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## Sustainability at KONE

At KONE, sustainability is embedded in our organizational culture. It is how we treat each other and our stakeholders, how we take the environment into account in all of our actions, and how we foster economic performance now and in the future. Our vision is to deliver the best People Flow® experience. Sustainability is a source of innovation and a competitive advantage for us. KONE is committed to conducting our business in a responsible and sustainable way and we expect the same commitment from our partners.



**Read more** about our approach to sustainability at www.kone.com/sustainability



INTERVIEW WITH THE CHAIRMAN KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT

AND THE PRESIDENT AND CEO

"We need to be able to understand customer needs better, and offer flexible solutions which benefit customers and users in the best way."

-Henrik Ehrnrooth

## SUSTAINABILITY FOR AN URBANIZING WORLD



A conversation with Chairman Antti Herlin (on the right) and President and CEO Henrik Ehrnrooth on our progress in 2016. Picture taken from KONE's Annual General Meeting in Helsinki, Finland, in March 2017.

# Has sustainability become a more significant trend during 2016?

Antti Herlin (AH): Sustainability is as significant as it always has been for all of us at KONE. We live in a world where markets and technologies are changing fast, competition is intensifying and urbanization is expanding. There are many economic, environmental and social aspects to this. But there are also many opportunities.

I believe at KONE we have done a good job in being more visible and clear about our mission and vision and how we create value for our customers and users, and society at large. That not only means better people flow; but also smarter ways of doing business. Sustainability is a huge part of achieving that.

Henrik Ehrnrooth (HE): There are also other trends which have accelerated, and which we have addressed in concrete ways. First is the move towards customer centricity and delivering more value to our customers. Our customers need us to provide solutions to problems, to provide outcomes that are based on their business success. Because when our customers succeed then we benefit. We need to be able to understand these needs better than anyone else, and offer flexible solutions which benefit customers and users in the best way.

Second is the urbanization and the continuing development of cities, buildings, populations and infrastructure. For KONE, this means it is no longer enough to have products and services that perform a single task. We need to be able to meet the needs for changing demographics, different types of accommodation and use technologies in

better ways for instance by reducing energy consumption and waste.

We will for example maximize all that digitalization has to offer. It can make our equipment smarter, and help our customers be more successful.

# How would you summarize KONE's sustainability performance in 2016?

**AH:** Our whole industry – not only KONE – faces change on a number of fronts. But change means opportunity.

We have taken positive steps in providing sustainable technological solutions for the whole equipment life-cycle. Here it is important to be efficient with resources and we have done this wisely. There are many examples of where we have become more effective and efficient, which ultimately means we are saving our customers' resources.

HE: Yes, it was a good year in terms of sustainability performance. We continued to develop our solutions in terms of their ecoefficiency, for instance, we now have more products in the A Class category according to the ISO 25745 energy efficiency standards. Secondly, we have also actively developed our services business, to bring better solutions to our customers. In 2016 we tested and piloted many new services, which helped our customers to improve their business. As a result, we have seen strong growth there and a clear improvement in our customer loyalty scores.

It's also important to note that 2016 was the last year of our development programs, which were part of our strategy - and I am pleased to see that we made good progress in our strategic target to be a leader in sustainability.

Naturally we have been developing our strategy and we are now embarking on the next phase, Winning with Customers. This marks a new and inspiring chapter for us.

In a fast-changing and connected world that Antti referred to, customers advocating on our behalf will lead to the best form of growth and success for KONE. Winning with Customers will help differentiate us and bring new levels of customer centricity that have not been seen in this industry before. This way we will help make customers businesses more sustainable.

Can you reflect on the people aspects of KONE's progress, especially in areas like safety and quality?

AH: Well, I think that quality and safety continue to be an integral part of KONE's strategy and a cornerstone of our business. Many cities are undergoing urban transformations and adopting sustainable practices. However, it is important to remember that in a life-cycle business, such as ours, safety and quality remain essential and they are deeply embedded in KONE's culture.

**HE**: I'd like to follow that by going through how safety and quality are related.

Everything we do starts with safety, and this can never be overstated. After all, each day, over a billion people use equipment that we service and we have thousands of employees and contractors serving customers and servicing equipment. We always want our employees, and people who use our equipment, to return home safely.

In 2016, it was good to see that our Industrial Injury Frequency Rate (IIFR) was reduced further to 2.1, down from 2.3 last year. The average lost days per incident was reduced by 14.2%.

Service quality is absolutely critical to safety. We work very closely together with customers, building owners and equipment users to educate and promote safety and deal with situations that could lead to potential safety risks.

From a quality point of view, the quality culture we promote encompasses our products, processes, and all the services we offer from design to maintenance and modernization.

Everyone at KONE is responsible for quality.

# And have there been notable developments during the year, when it comes to KONE people and employees?

AH: KONE people continue to be our best ambassadors and a diverse employee base means

we can attract a more diverse base of customers around the world. It is clear that we need to be able to build deeper customer relationships and better understand customer needs.

**HE:** I couldn't agree more. If we are to succeed in a customer-centric environment, we need many new perspectives and ideas, as well as the ability to implement and execute.

There's no doubt we have made progress: in 2016, over 97% of eligible staff and over 94% of eligible technicians took part in performance and career development reviews. At the same time there has been a strong focus on competence development, with over 3,400 training programs in our training offering.

However, we need to continue to encourage diversity at KONE and make it a competitive advantage for us. Diversity will help broaden our capabilities, deliver better value to our customers and meet their changing needs.

Finally, how has KONE improved its business performance while implementing sustainable practices?

**HE:** It's worth remembering that sustainable practices are good for business. Sustainability leads to better energy efficiency, better processes and better management of our resources.

And, ultimately, benefits are passed on to our customers, bringing them added value. From our operations point of view, KONE's carbon footprint relative to net sales decreased by 4.1% compared to 2015.

Our achievements have been recognized worldwide. 2016 marked the second year KONE has earned a place on the A List for the CDP as one of only 193 companies from thousands of others independently assessed against CDP's scoring methods. We also received recognition as a leading supplier for action on climate change.

AH: Let me conclude by adding that sustainable and socially responsible activity is an important prerequisite for the long-term success of our company. They are a driver for innovation and growth and I believe there is an exciting future ahead. With this in mind, we of course strive to enhance our contribution to a sustainable future, so that we can continue to earn our stakeholders' trust.

"Sustainable and socially responsible activity is an important prerequisite for the long-term success of our company."

INTERVIEW WITH THE CHAIRMAN

AND THE PRESIDENT AND CEO

- Antti Herlin

Read more

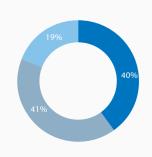
about KONE's financial performance on p. 38 - 40.

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SUSTAINABILITY HIGHLIGHTS IN 2016 KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT SUSTAINABILITY HIGHLIGHTS IN 2016

## SUSTAINABILITY HIGHLIGHTS IN 2016

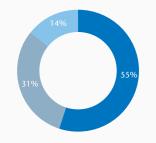
## Sales by market, 2016



- EMEA 40% (39%)
- Asia-Pacific 41% (44%)
- Americas 19% (17%)

(2015 figures in brackets)

## Sales by business, 2016

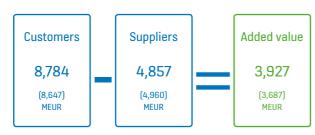


- New equipment 55% (57%)
- Maintenance 31% (31%)
- Modernization 14% (12%)

(2015 figures in brackets)

Key financial figures		2015	2016	change, %
Orders received	MEUR	7,959	7,621	-4.2%
Order book	MEUR	8,201	8,952	7.7%
Sales	MEUR	8,647	8,784	1.6%
Operating income	MEUR	1,241	1,293	4.2%
Operating income margin	%	14.4	14.7	
Cash flow from operations (before financing items and taxes)	MEUR	1,474	1,509	
Net income	MEUR	1,053.1	1,023	
Basic earnings per share	EUR	2.01	2.00	
Interest-bearing net debt	MEUR	-1,512.6	-1,687.6	
Total equity/total assets	%	45.4	46.8	
Gearing	%	-58.7	-60.4	
R&D expenditure	MEUR	121.7	140.5	

