

# Sustainability Report 2019

ASSA ABLOY

Experience a safer  
and more open world



Every day, we help billions of people to experience a more open world with innovative solutions that enable safe, secure and convenient access to physical and digital places

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## About the report

This report, along with additional information available online, describes our sustainability initiatives and performance in 2019, and addresses issues that ASSA ABLOY has identified as the most important to our 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 2019. 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.

We have participated in the Carbon Disclosure Project (CDP) since 2007. For 2019, the Group received a score of C in the CDP Climate Change Program, and a score of C in the CDP Water Program.

In 2017, ASSA ABLOY became an official regional partner in the World Green Building Council's Europe Regional Network. The Network represents a confederation of 20 Green Building Councils, eight Regional Partners and over 4,600 company members.

Other important main memberships include:

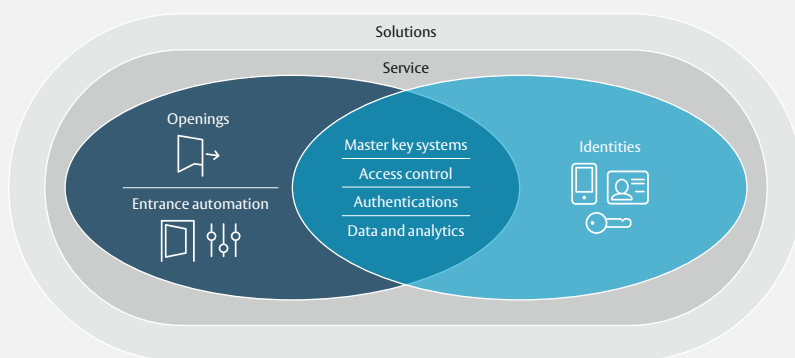
The Confederation of Swedish Enterprise (Svenskt Näringsliv), The Royal Swedish Academy of Engineering Sciences (IVA), Physical Security Interoperability Alliance (PSIA), The Zigbee Alliance and The Z-Wave Alliance.



## ASSA ABLOY in brief

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 trusted identities, with keys, cards, tags, mobile and biometric identity verification systems as parts of the offering.

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



# Highlights 2019

- The Group had a positive development across a majority of the reporting areas.
- Our continued focus on Health and Safety is working, keeping employees and stakeholders safer. The Injury rate was reduced by 16%.
- The Water intensity has decreased by 8% during the year.
- The Energy intensity has decreased by 10% during the year.
- The Group's total greenhouse gas emissions were reduced by 16%, as a result of increased energy efficiency and productivity, as well as new technology upgrades.
- By the end of 2019 the Group had 325 Environmental Product Declarations verified and published.
- The Group carried out 1,175 sustainability audits of direct material suppliers in low-cost countries.

## Environmental KPI's



Energy intensity

–10%

CO<sub>2</sub> intensity<sup>1</sup>

–55%

<sup>1</sup> Industrial processes

Water intensity

–8%

## Social KPI's



Injury rate

–16%

Injury lost day rate

–8%

Gender equality: Portion of females in management positions

25%

## Supply Chain KPI's



Portion of spend in low-cost countries represented by sustainability audited direct material suppliers

97%

Number of sustainability audits of direct material suppliers in low-cost countries

1,175

Portion of spend in all countries represented by direct material suppliers who have signed the Business Partner Code of Conduct

93%



# Together we are committed to sustainability

**Sustainable solutions will be vital to economic and industrial development in the next decade. For me personally it is essential that we do not simply pass the challenge of climate change along to the next generation. At ASSA ABLOY we aim to act as a responsible global citizen – improving in line with our sustainability program, which addresses the environment, our people, our products and solutions, and our customers' and business partners' needs.**

## **Demand for sustainable solutions**

We are seeing increasing demand for sustainable solutions, with strong growth in investments in green buildings. Our customers' requirements include energy savings, reduced embodied carbon and the use of renewable or recycled materials. The health aspects for the inhabitants of a building are also becoming increasingly important. We offer a broad range of products and solutions to meet these changing needs.

Sustainability is integral to our product innovation. Sustainable products, with relevant transparency documents, enable our customers to reduce their footprint during a building's lifecycle. We have Environmental Product Declarations (EPD) for all major product groups, representing about a third of the Group's total sales. We are supporting a sustainable future by designing products that have less impact on the environment or with attributes that contribute positively to the environment.

## **Performance in 2019**

Our current five year sustainability program is making good progress and we're working hard to end our 2020 program in a positive way. We are committed to reducing our environmental footprint to help mitigate our impact on climate change. About 12.3% of our total energy consumption is generated by renewable resources, a figure we continue to focus on increasing. In 2019 we reduced our water and energy intensity by 8% and 10% respectively.

Furthermore, our efficiency programs, such as the manufacturing footprint and VA/VE (value analysis/value engineering) also made a significant contribution to our overall improvements in sustainability, in terms of reduced consumption of energy and materials.

We are working towards an injury-free workplace and our health & safety performance has improved with an injury rate reduction of 16% during 2019. I'm also pleased to note that the number of sustainability audits of direct material suppliers increased during the year, and over 93% of our direct material suppliers have signed our Business Partner Code of Conduct.

## **Future strategy**

We have started the process to review our long-term sustainability targets. This year we will develop our sustainability strategy beyond 2020. Today we report extensively to the Carbon Disclosure Project (CDP). We are looking at the Task Force on Climate-related Financial Disclosures (TCFD) to find out how its recommendations can be implemented in an efficient way, and to understand the financial materiality and wider impact that climate-related challenges present to ASSA ABLOY.

## **Internal commitment**

In 2019 we've seen a sharp increase in internal commitment to sustainability across the Group. Our Green Team Playbook helps sites to measure the efficiency and sustainability of their operations – and to develop clear action plans to reduce energy, water, waste and material use while tracking cost savings. Our aim is to continue to promote a sustainability culture within ASSA ABLOY.

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 our progress. We are committed to contributing to our identified six most relevant UN Sustainable Development Goals (SDGs), demonstrating our progress along the way.

Finally, I would like to take this opportunity to thank all our employees for the effort they have invested in ASSA ABLOY in 2019. Together we are making ASSA ABLOY a more sustainable company.

Stockholm, 5 February 2020

Nico Delvaux  
President and CEO

## **WE SUPPORT**



"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."





# The UN Sustainable Development Goals (SDGs)

THE UN 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.

## SDG

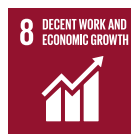
## ASSA ABLOY's contribution and progress



In order to reach ASSA ABLOY's overall goal of reducing its environmental impact, implementing water reuse and recycling systems, with a more efficient use and management of water is a critical step. During 2019 ASSA ABLOY decreased water intensity by 8% and water withdrawal by 1%. While 21% of total water consumption was recycled.

*Progress indicator:* CDP W1.2 & CDP W1.2b, CDP W5.1 & CDP W5.1a, CDP W8.1a & CDP W8.1b.

*Progress indicator GRI:* See GRI Index on page 35 for GRI progress indicator. Also, see Material KPI table on page 8.



ASSA ABLOY promotes inclusive and sustainable economic growth by integrating sustainability into the sourcing processes. Labour rights, decent work with equal pay, health and safety and gender balance are key priorities at all levels throughout the Group and the supply chain. During 2019 ASSA ABLOY reduced energy and water intensity by 10% and 8% respectively. Women constituted 29% of all employees. ASSA ABLOY conducted 1,175 supplier sustainability audits, while 93% of all direct material suppliers signed the Business Partner Code of Conduct.

*Progress indicator GRI:* See GRI Index on page 35 for GRI progress indicator. Also, see Material KPI table on page 8.



ASSA ABLOY supports the intention of SDG 9 on resilient infrastructure, inclusive and sustainable industrialization and innovation by systematically exploring ways to reduce production materials, optimizing product components and streamline production as well as transport methods. The Sustainability Compass is integrated into ASSA ABLOY's product innovation process, organically embedding sustainable design into the development of new products. During 2019 the overall energy consumption decreased with 4% and the proportion of energy sourced from renewable resources increased from 11.9% to 12.3%. The Group has Environmental Product Declarations (EPD) from all major product groups, representing about a third of the Group's total sales. 88% of the Group's product managers have received training regarding the use of the Compass. During 2019 we invested SEK 3.6 BSEK in R&D and we have some 2800 R&D engineers.

*Progress indicator:* Sustainability Compass.



As the global leader in access solutions, ASSA ABLOY is contributing to SDG 11 on making cities and human settlements inclusive, safe, resilient by offering sustainable products and services related to openings and entrance automation solutions. At the end of 2019, ASSA ABLOY had EPDs from all major product groups, which contribute points towards higher ratings in global green building certifications such as LEED and BREEAM. All new products are required to be developed using the Sustainability Compass, which focuses on optimising the environmental footprint during the whole product lifecycle.

*Progress indicator:* Sustainability Compass and Product Specific EPDs.



ASSA ABLOY has committed to adopt sustainable practices into its operations with a strong focus on resource efficiency and waste reduction through prevention, reduction, recycling and reuse. 93% of all direct material supplier sites were covered by ASSA ABLOY's Business Partner Code of Conduct. In 2019, ASSA ABLOY conducted 1,175 (1,067) sustainability audits. At least 8% of the hazardous waste was recycled in 2019.

*Progress indicator GRI:* See GRI Index on page 35 for GRI progress indicator. Also, see Material KPI table on page 8.



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 by considering lifecycle environmental impacts of a product through more efficient resource use, and by applying the reduce reuse recycle principle. During 2019 the Group's total greenhouse gas emissions decreased by 16% and the related intensity improved by 21%, driven by reduced energy consumption and re-design of CO<sub>2</sub> intensive production processes. The energy intensity has decreased by 10% during the year. The water intensity decreased by 8% during the year.

*Progress indicator:* CDP CC 2019.

*Progress indicator GRI:* See GRI Index on page 35 for GRI progress indicator. Also, see Material KPI table on page 8.

# 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 our stakeholders' trust is to manage the material aspects of sustainability throughout our 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. United Nations project that population living in urban areas could add another 2.5 billion people by 2050. 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, we have demonstrated our 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, we are promoting resource efficiency to further enhance profitability while reducing our environmental footprint.

## Engaging with stakeholders

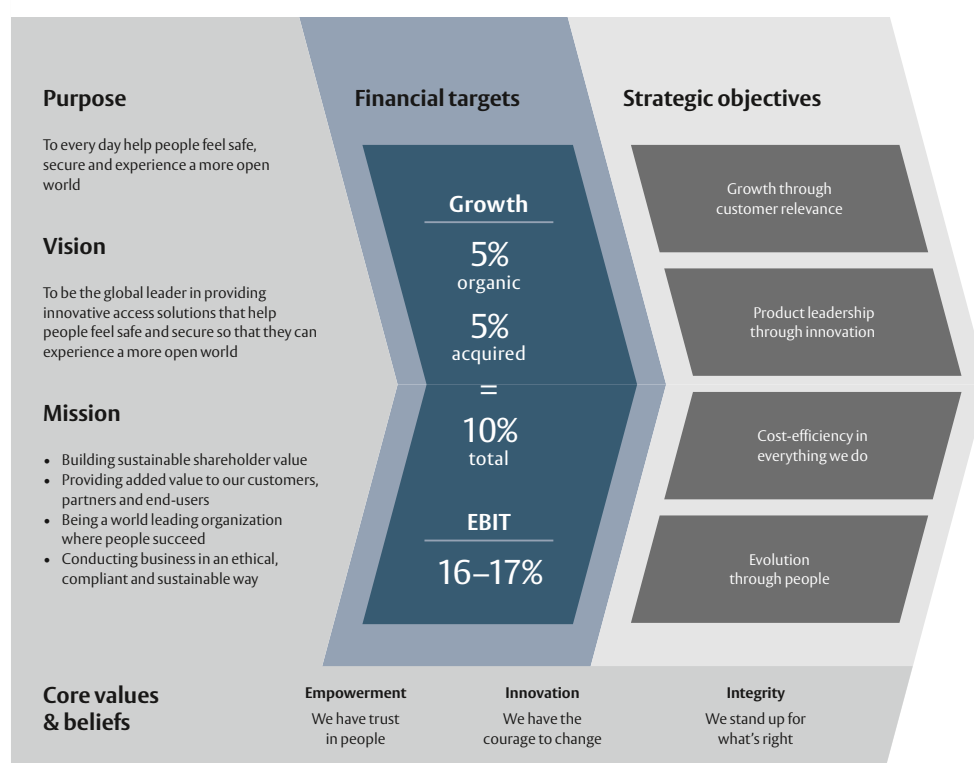
Stakeholder engagement is vital to understand society's needs and expectations of ASSA ABLOY and how they can be met. Our main stakeholder groups are those with a high level of influence, and with whom we interact directly and actively in our day-to-day business – including customers, investors and shareholders, employees, suppliers, non-governmental organizations and local communities.

