

# Sustainability Report 2018

**ASSA ABLOY**

Experience a safer  
and more open world



ASSA ABLOY meets the most stringent environmental certification ratings at Delos new headquarters at 860 Washington Street in Manhattan.

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## Sustainability needs to be on top of our agenda

The need for sustainable access solutions is continuously growing among ASSA ABLOY's customers.



## Environmental performance

The Group's ambition is to reduce the environmental impact and enhance performance while expanding the Group.

## Sustainability governance including organizational responsibility and stakeholder engagement

## About the report

This report, along with additional information available online, describes the Group's sustainability initiatives and performance in 2018, 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 2018. This report has been prepared in accordance with the GRI Standards: Core option (see pages 34–35 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 36.

## External recognition and memberships

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 2018, the Group received a score of C in the CDP Climate Change Program, and a score of C 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.

Other important main memberships include: The Confederation of Swedish Enterprise (Svenskt Näringsliv), The Royal Swedish Academy of Engineering Sciences (IVA), Physical Security Interoperability Alliance (PSIA), The Zigbee Alliance and The Z-Wave Alliance.



# ASSA ABLOY in brief



## Who are we?

**The ASSA ABLOY Group is the global leader** in access solutions. The offering covers products and services related to openings, such as locks, doors, gates and entrance automation solutions. The Group also has expertise in controlling identities, with keys, cards, tags, mobile and biometric identity verification systems as parts of the offering.

## What do we do?

**Every day, ASSA ABLOY helps** billions of people experience a more open world through innovations that enable safe, secure and convenient access to physical and digital places.

## For whom?

**The ASSA ABLOY Group provides** access solutions, trusted identities, entrance automation and service for institutional and commercial customers, as well as for the residential 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?

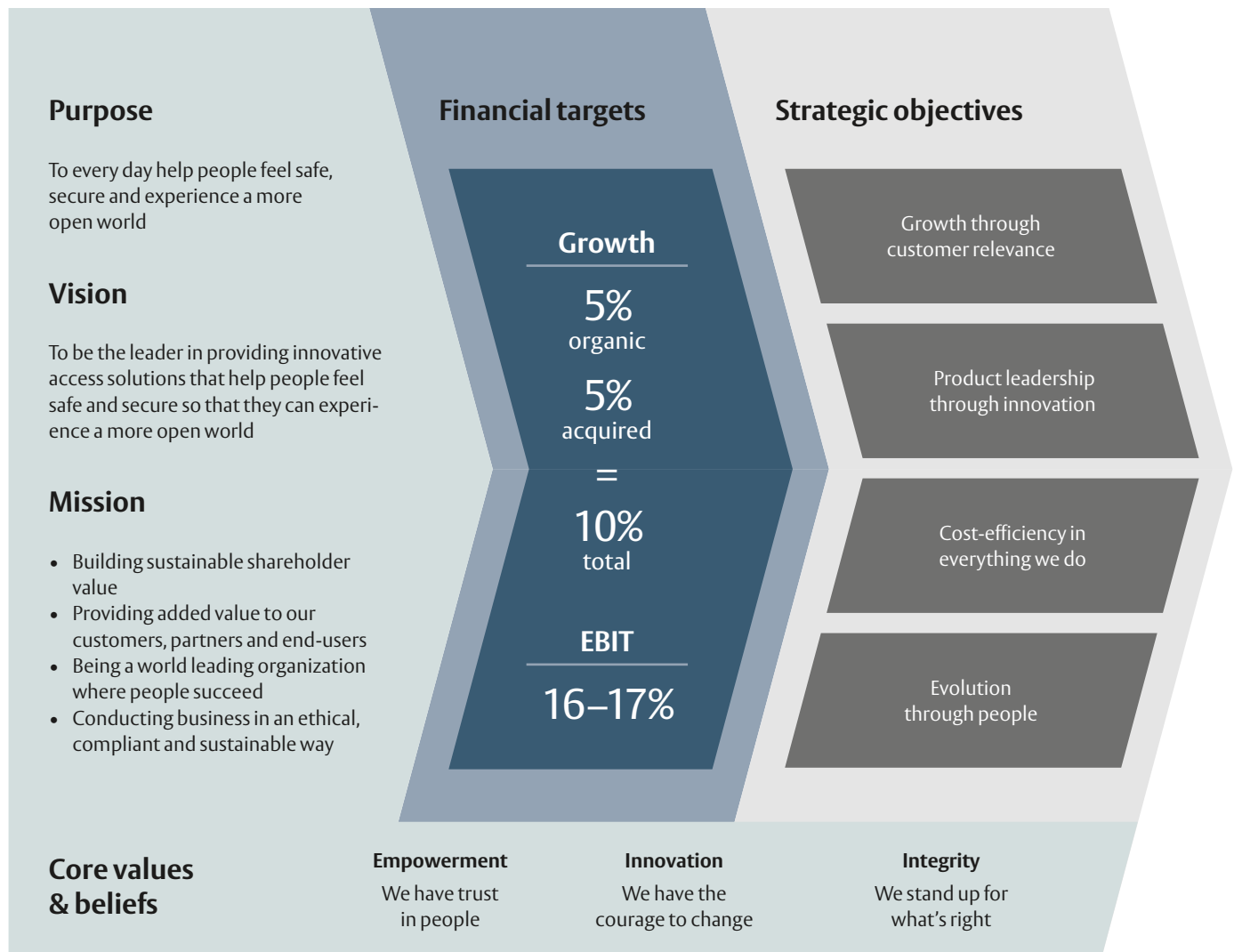
**The Group has leading positions** in most of Europe, North and South America, Asia and Oceania.

### Share of Group sales by region 2018

North America	42%	(40)
South America	3%	(3)
Europe	38%	(38)
Asia	13%	(14)
Oceania	3%	(4)
Africa	1%	(1)

# Value creation strategy

The Group's strategic direction is to lead the trend towards the world's most innovative and well-designed access solutions. Our purpose is to help people feel safe, secure and experience a more open world. Our core values, beliefs and strategic objectives help guide our way.





# Highlights 2018

- The Group had a positive development across a majority of the reporting areas.
- The Group's materiality analysis was updated during the year with input from employees, customers and suppliers. The result confirms that the Group is working with the right priorities.
- The increased focus on Health and Safety has paid off and led to a decrease of the injury rate by 11 percent.
- The water intensity has decreased by 10 percent during the year.
- The Energy intensity has decreased by 5 percent during the year.
- By the end of 2018 the Group had 332 Environmental Product Declarations verified and published.
- The Group carried out 1,055 sustainability audits of suppliers in low cost countries.
- The Code of Conduct was updated with the Group's global Data protection compliance program. The Code of Conduct will be rolled out in 28 languages.



# Sustainability needs to be on top of our agenda

During my first year at ASSA ABLOY I've visited many customers, companies and employees around the world. I was excited to learn that the need for sustainable access solutions is continuously growing among ASSA ABLOY's customers.

When it comes to ASSA ABLOY's sustainability performance, we had another good year with substantial improvements in many areas. Within health and safety, both the injury rate and the severity of injuries continued to develop in a positive way, where the injury rate decreased by 11 percent. The use of water has been reduced, through further improvements in efficiency. We have also expanded our portfolio of our energy-harvesting products during the year.

Sustainability is a license to operate, where we continuously work to do more with fewer resources. Efficiency in terms of the way we use our resources and taking responsibility for this are fully integrated into ASSA ABLOY's processes and make us a better business.

An important driver for product development is the sharply rising demand for sustainable solutions. There is strong growth in investments in green buildings – with customer requirements for energy savings, reduced consumption of materials, the health aspects for the inhabitants of a building and renewable or recycled materials becoming increasingly important.

The various openings of a building can influence up to 20 percent of its energy consumption. ASSA ABLOY offers a growing range of products with environmental declarations, with a focus on saving energy, as well as reduced consumption of materials and other resources used in production. During 2018, the number of EPDs (environmental product declarations) increased to 332. Higher sustainability performance from a life cycle perspective is a prerequisite for our development work and is integrated into the product innovation process. We have great sustainable solutions that make a difference in helping our customers to create a more sustainable building.

ASSA ABLOY's five year sustainability program is making good progress. Water and energy intensity decreased by 10 percent and 5 percent respectively. The consumption of organic solvents continued to decrease by switching to more environmentally friendly processes such as using

water-based paint. Furthermore, our efficiency programs, such as the manufacturing footprint and VA/VE (value analysis/ value engineering) also made a significant contribution to the overall improvements in sustainability in terms of reduced consumption of energy and materials. The number of sustainability audits of suppliers remains at a high level.

During the year we carried out an update of the Group's materiality analysis, identifying the most important sustainability areas. Customers, suppliers and employees have been asked to provide input on our most important areas. I'm pleased to say that the outcome of the updated analysis confirms that we're working on the right priorities.

We have evaluated our sustainability program in relation to the UN Sustainable Development Goals and concluded that our work is in line with the UN SDG initiatives.

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 its progress.

Finally – a few important words on values, purpose and beliefs. During the year we launched our core values, namely Empowerment, Innovation and Integrity. The Group's mission is to build sustainable shareholder value, but also to be an attractive company to our employees and to conduct business in an ethical, compliant and sustainable way. For me, the employees and the competence they possess are our most important asset. It is our employees who bring everything together. I would like to take this opportunity to thank all our employees for the effort they have invested in ASSA ABLOY in 2018 and for making ASSA ABLOY a more sustainable company.

Stockholm, 4 February 2019

Nico Delvaux  
President and CEO



"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 business context

ASSA ABLOY is the global leader in access 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 access 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 access 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 four main strategic objectives of growth through customer relevance, product leadership, cost efficiency and evolution through people, 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.

## 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.

## Customer relevance

ASSA ABLOY offers solutions that meet customer requirements for safety, security, convenience and sustainability. The solutions need to meet local requirements, rules and standards, as well as the need for integration into new or existing security systems.

## 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 access solutions, ASSA ABLOY's sustainability work is aligned with the objectives of the SDGs – with a focus on six SDGs in particular.

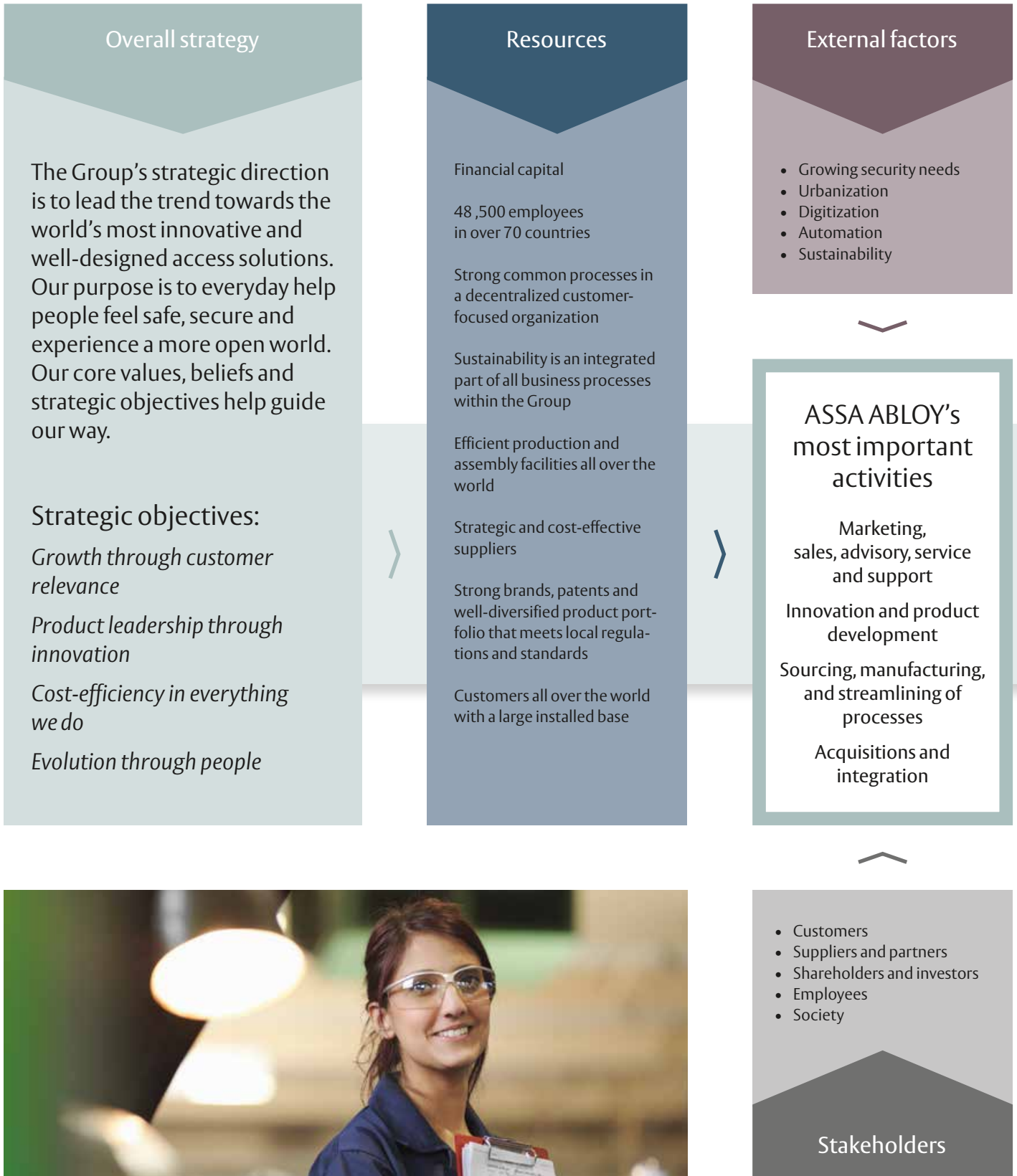
Urbanization and the role of sustainable cities is an important opportunity for ASSA ABLOY. The business is contributing to SDG 11 on making cities and human settlements inclusive, safe, resilient and sustainable. Everywhere ASSA ABLOY operates, the company supports the intention of SDG 9 on resilient 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.