## KONE's economic impacts in 2016

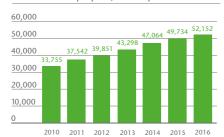


(2015 figures in brackets)

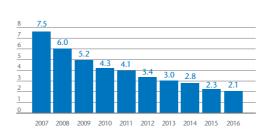
## Stakeholders

Employees	1,962 (1,825) MEUI
Creditors	-36 (-122) MEUI
Public sector	<b>979</b> (932) MEUI
Shareholders	<b>795</b> (718) MEUI
Economic value retained in the company	<b>226</b> (334 MEU)

## Number of employees, end of year

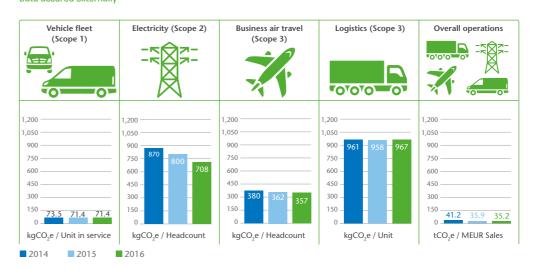


Industrial Injury Frequency Rate development among KONE employees



KONE tracks the number of lost time injuries of one day or more, per million hours worked, as a key performance indicator. The IIFR covers KONE's own employees.

## Relative operational carbon footprint Data assured externally



Energy consu	mption	Unit	2014	2015	2016
Direct	Heating and vehicle fleet fuels (heating oil, natural gas, petrol, diesel, biodiesel)	MWh	404,200*	413,000*	423,000
Indirect	Electricity	MWh	80,000*	79,900*	78,900
	District heat	MWh	15,900	15,100	15,900

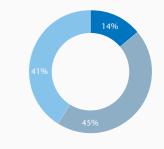
Carbon footprint of	KONE's operations, tCO <sub>2</sub> e	2014	2015	2016
Direct energy (scope 1)	Vehicle fleet	85,800	88,500	92,000
	Heating fuels	12,600*	12,300*	11,100
	Cooling gases	1,400	1,900	1,600
IIndirect energy (scope 2)	Electricity consumption and district heat**	40,900	39,800*	36,900
Other relevant indirect (scope 3)	Logistics	141,000*	147,700*	149,000
	Business air travel	17,900	18,000*	18,600
	Waste	2,300	2,300*	1,800
Total		301,900	310,500	311,000

Waste, tonnes	20	)14	2015	2016
Recycled waste	16	,800*	16,100*	17,500
Incinerated waste	2,2	200	2,200	2,900
Landfill waste	2,7	700	3,000	1,900
Hazardous waste	90	0*	800	800
Total	22	,600	22,100	23,100
*Restated				

Water consumption		2014	2015	2016
Total	m³	390,000	390,000	350,000

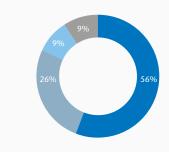
 $\blacksquare$  Scope 1, scope 2, and scope 3 logistics and business air travel data assured by Mitopro Oy

## Employees by market, 2016



- Americas: 14% (13%)
- Asia-Pacific: 45% (45%)
- EMEA: 41% (42%) (2015 figures in brackets)

## Employees by job category, 2016



- Maintenance and modernization 56% (56%)
- New equipment, sales and installation 26% (26%)
- Manufacturing 9% (9%)
- Administration, IT and R&D 9% (9%)

(2015 figures in brackets)

STRATEGY AND MEGATRENDS KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT STRATEGY AND MEGATRENDS

# TOWARDS WINNING WITH CUSTOMERS – OUR STRATEGY AND MEGATRENDS

#### OUR CULTURE

We are passionate about safety, quality, and the KONE values, which together form a strong foundation for our company culture. Our culture builds on our values of delighting the customer, energy for renewal, passion for performance, and winning together.

We move over 1 billion users each day, with over 1.1 million elevators and escalators in our service base. All this, while serving more than 450,000 customers around the world.

At KONE, our vision is to deliver the best People Flow® experience. This means we make sure that the people who use our products and services, the people who live in towns and cities, can move around more easily, more effectively and have more enjoyable experiences. Our job is to make the best of the world's cities, buildings and public spaces, because we believe that cities are part of the solution for a better future. Our mission is to improve the flow of urban life.

## Megatrends that shape our world

The global elevator and escalator industry is shaped by two major megatrends: Urbanization and technological disruption.

The world's cities are constantly growing. They attract billions of people and by 2050 more than two in every three people on the planet will live in urban areas. Estimates tell us that around 200,000 people move into cities across the globe each and every day, which is the same as 140 people every minute. It is by understanding urbanization and focusing on improvements for people that we can create better buildings, better low-carbon cities and a better world.

Rapid technological advancements in connectivity, mobility, and computing power are changing many aspects of our lives. Technological disruption drives change and means a faster pace of business and new expectations for ways of working. New technology gives us a great opportunity to serve our customers in smarter and more exciting ways.

## Everything starts with the customer

Every one of our customers is different. We want to deliver better value and meet their individual needs. To do this, we are investing more than ever in new technologies, connectivity and new solutions. With new ways of working, partnering and co-creation, we will help our customers improve their businesses.

2016 marked the last year when KONE implemented its five development programs as part of its strategy. Now, in a fast-changing and connected world, we are entering a new strategic

phase for 2017–2020 called Winning with Customers. The objective is to drive differentiation further by putting the needs of customers and users at the center of what we do.

## Strategic targets and four Ways to Win

Our strategic targets are how we measure our success, and they remain unchanged. We aim to have the most loyal customers, be a great place to work, grow faster than the market, have the best financial development in our industry and be a leader in sustainability.

The four Ways to Win bring our strategy to life. Each of these contains a number of programs, which is how we make progress.

## Collaborative innovation and new competencies

To be able to bring new solutions and services to our customers more quickly, we need to collaborate much more with our partners and customers. As we bring more new technologies in order to deliver better value to our customers, we all need to develop new competencies to bring these innovations to life.

## Customer-centric solutions and services

Customers choose partners who best understand their changing needs and help them succeed. We understand these needs, and offer flexible solutions and services which benefit customers and users in the best way.

#### Fast and smart execution

Customers want their partners in construction projects and building services to be professional, fast and reliable. They choose partners that continuously improve and focus on what is essential. We will increase speed and work smarter to focus on activities that are valuable to the customer.

#### True service mindset

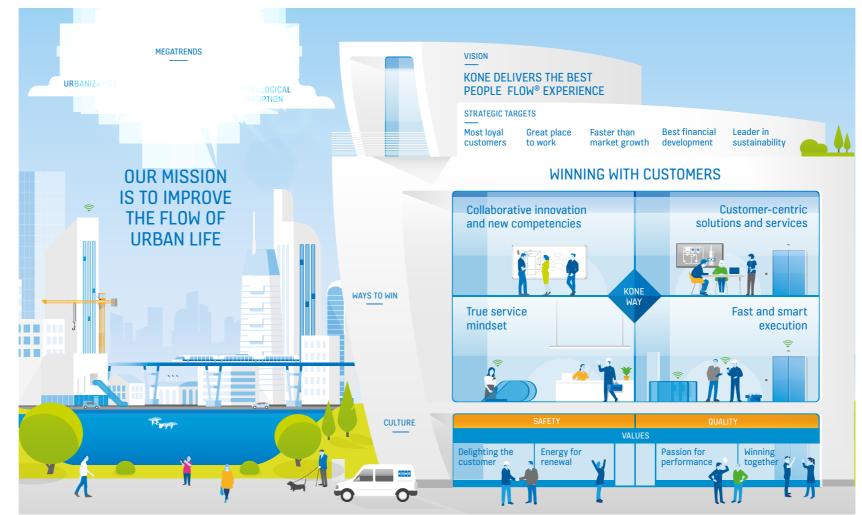
Customers value partners who strive to understand and take action to exceed expectations. We can make a difference by serving our customers better than anybody else.