As stakeholder relationships differ greatly, so too does our engagement approach for particular stakeholder groups. For example, our customers are involved in the product development process through the 'Voice of the Customer' customer assessment tools; direct material suppliers are engaged through our sustainability audit program; employees through day-to-day operations, training, the employee survey, and the work council; and the investment community through open and transparent dialogue on sustainability together with traditional investor relations activities. Read more about stakeholder engagement on page 30.

## Customer relevance

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

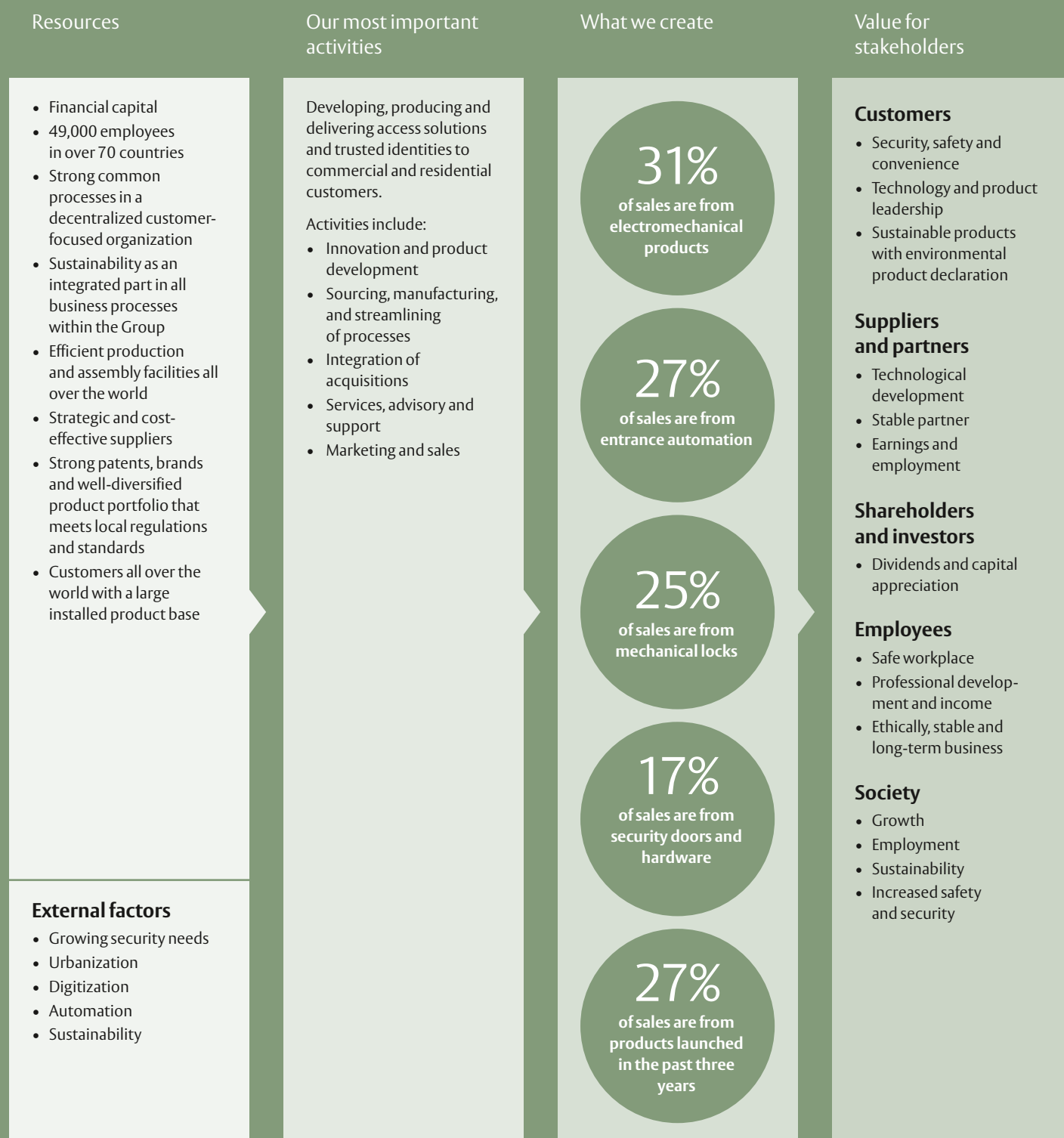
## ASSA ABLOY's value creation strategy



# Value creation business model

BUSINESS MODEL

Our vision is to be the global leader in providing innovative access solutions that help people feel safe, secure and experience a more open world. By responsibly using human capital, natural resources and capital, we continuously create sustainable value not only for our shareholders, but also for other stakeholders.



# Our strategic direction

**Our strategic objectives guide the ASSA ABLOY Group towards market growth, product leadership, cost-efficiency in everything we do and evolution through people. Our strategic objectives and the mission to conduct business in an ethical, compliant and sustainable way form the basis of our 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. Our expansion is facilitated by a strong brand and good reputation, which are supported by acting responsibly.

We 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. We can reduce our 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 our business plans, decision-making processes, and business principles.

## Sustainability risk management

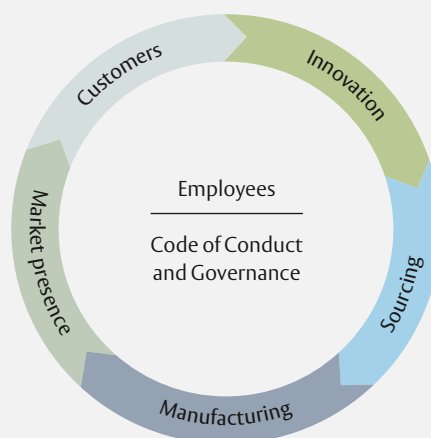
ASSA ABLOY's long-term risk-management strategy covers sustainability aspects throughout our value chain. Our direct material supplier audit program helps to manage risks related to suppliers, with a particular focus on high-risk suppliers. When incorporating new acquisitions, we have established an 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 our 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 sustainable innovation and embedding sustainability into product development. The Compass is ensuring that our next generation of products is more sustainable than the previous generation, which mitigates risks for both ASSA ABLOY and our customers.

## Sustainability in the value chain

Sustainability is a driver throughout our 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 8,000 direct material suppliers around the world at a value of more than SEK 28 billion. Around 51% of this value is sourced in low-cost countries. Direct material suppliers in risk areas are evaluated from a sustainability perspective. China is by far the dominant low-cost country.

**Manufacturing** The manufacture of our 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 we do business, we follow the Code of Conduct, respect the laws and regulations governing business ethics in the countries in which we operate, and we require all of our partners to do the same.

**Customers** Our ambition is to supply high-quality products that fulfil customer requirements, have a long life, are manufactured with minimal use of resources, and have a minimal environmental impact throughout their life cycle. Our customers 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 our distribution channels are: 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, we report on, follow up, and evaluate our 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 us 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, we aim to help all stakeholders to reduce the environmental footprint of all building types globally.

### Materiality analysis and sustainability priorities

In 2019, ASSA ABLOY's Sustainability Council reviewed our materiality analysis in accordance with GRI Standards. As the latest materiality analysis was carried out in 2018, the review concluded that the materiality analysis is still valid and relevant and did not require updating.

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 22–24
- Safety, security and convenience for customers  
▶ Read more on page 11
- 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.

## The Sustainability Compass in action: enhancing product performance

A product development team used the Sustainability Compass to improve the Securitron EcoMag Series. The M380E Magnalock offers the same unsurpassed intelligence and style as the previous M380, but with an 80% reduction in energy consumption.

**CHALLENGE:** Customers were looking for a sustainable product that was aesthetically pleasing, and low profile for high-design architectural openings. The legacy product was sleeker looking than other Magnalocks, but had no way to self-adjust power consumption depending on door position.

**SOLUTION:** The new design included lowering energy requirements and reducing our environmental footprint with regard to packaging, while maintaining an aesthetically appealing exterior and ease of installation.

**RESULT:** The new Securitron M380E with EcoMag technology from ASSA ABLOY Electronic Security Hardware features door prop sensing that allows the magnet to de-energize the coil when the door is held open for extended periods, dropping power draw as low as 20mA at 12V. The packaging insert is now made of biodegradable corn starch, further reducing the environmental impact.



# Performance in 2019 and targets for 2020

**During the year, we 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 we report our sustainability performance (certain KPIs) every quarter. With 371 (361) 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	2014	2015	2016	2017	2018	2019 <sup>1</sup>	Target 2015–2020	Change 2015–2019	Linked SDGs
<b>Environmental KPI</b>									
Number of entities covered by ISO 14001 certificates and other certifiable management systems	111	121	124	134	121	112	120 ●	–9 <sup>2</sup>	12
Intensity of greenhouse gas emissions related to energy consumption (tons/SEK M)	9.2	9.0	8.0	8.2	8.1	7.0	–20% ●	–22%	12 13
Intensity of greenhouse gas emissions related to chemicals in industrial processes (tons/SEK M)	8.7	6.1	3.0	2.1	2.1	1.0	–85% ●	–84%	12 13
Energy intensity (MWh/SEK M)	26.4	25.8	23.3	22.3	21.5	19.4	–20% ●	–25%	8 12 13
Water intensity (m <sup>3</sup> /SEK M)	99.1	92.4	71.7	61.6	57.0	52.7	–20% ●	–43%	6 8 12
Hazardous waste intensity (kg/SEK M)	104.5	118.6	115.9	115.8	114.2	112.3	–20% ●	–5%	6 12
Non-hazardous waste intensity (kg/SEK M)	823	880	817	779	720	694	–20% ●	–21%	6 12
Consumption of chlorinated organic solvents (PER and TRI) (tons)	1.7	19.0	16.8	19.5	27.1	24.3	–85% ●	+28%	6
Consumption of other types of organic solvents (tons)	1,033	1,255	1,160	945	812	765	–50% ●	–39%	6
Portion of renewable energy	7.8%	9.1%	11.7%	11.6%	11.9%	12.3%	20% ●	+3.2 p.p.	
<b>Social KPI</b>									
Injury rate (number of injuries per million hours worked)	6.4	6.7	5.1	4.1	3.6	3.0	–55% ●	–55%	8
Injury lost day rate (number of lost days related to injuries per million hours worked)	135.7	136.0	89.2	74.6	65.6	60.5	–64% ●	–55%	8
Portion of spend in low-cost countries represented by sustainability audited direct material suppliers	90%	90%	93%	93%	96%	97%	90% ●	+7 p.p.	8
Number of sustainability audits of direct material suppliers in low-cost countries	812	890	865	919	1,067	1,175		+285	8
Gender equality <sup>3</sup>									
Portion of females in management positions	Level 2: 27%	27%	27%	27%	20%	9%		–18 p.p.	8
	Level 3: 16%	17%	18%	17%	17%	21%		+4 p.p.	
	Level 4: 20%	16%	16%	16%	20%	21%		+5 p.p.	
	Level 5: 23%	25%	24%	25%	25%	26%		+1 p.p.	
	Level 2–5: 22%	23%	22%	23%	24%	25%	30% ●	+2 p.p.	