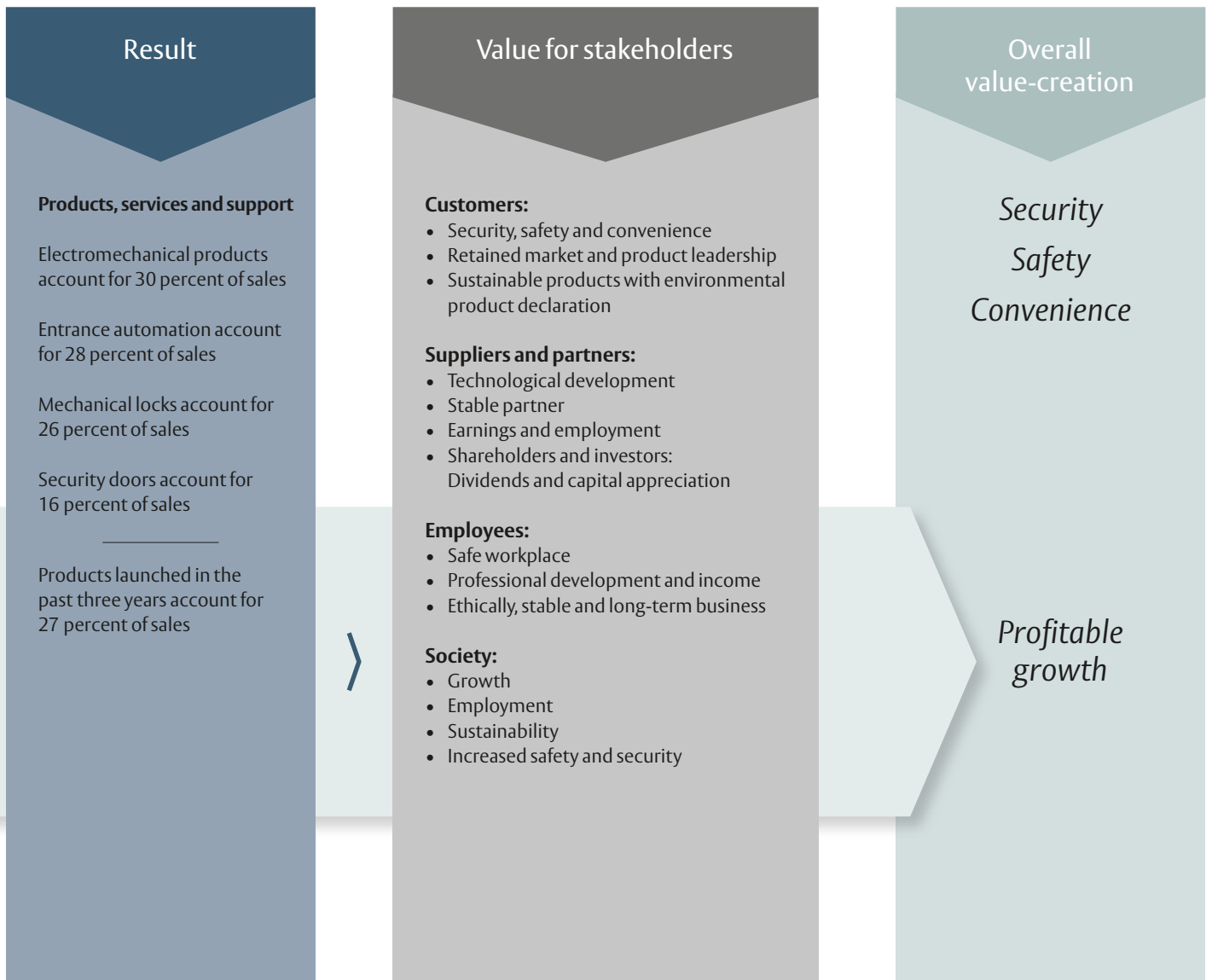
Taking responsibility in its operations, ASSA ABLOY has a strong focus on efficiency, which is related to SDG 12 on responsible production, through a focus on resource efficiency and waste reduction. The Group's goal is to reduce water intensity, which supports SDG 6 on clean water and sanitation. Integrating 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.



# Value-creation for all stakeholders







# Strategic direction

The strategic objectives guide the ASSA ABLOY Group towards market growth, product leadership, cost-efficiency in everything we do and evolution through people. The strategic objectives and the mission to conduct business in an ethical, compliant and sustainable way form the basis for the company's sustainability work.

As the global leader in access 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 reduce-reuse-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

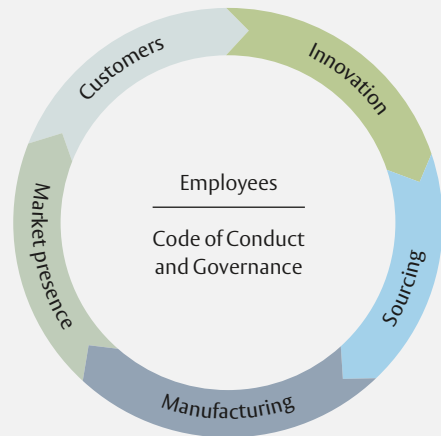
related to suppliers with a particular focus on high-risk suppliers. When incorporating new acquisitions, ASSA ABLOY has established an efficient process that comprehensively reviews sustainability-related issues in order to mitigate the risks associated with incorporating new companies and their supply 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 8000 direct suppliers around the world at a value of more than SEK 26 billion. 48 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 high-quality products that fulfill customer requirements, have a long life, are manufactured with minimal use of resources, and have a minimal environmental impact throughout their life cycle. End users are large institutional and commercial customers (within health care, education, retail, hospitality, office buildings, and industry), small and medium-sized customers (offices, stores), and the residential market (apartments, houses). Examples of distribution channels: security systems integrators, locksmiths, security installers, building and lock wholesalers, retailers, DIY, hardware and security stores, original equipment manufacturers, and door and window manufacturers.

### Actions to improve performance

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 and sustainability priorities

During 2018, ASSA ABLOY performed a materiality analysis based on requirements in the GRI Standards. The purpose was to identify and secure that ASSA ABLOY manages and reports on its significant economic, environmental and social impact having a substantive influence on the assessments and decisions of important stakeholders.

The outcome of the materiality analysis is a list with significant sustainability topics, which also shape the content of this report. The significant sustainability topics are connected to KPIs reported on a quarterly basis.

#### Significant sustainability topics:

- Reduce emissions with global warming potential ▶ Read more on page 16–17
- Resource efficiency ▶ Read more on page 9–10, 15–20
- Sustainable and circular products ▶ Read more on page 9–10
- Creating a culture of diversity ▶ Read more on page 22–23
- Safety, security and convenience for customers ▶ Read more on page tab, 3
- Human capital development ▶ Read more on page 22–25, 32
- Improve health and safety performance ▶ Read more on page 24–25
- Business compliance ▶ Read more on page 28–29, 32
- Sustainable supply chains ▶ Read more on page 12–14
- Responsible acquisitions ▶ Read more on page 33
- Strengthen anti-corruption measures ▶ Read more on page 22,32

See page 30 for more information about the materiality analysis process.

# Performance in 2018 and targets for 2020

During the year, the Group saw a positive trend across the majority of the reporting areas – including strong improvements in the injury rate and the injury lost day rate, and for water and energy efficiency.

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 361 (360) 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.

## MATERIAL KPI

Area	2013	2014	2015	2016	2017	2018 <sup>1</sup>	Target 2015–2020	Change 2015–2018
<b>Environmental KPI</b>								
Number of entities covered by ISO 14001 certificates and other certifiable management systems	101	111	121	124	131	119	125 ●	-2 <sup>2</sup>
Intensity of greenhouse gas emissions related to energy consumption (tons/SEK M)	10.0	9.0	9.5	8.3	8.7	8.2	-20% ●	-14%
Intensity of greenhouse gas emissions related to chemicals in industrial processes (tons/SEK M)	7.6	9.1	6.5	3.1	2.2	2.3	-85% ●	-65%
Energy intensity (MWh/SEK M)	28.4	27.7	27.3	24.2	23.6	22.3	-20% ●	-18%
Water intensity (m <sup>3</sup> /SEK M)	108.9	104.1	97.5	74.6	65.1	58.8	-20% ●	-40%
Hazardous waste intensity (kg/SEK M)	110.0	109.9	125.2	120.5	122.5	118.9	-20% ●	-5%
Non-hazardous waste intensity (kg/SEK M)	683	865	928	850	824	754	-20% ●	-19%
Consumption of chlorinated organic solvents (PER and TRI) (tons)	14.4	1.7	19.0	16.8	19.5	15.6	-85% ●	-18%
Consumption of other types of organic solvents (tons)	949	1,033	1,255	1,160	945	809	-50% ●	-35%
Portion of renewable energy	6.9%	7.8%	9.1%	11.7%	11.6%	12.0%	20% ●	+2.9 p.p.
<b>Social KPI</b>								
Injury rate (number of injuries per million hours worked)	7.5	6.4	6.7	5.1	4.1	3.7	-55% ●	-45%
Injury lost day rate (number of lost days related to injuries per million hours worked)	168.2	135.7	136.0	89.2	74.6	67.7	-64% ●	-50%
Portion of spend in low-cost countries represented by sustainability audited suppliers	89%	90%	90%	93%	93%	96%	90% ●	+6 p.p.
Number of sustainability audits of suppliers in low-cost countries	885	812	890	865	919	1,055		+165
Gender equality <sup>3</sup>								
Portion of females in management positions	Level 2:	27%	27%	27%	27%	27%	20%	-7 p.p.
	Level 3:	12%	16%	17%	18%	17%	18%	0 p.p.
	Level 4:	21%	20%	16%	16%	16%	20%	+4 p.p.
	Level 5:	24%	23%	25%	24%	25%	25%	0 p.p.
	Level 2–5:	23%	22%	23%	22%	23%	24%	+1 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

<sup>1</sup> For comparable units in 2018.

<sup>2</sup> The development is a combination of an increased number of certified entities, recently acquired companies with ISO 14001 certification and restructuring activities.

<sup>3</sup> The definition of management positions have been revised during 2014. 2013 have been restated to be comparable with 2014.



# Sustainable innovation

The demand for sustainable access solutions is continuously growing among ASSA ABLOY's customers, driven by the need for energy savings and the health aspects for the inhabitants of a building. Sustainable innovation is essential to meet those customer needs – ASSA ABLOY therefore uses its sustainable innovation practices to promote sustainability-related design criteria in product development.

Sustainable solutions will be an important driver for economic and industrial development in the coming decade. ASSA ABLOY is committed to make sustainability an integral part of its product innovation. Designing new products that are sustainable and with relevant transparency documents is one of our core values.