#### LIFE-CYCLE APPROACH

Our business model is based on a life-cycle approach. This means that we provide value for our customers every step of the way for the entire lifespan of the building. We offer innovative and sustainable new equipment solutions, ensure safety and availability of the equipment in operation and offer modernization solutions for aging equipment.

## **GROWING MAINTENANCE BASE**

KONE delivered approximately
136,000 new elevator and escalator
units in 2016. Our elevator and
escalator maintenance base continued
to grow and was clearly over
1,100,000 units at the end of the year.



MANAGING SUSTAINABILITY KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT

## SUPPORTING THE UN GLOBAL COMPACT

KONE is a committed member to the UN Global Compact. "We are dedicated to carrying out business in a sustainable way, and we are active on many fronts with selected organizations, in order to make the best impact," says Henrik Ehrnrooth, President and CEO, KONE Corporation.

"As a member of the UN Global Compact, KONE is committed to upholding its ten principles, which are aimed at promoting sustainability and fairness in the business environment. Our Sustainability Report communicates our progress on some of the specific initiatives across the breadth of our businesses, including KONE's Code of Conduct, Competition Compliance Policy, and our Environmental Excellence Program. Every day, our solutions help to address the challenges created by urbanization, demographic change, the need for improved energy efficiency, and increased safety demands," Ehrnrooth added.

## MANAGING SUSTAINABILITY AT KONE

KONE is committed to conducting its business in a responsible and sustainable way, and we expect the same commitment from all our partners. We comply with the laws and rules of the societies in which we operate. Our everyday work is guided by KONE's Code of Conduct and other company policies and guidelines.

Sustainability and its management are the responsibilities of KONE's Executive Board and our President and CEO.

Our management and supervisors work to ensure that our employees are familiar with and comply with the legislation, regulations, and internal operating guidelines of their respective areas of responsibility, and that our products and services are in full compliance with all codes and standards applicable to them.

	Management systems and certificates	Management bodies in KONE
Economic responsibility	Finnish Corporate Governance Code, internal control, internal auditing	Board of Directors, Executive Board, President and CEO, Annual General Meeting, Internal Audit function
Social responsibility	KONE Code of Conduct, KONE's Competition Compliance Policy, KONE Supplier Code of Conduct, OHSAS 18001 Occupational health and safety management system	Board of Directors, Executive Board, President and CEO, Internal Audit function, Global Compliance Committee
Environmental and product responsibility	ISO 14001 Environmental management system, ISO 9001 Quality management system, ISO 25745 Parts 2 and 3 Energy performance of lifts, escalators and moving walks, KONE's Supplier Excellence Certification, ISO 50001 Energy Management System, LEED, BREEAM or other green building certification systems	Board of Directors, Executive Board, President and CEO, Quality and Environmental Board



#### Read more

about our corporate governance on p. 76–79 of our Annual Review.

## LISTENING TO OUR STAKEHOLDERS

We work closely with our stakeholders on the various topics of sustainability, and maintain an active dialogue with them. KONE's main stakeholders are our customers, employees, shareholders, suppliers, distributors, media, educational institutions, and local communities.

Keeping an open and continuous dialogue enables us to collaborate efficiently and ensures a predictable business environment for all parties. Read more about this collaboration in the table below.

Stakeholder group	Channels of dialogue	Assessments and key topics raised
KONE deals with over 450,000 customers worldwide. Our main customers are builders, building owners, facility managers, and developers	Customer meetings and events, constant dialogue through solution support, seminars and conferences, company reports, brochures and magazines, company website and social media channels	Annual global customer loyalty survey: Continued positive feedback on product quality, reliability as a partner and maintenance operations, as well as competence of KONE personnel. KONE is continuously developing in several areas: project management, customer communication and collaboration.
KONE pays wages and salaries to over 52,000 employees in over 60 countries	Performance discussions, continuous face- to-face dialogue between employees and managers, European Annual Employee Forum, company intranet, internal employee publications, training events, global learning solutions, innovation creation through Innovation Tool	Pulse employee survey, annual performance discussions, Idea Management System, Innovation Tool. The Pulse results showed clear improvements in the perceived learning, development, and training opportunities available to employees. Cross-team workgroups continued to drive further development of work processes and collaboration.
KONE conducts business with approximately 20,000 suppliers	Continuous one-to-one dialogue, Annual Supplier Day for Strategic Suppliers, trade fairs, steering group meetings, supplier workshops	Annual supplier survey, supplier performance assessment with the Supplier Excellence Certification Program. No material concerns raised, discussions about day-to-day operational issues, for example on how to further improve the logistic processes and quality. (Read more on pages 24-25 and 46-47.)
KONE pays dividends to over 56,000 share- holders, ranging from institutional investors and companies to individuals, public institutions, and non-profit organizations	An active and open dialogue: Financial disclosure is provided through stock exchange releases, as well as financial and other company reports. In addition, more personal channels of dialogue include management meetings with investors and analysts, annual general meetings, and capital markets days. We have a dedicated Investor Relations team, which coordinates all of KONE's Investor Relations activities. This ensures fair and equal access to company information and to its spokespersons	Some of the most discussed topics with KONE's stakeholders include current and future business performance, KONE's strategy, the development of KONE's end markets as well as KONE's capital allocation. We receive direct feedback from financial market representatives in discussions and meetings, and we collect feedback from the financial community also through surveys.
KONE collaborates with authorized distributors in over 80 countries	Continuous dialogue through daily contacts, regular country visits, distributors' meetings and various support tools	Customer survey, monitoring of sales-related activities, and direct feedback from distributors. No material concerns raised.
KONE communicates proactively and openly with representatives of the media	Press releases, interviews, background briefings, visits, press events, factory tours, publications, company website and social media channels	Surveys, media analysis, reputation studies. No special issues raised during the reporting period
KONE collaborates with educational institutions locally and globally	KONE International Trainee Program, CEMS, Singularity University, thesis opportunities, local internships, participation in recruitment fairs, common projects, guest lectures, participation in research programs and social media platforms	Most attractive workplace surveys, online tracking. Efforts for deepening school collaboration and social media visibility have been increased to further strength- en talent acquisition and employer brand.
Society - KONE pays direct taxes, social security, and employer expenses in more than 60 countries	Media coverage, company website and social media channels, reports, stakeholder relations	Sustainability surveys, reputation studies. No special issues raised during the reporting period.

# MEMBERSHIPS AND POSITIONS OF TRUST

KONE is an active participant in organizations developing codes, standards, and guidelines for improving safety, accessibility, energy efficiency, as well as other organizations advancing sustainable development. In 2016, KONE continued to be a member or joined the following organizations:

- United Nations Global Compact
- The International Organization for Standardization (ISO)
- Standardization Administration of China (SAC)
- The European Committee for Standardization (CEN)
- International Trade Associations, such as the European Lift Association (ELA), the Pacific Asia Lift and Escalator Association (PALEA), and the National Elevator Industry, Inc. (NEII) in North America
- World Business Council for Sustainable Development (WBCSD)
- Green building councils in the United States, Finland, India, Italy, Romania, Singapore, the Netherlands, Sweden, Vietnam and the Czech Republic
- World Alliance of Low Carbon Cities (WALCC)
- European Round Table of Industrialists' Energy and Climate Change Working Group (ERT)
- Cleantech Finland
- Climate Leadership Council
- Council on Tall Buildings and Urban Habitat (CTBUH)
- FIBS Finnish corporate responsibility network

MATERIALITY ANALYSIS KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT MATERIALITY ANALYSIS

## SUSTAINABILITY FOCUS AREAS AND MATERIAL TOPICS

#### **DEFINING THE FOCUS AREAS**

Altogether 24 GRI G4 aspects were recognized material when mapping the KONE focus area content with GRI G4 definitions. This mapping is presented in GRI table on p. 48, including also the reporting boundaries within KONE value chain by focus area.