<sup>1</sup> For comparable units in 2019.

<sup>2</sup> The development is a combination of an increased number of certified entities, recently acquired companies with ISO 14001 certification, consolidation of entities with ISO 14001 and restructuring activities. The 2020 target has been updated to reflect the changes in the Group.

<sup>3</sup> The definition of management positions have been revised during 2014.

- 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



**The demand for sustainable access solutions is continuously growing among our 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 – therefore we use sustainable innovation practices to promote sustainability-related design criteria in our 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 our product innovation, designing new products that are sustainable and with relevant transparency documents.

## Progress in 2019

### *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*

Our 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 2019, 88% of the Group's product managers have been trained. Each division is responsible to train employees involved in the innovation process. We implement methodologies and ways of working on a continuous basis – a good opportunity to establish a lasting change in culture. One of the Product Innovation KPIs in all divisions is that 90% of new development projects have to include a Sustainability Compass, therefore securing sustainability by design.

### *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.

Our 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, and continued to be rolled out during 2019, 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 our 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 Declare Labels, to add a level of accountability.

### *Internal sustainability awareness*

The Very Green Book explains our policies and goals within our sustainability journey. The Green Team Playbook helps 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 roll out of The Very Green Book and the Green Team Playbook are ongoing throughout the organization. The ambition is to develop a standardized sustainable assessment process throughout the Group. Our aim is to guide and further promote the sustainable culture within ASSA ABLOY.

## Growing market for 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% of consumers across 60 countries are searching for green products and 55% of those are willing to pay more for products and services provided by companies committed to a positive social and environmental impact.

## Sustainable building solutions – a key differentiator

Markets where LEED and BREEAM are used continue to be where sustainable innovation is a key differentiator. According to the 2018 Dodge Data & Analytics World Green Building Trends report, client demand is the main factor to encourage green building activity. Environmental regulations and requirements for healthier buildings also play a part. Respondents in the report also stated that perceived higher cost of a product is the largest obstacle to green building. Innovative solutions designed with sustainability in mind are offered at little to no additional cost to the customer. As the industry continues to grow more competitive, EPDs make our products more attractive as they help our customers to achieve higher ratings in their green building certification.

## ASSA ABLOY's Sustainability Compass

Our Sustainability Compass is integrated into our product development process and 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 our sustainability products scorecard. The compass has also

been integrated into our 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 EPDs and HPDs where applicable. In many cases the purchasing decision and path to achieve LEEDv4 and other certifications are based on information from EPDs. By the end of 2019, the Group had EPDs from all major product groups, representing about a third of the Group's total sales.

The information most often requested by customers involved is: 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 our customers to compare products that fulfil 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.

Our focus on EPDs is relevant to a progressive building-materials industry. EPDs help to attain certifications such as LEED, but the data within an EPD can be applied even further. Embodied carbon reduction has become a major consideration for building project teams. Global construction group Skanska has recently designed a tool to specifically calculate the embodied carbon of construction materials. We can use the calculator along with EPDs for product optimization.

#### Future possibilities

The Internet of Things (IoT) will play a key role in developing 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.

Connected devices supply data about how doors in various applications are opened and closed. These data patterns can be used to change user behavior to maintain a consistent indoor temperature. This will help reduce energy usage and make buildings more efficient.

Connected and smart devices have the potential to offer 'predictive maintenance,' where a product automatically notifies when maintenance is needed, preventing product malfunction and minimizing downtime. This can reduce a service organization's energy consumption by preventing unnecessary journeys to check doors. It will also help to reduce energy loss in a building by minimizing downtime and it can help to extend the lifespan of an installed product.

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 key cards required.

#### Building Information Modeling advances sustainability efforts

Building Information Modeling (BIM) allows hardware and architectural consultants to produce complete opening models with door, frame and hardware specifications. Environmental data about buildings is shared with customers through BIM, EPDs and the use of digital collaboration tools. The digitalization of the built environment continues to accelerate, and so do the opportunities to create innovative solutions for customers. Specification is a focused area, where BIM-enabled software tools open the door for cloud-based communication. We use this to drive the sales of sustainable products, in key markets in an effort to reduce overall environmental footprint.

## FARGO printer for ID cards is first to achieve GreenCircle certification

**CHALLENGE:** Producing ID cards, particularly in large volumes, can be costly in terms of both energy use and materials, including waste by-products.

**SOLUTION:** The FARGO HDP6600 from HID Global is ideal for organizations that need retransfer printing technology to routinely issue secure and durable high-definition ID cards. As a cost-effective, eco-friendly and reliable solution, the HDP6600 provides high resolution printing for superior text and image quality.

**RESULT:** The HDP6600 features HID Global's iON technology which allows the unit to reach its optimal operating temperature in less than 60 seconds. With a built-in intelligent temperature control, the HDP6600 is the first and only retransfer printing solution for ID card personalization that has GreenCircle certification for its unmatched energy efficiency, which translates to significant energy savings for larger projects.

Sustainability is further improved through an optional wasteless lamination module that dramatically reduces the waste by-products that other printers generate. The module cuts consumables costs by up to 40% for printed and laminated cards.



# Creating customer value through product innovation

CUSTOMER VALUE AND  
SUSTAINABLE INNOVATION

**We are committed to promoting sustainable design criteria in the development of our 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.

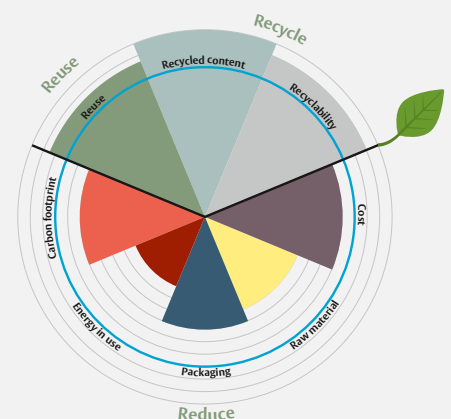
## Sustainability Compass points to hurricane door improvements

**CHALLENGE:** The US market required a high-performance hurricane-impact rated door to increase protection levels while maintaining an aesthetically pleasing building entrance that is energy efficient and sustainable. The legacy product had limited options, heavy weight, and a large amount of packaging materials.

**SOLUTION:** Using our Sustainability Compass as a guide, the North American Product Development team identified several areas for improvement. By using patent pending lightweight integrated reinforcement they reduced the weight of the product by 31% while redesigning the packaging reduced its weight drastically by 96%. Improvements to the door's design, including EcoDoor Seals and

directional sensors, plus hurricane-impact rated insulated glazing options, all reduce outdoor air infiltration and heat loss from the building.

**RESULT:** The new ASSA ABLOY SL500 Resilience R104 achieved the goals of being the highest rated product on the market, while reducing its in-life energy consumption by 31%. The decreased weight of the door and its packaging reduces use of materials and energy required for transportation. The solution allows customers to experience the highest level of hurricane protection while having an attractive and more energy-efficient entrance.





# Supply chain management

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

## Progress in 2019

### • Continued Business Partner Code of Conduct roll out

A total of 96% of direct material supplier sites from low-cost countries and 93% of all direct material supplier sites were covered by ASSA ABLOY's Code of Conduct for Business Partners at the end of 2019 – with the objective to cover over 95% 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, we have intensified our efforts in this area and 94% (91% in 2018) of Group spend is now reported through ASSA ABLOY's Business Intelligence System.

## Supply chain risks and challenges

Ensuring that suppliers fulfill our requirements involves ongoing risks and challenges. Our low-cost country suppliers continue to pose the greatest supply chain risks – particularly

related to human rights and the environment. Our 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 develop EPDs, which are increasingly requested by customers.

## Supply chain risk management

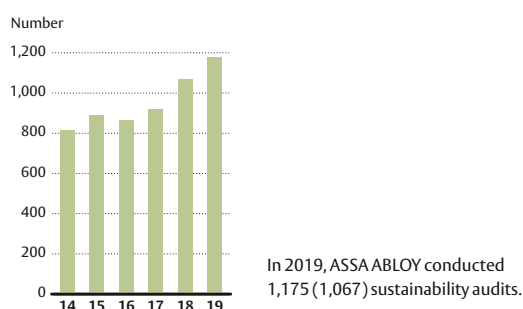
We manage supply chain risks and challenges by continuing to roll out our Business Partner Code of Conduct to improve the monitoring of supplier compliance. The Code ensures a consistent approach to supply chain management and helps to bring new suppliers – particularly in low-cost countries – up to our 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 we continue to phase out hazardous substances, we also audit the supplier use of such chemicals.

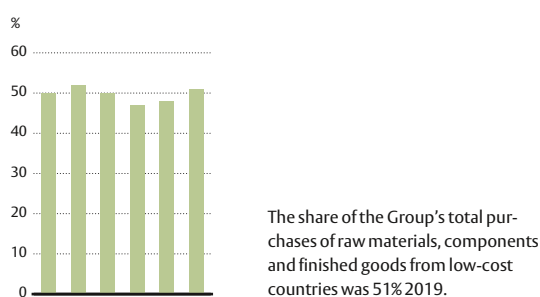
## Supplier sustainability audit program

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 our policies and principles on business ethics, human rights

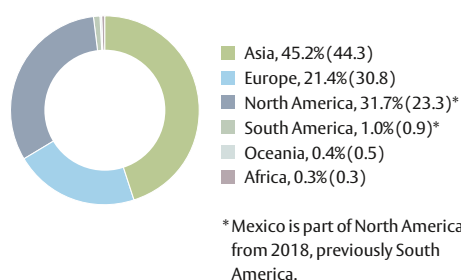
Sustainability audits of direct material suppliers in low-cost countries



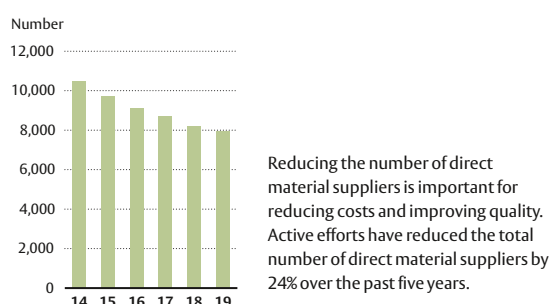
Share of purchases in low-cost countries



Distribution of direct material supplier spend



Number of direct material suppliers



## Plants in low-cost countries



and labor standards, health and safety, and the environment, to suppliers. We conduct our 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, we require 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 our 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 2019

- 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 2019, 1,623 of the 1,794 low-cost country suppliers audited had satisfied our minimum sustainability requirements – equivalent to 97% of our total spend in low-cost countries. During 2019 the Group got 1,670 new suppliers in high- and low- cost-countries. During the year, 1.9% of those new suppliers were audited, the share of new audits in low-cost countries was 35%.

- One supplier in low-cost countries was blacklisted and prevented from doing business with us, and 13 put on 'new-business hold' by the Group, meaning they were not eligible for new business from any ASSA ABLOY entity.

According to our 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 about 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 no environmental risk assessments and improvement action plans.