## Progress in 2018

### • Sustainable innovation

Sustainable innovation is about creating a sustainable future by designing products that have less impact on the environment or have green attributes that will contribute positively to the environment. With this in mind, a task force was created to support and develop sustainable innovation ideas and initiatives.

### • Sustainability Compass

The Sustainability Compass is used to assess a variety of environmental attributes of new products. The roll out of the compass is high on the agenda and followed up in global KPIs. The Sustainability Compass is an important part of the mandatory product management training. At the end of 2018, 75 percent of the Group's product managers have been trained. Each division is responsible to train employees involved in the innovation process. Training materials are updated on an ongoing basis and are a good opportunity to establish a lasting change in culture.

### • Material lists

An important element to consider is the materials used. To simplify the material selection process, ASSA ABLOY is working with two lists: one list with materials that should be avoided and another list that provides guidance in the best choice from a sustainability perspective.

ASSA ABLOY's restricted materials list for new products was updated by ensuring alignment with the latest global standards, such as the European Union Standards REACH and RoHS, as well as the American standards Prop 65 and Conflict Minerals.

The ASSA ABLOY Materials Reference Sheet works in harmony with the Sustainability Compass and helps designers to make better environmental choices when developing new products. Implemented in 2018, the Materials Reference Sheet is a live document with new materials added or removed regularly, much like global standards are managed.

### • Third-party verification

ASSA ABLOY is committed to reducing its environmental impact through smarter products and advanced production methods. The results of these efforts are third-party verified, for example, Environmental Product Declarations (EPDs), Health Product Declarations (HPDs) and declared labels, to add a level of accountability.

### • Internal sustainability awareness

The roll out of The Very Green Book and the Green Team Playbook are ongoing throughout the organization. The Green Team Playbook help sites to measure efficiency and sustainability of current operations and develop action plans to reduce energy, water, waste and material use while tracking cost savings. The ambition is to develop a standardized sustainable assessment process throughout the Group. The aim is to guide and further promote the sustainable culture within ASSA ABLOY.

## Growing market for more sustainable and resilient products

The demand for more sustainable and resilient ASSA ABLOY products, including environmental and material 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, BREEAM and the Living Building Challenge. The market for green certified buildings is expected to grow significantly faster than the market in general.

Market studies show that almost 70 percent of consumers across 60 countries are searching for green products and 55 percent of those are willing to pay more for products and services provided by companies committed to a positive social and environmental impact.

## 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 LEED, BREEAM and the Living Building Challenge.

Delos is an organization aiming to transform indoor environments for people by placing health and wellness at the center of design. That's why Delos partnered with ASSA ABLOY to help put together a complete door opening solution for its New York City headquarters: from products with HPDs and EPDs, in addition to solutions that are energy efficient.

The ASSA ABLOY sustainable sales strategy centers on helping its customers to reduce their environmental footprint by adopting the Group's expanding line of products with green attributes.

**ASSA ABLOY’s Sustainability Compass**

The Sustainability Compass is integrated into ASSA ABLOY’s product development process. The compass provides an understanding of sustainability-related design criteria during the development of new products. The goal is to improve the sustainable attributes in the product portfolio.

The compass includes eight dimensions: raw materials, water, virgin material, end-of-life reusability, recyclability, in-life energy consumption, carbon footprint, and financial cost. Each dimension is evaluated from a life cycle perspective and the goal is to have a lower impact than the previous product. These areas are tracked and communicated among internal stakeholders involved in product innovation and development.

The Sustainability Compass is generated from input from the ASSA ABLOY sustainability products scorecard. The compass has also been integrated into ASSA ABLOY’s standard product design process, which includes the material reference list.

A key challenge for sustainable product innovation is identifying the best overall solution. For example, a solution might have excellent green attributes from one perspective, but may be less suitable from another perspective.

**Environmental and Health Product Declarations**

Customers are increasingly assessing the environmental impact of building materials, and ASSA ABLOY continuously works to declare products with both Environmental Product Declarations and Health Product Declarations 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 2018, the Group had a total of 332 EPDs from all major product groups, representing about a third of the Group’s total sales.

The information most often 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.

Focus will continue to shift to the health and wellness of a building’s occupants, with programs such as WELL, Fitwel, and the Living Building Challenge. The building’s footprint will continue to be considered, especially with the push for Zero Net Energy. Building resiliency will also come into view, given natural disaster and climate change conditions.

**Future possibilities**

The Internet of Things (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. Another example is ASSA ABLOY Mobile Access, which allows keyless entry to hotel rooms, reducing the number of plastic cards.

Communication about sustainable products and solutions is very important to drive sales in this direction. The Group’s intention is to increase the communication to capture this market opportunity.

**Building Information Modeling advances sustainability efforts**

Environmental data about buildings is shared with customers through Building Information Modeling (BIM) objects, product EPDs and the use of digital collaboration tools. The digitalization of the built environment continues to accelerate rapidly, and so do the opportunities to create innovative and unique solutions for customers. Specification is a focused area, where BIM-enabled software tools open the door for cloud-based communication.

ASSA ABLOY leverages this to drive the sales of sustainable products through specification, coordination and the promotion of such, in key markets in an effort to reduce overall environmental footprint. ‘Green attributes’ within the company’s product portfolio ensures consistency, clarity and transparency. Virtual building enables cost and resource savings before construction begins.

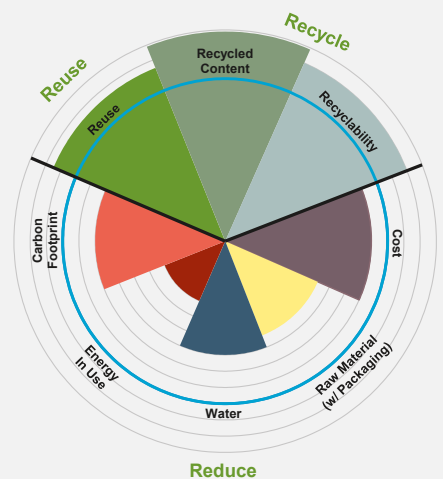
**The Sustainability Compass in action: enhancing product performance**

An ASSA ABLOY team used the Sustainability Compass to develop a low-power panic exit device trim solution to improve life cycle energy performance and reduce overall energy usage, to improve durability and reduce product cost, and to achieve over USD 100,000 (EUR 88,000) cost savings.

**CHALLENGE:** The US market required an energy-efficient panic exit device electrified trim solution designed to reduce energy use while improving performance and durability. The legacy product had used a solenoid design which consumed a lot of power and would often fail in the field, requiring replacements.

**SOLUTION:** The product development team worked to ensure the product incorporated a sustainable design using the Sustainable Product Scorecard (SPS) and Sustainability Compass. Considerations for the design included environmental impacts of lowering product costs, lowering energy in use requirements, materials, manufacturing process, and reducing total cost of ownership.

**RESULT:** The new Eco ET panic exit device low power electrified trim solution achieved the goals of the customer and market requirements, as well as meeting internal requirements, including achieving a 96 percent reduction in energy in use, no cost of quality issues/no product returns, USD 125,000 (EUR 110,000) in annual cost savings, and winning several industry awards. This solution also expands the ASSA ABLOY Eco family and suite of product offerings, which includes mortise locks, magnetic locks, electric strikes and power supplies.



## Creating customer value through product innovation

ASSA ABLOY is committed to promoting sustainable design criteria in the development of its new products, thereby reducing life-cycle costs and creating customer value. The ASSA ABLOY Innovation system and the Global Sustainability Product Council are key components of the company's product innovation work.

### Product innovation

Based on Lean innovation principles, the ASSA ABLOY Innovation system consists of several modules such as product management, customer insight, long-term trends, generation planning, and project optimization. The system ensures that new product concepts are fully evaluated against customer needs and sustainability requirements before moving on to the engineering design phase.

### The Global Sustainable Product Council

ASSA ABLOY's Global Sustainable Product Council brings together representatives from all divisions. Together, this group shares best practices and technology, and provides second opinions and reviews on tools and methods of working. Each member leads and coordinates divisional activities to promote more sustainable product development and drive culture change throughout the organization.

### Sustainability is the key driver of innovation

These are the five stages companies go through on their path to become sustainable.



#### Stage 1: Viewing compliance as opportunity

Compliance becomes a springboard to innovation, forcing creativity and outside the box thinking with materials, processes and technologies.

#### Stage 2: Making value chains sustainable

The entire value chain needs to be looked at, not only the raw materials but also the energy and water for the processes, and innovative uses for returned products.

#### Stage 3: Designing sustainable products

Introspection is necessary to determine which products need to be worked on. Packaging must not be neglected.

#### Stage 4: Developing new business models

A deep understanding of what customers really want allows companies to find new, more sustainable ways to serve them.

#### Stage 5: Creating next practice platforms

By questioning the status quo and going beyond the obvious, it becomes possible to create the next practice platforms.

## ASSA ABLOY joins Living Building Challenge Approved Product List

**CHALLENGE:** Sustainable building consultant Integrated Eco Strategy produces a Living Building Challenge Approved Product List – a rigorous performance standard to certify top-performing green building projects. Product approval demands the most basic levels of ingredient disclosure and certifying each ingredient.

**SOLUTION:** A team from ASSA ABLOY Group companies Ceco and Curries embarked on a comprehensive product data gathering project, seeking details that included component ingredients, material suppliers' distance to manufacturing sites, Chemical Abstract Number and weights and percentages of all ingredients.

The team contacted manufacturers to obtain details on minute proportions of ingredients that were unaccounted for on data sheets.

**RESULT:** Providing the detailed product information put ASSA ABLOY on the approved supplier list for more than a dozen Living Building Challenge projects.

A comprehensive database documents every component in Ceco and Curries steel door and frame products to ensure they qualify.

Architects and project managers can search the database for approved products in various categories and retrieve the environmental product details they need in hours, rather than months.



# 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.

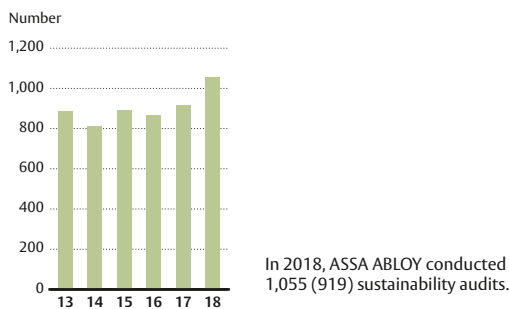
## Progress in 2018

- Continued Business Partner Code of Conduct roll out**  
 88 percent of direct material supplier sites from low-cost countries and 73 percent of all direct material supplier sites were covered by ASSA ABLOY's Code of Conduct for Business Partners at the end of 2018 – 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 (85 in 2017) of Group spend is now reported through ASSA ABLOY's Business Intelligence System. Importantly in 2018, newly acquired businesses were more quickly introduced to ASSA ABLOY's Business Intelligence System through streamlined processes.

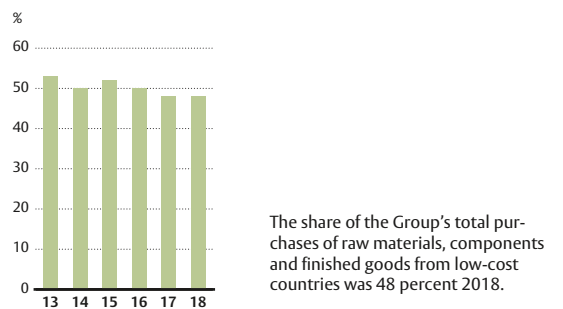
## Supply chain risks and challenges

Ensuring that suppliers fulfill ASSA ABLOY's requirements involves ongoing risks and challenges. ASSA ABLOY's low-cost 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.