KONE's sustainability reporting follows the Global Reporting Initiative's (GRI) G4 guidelines. In 2016, we conducted a materiality assessment to update our sustainability focus areas and topics. Those are now also aligned with the new phase in KONE's strategy, "Winning with customers", launched in January 2017.

To conduct the materiality assessment, we analyzed industry and peer group reporting and developments to legislation. Furthermore, we conducted an online survey, as well as interviews with stakeholders and KONE's Executive Board members. An online questionnaire was sent to over 250 respondents, including customers, investors and analysts, industry associations, public authorities, suppliers, employees, media representatives and educational institutions.

The response rate to the questionnaire was 42%, amounting to 106 responses. In addition, 20 stakeholder representatives were interviewed

to improve our understanding of their views on KONE's sustainability approach.

The identified topics were then ranked in regards to their impact on our value chain, business implications and stakeholder interest. Based on the results of the materiality analysis, we updated KONE's sustainability focus areas, which were then approved by the President and CEO and the selected members of the Executive Board. This report is structured to correspond with the focus areas, and the results of the materiality analysis and prioritization are presented in the chart below.

Global governance and compliance, risk management, stakeholder engagement and proactive communications form the basis of our sustainability framework. These topics cut across all four focus areas, reflecting our continuous efforts towards effective global enforcement and transparency in our communications.

## Driving innovation and improving resource efficiency

At KONE, innovations in urban development have an important role in tackling issues like social progress, economic prosperity and climate change. For example today's cities take up about 2% of the world's land mass, but account for 75% of global energy consumption and 80% of manmade carbon emissions. Reducing the impact urban areas make on the environment is essential for a more sustainable future.

Providing the most sustainable offering Elevators, escalators and automatic building doors are everywhere, and the safety of the millions of people who use them is our first priority. In addition, the quality and ecoefficiency of our solutions is critical. Quality is embedded in everything we do, as we strive to deliver the best customer and user experience. Eco-efficient solutions are a must in combatting climate change.

## Being the best employer and attracting talent

One of our strategic targets is to make KONE a great place to work. We strive to maintain a safe and healthy working environment and foster a collaborative culture, where people are motivated to develop their competencies and deliver the best results. We see diversity as a strength and prohibit discrimination of any kind.

## Enabling our partners and societies to prosper

KONE directly contributes to economic development in the countries where we operate. In addition, we work with approximately 20,000 suppliers who provide us with raw materials, components and modules, and logistics and installation services. As a responsible corporate citizen and business partner, we are committed to making a positive impact throughout the whole value chain.

## **UN SUSTAINABLE DEVELOPMENT GOALS**

As a member of the UN Global Compact, KONE supports the Sustainable Development agenda and its goals.

We have chosen the goals where KONE can make the biggest impact through its own operations, and we have mapped them to our own sustainability focus areas.







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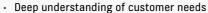
## BE A LEADER IN SUSTAINABILITY







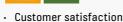




- · Sustainable innovations and business models
- · Resource efficiency and life-cycle thinking
- · Low-carbon operations







- · Product and service quality
- · End user safety
- Accessibility
- · Energy efficiency of solutions







- · Competence development
- · Motivated and engaged employees
- · Diversity and non-discrimination
- · Employee safety and well-being



- · Creating wealth via taxes and employment
- · Generating long-term returns

**ENABLING OUR PARTNERS AND** 

**SOCIETIES TO PROSPER** 

- · Supporting local communities
- · Ethical business practices
- · Long-term relationships with our suppliers

Global governance & compliance

Risk management

Stakeholder engagement -

- Proactive communications

Read more

about our reporting scope on p. 48.

SUSTAINABLE SOCIAL, ENVIRONMENTAL AND ECONOMIC PERFORMANCE

# DRIVING INNOVATION AND IMPROVING RESOURCE EFFICIENCY

At KONE, innovations in urban development have an important role in tackling issues like social progress, economic prosperity and climate change. For example today's cities take up about 2% of the world's land mass, but account for 75% of global energy consumption and 80% of manmade carbon emissions. Reducing the impact urban areas make on the environment is essential for a more sustainable future.



## **G4 INDICATORS RELATED TO THIS SECTION**

G4 EN3: Energy consumption within the organization

G4-EN6: Reduction of energy consumption

G4-EN8: Total water withdrawal by source

G4-EN15: Direct GHG emissions

G4-EN16: Indirect GHG emissions

G4-EN17: Other indirect GHG emissions

G4-EN18: GHG emissions intensity

G4-EN19: Reduction of GHG emissions

G4-EN23: Total waste by type and disposal method

G4-EN29: Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations

G4-EN30: Significant environmental impacts of transport

# INNOVATING FOR SMART URBAN ENVIRONMENTS

Urbanization is generating new needs for buildings and infrastructure, for living standards, for safety and for sustainable low-carbon societies. The increasing pace of urbanization is transforming how people live. There is a need to improve and modernize existing cities to accommodate a growing population. All this provides us with great potential for new innovations.

We have developed numerous eco-innovations over the past decades, and we pay special attention to resource efficiency in all of our actions. We also continuously develop, improve and refine our approach to innovation. For the most part, KONE's business has been driven by advances in mechanical engineering for more than a century. Innovation in today's world is much more. It means new processes, new integrated technologies and connectivity, as well as new benchmarks for customer service.

At a time when markets and technologies are changing, competition is intensifying and urbanization is happening faster than ever, at KONE, we have mapped our innovation focus areas by understanding universal needs for sustainable and smart urban development. We have defined six of the most important needs, listed on the table next page.

If we can understand the demands and the changing trends of urbanization and technological disruption, then we believe we will have a great opportunity to add value to our customers and society at large, making a contribution to rising living standards, in the most sustainable ways.

## Collaborative approach

The needs which arise from urbanization play a large role in the development of our Research & Development (R&D). For the past century, we have made systematic, long-term investments into our R&D capabilities. Today we have eight global R&D competence centers

## Needs for sustainable and smart living

- Providing innovative, affordable vertical housing to facilitate better living for aging populations as well as the changing needs of inhabitants.
- Maintaining safe and reliable infrastructure. As populations grow, the design of infrastructure needs to be modernized and made more efficient.
- 3. Improving living standards and convenience, especially as the global middle classes increase their income and develop increased expectations.
- 4. Putting more of a premium on eco-efficiency and sustainability, to reduce energy consumption, manage waste and pollution and use materials smartly.
- Smart cities are evolving, buildings and complexes are getting bigger and more complicated; so for instance, heating, cooling and utilities all need to work together. Digital technologies and connectivity can also enable better public services for citizens, better use of resources and increased comfort and reliability.
- Finally, addressing the growing value placed on well-being and better living standards, as people increasingly want to live in harmony with their surroundings.

which are located in Finland, China, Italy, India, the United States, Mexico, Germany, and the Netherlands, and over 800 dedicated technology professionals working for R&D.

Our R&D process leads to a continuous search for new ideas and opportunities. Our starting point is a wide variety of sources, the most important ones being our customers and equipment users. We also make use of opportunities presented by the market, for example the demands of ever-higher buildings and their growing populations, as well as ideas generated through our own innovation processes.

At KONE we take a collaborative approach to innovation. By opening up, and by encouraging new ideas we develop new skills, identify new challenges as well as pilot and commercialize new products and services at a faster pace. We work closely with our customers, partners, universities, and research centers and we encourage our own people to share their inspirations and ideas. Throughout the entire R&D process, eco-efficiency, safety and quality are of utmost importance.