#### Supply chain management governance

Our 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 our requirements.

# Supply chain auditing

**ASSA ABLOY rates the performance of our direct material suppliers and how they conform to our Business Partner Code of Conduct.**

## Direct material supplier audits

Our audits are designed to assess if suppliers comply with our 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 is terminated. There are many reasons why suppliers are blacklisted, but the main reason is an unwillingness to improve and meet our 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 our Business Intelligence Supply Management System, which allows us to assess and analyze the performance of our suppliers. The system is used as basis for procurement decisions to identify preferred suppliers and enables us to monitor several supply chain KPIs.

### 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 connected UN Conventions
- ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy
- OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data
- OECD Guidelines for Multinational Enterprises
- UN Global Compact
- ISO 14001

The ASSA ABLOY Business Partners Code of Conduct is available in 21 languages.

### Audit process and Traffic-light system

Long term

Direct material supplier development and consolidation

Mid term

Targets and measurements

Supplier risk assessment

Ongoing

Supplier self-assessment

Sustainability

Supplier quality

On-site audits

Scoring principles  
Traffic-light system



Follow-up audits

Supplier development

Grow

Fix

Exit

### The traffic-light system

We use a traffic-light system to rate individual direct material suppliers on how they conform to our Business Partner Code of Conduct. Suppliers are rated on the following five color-coded system:

**Green** – the supplier is approved. A re-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 the environmental performance in our operations is important to ASSA ABLOY. We have a clear ambition to continuously reduce the environmental impact and enhance our performance while expanding the Group. Good progress was made during the year, particularly with ongoing projects to further enhance operational efficiency.**

## Progress in 2019

### • Operational efficiency projects

Progress was made with various ongoing projects throughout the Group to optimize energy, CO<sub>2</sub>, water and organic solvents.

### • Reduced greenhouse gas emissions

Our total greenhouse gas emissions decreased by 16.1% and the related intensity improved by 21.4%, driven by reduced energy consumption and re-design of CO<sub>2</sub> intensive production processes.

### • Continued reduction of organic solvents

Our organic solvent consumption decreased by 5.8%, as a result of optimized process design and switching to water-based paint where possible.

## Environmental risks and challenges

ASSA ABLOY's continued growth presents us with significant opportunities. 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 our most significant environmental impacts. Geographic expansion also requires that environmental risks and challenges associated with transportation must be managed.

We are currently in the process of reviewing the recommendations for Task Force on Climate-related Financial Disclosures (TCFD). This will enable us to determine the climate-related financial risks and opportunities, while we also further analyze our risk to the environment and climate change; a double materiality perspective.

## 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 2018, all our entities were analyzed to establish which need to be ISO 14001 certified, and most of the relevant remaining entities will be certified by the end of 2022. A variety of ongoing programs also work to optimize the use of resources, and mitigate the associated risks. We have also further developed our 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 our overall risk management. We have a comprehensive platform to monitor individual supplier risks and performance, in particular through audits of low-cost country suppliers. A total of 1,175 such audits were conducted in 2019. 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 impact and resource consumption throughout the life-cycle of a product are also important to us. When developing new products, we use 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 11. 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

Our 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.

Our 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. Our belief is that benchmarking and best practice sharing within ASSA ABLOY drives progress.

## Environmental compliance

Ensuring environmental compliance is essential to maintain our reputation and the company's license to operate. Non-compliance could result in issues with our 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 2019.

# Energy consumption and carbon emissions

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

## Performance in 2019

Operational efficiency activities during the year have:

- reduced total energy consumption by 3.5% (2.5%) for comparable units.
- reduced energy consumption by 25,728 MWh for comparable units.
- reduced energy intensity by 9.7% (5.5%) for comparable units.
- increased the proportion of energy sourced from renewable resources – primarily from hydropower, wind and solar – from 11.9% in 2018 to 12.3% in 2019. The target is to increase the ratio to 20% by the end of 2020.

## Energy efficiency at production units

As much as 50% of energy consumption in large manufacturing units is related to factors independent of production volume. We have reduced our 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 the 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 our 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

We continued to use the energy Kaizen concept in our EMEA division to promote continuous improvements in energy efficiency. In general the Kaizen workshops generate annual energy savings of 5–8% 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 our footprint.

## Phasing out substances with global warming impact

The total calculated CO<sub>2</sub>-emissions amounted to 289,166 tons in 2019 of which emissions related to direct and indirect energy consumption in our factories and sales companies correspond to 88% 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% 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 fully in 2020. ASSA ABLOY complies with the Montreal Protocol and with country-specific legislation on ozone-depleting substances.

## Intelligent logistics

We have 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.

We use a database to assess and identify smart transport solutions with the lowest environmental impact. The database includes suppliers as well as our factories and sales companies, and is connected to our central purchasing database.

## Pre-treatment change yields major benefits

**CHALLENGE:** Our manufacturing facilities continuously examine production processes to find ways to reduce environmental impact and generate cost savings. US-based hollow metal door and frame manufacturer Curries analyzed its pre-treatment process to find a better method. The production was using a five-stage iron phosphate process to pre-treat hollow metal door frames prior to painting.

**SOLUTION:** After examining various options, Curries converted to a zirconium pre-treatment process in 2018. The various stages of the process were reconfigured to accommodate the new chemical. The existing washer was modified – the previous iron phosphatizing stage was converted to a rinse stage and a counter-flow rinse process was implemented to reduce water use. The zirconium does not require heating, so Curries was able to shut down its gas heater.

**RESULT:** Natural gas reduction of 3,100 MWh has been achieved with savings of USD 52,400 (SEK 511,000) per year and reduced carbon footprint of 630 tons, the equivalent of enough energy to power 100 homes for one year. Water reduction of over 16 million liters has been achieved with cost savings of USD 28,000 (SEK 273,000) a year. Chemical costs have been reduced by USD 86,400 (SEK 842,000) per year. Additional savings have been realized due to reduced work required to maintain tank cleanliness.





## Geographical split of energy and water consumption

	Africa	Asia	Europe	North America	South America	Pacific
Energy consumption (%)	0.5	21.6	27.8	43.2	4.8	2.0
Water withdrawal (%)	0.8	56.0	12.8	23.4	5.8	1.3

## Ozone-depleting substances

	2014	2015	2016	2017	2018	2019 <sup>2</sup>
Ozone-depleting substances in tons of R11 equivalent <sup>1</sup> (tons)	30.3	20.8	8.1	4.8	8.0	2.7

<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 2.7 tons, including units acquired during the year.

Energy consumption and related CO<sub>2</sub> emissions

	2014	2015	2016	2017	2018	2019 <sup>1</sup>
Direct energy – Scope 1						
– oil (MWh)	29,231	23,177	23,911	25,965	21,697	15,054
– gas (MWh)	244,785	251,997	251,402	258,857	268,609	286,189
– coal (MWh)	77,695	88,226	48,884	30,711	11,694	10,093
– biofuel/biomass (MWh)	2,201	1,958	3,119	3,706	8,975	9,737
<b>Total</b>	<b>353,912</b>	<b>365,358</b>	<b>327,316</b>	<b>319,239</b>	<b>310,975</b>	<b>321,074</b>
Indirect energy – Scope 2						
– electricity (MWh)	347,306	358,983	360,618	375,982	380,470	341,161
– district heat (MWh)	30,877	30,981	28,069	34,567	35,507	38,990
<b>Total</b>	<b>378,183</b>	<b>389,964</b>	<b>388,687</b>	<b>410,549</b>	<b>415,977</b>	<b>380,150</b>
<b>TOTAL ENERGY CONSUMPTION<sup>2</sup></b>	<b>732,095</b>	<b>755,322</b>	<b>716,003</b>	<b>729,788</b>	<b>726,952</b>	<b>701,224</b>
KPI, Energy intensity <sup>3</sup> (MWh/SEK M)	26.4	25.8	23.3	22.3	21.5	19.4 <sup>4</sup>
CO <sub>2</sub> emissions related to direct energy consumption – Scope 1 (tons)	84,711	87,994	75,033	71,101	67,009	68,396
CO <sub>2</sub> emissions related to indirect energy consumption – Scope 2 (tons)	170,460	174,847	171,067	196,697	205,309	185,910
Total greenhouse gas emission related to energy consumption CO <sub>2</sub> (tons)	255,171	262,841	246,101	267,798	272,318	254,306 <sup>5</sup>
KPI, Greenhouse gas emissions intensity <sup>6</sup> (tons/SEK M)	9.2	9.0	8.0	8.2	8.1	7.0 <sup>7</sup>
Greenhouse gas emission related to substances in industrial processes						
– Calculated CO <sub>2</sub> emissions <sup>8</sup> (tons) – Scope 1	241,783	179,395	92,385	68,106	72,206	34,860 <sup>9</sup>
– Total CO <sub>2</sub> emissions – Scope 1 and 2	496,954	442,236	338,486	335,904	344,524	289,166
KPI, Portion of renewable energy (%)	7.8	9.1	11.7	11.6	11.9	12.3

<sup>1</sup> For comparable units. Total energy consumption amounted to 709,253 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 19.3 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 256,850 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/valued added amounted to 7.0 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 34,860 tons, including units acquired during the year.

# Water and waste management

**Efforts to reduce water consumption and improve waste management are key parts of reducing our environmental impact, increasing efficiency and making financial savings. We have 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 our water footprint. We are implementing water recycling systems, and even closed loop systems, to promote water efficiency.

During 2019, water withdrawal decreased by 1.2% and water intensity by 7.5% 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% of our total water consumption.

In 2019, our total water withdrawal amounted to 1,903,024 m<sup>3</sup>, of which 83% was sent to municipal treatment plants after use. Water recirculation in wastewater treatment plants improves efficiency, and in 2019 the total amount of recycled water equated to 21% 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: 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, 76% is measured based on sensor readings, another 7% of the volume is calculated for the full reporting period based on a smaller number of readings at certain points in time. Around 17% of the total volume is estimated due to lack of sensors for measurement.

## Accidental discharges

There were no major spill incidents in 2019, and four minor spill incidents were reported. The cases did not cause us to exceed permitted levels and were managed in accordance with national legislation. We have improved our relevant internal processes to avoid future incidents.

## CDP Water

We achieved the C level on the CDP Water security evaluation for 2019

## Waste management

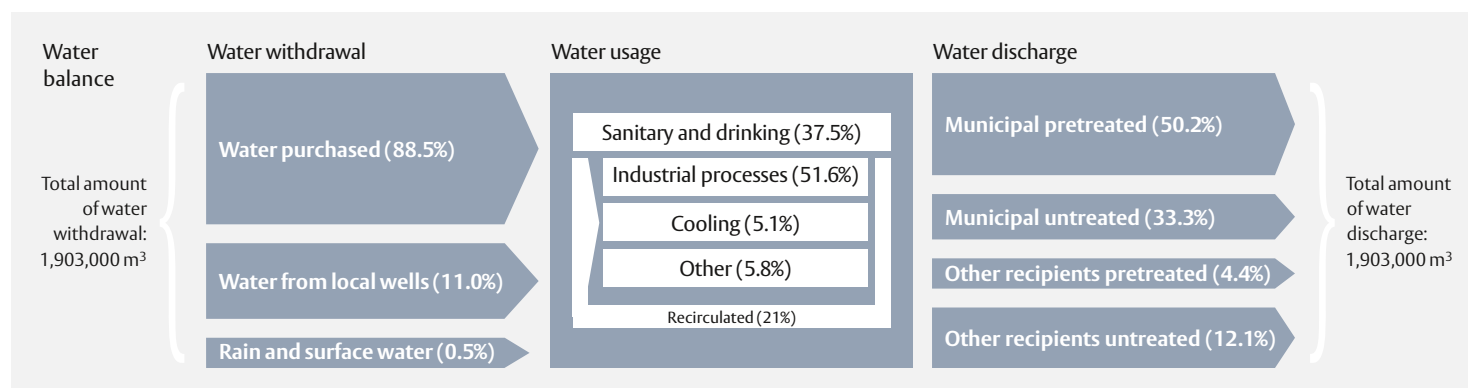
Waste represents a substantial cost both in terms of the resources needed to generate the waste and the cost to handle the waste in a proper way.