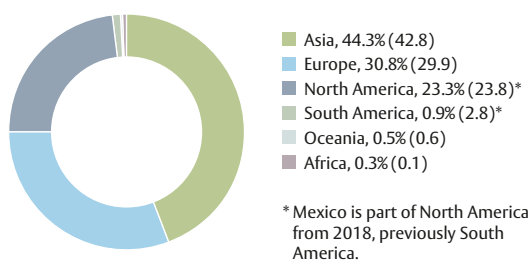
SUSTAINABILITY AUDITS OF SUPPLIERS IN LOW-COST COUNTRIES



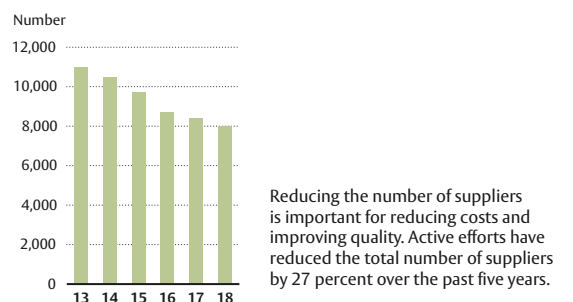
SHARE OF PURCHASES IN LOW-COST COUNTRIES



DISTRIBUTION OF SUPPLIER SPEND



NUMBER OF SUPPLIERS





## PLANTS IN LOW-COST COUNTRIES

**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 2018**

- ASSA ABLOY has around 8,000 direct external material suppliers – including 3,400 in low-cost countries and regarded as high risk.
- By the end of 2018, 1,399 of the 1,421 low-cost country suppliers audited had satisfied the company's minimum sustainability requirements – equivalent to 94 percent of ASSA ABLOY's total spend in low-cost countries. During 2018 the Group got 1,090 new suppliers in high- and low-cost-countries. During the year, 2.8 percent of those new suppliers were audited, the share of new audits in low-cost countries were 4.2 percent.
- One suppliers in low-cost countries were blacklisted and prevented from doing business with ASSA ABLOY, and 14 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.

# 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.

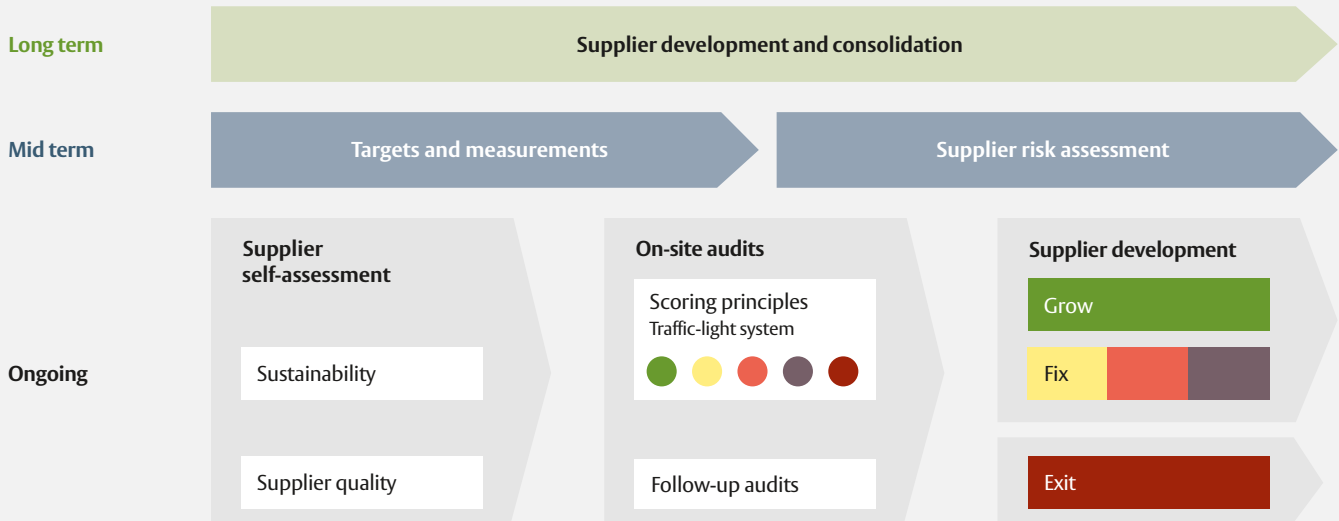
#### THE ASSA ABLOY BUSINESS PARTNER CODE OF CONDUCT

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 2018

### • Operational efficiency projects

Progress was made with various ongoing projects throughout the Group to optimize energy, water and waste.

### • Reduced greenhouse gas emissions

The Group's total greenhouse gas emissions decreased by 1.1 percent and the related intensity improved by 4.2 percent, driven by reduced energy consumption.

### • Continued reduction of coal consumption

The Group's coal consumption decreased by 62 percent as several factories in China switched to other sources of energy. Since 2015 the coal consumption has decreased by 86 percent.

## 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 until end of 2022. 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. 1055 such audits were conducted in 2018. 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.

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 non-monetary sanctions for non-compliance with environmental laws and regulations occurred during 2018.

## 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 2018

Operational efficiency activities during the year have:

- reduced total energy consumption by 2.5 (3.3) percent for comparable units.
- reduced energy consumption by 18,244 MWh for comparable units.
- reduced energy intensity by 5.5 (6.3) percent for comparable units.
- increased the proportion of energy sourced from renewable resources – primarily from hydropower, wind and solar – from 11.6 percent in 2017 to 12.0 percent in 2018. 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 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<sub>2</sub>-emissions amounted to 343,230 tons in 2018 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<sub>2</sub>-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 2019. Quality issues have delayed the phase out in one of the factories. ASSA ABLOY complies with the Montreal Protocol and with country-specific legislation on ozone-depleting substances.

### Intelligent logistics

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.

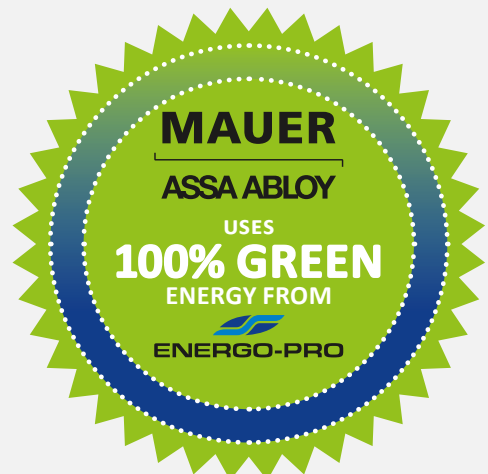
The Group uses a database to assess and identify smart transport solutions with the lowest environmental impact. The database includes suppliers as well as ASSA ABLOY factories and sales companies, and is connected to ASSA ABLOY's central purchasing database.

## Renewable energy certification in Bulgaria

**CHALLENGE:** ASSA ABLOY's increasing presence in Eastern European markets is being matched with a strong drive to shift to renewable energy to minimize the amount of greenhouse gas emissions.

**SOLUTION:** ASSA ABLOY Mauer Locking Systems in Varna, Bulgaria, has obtained a certificate from its electricity power supplier, Energo-Pro, to verify that 100 percent of the electricity supplied to the company has been generated from renewable sources instead of from fossil fuels.

**RESULT:** The certification confirms that ASSA ABLOY Mauer is working to reduce its environmental footprint, and its contract with Energo-Pro will help the site to achieve a 10 percent saving in its energy costs.





## GEOGRAPHICAL SPLIT OF ENERGY AND WATER CONSUMPTION

	Africa	Asia	Europe	North America	South America	Pacific
Energy consumption (%)	0.5	23.3	28.0	41.4	4.7	2.0
Water withdrawal (%)	0.8	62.4	13.4	16.1	5.9	1.5

## OZONE-DEPLETING SUBSTANCES

	2013	2014	2015	2016	2017	2018 <sup>2</sup>
Ozone-depleting substances in tons of R11 equivalent <sup>1</sup> (tons)	27.7	30.3	20.8	8.1	4.8	8.0

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

<sup>2</sup> For comparable units. Total amount of ozone depleting substances in tons of R11 equivalent amounted to 8.0 tons, including units acquired during the year.

ENERGY CONSUMPTION AND RELATED CO<sub>2</sub> EMISSIONS

	2013	2014	2015	2016	2017	2018 <sup>1</sup>
<b>Direct energy – Scope 1</b>						
– oil (MWh)	31,179	29,231	23,177	23,911	25,965	21,475
– gas (MWh)	200,393	244,785	251,997	251,402	258,857	267,966
– coal (MWh)	86,493	77,695	88,226	48,884	30,711	11,694
– biofuel/biomass (MWh)	3,480	2,201	1,958	3,119	3,706	8,975
<b>Total</b>	<b>321,545</b>	<b>353,912</b>	<b>365,358</b>	<b>327,316</b>	<b>319,239</b>	<b>310,110</b>
<b>Indirect energy – Scope 2</b>						
– electricity (MWh)	321,824	347,306	358,983	360,618	375,982	369,893
– district heat (MWh)	47,493	30,877	30,981	28,069	34,567	31,541
<b>Total</b>	<b>369,317</b>	<b>378,183</b>	<b>389,964</b>	<b>388,687</b>	<b>410,549</b>	<b>401,434</b>
<b>TOTAL ENERGY CONSUMPTION<sup>2</sup></b>	<b>690,862</b>	<b>732,095</b>	<b>755,322</b>	<b>716,003</b>	<b>729,788</b>	<b>711,544</b>
KPI, Energy intensity <sup>3</sup> (MWh/SEK M)	28.4	27.7	27.3	24.2	23.6	22.3 <sup>4</sup>
CO <sub>2</sub> emissions related to direct energy consumption – Scope 1 (tons)	79,674	84,711	87,994	75,033	71,101	66,818
CO <sub>2</sub> emissions related to indirect energy consumption – Scope 2 (tons)	163,204	170,460	174,847	171,067	196,697	193,187
Total greenhouse gas emission related to energy consumption CO <sub>2</sub> (tons)	242,878	255,171	262,841	246,101	267,798	260,004 <sup>5</sup>
KPI, Greenhouse gas emissions intensity <sup>6</sup> (tons/SEK M)	10.0	9.0	9.5	8.3	8.7	8.2 <sup>7</sup>
<b>Greenhouse gas emission related to substances in industrial processes</b>						
– Calculated CO <sub>2</sub> emissions <sup>8</sup> (tons) – Scope 1	184,552	241,783	179,395	92,385	68,106	72,037 <sup>9</sup>
– Total CO <sub>2</sub> emissions – Scope 1 and 2	427,430	496,954	442,236	338,486	335,904	332,042
KPI, Portion of renewable energy (%)	6.9	7.8	9.1	11.7	11.6	12.0

<sup>1</sup> For comparable units. Total energy consumption amounted to 726,952 MWh, including units acquired during the year.

<sup>2</sup> The historical numbers have been adjusted with proforma data.

<sup>3</sup> Total energy use/value added.

<sup>4</sup> For comparable units. Total energy use/value added amounted to 22.5 MWh/SEK M, including units acquired during the year.

<sup>5</sup> For comparable units. Total greenhouse gas emission related to energy consumption amounted to 271,024 tons, including units acquired during the year.

<sup>6</sup> Greenhouse gas emission related to energy consumption CO<sub>2</sub>/value added.

<sup>7</sup> For comparable units. Total greenhouse gas emission related to energy consumption/value added amounted to 8.4 tons/SEK M, including units acquired during the year.

<sup>8</sup> Emission factors are based on data published by the United Nations Intergovernmental Panel on Climate Change (IPCC, 2007).

<sup>9</sup> For comparable units. Total calculated CO<sub>2</sub>-emissions related to substances in industrial processes amounted to 72,206 tons, including units acquired during the year.

## Energy calculator helps customers make best door choice

**CHALLENGE:** ASSA ABLOY offers a wide range of attractive and easy to operate industrial overhead sectional doors. Customers wanted guidance in which type of overhead sectional door would best meet their requirements in terms of minimizing energy use and maximizing energy savings.

**SOLUTION:** To help customers to decide which brand of overhead door to choose, we have introduced an energy calculator. The customer provides information about the door configuration, the location of the doors and the number of door openings.

The calculator compares three different types of door. The calculations are based on the energy consumption of door and energy losses due to air leakage and air infiltration. To calculate the savings,

we compare the energy consumption against an uninsulated overhead sectional door.

**RESULT:** The energy calculator helps the customer select which door best suit their specific needs from an energy consumption and energy saving perspective.