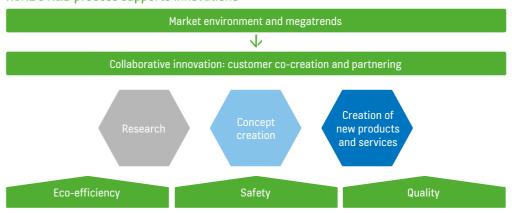
# WORLD'S FIRST ARCHED ESCALATORS

Opened in November 2016, Elbphilharmonie concert hall is the newest landmark in Hamburg, Germany. It features the world's first arched escalators by KONE. Allowing for 'endless' escalator rides, the escalators are more than 80m in length and climb to a height of 21.43m. They were developed especially for the new state-of-the-art music venue, enabling visitors to dive into a fascinating world of light and color.

## HACKERS AT WORK

KONE organized its first hackathon in March 2016 and brought together 15 teams to co-create new solutions for better people flow. During the three day event, KONE executives and representatives of global companies such as IBM and ABB exchanged ideas with start-up entrepreneurs in Hyvinkää, Finland. The teams brainstormed ideas for solutions ranging from augmented reality tools for maintenance technicians, to ways of using games and music in elevators to collect user data and feedback.

## KONE's R&D process supports innovations



INNOVATIONS KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT RESOURCE EFFICIENCY



## **BEIJING'S TALLEST**

KONE will provide China Zun, Beijing's tallest building-to-be with the latest high-rise solutions available in the industry. The mixed-use skyscraper is currently being built with the help of KONE JumpLift™ construction-time elevator, and once completed, the landmark building's elevators will be hoisted using the revolutionary KONE UltraRope® high-rise rope technology. KONE UltraRope provides unrivalled elevator eco-efficiency, reliability and durability. It eliminates the disadvantages of existing steel ropes and enables elevator travel heights up to 1,000 meters.

## KONE JOINS FORCES WITH IBM

In 2016, KONE signed an agreement with IBM, which will transform KONE's operations and technology capabilities around the world, using IBM's technology and experience to harness the potential of digitalization and the Internet of Things (IoT). KONE will use IBM's Watson IoT Cloud Platform to collect and store equipment data, build applications and develop new solutions. The platform will gather data from sensors and systems connected to equipment in KONE's maintenance base. With IBM's advanced analytics engine, that information will be used to enable new services and new experiences for KONE's customers.

## Highlights from 2016

During the reporting year, KONE started working together with IBM. We will use IBM's Watson IoT Cloud Platform to collect and store equipment data, build applications and develop new solutions in order to create added value to our customers with cloud-based services. We also expanded our relationship with Salesforce in 2016 to further improve our customer service. Salesforce's Service Cloud Lightning will enable us to deliver faster, smarter and more personalized service for our customers worldwide.

In 2016, we continued to enhance our offering, launching both a number of new solutions as well as enhancements to our existing solutions. In the United States and Canada, we introduced the KONE MonoSpace®500 volume elevator offering. In China and the rest of the Asia-Pacific region, we released several updates and enhancements to our existing elevators in both commercial and residential segments.

In addition, we further extended our elevator range in India. In order to comply with various new safety standard requirements, we launched an updated offering and made updates to KONE NanoSpace™ and KONE ProSpace™ residential segment elevators in Europe. In modernization, we extended our offering in Europe with the launch of the KONE HydroMod™ 200 modernization solution for hydraulic elevators.

Globally KONE enhanced its People Flow Intelligence offering by launching a next generation destination product for office segment, and improving the KONE Access solution by making it fully compatible with almost any other access control system in the building.

During the reporting year, we also opened a new U.S. manufacturing and R&D facility in Allen, Texas. The new facility houses the supply operations for the KONE Americas region as well as a research and development center, including a test tower (read more on p. 45).

In 2016, KONE was ranked 56th out of 100 in a list of the world's most innovative companies, put together by business magazine Forbes (2015: 48th). KONE was included in the Forbes' list for the sixth consecutive year and was the only elevator and escalator company featured on the list in 2016.

In addition, KONE received recognition for its design during 2016. KONE was awarded three design awards: the iF Design Award for KONE Card Collector and two Red Dot Product Design Awards, for KONE DT6 ride comfort measurement tool and KONE Rondel Light, new solution for elevator car lighting. This was the fourth time that KONE was recognized in the iF Design Awards.



KONE Rondel Light, our new solution for elevator car lighting, received the Red Dot Product Design Award.

## STRIVING FOR RESOURCE EFFICIENCY



KONE aims to be a leader in sustainability, and we strive for continuous improvement in all our business activities. Increasing resource efficiency is among our top priorities and we always work to do things in smarter ways. We give importance to our natural resource use throughout the whole value chain as this offers significant economic opportunities, brings down costs and boosts productivity. Resource efficiency is very important to our customers, whether it's savings in materials, emissions, or time. It is essential that we create extra value for our customers via resource efficiency.

KONE's environmental policy is to provide innovative, safe, high-quality and environmentally efficient products and services. We strive for continuous improvement in all our business operations. In addition to complying with, or exceeding applicable laws, rules, and regulations, we work with our suppliers and customers to increase environmental awareness and minimize our operational carbon footprint as well as improve energy, material, and water efficiency.

KONE's R&D process, for example, seeks to optimize material use, including packaging and waste; avoid the use of hazardous substances; maximize material durability and recycled content; and minimize water consumption, among others.

# New targets for low-carbon solutions and operations

Our ambitious environmental targets for 2014–2016 focused on further improving the eco-efficiency of our solutions and reducing greenhouse gas emissions from our own operations. According to the revised targets

for 2017–2021 we aim to be leading provider of low-carbon people flow solutions and to have efficient low-carbon operations. Our Environmental Excellence program supports the ongoing green transformation of the urban environment into smart eco-cities, low-carbon communities, and net zero energy buildings (read more about Environmental Excellence key initiatives and 2016 achievements on p.23). It is estimated that the market for smart cities will reach a phenomenal value of US\$ 1.6 trillion globally by 2020\*.

## Showing commitment

As a signatory company of the UN Global Compact, KONE supports the Sustainable Development agenda, addressing the social, economic, and environmental dimensions of sustainability. KONE solutions help to address the challenges created by urbanization, climate change, demographic change, and increased safety demands – all covered in the new UN Sustainable Development Goals.

KONE has also signed the Paris Pledge for Action climate initiative for non-state actors, showing climate leadership and commitment to limiting global warming to under 2 degrees Celsius in accordance with the Paris Climate Agreement. In 2016 KONE, together with other leading companies, conducted a pilot study on setting science-based emission targets.

In this chapter we will concentrate on our operations and resource efficiency.

\*Source: Benefits of Carbon Neutrality in a Rapidly Changing Business Environment. Frost & Sullivan and SITRA, 2015. Smart cities use the latest intelligent and green initiatives to reduce energy and resource consumption and improve efficiencies in all facets of human life

# LONG-TERM ENVIRONMENTAL TARGETS

OPERATIONS:

Efficient low-carbon operations

PRODUCTS AND SERVICES: Leader in low-carbon People Flow® solutions for smart buildings

# KONE A WORLD LEADER IN CDP 2016 CLIMATE CHANGE REPORTING

2016 marks the second year KONE has earned a place on the A List, this year as one of the only 193 companies from thousands of others independently assessed against CDP's scoring methods. The company's score has risen for seven consecutive years. The Climate A List comprises companies from around the world that have been identified as leaders in their efforts and actions to combat climate change, during the past CDP reporting year. The Climate A List constitutes the baseline for corporate climate action and includes companies identified as leaders in the transition towards a low-carbon economy.

During 2016, KONE also received recognition as a leading supplier for action on climate change and was recognized on the new global CDP Supplier A List.



#### **Read more**

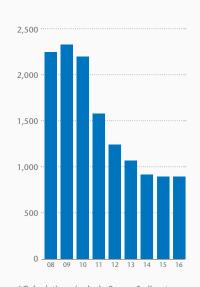
about our eco-efficient solutions on p. 30 - 33.

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## REDUCING OUR LONG-TERM CARBON FOOTPRINT

KONE has been measuring its operational carbon footprint since 2008. Between 2008 and 2016, we have succeeded to reduce our Scope 1 and 2 carbon footprint relative to orders received by over 60%.\*

Scope 1 and 2 carbon footprint, kgCO<sub>2</sub> relative to orders received.