Water performance	2014	2015	2016	2017	2018	2019
Purchased water (1,000 m <sup>3</sup> )	1,600	1,565	1,508	1,391	1,588	1,684
Water from on-site wells (1,000 m <sup>3</sup> )	1,144	1,127	684	616	335	210
Rainwater (1,000 m <sup>3</sup> )	1	7	9	5	4	9
Surface water (1,000 m <sup>3</sup> )	6	3	2	0	0	0
<b>Total water withdrawal (1,000 m<sup>3</sup>)<sup>3</sup></b>	<b>2,752</b>	<b>2,702</b>	<b>2,203</b>	<b>2,012</b>	<b>1,927</b>	<b>1,903<sup>1</sup></b>
<b>KPI, Water intensity (m<sup>3</sup>/SEK M)<sup>3</sup></b>	<b>99</b>	<b>92</b>	<b>72</b>	<b>62</b>	<b>57</b>	<b>53<sup>2</sup></b>

<sup>1</sup> For comparable units. Total water withdrawal (1,000 m<sup>3</sup>) was 1,911, including units acquired during the year.

<sup>2</sup> For comparable units. Total water intensity amounted to 52 m<sup>3</sup>/SEK M, including units acquired during the year.

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



We work to minimize waste from our 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 2019, our total waste generated amounted to 81,026 (84,010) tons. The amount of hazardous waste increased for comparable units 4,054 (3,861) tons. During 2019 more waste is categorized as hazardous waste due to implementation of stricter national rules; for example, 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 1.7% 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 our ambition is to further reduce the amount of metal waste by optimizing the dimensions of raw materials used.

We also focus on increasing the portion of non-hazardous waste being sent for either recycling or energy recovery through incineration. Hazardous waste is being sent to authorized companies for proper processing, recycling and disposal. Available data indicates that at least 8.1% of the hazardous waste was recycled in 2019.

#### Recycled metal

	2014	2015	2016	2017	2018	2019 <sup>1</sup>
Waste metal for recycling (tons)	54,025	57,632	56,338	58,316	55,795	51,892

<sup>1</sup> For comparable units. Total amount of waste metal for recycling amounted to 52,258 tons, including units acquired during the year.

#### Hazardous waste

	2014	2015	2016	2017	2018	2019
Metal sludge (tons)	563	805	873	838	915	914
Oil for recycling (tons)	370	360	421	433	361	330
Electrical and electronic waste (tons)						88
Other types of toxic waste (tons)	1,971	2,304	2,266	2,513	2,585	2,722
<b>Total hazardous waste (tons)</b>	<b>2,904</b>	<b>3,469</b>	<b>3,560</b>	<b>3,785</b>	<b>3,861</b>	<b>4,054<sup>1</sup></b>
<b>KPI, Hazardous waste intensity (kg/SEK M)</b>	<b>105</b>	<b>119</b>	<b>116</b>	<b>116</b>	<b>114</b>	<b>112<sup>2</sup></b>

<sup>1</sup> For comparable units. Total amount of hazardous waste was 4,058 tons, including units acquired during the year.

<sup>2</sup> For comparable units. Total amount of hazardous waste/value added amounted to 111 kg/SEK M, including units acquired during the year.

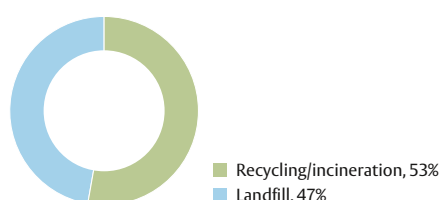
#### Non-hazardous waste

	2014	2015	2016	2017	2018	2019
Household incinerated/recycled (tons)	1,955	1,766	1,838	1,960	3,200	2,744
Household deposited (tons)	9,531	11,208	11,355	11,104	9,889	10,248
Paper and cardboard for recycling (tons)	4,329	4,803	4,447	4,748	4,465	4,471
Plastic waste for recycling (tons)	1,051	879	768	797	863	867
Wood waste for recycling (tons)	4,224	4,277	4,426	4,854	4,470	5,009
Glass for recycling (tons)	NA	NA	NA	185	174	236
Other types of waste (tons)	1,774	2,787	2,270	1,823	1,293	1,505
<b>Total (tons)</b>	<b>22,864</b>	<b>25,720</b>	<b>25,105</b>	<b>25,471</b>	<b>24,354</b>	<b>25,080<sup>1</sup></b>
<b>KPI, Non-hazardous waste intensity (kg/SEK M)</b>	<b>823</b>	<b>880</b>	<b>817</b>	<b>779</b>	<b>720</b>	<b>694<sup>2</sup></b>

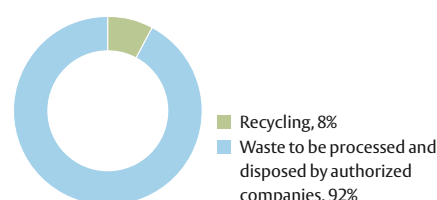
<sup>1</sup> For comparable units. Total amount of non-hazardous waste was 25,310 tons, including units acquired during the year.

<sup>2</sup> For comparable units. Total amount of non-hazardous waste/value added amounted to 690 kg/SEK M, including units acquired during the year.

#### Non-hazardous waste – disposal method



#### Hazardous waste – disposal method



## Organic solvents and surface treatment

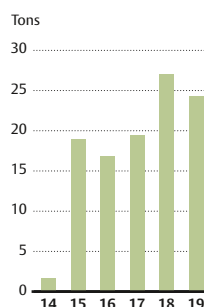
**We have reduced the consumption of chlorinated organic solvents through investments in new cleaning technologies, as part of a gradual phase out of such chemicals.**

We use chlorinated organic solvents such as perchloroethylene (PER) and trichloroethylene (TRI) for the surface treatment of metals, including degreasing, cleaning and pre-treatment before plating. Surface treatment is needed to meet high standards of durability, corrosion resistance, quality and finishing. We are working systematically to eliminate 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 10.3% for comparable units during 2019. 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% between 2015 and 2020. We have focused projects in place to try and achieve this target.

The Group also uses other types of organic solvents, primarily for painting. The total consumption of other types

Consumption of chlorinated organic solvents



of organic solvents for comparable units decreased by 5.8% to 765 tons in 2019. Compared to 2015 the consumption has been reduced by 39%. The target is to reduce consumption by 50% between 2015 and 2020, primarily by switching to water or powder-based paint applications.

### Phasing out organic solvents in door products in the Middle East

**CHALLENGE:** ASSA ABLOY is constantly searching for processes that deliver high quality products with the lowest possible impact. ASSA ABLOY Opening Solutions Middle East, based in Dubai UAE, is a door and frame manufacturer that has been investigating alternative methods for organic solvents based paints. During the application and drying of these paints, volatile chemicals evaporate.

**SOLUTION:** Our specifications teams are on a journey of educating the market of the benefits that water-based paints can provide for both the customer and the environment. Realizing this transition will take time, though the operations team at ASSA ABLOY Opening Solutions Middle East has taken the decision to redesign the paint shop and focus entirely on water-based paints to become a more sustainable manufacturer.

**RESULT:** The phase out of organic solvents will significantly reduce the quantity of hazardous chemicals used. Thanks to advances in paint technology, it is possible to get water-based paints that match or surpass the performance of solvent paints, while still providing the same hardness and durability. Working together with the customers will allow the door and frame industry to reduce its impact on the environment.



**Our 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.**

covered by ISO 14001 environmental management systems decreased by to 101, primarily as a result of ongoing restructuring activities and consolidation of a number of reporting entities with ISO 14001. Our target is to certify 7 more factories by the end of 2020.

A total of 115 units had environmental management systems at the end of the year, covering 75% of employees in our factories. For comparable units the number of entities

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

	2014	2015	2016	2017	2018	2019
ISO 14001	85	98	110	116	104	101
Certifiable systems	26	23	14	18	17	11
<b>Total</b>	<b>111</b>	<b>121</b>	<b>124</b>	<b>134</b>	<b>121</b>	<b>112<sup>1</sup></b>
Factory employees covered by environmental management systems, %	N/A	73	77	79	77	75

<sup>1</sup> The total number of entities covered by ISO 14001 and other certifiable management systems amounted to 115, including units acquired during the year.

## Sustainable and effective key management for Stockholm's schools

**CHALLENGE:** Owned by the City of Stockholm, SISAB manages 600 school properties, including 3,000 buildings. Subcontractors needed to visit SISAB headquarters to receive keys to access a particular site to perform routine maintenance or repairs. With an average of 25 to 30 keys being handed out per day, the subcontractors were spending significant time and fuel making trips to collect and return keys, contributing to an unnecessarily high carbon footprint.

**SOLUTION:** Thanks to expertise from across the ASSA ABLOY Group, SISAB was able to implement a tailored digital key management system, SKOL, built around the Traka intelligent key management system and CLIQ Remote digitally-encrypted keys. Keys are obtained from a cabinet located within the perimeter of each property and can only be used in combination with digital accreditation and registration in the system.

The solution eliminates the time and fuel wasted visiting SISAB headquarters to collect keys, or even arriving at a property with the wrong key.

**RESULT:** Since implementing SKOL, approximately 54,000 key extractions have successfully taken place on-site without visiting SISAB headquarters. This has resulted in SISAB eliminating 40 tons in CO<sub>2</sub> emissions within the first two years of implementing SKOL. As a completely digitalized platform, SKOL also reduces the use of paper documentation.





# Together ahead

**In 2019, the Group identity, 'Together we,' was launched. Our ambition is to, in our decentralized structure, work more closely together cross-divisionally to create synergies and work as one Group, heading in the same direction. We aim to create a modern and empowering environment, where we all can work autonomously, with easy access to systems and information.**

## Our culture

ASSA ABLOY is a diverse Group, with a shared purpose and vision that unites us across geographies, divisions, brands and companies. This is underpinned by our three core values: empowerment, innovation and integrity. These values are central to us as an organization, with the ambition to be always growing, never boring and leading right. A strong identity and inclusive culture help us to align and to create a sense of belonging.

Our ethical and social responsibility practices are based on visibility and transparency. We have an ambitious sustainability agenda, including initiatives to decrease our environmental impact. We promote acceptance, respect and collaboration regardless of differences in race, age, gender, language, political beliefs, religion, ability, sexual orientation or communication styles.

## Core values:

- Empowerment
  - We trust our people.
- Innovation
  - We have the courage to change.
- Integrity
  - We stand up for what's right.

## Our vision

ASSA ABLOY's vision and strategy for our employees is to encourage and support a business culture that enables our people to build a world-leading organization. With a global presence, and a strong culture of local ownership and decentralized decision-making, we share the same purpose, values and beliefs. Our vision, strategy and framework provide our employees with a space where it is possible to make a difference. We believe that having the right people in the right place is the driving force for growth, and that the right structure and processes add value to our business.