## 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 2018, water withdrawal decreased by 6.9 percent and water intensity by 9.7 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 2018, the Group's total water withdrawal amounted to 1,874,000 m<sup>3</sup>, of which 82 percent was sent to municipal treatment plants after use. Water recirculation in wastewater treatment plants improves efficiency, and in 2018 the total amount of recycled water equated to 18 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 discharges are being measured, calculated or estimated depending on available sources of information and requirements. Out of the total reported volume, 82 percent is measured based on sensor readings, another 4 percent of

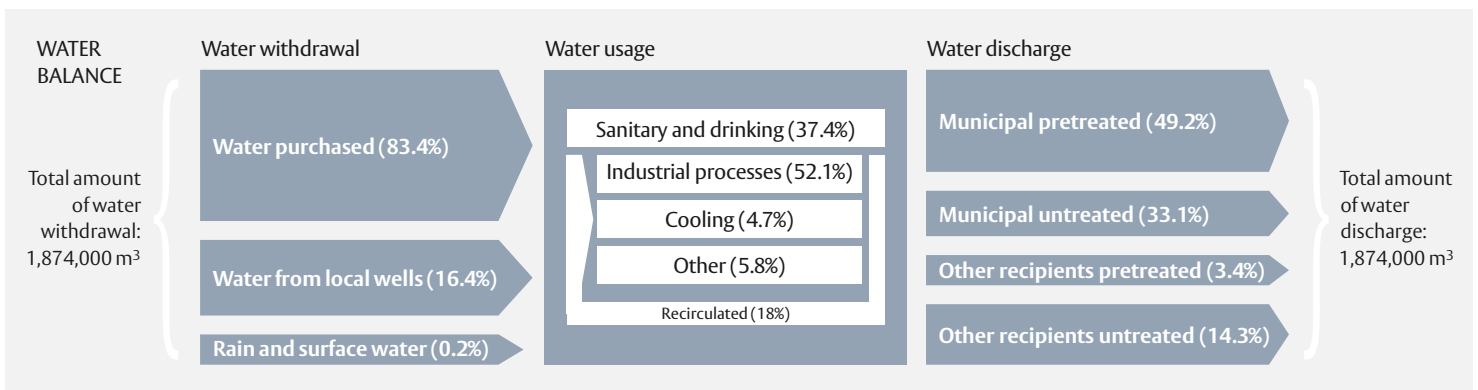
### WATER PERFORMANCE

	2013	2014	2015	2016	2017	2018
Purchased water (1,000 m <sup>3</sup> )	1,575	1,600	1,565	1,508	1,391	1,563
Water from on-site wells (1,000 m <sup>3</sup> )	1,063	1,144	1,127	684	616	307
Rainwater (1,000 m <sup>3</sup> )	4	1	7	9	5	4
Surface water (1,000 m <sup>3</sup> )	10	6	3	2	0	0
<b>Total water withdrawal (1,000 m<sup>3</sup>)<sup>3</sup></b>	<b>2,652</b>	<b>2,752</b>	<b>2,702</b>	<b>2,203</b>	<b>2,012</b>	<b>1,874<sup>1</sup></b>
<b>KPI, Water intensity (m<sup>3</sup>/SEK M)<sup>3</sup></b>	<b>109</b>	<b>104</b>	<b>98</b>	<b>75</b>	<b>65</b>	<b>59<sup>2</sup></b>

<sup>1</sup> For comparable units. Total water withdrawal (1,000 m<sup>3</sup>) was 1,927, including units acquired during the year.

<sup>2</sup> For comparable units. Total water intensity amounted to 60 m<sup>3</sup>/SEK M, including units acquired during the year.

<sup>3</sup> The historical numbers have been adjusted with proforma data.



## New Water System Yields Significant Savings

**CHALLENGE:** Ameristar Perimeter Security's tube and roll mill department in Tulsa, Oklahoma, was concerned about the costs and environmental impact of its water system. The mill used operational process water for cooling until the suspended solids, pH level and clarity of the water rendered it unusable. However, since the leftover water also contained oil, they could not treat it in the existing waste water system. Instead it had to be disposed off-site, which resulted in extra costs and labor related to renting holding containers and then paying for the disposal, which could run up to \$8,000 for each load of 2,500 gallons of water.

**SOLUTION:** The mill implemented a closed loop system that separates the oil for recycling purposes and adjusts the pH so the water can be reused multiple times. Either reverse osmosis water (neutral pH) or city water (higher pH) is used to make up for evaporation. By using this approach we can adjust the pH instead of adding chemicals and adding cost to the process.

**RESULT:** The closed loop system resulted in reduced water consumption of more than 30,000 gallons a month with a monthly cost savings of \$17,000. In addition the closed loop system also reduces reliance on

chemicals used in the wastewater treatment systems, completely eliminating two – calcium chloride and ferric chloride.



the volume is calculated for the full reporting period based on a smaller number of readings at certain points in time. Around 14 percent of the total volume is estimated due to lack of sensors for measurement.

### Accidental discharges

There were no major spill incidents in 2018, and two 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 C level on the CDP Water security evaluation for 2018.

### 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 2018, the Group's total waste generated amounted to 82,620 (87,572) tons. The amount of hazardous waste was unchanged for comparable units. During 2018 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 hazardous waste decreased by 3.0 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 51 percent to 46 percent in 2018. Hazardous waste is being sent to authorized companies for proper processing, recycling and disposal. Available data indicate that at least 9 percent of the hazardous waste was recycled in 2018.

RECYCLED METAL	2013	2014	2015	2016	2017	2018 <sup>1</sup>
Waste metal for recycling (tons)	49,000	54,025	57,632	56,338	58,316	54,822

<sup>1</sup> For comparable units. Total amount of waste metal for recycling amounted to 55,795 tons, including units acquired during the year.

HAZARDOUS WASTE	2013	2014	2015	2016	2017	2018
Metal sludge (tons)	537	563	805	873	838	915
Oil for recycling (tons)	295	370	360	421	433	352
Other types of toxic waste (tons)	1,846	1,971	2,304	2,266	2,513	2,521
<b>Total hazardous waste (tons)</b>	<b>2,678</b>	<b>2,904</b>	<b>3,469</b>	<b>3,560</b>	<b>3,785</b>	<b>3,788<sup>1</sup></b>
<b>KPI, Hazardous waste intensity (kg/SEK M)</b>	<b>110</b>	<b>110</b>	<b>125</b>	<b>120</b>	<b>122</b>	<b>119<sup>2</sup></b>

<sup>1</sup> For comparable units. Total amount of hazardous waste was 3,861 tons, including units acquired during the year.

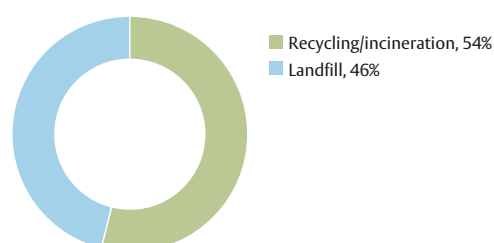
<sup>2</sup> For comparable units. Total amount of hazardous waste/value added amounted to 120 kg/SEK M, including units acquired during the year.

NON-HAZARDOUS WASTE	2013	2014	2015	2016	2017	2018
Household incinerated/recycled (tons)	1,938	1,955	1,766	1,838	1,960	3,060
Household deposited (tons)	7,308	9,531	11,208	11,355	11,104	9,855
Paper and cardboard for recycling (tons)	3,833	4,329	4,803	4,447	4,748	4,421
Plastic waste for recycling (tons)	550	1,051	879	768	797	852
Wood waste for recycling (tons)	NA	4,224	4,277	4,426	4,854	4,457
Glass for recycling (tons)	NA	NA	NA	NA	185	173
Other types of waste (tons)	3,013	1,774	2,787	2,270	1,823	1,193
<b>Total (tons)</b>	<b>16,642</b>	<b>22,865</b>	<b>25,720</b>	<b>25,105</b>	<b>25,471</b>	<b>24,010<sup>1</sup></b>
<b>KPI, Non-hazardous waste intensity (kg/SEK M)</b>	<b>683</b>	<b>865</b>	<b>928</b>	<b>850</b>	<b>825</b>	<b>754<sup>2</sup></b>

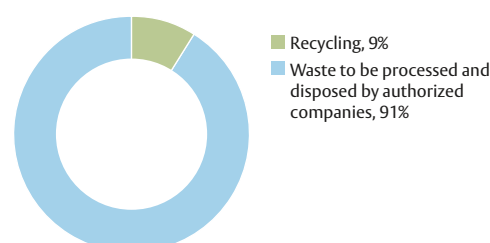
<sup>1</sup> For comparable units. Total amount of non-hazardous waste was 24,354 tons, including units acquired during the year.

<sup>2</sup> For comparable units. Total amount of non-hazardous waste/value added amounted to 754 kg/SEK M, including units acquired during the year.

### NON-HAZARDOUS WASTE – DISPOSAL METHOD



### HAZARDOUS WASTE – DISPOSAL METHOD



## 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.

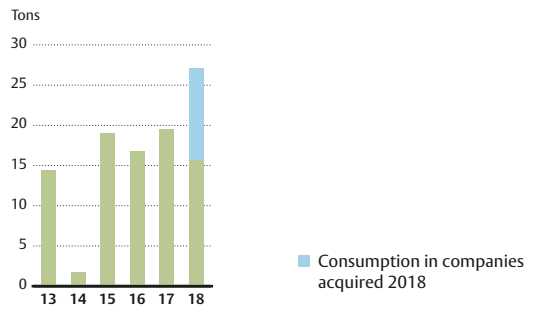
ASSA ABLOY uses chlorinated organic solvents such as perchloroethylene (PER) and trichloroethylene (TRI) for the surface treatment of metals, including degreasing, cleaning and pretreatment before plating. Surface treatment is needed to meet high standards of durability, corrosion resistance, quality 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 decreased by 20 percent for comparable units during 2018. 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

14 percent to 809 tons in 2018. Compared to 2015 the consumption has been reduced by 35 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



## Equipment upgrade saves energy and minimizes pollutants

**CHALLENGE:** ASSA ABLOY's manufacturing site in Zhongshan, China, is a major producer of door hardware. With some of its equipment, especially for die-casting, around 20 years old, the machines needed to be upgraded to minimize pollutants and improve efficiency.

**SOLUTION:** ASSA ABLOY Zhongshan moved its die-casting, polishing and finishing process to new premises in an industrial park. Its state-of-the-art facilities include dust removal and smoke treatment equipment. Its furnace is now heated using natural gas instead of diesel fuel. Moreover, 93 percent of the die-casting machines have been equipped with robots for the picking of parts to reduce manual handling.

**RESULT:** Energy consumption has decreased by 30 percent and the use of natural gas has also significantly reduced the CO<sub>2</sub> emissions. Manual handling been reduced by 80 percent, helping to minimize repetitive strain injuries.





## 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 121 units had environmental management systems at the end of the year, covering 77 percent of employees in the Group’s factories. For comparable units the number of entities covered by ISO 14001 environmental

management systems decreased by 13 to 103 , primarily as a result of ongoing restructuring activities and consolidation of number of reporting entities. The target is to certify 4 more factories by the end of 2020.

NUMBER OF ENTITIES COVERED BY ISO 14001 CERTIFICATES AND OTHER CERTIFIABLE ENVIRONMENTAL MANAGEMENT SYSTEMS

	2013	2014	2015	2016	2017	2018
ISO 14001	75	85	98	110	116	103
Certifiable systems	26	26	23	14	18	16
<b>Total</b>	<b>101</b>	<b>111</b>	<b>121</b>	<b>124</b>	<b>134</b>	<b>119<sup>1</sup></b>
Factory employees covered by environmental management systems,%	N/A	N/A	73	77	79	77

<sup>1</sup> The total number of entities covered by ISO 14001 and other certifiable management systems amounted to 121, including units acquired during the year.

### Water recycling system reduces consumption

**CHALLENGE:** ASSA ABLOY’s manufacturing plant in Rychnov, Czech Republic, uses two galvanic lines for plating the surfaces of its products, which have a combined daily water consumption of about 100m<sup>3</sup>. The challenge was to reduce water consumption in the galvanic process.

**RESULT:** The implementation of the pumping equipment and recirculating the rinsing water has resulted in a 10 percent reduction in water consumption as well as a reduction in operating costs and in the generation of hazardous waste.

**SOLUTION:** An investigation was conducted to evaluate the different types of technologies available to improve the process. The study found that the most effective solution involved the installation of pumping equipment and pipes, which allowed the water used in the rinsing phase to be reused in other rinsing baths later on in the galvanic process.



# Our employees lead the way

People can achieve great things. That is why ASSA ABLOY's employees are provided with opportunities, responsibilities and the authority to act. The Group's 48, 500 employees, working in over 70 countries, strive together to keep ASSA ABLOY as the global leader in access solutions.