\*Calculations include Scope 1 direct energy (heating/vehicle fleet fuels), cooling gases, and scope 2 indirect energy (electricity/district heat).

# THE ENVIRONMENTAL IMPACT OF KONE'S OPERATIONS IN 2016

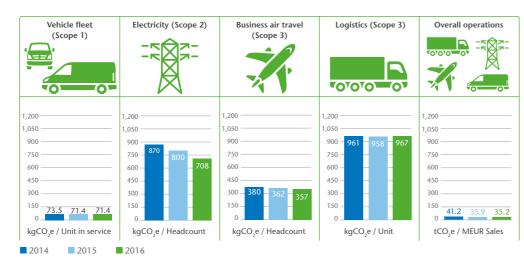
KONE's operational environmental work focuses on reducing our carbon footprint and improving energy and material efficiency, lowering our water consumption and waste amounts, and minimizing our use of hazardous substances. We work with our suppliers and customers to avoid greenhouse gas emissions and other adverse environmental impacts from our business operations whenever possible. (See p. 7 Key figures for our 2016 environmental data.)

In 2016, KONE's absolute operational carbon footprint increased by 0.2%. This slight increase can be attributed to the growth in our employee numbers and sales increase as well as adding some 500 corporate benefit vehicles to the reporting scope during the year. KONE's operational carbon footprint relative to net sales decreased by 4.1% with sales growth calculated

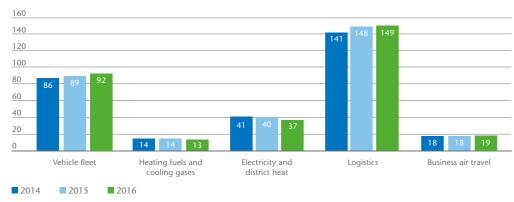
at comparable exchange rates (1.9% at historical exchange rates). During the year, the absolute operational carbon footprint of externally assured scope 1 and scope 2 greenhouse gas emissions decreased by 0.6%. The scope 1 and 2 carbon footprint relative to net sales decreased by 5.4% with sales growth calculated at comparable exchange rates (3.3% at historical exchange rates).

Logistics operations were the major source of greenhouse gas emissions in KONE's absolute carbon footprint, accounting for 149 ktCO<sub>2</sub>e (2015: 148). Other significant contributors were our vehicle fleet at 92 ktCO<sub>2</sub>e (2015: 89), electricity/district heat consumption at 37 ktCO<sub>2</sub>e (2015: 40), business air travel at 19 ktCO<sub>2</sub>e (2015: 18), and fuels for heating and cooling, which added to the total by 13 ktCO<sub>2</sub>e (2015: 14).

## Relative operational carbon footprint Data assured externally



# Absolute operational carbon footprint per category, $ktCO_2e$ Data assured externally



## Logistics

Logistics accounted for 149 ktCO<sub>3</sub>e (2015: 148), or 48% of KONE's operational carbon footprint, making it the biggest contributor in terms of greenhouse gas emissions. KONE's logistics greenhouse gas emissions data has been externally assured since 2013. In 2016 KONE's logistics carbon footprint relative to elevators and escalators delivered to customers increased by 0.9%. The main reasons for not meeting the 3% reduction target are increased transportation distances from KONE's supply unit in China to customer sites (average increase by 90 kilometers, impacting a 2% increase to the overall result), increased deliveries in the US (inbound road freight), and increased share of ocean freight (in particular export to distant countries) and air freight deliveries from Europe and China. Emissions from spares deliveries increased by 0.2%, but this has been excluded from the relative emission calculation. As positive developments we can mention the reduction of relative emissions from our GiantKONE supply unit in China thanks to shortened transportation distances, as well as reduced emissions from local logistics deliveries, escalator deliveries, and direct air freight shipments from suppliers to customers.

The logistics data covers the transportation of products from KONE's manufacturing units to customers and the transportation of those modules that are delivered straight from our suppliers to our distribution centers and onward to customers. The relative logistics carbon footprint excludes spare parts deliveries. During the year, KONE delivered over 3.3 million packages from distribution centers to installation sites, and around 1.3 million packages of spare parts from distribution centers to customer sites.

KONE has strict requirements concerning the eco-efficiency of its service providers' operations. KONE's biggest logistics service providers have ambitious environmental programs, and KONE as a customer enjoys the achievements of these programs. From a reporting perspective, we continuously improve our collaboration with logistics service providers by further developing our reporting methods and tools.

KONE's logistics operations are based on accurate and timely information at all phases of the delivery chain, and on using distribution models that take eco-efficiency into account. Special attention is paid to reducing the impact of transportation through route and shipment optimization, as well as through careful analysis of alternative transportation model.

Did you know that the domestic transportation in three biggest countries, China, the US and India, together contribute to almost half of KONE's total 2016 logistics carbon footprint?

Development action	Impact on eco-efficiency
Optimized use of transportation networks.	Optimal routing of material through distribution center network and selection of suppliers located close to distribution centers.
Maximized use of railway transportation, minimized use of air freight. Waterway transportation also preferred over air freight.	Less CO <sub>2</sub> emissions per tonne-kilometer.
Improved space utilization ratio in loading.	Better load planning of outbound trucks and containers resulting in improved container space utilization, optimization of transportation units used and more products delivered per shipment.
Centralized volumes to main suppliers, convenient location of suppliers close to distribution centers.	Fewer transportation routes and improved transportation efficiency ratio.
Use of more eco-efficient transportation equipment.	Truck equipment selection from eco-efficiency perspective. Requirement for Euro 4 trucks for European logistics service providers (European emission standard for vehicles).
How KONE reduces packaging-related emissi	ons and waste
Development action	Impact on eco-efficiency
Optimized packaging to better fit into logistics chain.	More products delivered per transportation unit.
Optimized use of packaging materials.	Less packaging material used, better waste management, increased recyclability of materials.
Management and development of suppliers' packaging.	Less packaging material used, better waste management, improved logistics efficiency.

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### **ELECTRIC VEHICLES**

At the end of 2016, we received our first electric vehicle in France, a Renault Zoe. This is part of our carsharing pool based in Nice.

In 2017, we hope to continue working towards an environmentally sound fleet composition. We expect more electric vehicles to be integrated into the car-sharing pool of our offices close to Paris. In addition, there is a growing customer interest in using electric vehicles in our service fleet and we plan to respond to this demand.

## Vehicle fleet

Of KONE's operational greenhouse gases in 2016, 30% was emitted by our global vehicle fleet, making it the second biggest contributor in terms of our greenhouse gas emissions. The total size of our fleet during the year was around 16,200, out of which 15,200 (94%) were in the scope of KONE's environmental reporting globally. The reporting scope, covering 22 countries, was extended during the year by adding some 500 employee benefit cars from Finland to the scope. Service vehicles made up in total twothirds of the fleet while benefit cars accounted for the rest. In total, KONE's vehicle fleet emitted 92 ktCO<sub>3</sub>e in 2016 (2015: 89). The absolute carbon footprint of our vehicle fleet

increased by 2.1% compared to 2015. The relative carbon footprint per units in service (elevators/escalators/building doors under KONE's maintenance contracts) remained the same as in 2015.

We continuously search for new and innovative ways to reduce the carbon footprint of our vehicle fleet. We have been further exploring the use of alternative fuels and planning for the long-term (2030) restructuring of our vehicle fleet composition. Our aim is to shift from fuel cars to electric cars in our vehicle fleet as soon as the leasing contract renewal periods allow and the infrastructure needed is in place in different countries where we operate.