Our aim is to continuously improve the employee experience, and enable a personalized development journey. The experience is tailored to everyone's individual needs and choices, from recruitment and onboarding to development and growth. We strive to support agile working methods by

Alana Leite, Sinara Valadares and Daniele Santos at the Papaiz facility, ASSA ABLOY Brazil, during the Group's 25th anniversary celebrations in November 2019.



providing collaboration tools and equipment to enable people to work flexibly. Simplicity and agility are valued, and we believe in an inclusive working environment, clear feedback and a workplace that encourages engagement, experimentation and efficiency in everything that we do.

### Talent management

To be a competitive employer, we aim to give people the opportunity to grow and develop their career within the organization. We focus on strengthening internal mobility, making it easier to move between roles, functions, businesses, divisions and countries. A continuous dialogue between managers and employees, focusing on development and growth, is also encouraged. We strive to offer interesting roles, in which employees can make a meaningful contribution to the business, relevant to the employees' experience, capabilities and interests.

Talent management also involves attracting the right people to our organization. We have established trainee programs, internships and strong relations with universities worldwide with the aim to develop our own talent. ASSA ABLOY has several graduate programs, with the EMEA program being the most developed and longest running. The EMEA Graduate Program has had 117 graduates since

2012 with an average retention rate of 81%. In 2019, 15 people took part in the program.

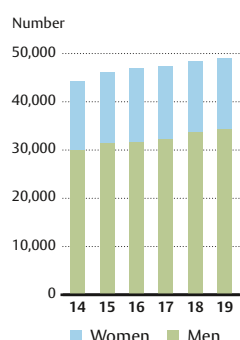
Attracting and retaining people with the right competence and attitude is vital to the company's continued success. We believe in creating an environment that enables employees to make a difference, and work on all levels to strengthen internal mobility and cross-level development opportunities. Our aim is to develop competence internally by giving people the opportunity to learn from experience through challenging roles and responsibilities. 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.

### Leadership development

Our organization is constantly developing. This requires driven and motivated leaders, who inspire others to share our business vision and goals. Good leaders can lead without formal authority, and have the ability to activate collaboration within teams and across the Group.

ASSA ABLOY has long-established leadership programs for managers both at Group and divisional level. The development agenda is built on a leadership framework that

Average number of employees



Number of employees by employment contract, employment type and gender

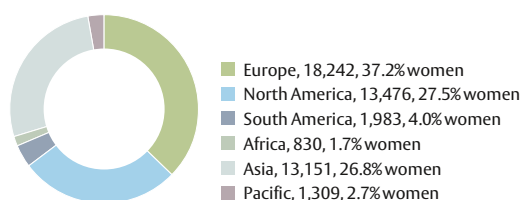
	Number	% of total	Female, %
Permanent	44,443	92	29
Temporary	3,806	8	31
<b>Total</b>	<b>48,248</b>	<b>100</b>	<b>29</b>

At the end of 2019, 35 percent of ASSA ABLOY employees were covered by collective bargaining. During 2019 the total employee turnover among permanent employees amounted to 18.9 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.

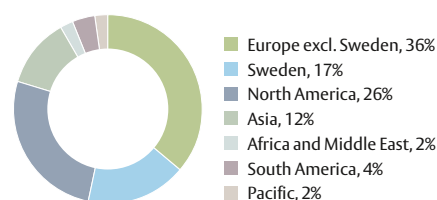
Women at different levels of the organization

Level	Percentage of women					
	2014	2015	2016	2017	2018	2019
2 – reports to CEO	27	27	27	27	20	9
3 – reports to level 2	16	17	18	17	17	21
4 – reports to level 3	20	16	16	16	20	21
5 – reports to level 4	23	25	24	25	25	26
<b>Level 2-5</b>	<b>22</b>	<b>23</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>
<b>All employees</b>	<b>31</b>	<b>31</b>	<b>31</b>	<b>30</b>	<b>30</b>	<b>29</b>

Average number of employees by region



Nationalities – ASSA ABLOY's management teams



guides our shared approach. The foundation consists of two development programs for senior managers: ASSA ABLOY MMT (Management training) and ASSA ABLOY IMD. The latter is a customized program, developed in collaboration with the Swiss management school, the International Institute for Management Development (IMD) in Lausanne, with 30 participants per intake. Its aim is to support the implementation of the Group's strategy, focusing on problem solving and topics that are relevant to us as an organization. About 655 of the Group's senior managers from 35 countries have participated in the IMD training program. The MMT program promotes best practice sharing and facilitates the integration of new employees following acquisitions. In 2019, 70 ASSA ABLOY managers participated in one of these two programs.

Diversity and inclusion

As an ethical and socially responsible employer, ASSA ABLOY promotes diversity and inclusion, and we strive to bring people together to harness their diverse perspectives. We act ethically and with integrity, and always comply with laws and regulations.

Our Code of Conduct states that any form of discrimination or harassment in the workplace, such as in terms of race, ethnicity, sexual orientation, gender, religion, age, disability, political opinion, and nationality, is not tolerated. We believe that promoting gender equality and diversity strengthens our competitiveness and performance.

ASSA ABLOY is constantly working to increase the diversity of employees participating in leadership and development programs. A diverse workforce with a good understanding of local markets is vital to our success. During 2019, 27 nationalities were represented at the highest management levels.

Gender balance

Our Code of Conduct and gender diversity initiatives provide the foundation for our ambition to increase gender balance at all levels throughout the Group. ASSA ABLOY has set gender diversity objectives, and the action taken to achieve them is managed and implemented at divisional level.

During 2019, much work has been done to make sure Group level gender objectives are met, but gender balance objectives remain a challenge. One of the reasons is that women represented a minority in several of the companies acquired by ASSA ABLOY in recent years. The Group target is to have 30% of management positions held by women and the progress is continuously measured. In 2019 the share of senior management positions held by women at ASSA ABLOY was 25% (24%).

Health and safety

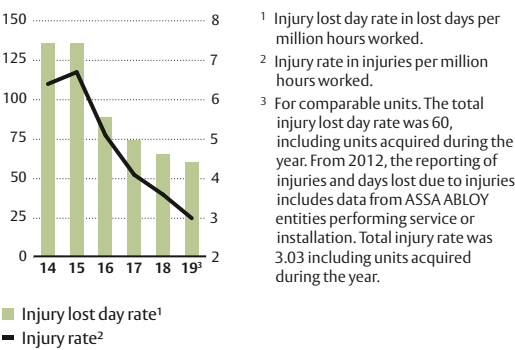
We are committed to providing a safe work environment for our people. We do not tolerate harassment, bullying or discrimination in the workplace, and we believe in a healthy work-life balance. The Group-wide safety agenda promotes safe behavior, reduces workplace hazards and risk taking, and supports the development of a workplace free of injuries across all operations. Safety training and audits are routine, and new Group policies focusing on safe driving and travel safety were launched during 2019.

In 2019, we continued our progress on key performance indicators of injury rate 3.0 and lost days per injury 20.1. A Group-wide implementation of a Safety Dialogue Workshop focusing on safe behavior in the workplace and our approach to risk taking resulted in almost 30,000 employees participating. A behavior-based safety culture initiative called 'Together we are safe' is under development and expected to launch in the beginning of 2020.

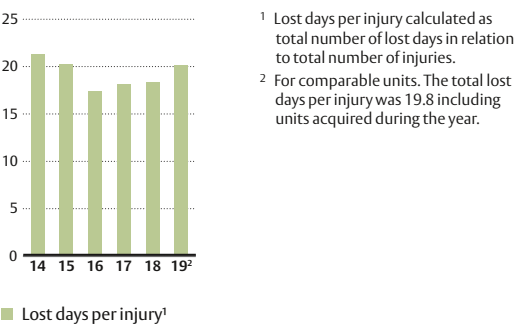
Managing health and safety

Our health and safety management system covers all business entities with at least 10 employees, and all program components at all sites. Since its implementation in 2017, ASSA ABLOY has seen a steady decrease in the injury rate, as well as in lost days per injury. The system involves a Group-wide structured process for reporting, documentation and indicators that provide the basis for analysis of safety risks and injuries. It includes indicators to identify hazards and follow-up training to prevent injuries, as well as safety communications and incident investigation.

Injuries



Lost days per injury<sup>1</sup>



Individual responsibility is the foundation of our approach to health and safety, and each manager has the responsibility to identify risks, take proactive action and encourage the right behavior. Each unit reports on metrics to identify areas for improvement and preventive action. Our risk management system places a strong emphasis on prevention, and showed positive results during 2019. A Group-wide focus on the leading indicators of safety improvements has been developed, and we are tracking both identified and implemented improvements.

Our goal is to offer our employees a safe place to work and safe physical working conditions. All units at ASSA ABLOY have a site safety representative, and all units with more than 50 employees have their own Health and Safety committee.

### Risk management

Risk management is central to improving the working environment and strengthening the Group's safety culture. The Group's Safety Manual builds on our belief that safety is a top priority, that injuries are preventable and that safety incidents are opportunities to learn from and improve on. The manual provides an extensive framework for implementing, reviewing and promoting a coherent approach to the Health and Safety system throughout the Group. It is based on the Group's experience of what is considered best practice, and assists in identifying and reducing workplace hazards. It is a part of the everyday health and safety work at all units. A key component is the identification and risk assessment model, which can be used in Group-wide operations on all levels. This year, a factory-oriented hazard assessment tool called the Operational Safety Assessment was deployed to increase our efforts to reduce workplace hazards.



## Energy-harvesting access system steps up sustainability performance

Imagine an access control system that is completely powered by the insertion of a digital key. No cabling, no mains electricity and no batteries. We've turned that into reality with ASSA ABLOY PULSE – a leap forward for sustainable security solutions.

PULSE relies on our new innovative energy harvesting technology. Encrypted electronics inside a PULSE locking cylinder or padlock are powered by the insertion and turning of a PULSE key. A small generator harnesses the kinetic energy.

The lock's electronics check the validity of a key's credentials to quickly accept or deny its unlock request. To the user, operation looks and feels familiar – just like a traditional mechanical key or our battery-powered electromechanical solution, CLIQ. PULSE's intelligent, self-powered security backbone works out of sight.

While battery-powered locking devices are generally more energy efficient than mains-powered

access control, non-renewable resources remain embodied in the battery itself – particularly if a user fails to recycle properly. Energy harvesting removes the need for external power altogether, including any battery. This marks a significant sustainability improvement.

Reuse is also built into every PULSE system. The keys are easily reprogrammed using our companion software. Security managers can simply delete and reprogram permissions stored in each key. Likewise, with PULSE cylinders and padlocks, if you wish to relocate them to a new door or building, this is easily done without having to start from scratch with new locks.

We believe that the wider launch of ASSA ABLOY PULSE, set to continue through 2020, will make a major contribution to sustainable security. Our message: the right access control can reduce your building's environmental footprint.

## Establishing a strong workplace safety culture in Korea

**CHALLENGE:** ASSA ABLOY's door closer plant in South Korea, is a manufacturer door closers and floor springs with approximately 200 shop floor workers. A focus on productivity, with new machinery, had resulted in an unacceptable level of safety-related incidents.

**SOLUTION:** The South Korean team decided to establish a strong workplace safety culture to change the mindset and attitude of our employees. Every morning before work begins, a routine sees employees remind themselves that safety is our number one priority and everyone's responsibility.

In addition, two major safety programs have been introduced since 2017. A 'near-miss' program has been expanded to identify unsafe conditions and 670 potential hazards have been recognized and addressed. A safety assessment for all facilities in the plant has been implemented and 327 identified hazards have been resolved.

**RESULT:** Through these continuous safety enhancement activities, the time lost through injuries has fallen by more than 90% compared with 2015. Everyone has changed their attitude towards safety, taking responsibility to create a safer workplace.