**The human resources framework is based on three foundations:**

- Increase diversity and inclusion
- Improve talent management
- Improve health and safety

During the year, ASSA ABLOY lunched core values and beliefs that will be activated throughout the Group in 2019. They form the base for the human resources vision, strategy and framework that were updated during the year. ASSA ABLOY also continued to work towards being the Employer of Choice. Good progress was also made within the health and safety area where the injury rate was reduced from 4.1 to 3.7 injuries per million hours worked for comparable units. Lost days per injury increased to 18.1. ASSA ABLOY'S health and safety focus for 2019 is to reduce workplace hazards and to minimize days lost due to workplace injuries.

**Human resources vision and strategy**

ASSA ABLOY's human resources vision is to drive and support a dynamic and agile business culture that enables our people to build a world leading organization. While the Group is global, there is a strong culture of local ownership and decentralized decision-making where the Group share the same purpose, corporate values and beliefs.

The human resources strategy is business oriented with a people focus. This means that the Group believes that the right people in the right place is the driving force for growth and that the right structure and processes add value to the business. The human resources vision, strategy and framework give the Group's employees the authority to act and enable an environment where it is possible to make a difference. ASSA ABLOY's employees have the opportunity to learn, grow and achieve results that make a positive impact.

**We stand up for what's right**

ASSA ABLOY must manage social and ethical issues and observe high standards of integrity and responsible practices. Ethical employee behavior is central to this and is promoted among employees through the Group-wide ASSA ABLOY Code of Conduct. The code is a key component of the ASSA ABLOY induction program, and all employees are expected to follow it from day one. The Code of Conduct

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. A new version of the Code of Conduct with an e-learning will be launched in 2019.

**Increase diversity and inclusion**

Promoting a gender equality and diversity strengthens ASSA ABLOY's competitiveness and performance. ASSA ABLOY's Code of Conduct states that gender, nationality, social or ethnic origin, age, religion, physical disability, sexual orientation and political opinion must not be the basis for negative discrimination. The Group is constantly making efforts to increase the diversity of employees participating in leadership and development programs. With a world-wide presence ASSA ABLOY promotes diversity to fully draw on the local expertise and dynamics of the individuals available to the company, and work towards a performance culture based on diversity of perspective.

ASSA ABLOY grows as employees' diverse perspectives come together. A diverse workforce with a good understanding of local markets is integral to ASSA ABLOY's success and the Group promotes diversity throughout the organization. For example, 28 nationalities are currently represented at the highest management levels.

**Gender balance**

With the Group's Code of Conduct and Gender Diversity Policy as a foundation, ASSA ABLOY systematically works with gender balance at all levels throughout the Group. Group-wide gender diversity objectives are set, and the actions taken to achieve them are managed and implemented at division level. The Group's target is to have 30 percent of management positions held by women. Progress is continuously measured. In 2018 the share of senior management positions held by women at ASSA ABLOY was 24 (23) percent. During 2018 several female appointments to executive positions were made.

One of the challenges on the way to the Group's gender balance objectives is ASSA ABLOY's acquisitions. Women have been in the minority in several of the companies that the Group has acquired in the past few years and much effort has been made to make sure Group-level gender objectives are met.

## Our core values and beliefs

**Empowerment**



We have trust in people

**Innovation**



We have the courage to change

**Integrity**



We stand up for what's right

### Recruitment process

ASSA ABLOY's recruitment process is central to achieving a better diversity and gender balance. The Group encourages its managers to engage in employee development and develop talent, to ensure that diversity and people development are considered in high-profile projects and leadership opportunities. ASSA ABLOY's recruitment policy gives priority to internal candidates provided they have equal qualifications to external applicants. All job vacancies are published on the Group's intranet to encourage internal mobility and there are several common programs for increased commitment and personal growth.

### Improving talent management

Employee commitment and competence are crucial to ASSA ABLOY's success. The principles of people empowerment, innovation and integrity are the core values of the ASSA ABLOY's employer brand. The Group believes in creating an environment that enables employees to make a difference by actively investing in the Group's employees' opportunities to learn, grow and achieve results that make a positive impact. ASSA ABLOY's aim is to create a value-based culture that promotes and encourages internal mobility, diversity and knowledge sharing, where all employees feel that they are making a contribution.

### Employee participation

By offering the Group's employees an interesting and challenging workplace, ASSA ABLOY will continue to grow. Every other year ASSA ABLOY conducts a Group-wide Employee Survey. The survey is an important tool to understand how employees feel about their workplace and role, as well as issues such as professional development, fair treatment and personal engagement. Through the employee engagement survey the Group's increases its accountability and transparency towards its employees.

The survey for 2018 had a response rate of 87 percent and with overall positive results, specifically concerning

innovation, employee development and work processes. Several areas were highlighted as key strengths; clear and challenging roles with a strong sense of employee empowerment, well-functioning health and safety work and a strong customer focus.

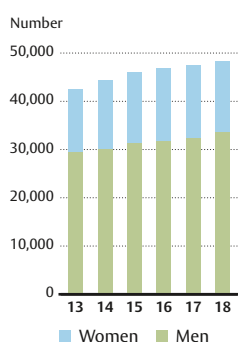
### Continuous development

ASSA ABLOY strives to attract and retain people with the right competences and attitude needed for the company's continued success. A key part of ASSA ABLOY's strategy is local accountability and the Group has nurtured a culture of local ownership and decentralized decision-making. In this way, our employees are given unique opportunities.

ASSA ABLOY believes in creating an environment that enables employees to make a difference. The Group operates on all levels to strengthen internal mobility and cross-level development opportunities. To attract external talent ASSA ABLOY has established multiple graduate programs, internships and strong relationships with universities worldwide. The EMEA Graduate Program has had 102 graduates since 2012 with an average retention rate of 78 percent.

The Group also has a global development process for senior managers, aimed at ensuring that the Group has the expertise it needs to meet future demands. Its foundation consists of two development programs for selected senior managers: the internally managed MMT (Management Training) development program, and the IMD "Leading the Future" program. About 620 of the Group's senior managers from 35 countries have participated in the IMD training program, which is conducted in cooperation with the Swiss management school IMD in Lausanne. Its aim is to support the implementation of the Group's strategies, with focus on problem solving and activities based on an analysis of various case studies. MMT promotes best practice sharing and facilitates the integration of new employees following acquisitions. In 2018, 92 (85) ASSA ABLOY managers participated in one of these two programs.

AVERAGE NUMBER OF EMPLOYEES



NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT, EMPLOYMENT TYPE AND GENDER

	Number	% of total	Female, %
Permanent	45,022	92	30
Temporary	3,895	8	35
<b>Total</b>	<b>48,917</b>	<b>100</b>	<b>30</b>

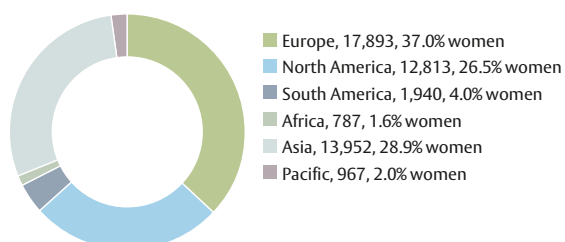
At the end of 2018, 35 percent of ASSA ABLOY employees were covered by collective bargaining. During 2018 the total employee turnover among permanent employees amounted to 19.1 percent. The labor turnover is influenced by the ongoing manufacturing footprint restructuring activities. Consolidated information 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

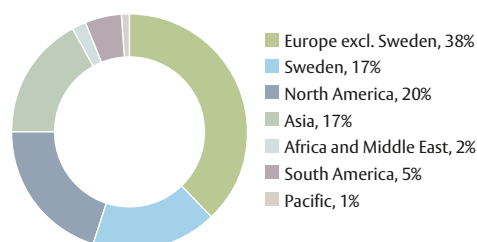
Level	Percentage of women					
	2013 <sup>1</sup>	2014	2015	2016	2017	2018
2 – reports to CEO	27	27	27	27	27	20
3 – reports to level 2	12	16	17	18	17	17
4 – reports to level 3	21	20	16	16	16	20
5 – reports to level 4	24	23	25	24	25	25
<b>Level 2-5</b>	<b>23</b>	<b>22</b>	<b>23</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>All employees</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>30</b>	<b>30</b>

<sup>1</sup> The definition of management positions was revised in 2014. 2013 have been recalculated to be comparable with 2014.

AVERAGE NUMBER OF EMPLOYEES BY REGION



NATIONALITIES – ASSA ABLOY'S MANAGEMENT TEAMS



**Improving health and safety**

ASSA ABLOY works for a workplace free of injuries in all its operations. With a Group-wide safety culture that promotes safe behavior, workplace hazards and risk taking are reduced. The ambition is to strive for an injury free workplace.

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.

**Health and safety management system**

The health and safety management system, launched in 2017, covers all business entities with at least 10 employees and all program components at all sites. The system includes indicators to identify hazards and follow-up training to prevent injuries, as well as safety communications and incident investigation. It involves a Group-wide structured process for reporting, documentation and indicators that provide the basis for analysis of safety risks and injuries.

Since the new management system's implementation, ASSA ABLOY has seen a steady decrease in the injury rate as well as in lost days per injury. The individual responsibility is the foundation of ASSA ABLOY's approach to health and safety and each manager has the responsibility to identify risks, take proactive actions and facilitate the right behavior. The Group's system places a strong emphasis on prevention and showed positive results during the year.

Every unit reports on metrics to identify focus areas for improvement and to measure progress. Some indicators serve to measure actual performance as they record injuries that have occurred. As part of the Groupwide approach, each unit also reports on leading indicators that help identify areas for improvements and preventive action. Through continuous work with our health and safety management system, the Group offers its employees a safe place to work and safe physical working conditions. ASSA ABLOY'S goal for 2019 is to reduce workplace hazards and minimize days lost due to workplace injuries, one of the focus areas being a drive safe campaign.

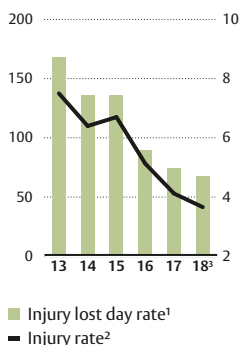
**Risk management**

Risk management is part of the everyday health and safety work at all units. It is a central part of improving the working environment and strengthening the Group's safety culture. The Group's Safety Manual builds on ASSA ABLOY's belief that safety is a top priority and everyone's responsibility, that injuries are preventable, and that safety incidents are opportunities to learn from and improve on. A key component is the identification and risk assessment model that can be used in Group-wide operations on all levels. The manual provides a coherent framework for implementing, reviewing and promoting a consistent approach to the Health and Safety system throughout the Group. It is based on the Group's experience and best practice and assists in identifying and reducing workplace hazards.

**Tools and processes in the health and safety management system:**

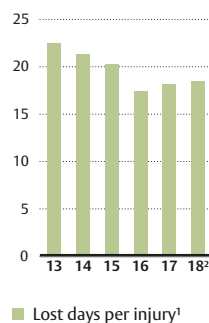
- Safety communications
- Training – employee health and safety awareness
- Safety metrics and reporting
- Hazard identification and risk assessment
- Incident investigation

**INJURIES**



<sup>1</sup> Injury lost day rate in lost days per million hours worked.  
<sup>2</sup> Injury rate in injuries per million hours worked.  
<sup>3</sup> For comparable units. The total injury lost day rate was 75, including units acquired during the year. From 2012, the reporting of injuries and days lost due to injuries includes data from ASSA ABLOY entities performing service or installation. Total injury rate was 3.6 including units acquired during the year.

**LOST DAYS PER INJURY<sup>1</sup>**



<sup>1</sup> Lost days per injury calculated as total number of lost days in relation to total number of injuries.  
<sup>2</sup> For comparable units. The total lost days per injury was 18.3 including units acquired during the year.





## Developing a safety-first culture at SMI

**CHALLENGE:** ASSA ABLOY acquired the Indian lock maker Shree Mahavir Metalcraft (SMI) in 2017. With a workforce of around 1,000 people, its employees were not familiar with ASSA ABLOY's core values in workplace health and safety and their considerable benefits.

**SOLUTION:** A comprehensive training program of over 3,000 hours was the first step of awareness to establish a health and safety culture at the company. Topics included areas such as accident reporting, first aid and fire-fighting training, walkway management and general safety-based behavior. The next phase will be a strict governance to take action around high-risk behaviors and reporting of near misses.

**RESULT:** SMI's employees now have a better understanding of hazards in the workplace and how to carry out corrective actions. Incident rates are monitored with an action plan to reduce incidents. The work is a continuous process to create and maintain a safety-aware culture among management and all employees.