## Key actions to reduce the carbon footprint of KONE's vehicle fleet

,	•
Compliance with KONE vehicle fleet policy	KONE continued to manage its vehicle fleet in compliance with the global vehicle fleet policy, which defines maximum CO <sub>2</sub> emission limits and encourages employees to select vehicles with lower CO <sub>2</sub> emissions for benefit cars. Typically best in class vehicles in each segment (vehicle size) are listed in the local vehicle policies.
Fuel-efficient vehicles	KONE continued its cooperation with internationally preferred suppliers Ford, Renault and Fiat, who comply with the Euro 6 emission standard for light passenger and commercial vehicles. Both passenger and commercial vehicles taken out of use were replaced by new, significantly more fuel-efficient models. In Finland & the United Kingdom, we have benefited from Ford's new product line of vans with improved fuel efficiency and have introduced a new compact van Courier. In Italy, Spain, Portugal, the Czech Republic, Slovakia, and Poland, we continued working mainly with Fiat Fiorino with stop-start technology. France, Belgium, Sweden and Netherlands continued with Renault vans, especially with Renault Kangoo which is among the best ones in terms of fuel efficiency in the medium vans segment.
Introduction of electric vehicles	Piloting full electric vehicles continued in Norway, France, the UK, and piloting hybrid electric vehicles continued in the United States and the Netherlands. In the US, KONE currently has 145 hybrid sedans on the road, where in the Netherlands around 15 hybrid vehicles in the fleet.
Vehicle rightsizing	The vehicle rightsizing program continued in 2016. KONE has continuously paid attention to selecting correctly sized commercial vans when replacing existing models, which often had larger cargo capacity than required. The proportion of compact and medium-sized vans in the global fleet continues to grow.
Monitoring driver performance	The driver performance monitoring program continued in 2016. KONE monitored the driving performance of its service drivers in France, the UK, the Netherlands, and the US. Each month, drivers were scored in terms of fuel efficiency and driving behavior.
Vehicle sharing program	The vehicle sharing program in France continued.
Telematics systems	Telematics systems were used in the UK and Sweden to increase driver safety and security, and to improve fuel efficiency through safer driving. Both countries achieved good results in fuel efficiency by minimizing idling time as well as reducing the number of incidents on the road.

#### Business air travel

Business air travel accounted for 6% of KONE's operational carbon footprint in 2016. India was added to the reporting scope in 2016. The absolute greenhouse gas emissions from air travel increased by 3.3% to 19 ktCO,e (2015: 18). The relative carbon footprint decreased by 1.4%. In order to reduce the need for travel and to facilitate global virtual collaboration, KONE continues to invest in better online meeting solutions and video conferencing equipment. In addition, KONE carefully considers the need for travel in the first place, and in the second place recommends optimizing the locations of the meetings and conferences. In 2016, virtual meeting time increased by 4% compared to 2015. This has been achieved by encouraging KONE personnel to use online meeting tools instead of travel.

## Electricity

Globally, 40% of CO<sub>2</sub> emissions comes from electricity consumption. Corporations are responsible for 50% of that figure\*. As such, these organizations play a vital role in reducing carbon emissions and it is crucial that they cut electricity consumption. KONE's aim is to increase its share of green electricity. Many of our units have already begun to purchase more green electricity in 2016, which has shown promising results.

Electricity and district heat consumption accounted for 37 ktCO<sub>2</sub>e (2015: 40) or 12% of KONE's operational carbon footprint in 2016. The electricity was used in KONE's offices, warehouses, and manufacturing facilities. The figures take into account our usage of green electricity produced using renewable sources (market-based calculation method). Without the use of green electricity (location-based method), the electricity/district heat carbon footprint would have amounted to 43 ktCO<sub>2</sub>e (2015: 43). The share of green electricity increased to 28% in 2016 (2015: 19%). In 2016, electricity consumption was 78,900 MWh (2015: 79,900) and the consumption of district heat 15,900 MWh (2015: 15,100). The absolute electricity/district heat carbon footprint decreased by 7.2% and the relative footprint by 11.5%.

\*Source: World Resources Institute (WRI)

## Heating fuels and cooling gases

Heating fuels and cooling gases account for 4% of our operational carbon footprint. In 2016, fuels for heating and cooling generated 13 ktCO<sub>2</sub>e (2015: 14) of greenhouse gas emissions.

## Material management

In 2016, KONE used 701 k tonnes (2015: 723) of materials for producing and packaging its elevators, escalators, and building doors. The figures have been calculated based on life-cycle assessment data. In 2016, building doors were added to the scope, but their impact on the overall material amounts is small. Read more about the material use on p. 32.

## Waste optimization in the manufacturing chain

In 2016, waste accounted for 1.8 ktCO<sub>2</sub>e (2015: 2.3) or 0.6% of KONE's operational carbon footprint. We aim to reduce the waste generated by our manufacturing processes and offices through reduction at the source, reuse and recycling. Landfill waste is kept to a minimum. Waste is always handled according to applicable laws and regulations in local KONE organizations, and we aim to exceed legal requirements. Based on environmental data collected from 13 KONE engineering and manufacturing sites, 90% of the waste generated by KONE's global delivery chain was recycled or incinerated. Only 10% (2015: 9%) was landfilled. KONE's long-term target (2030) for waste management is 0% landfill waste at our manufacturing units.

#### Water consumption

Water consumption in KONE's production and maintenance processes is minimal, and we continue to optimize and further minimize our usage of water. KONE uses municipal water, and waste water is released into municipal treatment systems that abide by local regulations. The total amount of water used in our manufacturing and office facilities was 350,000 m<sup>3</sup> (2015: 390,000). In 2016, KONE's manufacturing units released 14 tonnes (2015: 17, excluding GiantKONE) of waste water effluents into the municipal waste water

of the electricity consumed

head offices and its manufacturing and R&D sites in Finland, Italy, and the Netherlands is green electricity produced from renewable sources. Other KONE units that purchase green electricity are our Austrian, Belgian, Danish, Dutch, German, Italian, Norwegian and Swedish country organizations. In addition, we have some onsite renewable energy production in the U.S., Italy, Norway, Finland, and China.

manufacturing units in

China, the Czech Republic, Finland, India, Italy, the Netherlands, and the new AllenPlace in the U.S.

#### Read more

about Kaizen workshops arranged to improve resource efficiency and to reduce waste on p. 45.

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# SOLAR PANELS INSTALLED IN NORWAY HEAD OFFICE

The KONE Norway head office moved to a passive energy house in 2012. The expected return on investment was achieved one year ahead of schedule and it was decided that the money saved in energy costs would be invested in the installation of solar panels in May 2016. Panels produce around 40,000 kWh annually, which equals to 20% of electricity consumption of all lighting in the building. The KONE Oslo head office is currently one of the most energy efficient buildings in Norway.

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# Improving the eco-efficiency of our facilities

KONE has over 1,000 facilities globally, including office spaces and installation and service operation hubs. KONE has a Global Facility Policy approved by the Executive Board, which aims at a harmonized approach in the selection and management of our facilities. The policy aims at developing fit-for-purpose facilities and eco-efficient operations as well as providing a safe and secure work environment for all KONE employees.

In 2010, KONE set a target to reduce the facility-related carbon footprintby 15% relative to headcount by the end of 2016.

This target was reached by:

- Improving space efficiency at KONE facilities
- Optimizing energy usage in heating, ventilation, air conditioning, and in lighting systems by using proximity sensors and LED lights
- Deploying energy-saving practices for computers and office equipment
- Increasing the share of green electricity
- Improving material efficiency in manufacturing, warehousing, and offices
- Reducing waste and further improving recycling
- Selecting eco-efficient service suppliers
- In addition, new KONE buildings should be designed according to LEED or other green building standards. Green buildings should be chosen when relocating KONE facilities to existing buildings



In May 2016, 180 solar panels were installed in KONE Oslo's passive energy house covering one third of the rooftop.