# 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 of the Group's actions, behavior and external communications.**

## Frameworks and responsibilities

ASSA ABLOY has been a signatory to the UN Global Compact since 2008. Our affiliation with the UN Global Compact means that we support and commit to actively promoting and respecting the 10 principles on human rights, labor standards, the environment, and anti-corruption in our 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 our 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 30 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 and agree to abide by it and any related policies within three months of joining the Group.

ASSA ABLOY respects the laws and regulations of the countries in which we operate. 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 was launched during 2019.

## Business Partner Code of Conduct

Our 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

Together with the launch of the new version of the Code of Conduct In 2019, a new web-based training program was developed. It includes information and checkpoints to promote dialogue and raise awareness of the Code of Conduct among our employees. The training program also clarifies what is expected of our employees. The Code of Conduct is being rolled-out throughout the Group.

### The Code of Conduct Committee

ASSA ABLOY has a Code of Conduct Committee, which is chaired by the Executive Vice President & CHRO. Its members include the Director of 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 receive information from whistle-blowers and the committee ensures that such matters are dealt with appropriately and followed through. The committee meets three times per year.

### Growing with care

As we grow 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 our 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, we work to ensure that the business is run in line with ASSA ABLOY's Code of Conduct and beliefs. The ability to grow responsibly promotes our performance.

### Reporting Code of Conduct concerns

Conducting business in an ethical manner is vital to our long-term success. Employees are therefore expected to report Code of Conduct concerns and there are several communication channels available; for example, a central communication channel. The objective is for cases to be resolved on a local level; however in 2019, 31 (31) cases were reported through the central communication channel and dealt with on a Group level. The range of cases demonstrates that the mechanism is used throughout the organization.

The process for handling of Code of Conduct concerns has been set up to ensure that reported concerns are handled in a professional manner and that it is possible for a reporter to (as far as it is legally possible) remain anonymous. Further, since most cases are resolved at local level, the process is the same for all divisions and the requirements for closing an investigation are the same in all divisions.

### 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. We carry out one to three audits every year with a focus on our manufacturing sites in Africa, Asia, Eastern Europe, the Middle East and South America. The units are given specific improvement actions to fulfil, based on the audit results. In 2019, three external audits were performed on ASSA ABLOY's operations in the United Arab Emirates, Hungary and Brazil.

## Transparency documentation vital to LBC certification



**CHALLENGE:** The Kendeda Building for Innovative Sustainable Design is a new facility at Georgia Institute of Technology in Atlanta, US. The design and construction team set the ambitious goal of building the largest Living Building Challenge 3.1 certified facility in the Southeast United States. The Living Building Challenge (LBC) is a rigorous green building certification program which aims at net zero or net-positive energy, water, and waste. Attaining LBC certification requires building components – including door openings – that are backed by transparency documentation that lists material ingredients used in the product.

**SOLUTION:** ASSA ABLOY works directly with customers to meet LBC standards, providing clear and concise documentation illustrating the contributions offered by various products. 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 the materials used in its construction.

**RESULT:** The ASSA ABLOY Group brand products installed throughout the building with transparency documentation enabled the design and construction team to use the building's door openings as a sustainability asset to help achieve LBC certification.

# Organizational responsibility

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

**Managing the sustainability agenda**

Our 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 sustaina-

bility 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.

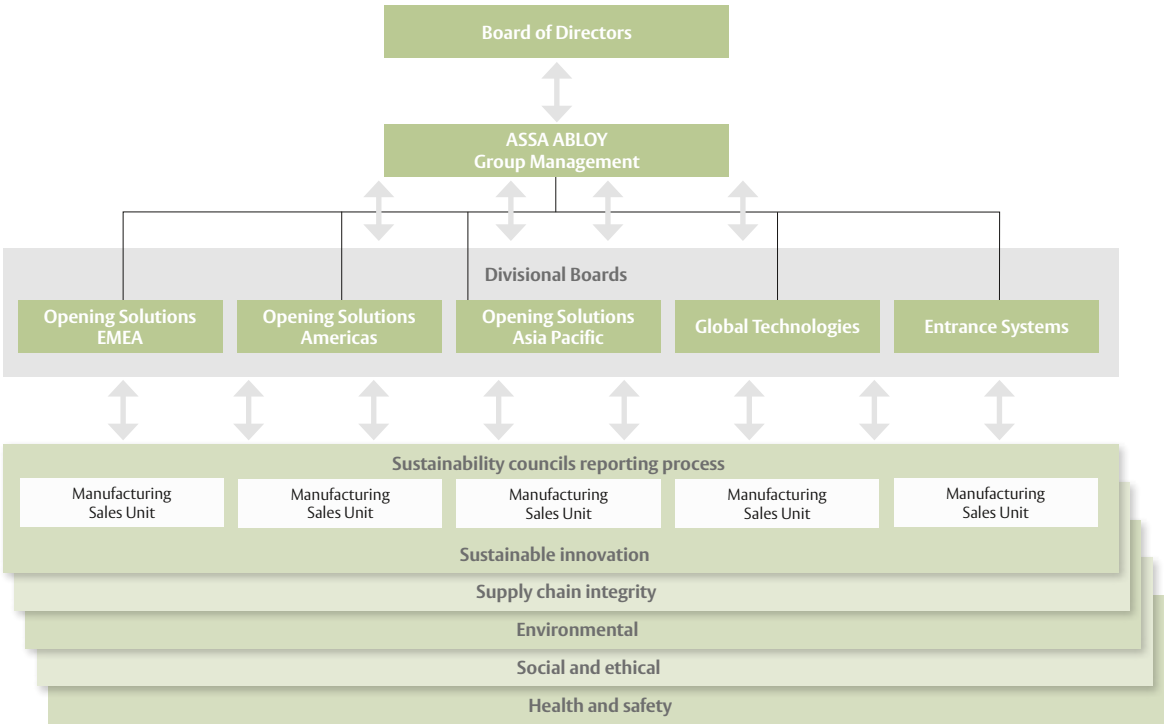
**Responsibilities**

Each division is responsible for managing our 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 our 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,

Organizational responsibility



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

We have 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 our sustainability targets. All companies and divisions in the Group can access information from the database to compare progress and trends. In 2019, 371 (361) 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 our Sustainability Council, which tracks the performance of individual KPIs, and the results are presented at Group Management meetings.

### ASSA ABLOY's councils

Our 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 eight to ten times each year, mostly through virtual meetings to cut down on carbon intensive travel; 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, Health and Safety, and Legal 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	Charles Robinson, Director of Sustainability <sup>1</sup>	Maria Romberg Ewerth, Chief Human Resources Officer	Maria Romberg Ewerth, Chief Human Resources Officer	Johan Ahlgren, Group General Counsel
Opening Solutions EMEA	David Moser, VP Product Innovation	Lee Philp, VP Operations	Leandro Peraro, Sustainability Manager	Allan Cooper, VP Human Resources	Leandro Peraro, Sustainability Manager	Hemma Patel, General Counsel
Opening Solutions Americas	Amy Musanti, Director of Sustainable Building Solutions	Jody Paviglionite, VP Supply Management	Vinny Yakoobian, Director Operational Excellence	Jack Dwyer, VP Human Resources and Administration	Kimberly Cummins, Human Resources Manager ASSA ABLOY Berlin	Page Heslin, General Counsel
Opening Solutions Asia Pacific	Jamie Tawhai, VP Innovation	Michael Deng, Sustainability Manager	Michael Deng, Sustainability Manager	Sally Georgas, Global Director Human Resources	Sally Georgas, Global Director Human Resources	Ivan Lu, General Counsel
HID Global	Ted Hoffman, Director Engineering	Joshua Freeman, VP Quality and Process Excellence	Jeff Sasse, Director Global Sustainability	Lisa Woodson, VP Human Resources	Jeff Sasse, Director Global Sustainability	Karen Higgins, 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	Ann-Charlotte Högberg, 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	Jakob Hedén, 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	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.

<sup>1</sup> A dedicated Director of Sustainability, Charles Robinson, was appointed during the year with the responsibility to coordinate all sustainability initiatives in the ASSA ABLOY Group through close collaboration with the different stakeholders and functions across the organization.

# Stakeholder engagement and materiality analysis

**Engagement with a wide variety of stakeholders helps us to be aware of societal expectations on the company. Stakeholder engagement also provides the basis for our materiality analysis, which provides a clear understanding of which sustainability topics that are the most significant to ASSA ABLOY and our stakeholders.**

## Stakeholder engagement

Our main stakeholder groups are those with a high level of influence and interaction, and with whom we interact directly and actively in our 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 our products are manufactured, along with details of the materials contained in products, and is addressed by the company's work with our 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 our products can make a contribution. We respond to this interest by engaging and collaborating with customers in product innovation and at relevant conferences and events, as well as through our membership of green building organizations and initiatives.

**Investors and shareholders** have become increasingly interested in sustainability issues in recent years. We engage 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, mergers & acquisitions 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. We work 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 our 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 we conducted our first materiality analysis. The analysis was reviewed in 2015, and again in 2017. During 2018, we 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 of 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 our business.

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

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

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

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



**Nina Bönnelyche**  
Business Analyst, Responsible Investment, Folksam

**“ASSA ABLOY is one of the few companies in the industry conducting supplier audits. This is positive.”**

ASSA ABLOY's core values sets the tone and direction of how the business is developed. Integration of sustainability aspects into the products is a strategic focus with great potential. ASSA ABLOY has improved how suppliers' audits are conducted in relation to the Code of Conduct. Important aspects are environmental and human rights compliance as well as third-party verification. ASSA ABLOY is one of the few companies in the industry conducting supplier audits. This is positive.

Folksam was one of the founders of the UN Convened Net Zero Asset Owner Alliance which was launched in September 2019. Through this Alliance we have committed

to net zero emissions of greenhouse gas by 2050 within our investments. The approach is to emphasize greenhouse gas emissions reduction in the real economy. We expect the companies we invest in to set up and deliver on their own greenhouse gas emission targets. ASSA ABLOY is doing their part of the job, but all companies must drive for continuous improvement.

Gender balance is a key challenge for ASSA ABLOY, with women accounting for around 20% of top managers. ASSA ABLOY needs to focus on how to attract, develop and keep women. A competitive strategy is needed if 30% of managerial positions are to be held by women by 2020.



**Peter Lundkvist**  
Senior Strategist and Head of Corporate Governance, Third Swedish National Pension Fund

**“I appreciate that ASSA ABLOY has evaluated its impact on a sustainable development and analyzed which of the UN's Sustainable Development goals that are in line with the business model.”**

ASSA ABLOY is constantly moving forward with a high degree of innovation and is at the forefront in relation to many other companies when it comes to integrating sustainability within business operation. ASSA ABLOY has a great opportunity to make a positive difference with its products. By continuous progress in areas such as digitalization and AI, there are no limitations on how products can be further developed. ASSA ABLOY's products are a vital component in creating sustainable cities today and in the future.

I appreciate that ASSA ABLOY has evaluated its impact on a sustainable development and analyzed which of the UN's Sustainable Development goals that are in line with the business model. ASSA ABLOY uses quantitative and qualitative targets with a clear ambition to reduce its climate impact. There are benefits with longer time cycles when setting sustainability targets and when evaluating sustaina-

bility activities. ASSA ABLOY's five-year sustainability programs are well considered.

ASSA ABLOY's greatest asset is the people behind the technology – implementing a corporate culture within the business and throughout the supply chain is therefore central. ASSA ABLOY has shown that they take the employee matters seriously through a clear focus on health and safety in recent years. It is important that ASSA ABLOY acknowledges the inherent risks of operating in low-cost countries. Transparency and constant work with social aspects throughout the supply chain are key for future success.