## Targeting zero injuries for locksmiths

**CHALLENGE:** How can you control the ever changing environment that our locksmiths face every day out in the field? With 330 employees, 19 branches, a fleet of 150 service vehicles and clients spread out across the country, Certego Norway employees face numerous risks in new situations every day. The safety and security of a locksmith is about more than just ensuring that they have personal protective equipment. There are also risks that exist in this business that may be overlooked, especially when they can be undermined by a sense of over-confidence.

**SOLUTION:** . The best way to handle risk is by embedding the awareness and knowledge within every employee to assess each situation and location separately, determining the potential hazards and decide whether it is safe enough to work.

Communication is key, being able to reach the employees in a systematic way with updates, common hazards, safety improvements implemented, trainings, or any other information is fundamental for education and the establishment of a safety culture. Also, benchmarking across the nordics is crucial to identify best practice H&S solutions and optimize resources.

**RESULT:** This is a long term work, targeting zero injuries of the workforce. The Safety Dialogue Workshop helps to engage the entire organization to tackle behavior change and reinforce the existing safety culture within the company.



## Encouraging people to talk about workplace safety

**CHALLENGE:** HID Global's headquarters in Austin, US, wanted to encourage its employees to be open and comfortable in talking about improving workplace safety.

**SOLUTION:** HID held a series of workshops attended by over 150 people. Employees performed exercises on topics which included: safe behaviors; unsafe dilemmas; hazard improvements; our relation to risk-taking; and how to have a comfortable and effective safety conversation with your coworkers.

**RESULT:** The workshop taught employees how to effectively collaborate with their coworkers and to better understand how communication is the key to building an improved safety culture. The exercises demonstrated the ASSA ABLOY Safety First culture, helping employees to refine their safety skills and get comfortable talking to each other about unsafe behaviors and hazards.



# 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.

## 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-of-conduct](http://www.assaabloy.com/code-of-conduct). 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.

A new version of the ASSA ABLOY Code of Conduct will be launched during 2019.

# 28

The Code of Conduct is available in 28 languages.



# 31

The Code of Conduct includes a mechanism for whistle-blowing. In 2018, the Group handled 31 (38) cases reported through the whistle-blowing function.

## 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 and they are all required to comply with it. The Business Partner Code of Conduct is available in 21 languages.

## New Code of Conduct e-learning

During 2018, the development of a Code of Conduct e-learning module continued. The e-learning will include a digital quiz to promote dialogue and raise awareness of the Code of Conduct among employees and what is expected of them. The roll out of the e-learning is scheduled for the first half of 2019.

## 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 2018, 31 (38) 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 2018, the process for whistle-blowing was further 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-three 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 2018, three external audit was performed on ASSA ABLOY's operations in India, Mexico and Chile.

## 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.

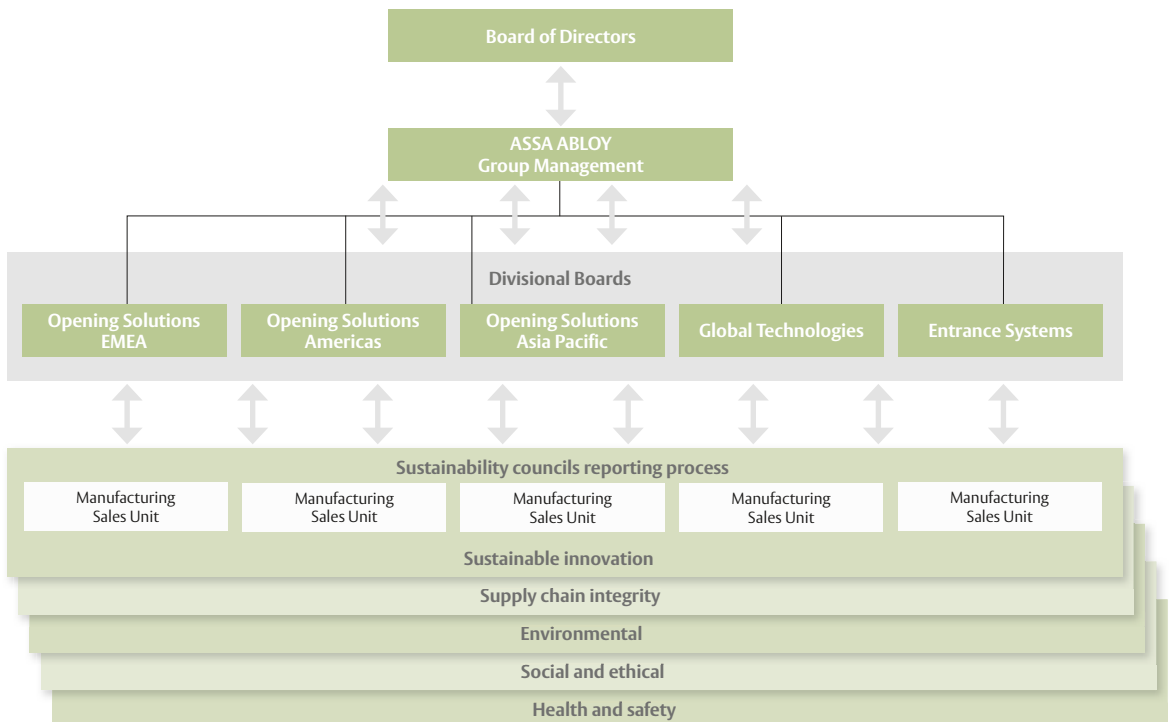
At Group level, performance is monitored via the sustainability reporting process, which includes each company’s reporting of material environmental risks and actions to mitigate them. Divisional board meetings address risks, compliance, performance and other sustainability matters. The delegation of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

### 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 2018, 361 (360) 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.

### ORGANIZATIONAL RESPONSIBILITY



### 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.

### COUNCILS AND WORKSTREAMS RELATED TO ASSA ABLOY'S SUSTAINABILITY WORK

	Sustainable Innovation	Supply chain integrity	Environmental	Social and ethical	Health and safety	Legal
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	Johan Ahlgren, Group General Counsel
Opening Solutions EMEA	David Moser, VP Product Innovation	Mauro Felice, VP Operations	Antonina Realmuto, Sustainability Manager	Allan Cooper, Director Human Resources	Mauro Felice, VP Operations	Hemma Patel, General Counsel
Opening Solutions 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	Page Heslin, General Counsel
Opening Solutions 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	Ivan Lu, General Counsel
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	Mark Camero, General Counsel
Global Solutions	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 Global solutions	Julie Zhu, VP Operations	Gerry Larmeu, General Counsel
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	Katarina Jarring, General Counsel
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	Code of Conduct Health and Safety Policy Manual	Code of Conduct Anti-bribery Policy Tax policy* *The Group's Tax policy is coordinated by Group Tax.

## 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 sustainability topics that are the most significant to ASSA ABLOY and its stakeholders.

### 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.

**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 CO<sub>2</sub> 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

In 2013 ASSA ABLOY conducted its first materiality analysis. The analysis was reviewed in 2015, and again in 2017. During 2018, ASSA ABLOY performed a materiality analysis based on requirements in the GRI Standards. Together with selected sustainability experts ASSA ABLOY's Sustainability Council identified and analyzed the significant impact from sustainability topics on the outside world. In addition, over 250 stakeholders in the form of customers, suppliers and employees assessed which sustainability topics they perceive have a substantive influence on their assessments and decisions in relation to ASSA ABLOY's business.

The materiality analysis highlights the following sustainability topics as the most significant ones:

#### Most significant sustainability topics for ASSA ABLOY and stakeholders:

- Human capital development
- Improve health and safety performance
- Sustainable and circular products
- Responsible acquisitions
- Sustainable supply chains
- Resource efficiency

#### Most significant topic for ASSA ABLOY:

- Reduce emissions with global warming potential

#### Significant topics for ASSA ABLOY and stakeholders:

- Safety, security and convenience for customers
- Responsible acquisitions
- Strengthen anti-corruption measures
- Business compliance

The materiality analysis forms the basis for defining the Sustainability Report content.





## Investor statements



**Peter Lööv**  
Head of Responsible  
Investment, Alecta

**“With many thousand suppliers, ASSA ABLOY’s audit program demonstrates commitment to a solid revision and monitoring process.”**

Sustainability is an integrated part of ASSA ABLOY’s products and offerings. Several sustainability challenges have been addressed in recently with increased margins as well as innovative solutions as an outcome. ASSA ABLOY’s focus on Health and Safety shows that there is a clear strategy to decrease the proportion of incidents and injuries.

Acquisitions pose a challenge regarding integrating guidelines and company values. ASSA ABLOY’s strategy has been successful in incorporating acquired business into operations, with the support of effective processes and targets. Gender balance is still a key challenge, not only for

ASSA ABLOY but for the industry sector. My perception is that improvements can be made in this area.

With many thousand suppliers, ASSA ABLOY’s audit program demonstrates commitment to a solid revision and monitoring process. It ensures transparency and access to information on the suppliers’ sustainability performance.

ASSA ABLOY’s sustainability communication sets out an ambitious and progressive agenda. Going forward, I expect a more comprehensive climate data disclosure and proactive approach on how ASSA ABLOY assess the potential financial impacts of climate-related risks of their investments.



**Kristin Wallander**  
Senior Sustainability Analyst,  
Swedbank

**“We see good progress in how ASSA ABLOY integrates and support acquisitions.”**

ASSA ABLOY’s presence in high risk countries poses a challenge to the organization and ASSA ABLOY has improved the way their suppliers are audited. The number of suppliers has decreased, thus consolidating and minimizing risks. From our perspective ASSA ABLOY has showed improvement in the management of supplier related risks – including risk assessments, screening and risk monitoring. Regarding the production process there are inherent risks like the use of chemicals and hazardous waste, but my perception is that ASSA ABLOY’s mitigates the environmental impact well.

We see good progress in how ASSA ABLOY integrates and support acquisitions. Through successful mergers ASSA

ABLOY enables a more sustainable product development as well as more innovative customer solutions. ASSA ABLOY also discloses interesting initiatives regarding the company’s gender balance and the retention rate of female employees.

ASSA ABLOY continues to improve and develop their sustainability work. In the future I believe that managing indirect emissions outside of ASSA ABLOY’s own operations is crucial, particularly related to investments and transportation. Finally, I would like to see more information regarding how ASSA ABLOY’s products contributes to the 2030 Agenda for Sustainable Development.



**Anette Andersson**  
Portfolio Manager & ESG  
Investment Specialist,  
Investment Management, SEB

**“We also see progress regarding diversity and ASSA ABLOY is working toward attracting and retaining competence to increase the gender balance.”**

ASSA ABLOY’s sustainability activities are integrated into business operations. ASSA ABLOY yearly hold dialogue sessions where investors are presented with their sustainability performance. This year ASSA ABLOY developed and launched a people vision, strategy and framework that will be interesting to follow. I welcome that ASSA ABLOY highlight the purpose of the business, not solely focusing on the financial success.

I appreciate ASSA ABLOY’s environmental efforts. The intent that every developed product must be superior to the product it is replacing efficiently work as a driver towards more energy efficient solutions. There is also a positive trend in how ASSA ABLOY manages risks related to the supply

chain. Multiple suppliers mean numerous challenges. My perception is that ASSA ABLOY’s processes for auditing and monitoring suppliers are clear, efficient and transparent. Progress has also been made in the due diligence process and sustainability issues are now incorporated in the acquisition process. We also see progress regarding diversity and ASSA ABLOY is working toward attracting and retaining competence to increase the gender balance.

Going forward I would like to see a clearer approach to the recommendations of the Task Force on Climate-related Financial Disclosures as well as to the Sustainable Development Goals.

## Anti-corruption and other compliance programs

ASSA ABLOY has specific global compliance programs and policies within the areas of anti-corruption, antitrust, export control and data protection, which supplement and build on the Code of Conduct. In 2018, ASSA ABLOY continued with the implementation of its Data Protection Compliance Program. The process for handling of Code of Conduct cases was further streamlined throughout the Group and the divisional due diligence processes was further strengthened.

