	15		compliance	
Supplier Environmental	103-1/2/3	Management Approach*	6, 7, 8, 12–14, 15, 25, 28, 29		Procurement	
Assessment GRI 308: Supplier Environmental	308-1	New suppliers that were screened using environmental criteria	12–14		⁻ practices	
Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken	12–13		_	
Environmental	103-1/2/3	Management Approach*	6, 7, 8, 15, 25, 28, 29		Environmental	
management systems		Number of entities covered by ISO 14001 certificates and other certifiable environmental management systems	19		systems	
Social						
Occupational Health and Safety	103-1/2/3	Management Approach*	6, 7, 8, 22–23, 25, 28, 29		Occupational health and safety	
GRI 403: Occupational Health and Safety 2016	403-1	Workers representation in formal joint management- worker health and safety committees	23		-	
	403-2	lypes of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	23	Data by gender and region not available. Absenteeism and occupational diseases not available on Group level. During 2018 different options for simplified data collection will be evaluated.		
Diversity and Equal Opportunity GRI 405: Diversity and Equal Opportunity 2016	103-1/2/3	Management Approach*	7, 8, 21, 25, 28, 29		Diversity	
	405-1	Diversity of governance bodies and employees	21	Data by age groups not available. During 2018 different options for simplified data collection will be evaluated.		
Human Rights Assessment GRI: 412 Human Rights Assessment 2016	103-1/2/3	Management Approach*	6, 7, 25, 27, 28, 29		Acquisitions	
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	27			
Supplier Social	103-1/2/3	Management Approach*	6, 7, 8, 12–14, 25 28, 29		Procurement	
Assessment GRI 414: Supplier Social	414-1	New suppliers that were screened using social criteria	12–14		practices	
Assessment 2016	414-2	Negative social impacts in the supply chain and actions taken	13			
Marketing and Labeling GRI 417: Marketing and	103-1/2/3	Management Approach*	6, 7, 9, 11, 28, 29		Sustainable innovation/ sustainable products	
Labeling 2016	41/-1	Requirements for product and service information and labeling	9-10			

* GRI 103: Management Approach 2016

Reporting principles

ASSA ABLOY continually works to improve reporting transparency, scope, quality and the frequency of information. This is the Group's twelfth Sustainability Report. ASSA ABLOY reports in accordance with the GRI Standards: Core option.

Reporting units

The number of entities (factories, sales companies and offices) reporting on sustainability in 2017 has increased from 347 to 360. The data in the sustainability report represents entities where 90% of the Group's employees work. In terms of manufacturing activities the report is estimated to cover entities that represents 95% of the Groups total manufacturing activities. The parts of the Group that are not covered are either related to recently acquired entities or entities with less than 10 employees. Joint ventures are included if ASSA ABLOY holds majority ownership. Sustainability indicators are reported by companies that have been part of the Group since at least the end of the first quarter of 2017.



Calculation principles

Reported number of employees represent the number of employed persons by the end of 2017.

Reported normalized KPIs are based on currency-neutral monetary values and value added rather than sales – 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.

ASSA ABLOY uses the CDP's principle for calculating carbon emissions. The selected method gives a more relevant calculation on the actual carbon emissions as it takes into account how electricity is generated in different countries.

Electricity emission factors are based on data on electricity production for 2010, as published by the International Energy Agency (IEA, 2012). These emission factors are used for calculation of emissions until end of 2016. In 2017 ASSA ABLOY have updated the emission factors used to calculate greenhouse gases from electricity consumption. The emission factors are based on the most recent data published by the International Energy Agency (IEA) and the International Panel on Climate Change (IPCC), and are expressed in CO₂ equivalents (CO₂e). For Brazil, Canada, United Kingdom and the United States the emission factors are based on data published by national agencies.

Due to the change in emission factors the CO_2e emissions from electricity have increased by 5 percent. Previous years data have not been updated.

ASSA ABLOY currently only report location based Scope 2 emissions due to the unavailability of market based data.

District heating emission 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's sustainability reporting system facilitates the collection of data that is aligned with the Group financial reporting. It also supports sustainability management in all areas of operations.

ASSA ABLOY has improved its internal sustainability reporting and analysis capabilities in recent years, which has resulted in restatements of previously reported data for water consumption, energy consumption and carbon emissions.

All units report sustainability performance every quarter (internal reporting).