As an investor, I expect a stronger link between ASSA ABLOY's sustainability and financial performance. ASSA ABLOY would also benefit from risk scenario analyses in accordance with Task Force on Climate-related Financial Disclosures framework.



**Anette Dahlberg**  
Portfolio Manager, Länsförsäkringar

**“ASSA ABLOY has taken initiative towards a more equal organization but gender balance remains a key challenge.”**

ASSA ABLOY helps its customers become more sustainable through energy-saving solutions and product innovation. In its own production there is active work to reduce the use of energy, use fewer and smaller quantities of dangerous chemicals and to reduce water consumption. ASSA ABLOY is actively working to develop more sustainable products and services. For example, methods to avoid the use of conflict minerals, and solutions to generate energy from the movement when the key is inserted in the key lock are very interesting.

ASSA ABLOY has taken initiative towards a more equal organization. ASSA ABLOY encourages women to apply for internally advertised managerial positions, and I appreciate

ASSA ABLOY's ambition to increase the opportunities within the company. Gender balance remains a key challenge.

It is important for ASSA ABLOY to ensure that the company's suppliers meet the requirements in the Code of Conduct. It is extensive work to ensure that suppliers in low-cost countries comply with the ASSA ABLOY Code of Conduct. This is one of ASSA ABLOY's largest challenges moving forward.

As an investor, it is desirable to see measurable performance and examples of how improvements are made. In the future, I want ASSA ABLOY to strive to give concrete examples of how ASSA ABLOY's products help their customers reduce their energy use.



# Anti-corruption and other compliance programs

**We have specific global compliance programs and policies within the areas of anti-corruption, antitrust, export control and data protection, which supplement and build on our Code of Conduct. In 2019, we continued with the implementation of our 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 2019

### • Data Protection Compliance Program update and 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 Trans-border Flows of Personal Data. During 2019, we have updated the Data Protection Compliance Program to further clarify its global scope and local law application and added and updated appendices for further guidance. Implementation of the program continues throughout the Group through dialogue with internal stakeholders to ensure understanding and commitment by every employee concerned.

### • Anti-Corruption Compliance Program

The Anti-Corruption Compliance Program was updated to further stress that it covers a broader scope than only anti-bribery.

### • Handling of Code of Conduct cases streamlined

The frequency of the Code of Conduct Committee meetings has increased in order to speed up the investigation process. Investigation guidelines have also been introduced to ensure that Code of Conduct cases are handled professionally and in the same way within the divisions.

### • Anti-corruption reviews

During the year, anti-corruption reviews have been conducted in Asia, South America and Europe.

### • Introduction of Compliance Dashboard

The implementation of the Anti-Corruption Compliance Program is regularly reviewed at the divisions' board meetings. Implementation is presented in a dashboard format.

## 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. Implementation of the Anti-Corruption Compliance Program is regularly reviewed at the divisions' board meetings. 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 2019 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 Asia, South America and Europe. The implementation of the programs is reviewed through our established

process for internal control in all operating companies and internal audits.

We also have 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 we are working continuously to evaluate and further develop their effectiveness.

## Anti-Corruption Compliance Program

Corruption increases inequality, the cost of doing business and reduces efficiency. We work actively to prevent corruption in our business. Our 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 its essential components. The 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.

We conduct business worldwide and consequently operate 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 our sales are handled through third parties, such as distributors, and the majority of our anti-corruption efforts are used to ensure that such third parties acting on behalf of us 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

Our 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 2019, 84% (83) of relevant employees had participated in anti-corruption training.

## Continued work in 2020

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. The anti-corruption reviews will continue in regions where the corruption risk exposure is perceived to be high and the process for follow-up of implementation of the Anti-Corruption Compliance Program at divisional level will be further developed.

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

## Progress in 2019

### • New acquisitions

12 acquisitions were consolidated during the year. 8% of the acquisitions were in emerging markets.

### • Acquisition post-closing follow up

A new process for formally following up on all acquisitions after some 15–18 months was implemented during 2018. The follow up focuses both on financial performance and synergies but also on the status of the integration process. This process has continued during 2019 and has become an integral part of the acquisition process.

### • Integration manager

The process for appointing a dedicated integration manager in all acquisitions that was formalized during 2018 has continued. The integration manager is appointed already during the acquisition process and is the lead person post-closing for managing all integration aspects of the acquired company.

With more than 200 acquisitions during the last 15 years, we have 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. We provide an overview of company-wide activities, and support divisions with common compliance guidelines.

We prefer to acquire sound companies that share our values and business practices, and the successful integration of acquired companies is an essential part of mitigating risks.

## The acquisition process

Our 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 us 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 our supplier database, which is continuously assessed and audited.

As part of the acquisition process, we are obliged in certain cases to file for antitrust approval. During 2019, the company did this in a number of cases when it was required.

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

## Risk management

We have identified the main areas of potential risks related to acquisitions, all of which are covered by Legal and Operational due diligence. Our 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

Our 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 our 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

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<sup>1</sup> Data for employee contract by region and employee type by gender is not available.

## Topic-specific Disclosures

GRI Standard	Disclosure		Page	Linked SDGs	Topic in ASSA ABLOY's Materiality Analysis
Economic					
Anti-corruption GRI 205: Anti-corruption 2016	103-1/2/3	Management Approach*	6–7, 12–13, 26–29, 30, 32–33	12	Anti-corruption
	205-1	Operations assessed for risks related to corruption	32, 33		
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Environmental					
Energy GRI 302: Energy 2016	103-1/2/3	Management Approach*	6–8, 15–17, 21, 29–26, 30	12	Energy
	302-1	Energy consumption within the organization	16–17, 36	8 12 13	
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Water GRI 303: Water 2016	103-1/2/3	Management Approach*	6–8, 15, 18, 26–30	12	Water
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Emissions GRI 305: Emissions 2016	103-1/2/3	Management Approach*	6–8, 15–17, 20, 26–29, 30	12	Emissions
	305-1	Direct (Scope 1) GHG emissions	17, 36	12 13	
	305-2	Energy indirect (Scope 2) GHG emissions	17, 36	12 13	
	305-4	GHG emissions intensity	17	13	
	305-5	Reduction of GHG emissions	17, 36	13	
	305-6	Emissions of ozone-depleting substances (ODS)	17	12	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions <sup>1</sup>	20	12	
Effluents and Waste GRI 306: Effluents and Waste 2016	103-1/2/3	Management Approach*	6–8, 15, 18–19, 26–30	12	Water Waste
	306-1	Water discharge by quality and destination	18	6 12	
	306-2	Waste by type and disposal method	19	6 12	
	306-3	Significant spills	19	6 12	
Environmental Compliance GRI 307: Environmental Compliance 2016	103-1/2/3	Management Approach*	6–8, 15, 26–30	12	Environmental compliance
	307-1	Non-compliance with environmental laws and regulations	15		
Supplier Environmental Assessment GRI 308: Supplier Environmental Assessment 2016	103-1/2/3	Management Approach*	6–8, 12–15, 21, 26–30	12	Procurement practices
	308-1	New suppliers that were screened using environmental criteria	12–14		
Environmental management systems	103-1/2/3	Management Approach*	6–8, 15, 21, 26–30	12	Environmental management systems
		Number of entities covered by ISO 14001 certificates and other certifiable environmental management systems	21		
Social					
Occupational Health and Safety GRI 403: Occupational Health and Safety 2016	103-1/2/3	Management Approach*	6–8, 22–25, 26–30	12	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 <sup>2</sup>	24		
Diversity and Equal Opportunity GRI 405: Diversity and Equal Opportunity 2016	103-1/2/3	Management Approach*	6–8, 21–25, 26, 30	12	Diversity
	405-1	Diversity of governance bodies and employees <sup>3</sup>	23	8	
Human Rights Assessment GRI 412: Human Rights Assessment 2016	103-1/2/3	Management Approach*	6–8, 12–14, 26–30, 33	12	Acquisitions
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	33		
Supplier Social Assessment GRI 414: Supplier Social Assessment 2016	103-1/2/3	Management Approach*	6–8, 12–14, 26–30	12	Procurement practices
	414-1	New suppliers that were screened using social criteria	12–14	8	
Marketing and Labeling GRI 417: Marketing and Labeling 2016	103-1/2/3	Management Approach*	6–7, 9–10, 26–30	12	Sustainable innovation/ sustainable products
	417-1	Requirements for product and service information and labeling	9–10	12	

\* GRI 103: Management Approach 2016

<sup>1</sup> Data includes the use of chlorinated organic solvents. Data by nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions is not available.<sup>2</sup> Data by gender and region not available. Absenteeism and occupational diseases not available on Group level.<sup>3</sup> Data by age groups not available.

# Reporting principles

**We work continuously to improve reporting transparency, scope, quality and the frequency of information. This is the Group's fourteenth 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 2019 has increased from 361 to 371. The data in the Sustainability Report represents entities where 90% of the Group's employees work. In terms of manufacturing activities the report is estimated to cover entities that represent 95% of the Group's 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 the majority ownership.

## Calculation principles

The reported number of employees represents the number of employed persons at the end of 2019.

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 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.

We 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's financial reporting. It also supports sustainability management in all areas of operations.

We have improved our 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 2019 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.

We report our sustainability performance annually, and the most recent Sustainability Report, for 2019, was issued in March 2020.

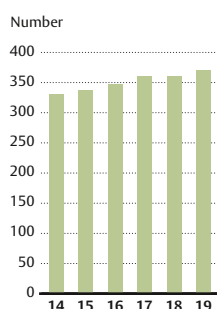
## External assurance

ASSA ABLOY has not sought external assurance for the Sustainability Report of 2019. PwC Sweden has performed a GRI check and confirms that we report 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. We also present our sustainability approach to external audiences, such as analysts and investors.

Number of reporting units



The number of reporting units in the Group has increased to 371 (361).



# 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 2019 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, 6 February 2020

PricewaterhouseCoopers AB

Bo Karlsson  
Authorized Public Accountant  
Auditor-in-charge

Linda Corneliusson  
Authorized Public Accountant

## Glossary

**Building Information Modeling (BIM):** 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:** A sustainability assessment method and rating system for buildings, measuring a building's environmental performance during building design, construction and operation.

**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.

**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.

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

**Injury rate:** Measure of 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 plus total cost for personnel.

## Contacts

### Sustainable innovation:

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

### Supply-chain integrity:

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

### Environmental sustainability:

Charles Robinson, ASSA ABLOY AB  
Director of Sustainability  
charles.robinson@assaabloy.com  
Tel: +353 (0) 8 770 985 83

### Social and ethical matters:

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



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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**



## Heroes don't always wear capes

**CHALLENGE:** What can we do to improve our safety-related behavior? Encouraging change is a challenge because entrenched negative safety behaviors need to be identified and overcome. Change begins with clear communication, and support and guidance for employees to improve safety awareness and achieve our goal of an injury-free workplace.

**SOLUTION:** As of 2018, 1,900 ASSA ABLOY Entrance Systems field service technicians participated in an annual safety workshop. Its aim is to increase safety awareness and understanding of why accidents happen; what makes a safe workplace and what the individual can do to achieve it. In 2019, Entrance Systems also introduced a health and safety campaign called 'Heroes don't always wear capes.' The campaign celebrates the service technicians as heroes who wear protective clothing and focus on working safely.

**RESULT:** The safety workshops and campaign improved safety awareness, and educated employees on the importance of clear communications when it comes to safety behaviours. By understanding safety risks, communicating effectively, and living by our values, employees improved our safety culture. ASSA ABLOY has set a target to reduce the injury rate by 55% between 2015 and 2020. In 2019 the Injury Rate was 3.0, which represents a reduction of 55% compared with the 2015 level and realises the 2020 target.

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