### Progress in 2018

- Data Protection Compliance Program implementation**  
 The 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. During the year, ASSA ABLOY has continued to implement its Data Protection Compliance Program throughout the company through dialogue with internal stakeholders to ensure understanding and commitment by every employee concerned and compliance with the Program.
- Handling of Code of Conduct cases streamlined**  
 The process was streamlined and made more comprehensive to ensure that Code of Conduct cases were handled in the same way within the divisions.
- Further strengthening of divisional due diligence processes**  
 During the year, the work with further strengthening the processes to evaluate and screen if third parties can make sales on ASSA ABLOY's behalf has continued. Such processes identify where the corruption risk exposure is perceived to be high and to determine whether such third parties should be engaged, and allows actions 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 and all Business Partners, including inter alia suppliers and agents, are required to adhere to the Business Partner Code of Conduct.

### 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 2018 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 have continued to be in focus. During the year anti-corruption reviews have been conducted in regions where the corruption risk exposure is perceived to be high. 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 came into force, special focus was given to the follow up of 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 33.

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-corruption compliance program

Corruption increases inequality, the cost of doing business and reduces efficiency. ASSA ABLOY works actively to prevent corruption in its business. The anti-corruption compliance program (the anti-bribery policy) 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-corruption compliance program. The anti-corruption compliance program is available on the external Group website, together with the Code of Conduct and the Business Partner Code of Conduct. All relevant ASSA ABLOY employees have received information on the anti-corruption compliance program and the Code of Conduct.

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 Perceptions Index.

### 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-corruption), webinars or face-to-face.

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

At the end of 2018, 83 percent (83) of relevant employees had participated in anti-corruption training.

### Continued work in 2019

The refined model for risk assessment will be further applied at divisional level allowing for actions to be prioritized and compliance risks to be identified and mitigated. Special focus will also be given to conduct anti-corruption reviews in regions where the corruption risk exposure is perceived to be high.

# 22

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

# 83

At year-end 2018, 83 percent of relevant employees had participated in anti-corruption 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.

# 190

ASSA ABLOY has made more than 190 acquisitions in the last 12 years.

### Progress in 2018

- **New acquisitions**  
14 acquisitions were consolidated during the year. 20 percent of the acquisitions were in emerging markets.
- **Finance Integration guidelines and scorecard**  
The Group-level Finance Integration guidelines that were introduced during 2017 as an additional check in the first 100 days of a new acquisition has been supplemented with a formal scorecard based process for following up that these measures actually have been implemented.
- **Acquisition post-closing follow up**  
A new process for formally following up on all acquisitions after some 15–18 months has been implemented during the year. The follow up focuses both on financial performance and synergies but also on the status of the integration process.
- **Integration manager**  
The process for appointing a dedicated integration manager in all acquisitions has been formalized. The integration manager shall be appointed already during the acquisition process and be the lead person post-closing for managing all integration aspects of the acquired company.

With more than 190 acquisitions during the last 12 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, semi-annual reporting, supply chain management, and Group-wide 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
- Data protection
- Environmental, health and safety
- Tax
- Human resources

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. During 2018 the two areas of Data protection and Human resources were added to the areas specifically covered in the process.

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 guidelines also offer guidance on this process.

# 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
<b>GRI 101: Foundation 2016</b>			
<b>GRI 102: General disclosures 2016</b>			
<b>Organizational Profile</b>			
102-1	Name of the organization	26	
102-2	Activities, brands, products, and services	Flip cover inside, 4-6, 11	
102-3	Location of headquarters	Backcover	
102-4	Location of operations	6, AR 90	
102-5	Ownership and legal form	25, AR 108-109	
102-6	Markets served	Flip cover inside, 6, AR 10-11, 76	
102-7	Scale of the organization	Flip cover inside, 23, AR 59-60, 76, 82, 90	
102-8	Information on employees and other workers	23, 36	Data for employee contract by region and employee type by gender is not available.
102-9	Supply chain	6, 12-14	
102-10	Significant changes to the organization and its supply chain	AR 42, 87	
102-11	Precautionary Principle or approach	15	
102-12	External initiatives	3, 26	
102-13	Membership of associations	7	
<b>Strategy</b>			
102-14	Statement from senior decision-maker	2	
<b>Ethics and Integrity</b>			
102-16	Values, principles, standards, and norms of behavior	Flip cover inside, 12, 16	
<b>Governance</b>			
102-18	Governance structure	26, 28	
<b>Stakeholder Engagement</b>			
102-40	List of stakeholder groups	30	
102-41	Collective bargaining agreements	23	
102-42	Identifying and selecting stakeholders	30	
102-43	Approach to stakeholder engagement	3, 30	
102-44	Key topics and concerns raised	30-31	
<b>Reporting Practice</b>			
102-45	Entities included in the consolidated financial statements	36, AR 82	
102-46	Defining report content and topic Boundaries	30, 36	
102-47	List of material topics	30	
102-48	Restatements of information	36	
102-49	Changes in reporting	36	
102-50	Reporting period	36	
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102-53	Contact point for questions regarding the report	37	
102-54	Claims of reporting in accordance with the GRI Standards	37	
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## Topic-specific Disclosures

GRI Standard	Disclosure	Page	Comment/Omission	Topic in ASSA ABLOY's Materiality Analysis
<b>Economic</b>				
<b>Anti-corruption</b> GRI 205: Anti-corruption 2016	103-1/2/3	Management Approach*	7, 26–27, 28, 30, 32	Anti-corruption
	205-1	Operations assessed for risks related to corruption	32, 33	
	205-2	Communication and training about anti-corruption policies and procedures	26, 32	
<b>Environmental</b>				
<b>Energy</b> GRI 302: Energy 2016	103-1/2/3	Management Approach*	6, 7, 8, 15, 16–17, 26–27, 28, 30	Energy
	302-1	Energy consumption within the organization	16–17, 36	
	302-3	Energy intensity	17	
	302-4	Reduction of energy consumption	17, 36	
<b>Water</b> GRI 303: Water 2016	103-1/2/3	Management Approach*	6, 7, 8, 15, 18, 26–27, 28, 30	Water
	303-1	Water withdrawal by source	18	
	303-3	Water recycled and reused	18	
<b>Emissions</b> GRI 305: Emissions 2016	103-1/2/3	Management Approach*	6, 7, 8, 15, 16–17, 26–27, 28, 30	Emissions
	305-1	Direct (Scope 1) GHG emissions	17, 36	
	305-2	Energy indirect (Scope 2) GHG emissions	17, 36	
	305-4	GHG emissions intensity	16	
	305-5	Reduction of GHG emissions	17, 36	
	305-6	Emissions of ozone-depleting substances (ODS)	17	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	20	
<b>Effluents and Waste</b> GRI 306: Effluents and Waste 2016	103-1/2/3	Management Approach*	6, 7, 8, 15, 19, 26–27, 28, 30	Water Waste
	306-1	Water discharge by quality and destination	18	
	306-2	Waste by type and disposal method	19	
	306-3	Significant spills	19	
<b>Environmental Compliance</b> GRI 307: Environmental Compliance 2016	103-1/2/3	Management Approach*	7, 15, 26–27, 28, 30	Environmental compliance
	307-1	Non-compliance with environmental laws and regulations	15	
<b>Supplier Environmental Assessment</b> GRI 308: Supplier Environmental Assessment 2016	103-1/2/3	Management Approach*	6, 7, 8, 12–14, 15, 26–27, 28, 30	Procurement practices
	308-1	New suppliers that were screened using environmental criteria	12–14	
<b>Environmental management systems</b>	103-1/2/3	Management Approach*	6, 7, 8, 15, 26–27, 28, 30	Environmental management systems
		Number of entities covered by ISO 14001 certificates and other certifiable environmental management systems	21	
<b>Social</b>				
<b>Occupational Health and Safety</b> GRI 403: Occupational Health and Safety 2016	103-1/2/3	Management Approach*	6, 7, 8, 24, 26–27, 28, 30	Occupational health and safety
	403-1	Workers representation in formal joint management-worker health and safety committees	24	
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	24	
<b>Diversity and Equal Opportunity</b> GRI 405: Diversity and Equal Opportunity 2016	103-1/2/3	Management Approach*	7, 8, 22–23, 26–27, 28, 30	Diversity
	405-1	Diversity of governance bodies and employees	23	
<b>Human Rights Assessment</b> GRI 412: Human Rights Assessment 2016	103-1/2/3	Management Approach*	6, 7, 26–27, 28, 30, 33	Acquisitions
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	33	
<b>Supplier Social Assessment</b> GRI 414: Supplier Social Assessment 2016	103-1/2/3	Management Approach*	6, 7, 8, 12–14, 26–27, 28, 30	Procurement practices
	414-1	New suppliers that were screened using social criteria	12–14	
<b>Marketing and Labeling</b> GRI 417: Marketing and Labeling 2016	103-1/2/3	Management Approach*	6, 7, 9, 11, 28, 30	Sustainable innovation/sustainable products
	417-1	Requirements for product and service information and labeling	9–10	

\* GRI 103: Management Approach 2016



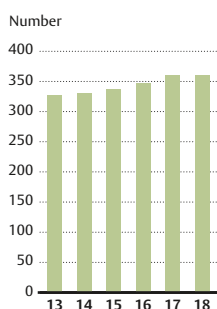
# Reporting principles

ASSA ABLOY continually works to improve reporting transparency, scope, quality and the frequency of information. This is the Group's thirteenth 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 2018 has increased from 360 to 361. The data in the sustainability report represents entities where 90 percent of the Group's employees work. In terms of manufacturing activities the report is estimated to cover entities that represents 95 percent 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 2018.

## NUMBER OF REPORTING UNITS



The number of reporting units in the Group has increased to 361 (360).

## Calculation principles

Reported number of employees represent the number of employed persons by the end of 2018.

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 CO<sub>2</sub> equivalents (CO<sub>2</sub>e). 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<sub>2</sub>e 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 2018 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 30. Omissions or incomplete data are commented on directly in the GRI index on pages 34–35.

ASSA ABLOY reports its sustainability performance annually, and the most recent Sustainability Report, for 2017, was issued in March 2018.

## External assurance

ASSA ABLOY has not sought external assurance for the sustainability report of 2018. 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](http://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 2018 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, 4 February 2019

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** CO<sub>2</sub> measurement of the impact of human activities on the environment, in terms of the amount of greenhouse gases produced.

**CO<sub>2</sub>** 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<sub>2</sub> 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.

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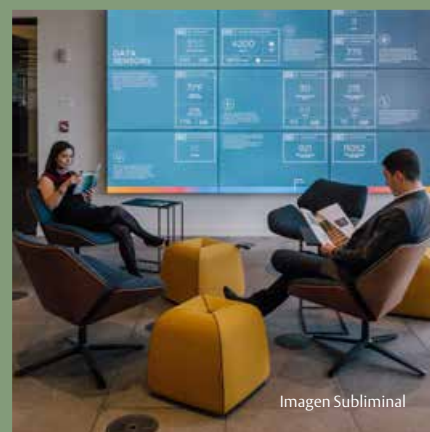
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The ASSA ABLOY Group is the global leader in access solutions. Every day we help people feel safe, secure and experience a more open world.

ASSA ABLOY



## Meeting the most stringent environmental certification ratings

**CUSTOMER:** Delos is a wellness real estate and technology company that is transforming the lives of people around the world by creating residential and commercial spaces designed to improve health, well-being and performance.

**CHALLENGE:** As a leading advocate for sustainability in the built environment, Delos wanted its new headquarters at 860 Washington Street in Manhattan to achieve the most stringent environmental certification ratings. The project has achieved WELL certification, LEED v4 and Living Building Challenge Petal Certification.

**SOLUTION:** In trying to meet the various healthy and environmentally sustainable building requirements for each of the certifications, Delos presented product manufacturers with a rigorous materials vetting template to determine the material ingredients, attributes and origins of each product that would be used in the construction project. Thanks to its commitment to sustainability, ASSA ABLOY was well versed in these certification requirements and able to comply with the request from Delos.

Many products from ASSA ABLOY Group brands have attained transparency documentation, including Health Product Declarations, Environmental Product Declarations and Declare labels that determine where a product came from, how it was made, and what is in it.

Not only was ASSA ABLOY able to provide this documentation, but the products enabled Delos to achieve their desired levels of safety, security and aesthetics, particularly with the extensive use of glass throughout the facility. Door and hardware components—including ASSA ABLOY Glass Solutions—used in the headquarters include hollow metal doors and frames from Curries; McKinney hinges; Rockwood strikes; Pemko continuous gaskets and seals; Corbin Russwin mortise locks and decorative levers; Rixson pivots and door stops; Rockwood flush bolts, door silencers, levers, cabinet pulls and door pulls; and Securitron maglocks.

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