GRI Standards

The Sustainability Report covers the 2017 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 Standards. This report has been prepared in accordance with the GRI Standards: Core option. Accordingly, the GRI indicators have been chosen to match the material issues disclosed on page 29. Omissions or incomplete data are commented on directly in the GRI index on pages 30–31.

ASSA ABLOY reports its sustainability performance annually, and the most recent Sustainability Report, for 2016, was issued in March 2017.

External assurance

ASSA ABLOY has not sought external assurance for the sustainability report of 2017. PwC Sweden has performed a GRI check and confirms that ASSA ABLOY reports in accordance with the GRI Standards: Core option.

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.

Auditor's report on the statutory sustainability report

To the general meeting of the shareholders in ASSA ABLOY AB (publ) AB, corporate identity number 556059-3575

Engagement and responsibility

It is the board of directors who is responsible for the statutory sustainability report for the year 2017 and that it has been prepared in accordance with the Annual Accounts Act.

The scope of the audit

Our examination has been conducted in accordance with FAR's auditing standard RevR 12 The auditor's opinion regarding the statutory sustainability report. This means that our examination of the statutory sustainability report is substantially different and less in scope than an audit conducted in

accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinion.

Opinion

A statutory sustainability report has been prepared.

Stockholm, 5 February 2018

Bo Karlsson Authorized Public Accountant Auditor-in-charge Linda Corneliusson Authorized Public Accountant

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.

CDP Formerly known as the Carbon Disclosure Project, 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 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 UN initiative that encourages companies to apply sustainable and socially responsible principles.

Global Reporting Initiative, GRI Global guidelines for sustainability reporting.

Global-warming potential (GWP) 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 CO_2 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 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.

Contacts

Sustainable innovation:

Zeljka Svensson Director, Global Innovation zeljka.svensson@assaabloy.com Tel: +46 (0) 8 506 485 00

Supply-chain integrity:

Stefan Calner Director Supply Management stefan.calner@assaabloy.com Tel: +46 (0) 8 506 485 00

Environmental sustainability:

Stefan Tisell, ASSA ABLOY AB Director Production Processes and Environmental Sustainability stefan.tisell@assaabloy.com Tel: +46 (0) 8 506 485 00

Social and ethical matters:

Maria Romberg Ewerth, ASSA ABLOY AB Senior Vice President Human Resources maria.ewerth@assaabloy.com Tel: +46 (0) 8 506 485 00





Production: ASSA ABLOY, Hallvarsson & Halvarsson. Photo: ASSA ABLOY's own photographic library, among others. Print: Göteborgstryckeriet 2018.

ASSA ABLOY

ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience

ASSA ABLOY AB Box 70340 SE-107 23 Stockholm Sweden Visiting address: Klarabergsviadukten 90 Tel +46 (0)8 506 485 00 Fax +46 (0)8 506 485 85 Corp. Reg. No. 556059-3575

www.assaabloy.com



Building to the World's Most Advanced Green Building Standard

CUSTOMER: Hampshire College is a private liberal arts college in Amherst, Massachusetts, US. The college, being environmentally focused, sought to construct a new classroom and administration facility to reflect this ideal.

■ CHALLENGE: The R. W. Kern Center at Hampshire College is a USD 7.8 million, 17,000 square foot classroom and administration facility constructed to the sustainability-driven Living Building Challenge (LBC), the built environment's most rigorous sustainability performance standard. The intent of the LBC is to build structures that are free from harmful chemicals, protecting not only those that live and work within, but alsothe people constructing the building, the workersthat produce the building materials and the environmentas a whole. To achieve this designation, a structure must generate its own electricity, collect its own water and avoid building products – including door openings – that contain "red list" chemicals.

■ SOLUTION: Achieving this goal requires selection of building products with accompanying transparency statements that openly list the material ingredients of these products. Finding products with transparency labels can be a challenge.

The construction firm building the R.W. Kern Center, Wright Builders, spent months sourcing components and ingredient lists from manufacturers. ASSA ABLOY made their job easier by providing Declare labels that list material ingredients for the door opening products used on the project including doors, locks and exit devices, hinges, door operators, accessories and pulls.

"Having companies like ASSA ABLOY declare that they meet standards, and provide ingredient lists, was an incredible help," said Andrew Solem, assistant project manager for Wright Builders. "The labels allow architects, designers, specifiers and builders to know immediately whether or not that the product will meet most green building programs and guidelines, including the Living Building Challenge."