## Environmental Excellence program 2014–2016

Key initiative	Achievements in 2016	Targets 2016
Solutions	The best possible A-class energy efficiency classification according to the ISO 25745-2* energy efficiency standard received for the following elevators:	Further reduce energy consumption of elevators and escalators compared to 2013,
	<ul> <li>KONE Z MiniSpace™</li> </ul>	and further improve resource efficiency
	KONE E MonoSpace®	
	KONE TransitMaster™ 140 escalator achieved the highest A+++ classification for escalators according to ISO 25745-3*.	
	Externally verified Environmental Product Declarations (EPD) created and published on www. ibu-epd.com for all KONE's 11 Building Door models**.	
Green building	KONE solutions delivered to LEED, BREEAM and other certified green buildings.	Develop solutions to fulfill green building requirements and implement LEED/BREEAM at selected KONE facilities
Environmental impact of operations	KONE's relative carbon footprint decreased by 4.1% with sales growth calculated at comparable exchange rates (1.9% at historical exchange rates). The carbon footprint of externally assured scope 1 and scope 2 greenhouse gas emissions relative to net sales decreased by 5.4% with sales growth calculated at comparable exchange rates (3.3% at historical exchange rates). In 2016, we reached the 15% reduction target set for our facility-related carbon footprint in 2010.	Reduce KONE's carbon footprint relative to net sales by 3% annually
OneISO and suppliers	<ul> <li>KONE's corporate units, all manufacturing units, and R&amp;D units are ISO 14001 and ISO 9001 certified.</li> <li>20 major country organizations are ISO 14001 certified (2015: 19), and KONE's manufacturing units in the Czech Republic</li> </ul>	Continue to maintain OneISO (ISO 9001/14001) and require ISO 9001/14001 from our strategic suppliers
	and Italy are ISO 50001 certified.	
	<ul> <li>93% of strategic suppliers are ISO 14001 certified (2015: 93%).</li> </ul>	
Reporting and communication	KONE Sustainability Report 2016 met GRI G4 requirements.	Work to meet GRI4
	<ul> <li>KONE's 2016 greenhouse gas emission data for Scope 1 direct energy consumption, Scope 2 electricity and district heat consumption, Scope 3 logistics and business air travel was externally assured.</li> </ul>	requirements and continue to maintain high CDP scores
	<ul> <li>KONE's score in CDP's climate change program was the best possible A for the second year running, with only 193 companies out of thousands achieving the A grade.</li> </ul>	
	<ul> <li>KONE achieved a position on CDP's global Supplier A List 2016 including the top 2% of suppliers that responded in CDP's supplier questionnaire.</li> </ul>	
	<ul> <li>KONE Sustainability Report 2015 was chosen as the best report of the year by Greenpeace Finland in the NGO's Choice category of Sustainability Reporting Award Finland.</li> </ul>	
	<ul> <li>KONE was confirmed as a constituent of the FTSE4Good Index in July and December. FTSE4Good is a global sustainability index measuring the performance of companies that demonstrate strong environmental, social and governance practices.</li> </ul>	

<sup>\*</sup>ISO 25745-2 is a global standard for the energy calculation and classification of elevators. ISO 25745-3 is the corresponding standard for escalators and autowalks.

## **KEY INITIATIVES 2017**



## SOLUTIONS

Our solutions are highly eco-efficient and contribute to green building ratings.



## OPERATIONS

We make business by developing resource efficiency and minimizing carbon footprint of our operations and services.

#### CULTURE

To build eco-culture together with customers and suppliers.





In 2016, KONE participated in WWF's Earth Hour in 30 countries worldwide.

 $<sup>\</sup>hbox{**Institut Bauen und Umwelt (IBU) is the program operator for building door EPDs.}\\$ 

# PROVIDING THE MOST SUSTAINABLE OFFERING

Elevators, escalators and automatic building doors are everywhere, and the safety of the millions of people who use them is our first priority. In addition, the quality and eco-efficiency of our solutions are critical. Quality is embedded in everything we do, as we strive to deliver the best customer and user experience. Eco-efficient solutions are a must in combatting climate change.



**G4 INDICATORS RELATED TO THIS SECTION** 

G4 EN1: Materials used by weight or volume

G4-EN7: Reductions in energy requirements of products and services

G4-EN27: Extent of impact mitigation of environmental impacts of products and services

G4-PR1: Percentage of significant product and service categories for which health and safety impacts are assessed for improvement

G4-PR5: Results of surveys measuring customer satisfaction

G4-PR9: Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services

## QUALITY FOCUS AT KONE

Quality is an integral part of KONE's culture. Our ambition is to deliver consistent high quality to make people's journeys safe, convenient, and reliable. We strive to reach this goal with the active participation of everyone at KONE and our "Quality starts with me" attitude.

We look at all of our operations from our customers' point of view. We focus on full chain quality encompassing our products, processes, and the services we offer, from design to maintenance and modernization.

Our goal is to improve the quality of our products and services throughout the equipment life-cycle. We strengthen our product quality through our quality improvement programs and constantly improve our installation and maintenance methods and process by taking ownership of the quality of our work.

We set targets and monitor key performance indicators (KPIs) such as percentage of defect-free units, first year call out rate, customer transactional survey feedback and customer complaints resolutions.

Everyone is responsible for quality
Good, solid working practices help us deliver
world-class products and services. If there is
an issue regarding quality, we look for the root
causes and take immediate action to solve it.
We listen to our customers closely by using
customer surveys and feedback questionnaires.
Ratings show that quality is among the top
reasons for choosing KONE as a partner.

We also support our employees so that they have the attitude and skills to solve quality issues in the most effective way possible. We give practical guidance to our employees and provide them with effective and easy-to-use problem solving tools. Employees are actively encouraged to take part in improving product quality and processes through an Idea Management System and Kaizen continuous improvement practices. Each of us is responsible for quality at KONE. It is about caring to take action, not accepting less than the expected level of quality, and caring about what we pass on to our colleagues and customers.

## Solution creation quality

KONE's new solutions are screened during the early stages for quality, using quality management tools and thorough verification processes. In the design stage we define critical quality parameters that all solutions must fulfill in order to proceed to production.

## Delivery and manufacturing

KONE is working to continuously improve its delivery chain in terms of quality, responsiveness, and efficiency. We make sure that we deliver to the highest quality standards. In 2016 KONE implemented the 10x Better Factory project aimed at improving in-house production quality in equipment component units around the globe. The project helped harmonize process control activities in our own production lines further. As part of the project, solid and up-to-date process control plans were created for each workstation, and critical standard processes are governed through real-time statistical process control. The project enabled production unit employees to improve their quality-related competencies.

During the review year we continued to implement our global production quality guidelines that direct our production units on their quality improvement journey. We built production quality competencies through eLearning materials and local classroom training sessions at all our production sites. The trainings will continue in 2017.

We have high standards for supplier quality. KONE pays special attention to ensuring our suppliers have excellent manufacturing processes and process controls in place. In 2016 we focused on process quality audits, quality development projects for continuous improvements of our supplier quality. We also created a supplier quality management process

# KONE's processes fulfill ISO 9001 quality management system requirements.

KONE's corporate units, all manufacturing units and R&D units are ISO 9001 certified

30 of KONE's major country organizations are ISO 9001 certified

99% of KONE's strategic suppliers are ISO 9001 certified

for performing quality inspections in our distribution center in Kunshan, China.

KONE's installation process quality enables us to monitor the installation quality at different stages of the process. We take corrective action if needed during installation, and conduct thorough quality tests to monitor the outcome. In 2016, we developed a new installation process quality plan that will be implemented in 2017.

## Maintenance quality

At KONE we are constantly working to maintain the highest quality of service, and to keep equipment in top condition for the best possible user experience. KONE maintenance delivers industry-leading customer value and quality. We service over 1.1 million elevators and escalators. We offer our expertise throughout the entire life-cycle of a building as maintenance and modernization are tailored to maximize equipment performance.

KONE develops a unique maintenance plan for each piece of equipment. Each technical module is maintained at appropriate intervals. This enhances quality and end user safety, and minimizes equipment downtime. Clear procedures for call handling, strong, real-time support from the KONE Customer Care Center, and detailed reporting and quality control on every site visit guarantee quality in everything we do. About 50 training hours per person per year give KONE service technicians the latest technical knowhow of the equipment they maintain. KONE's service technicians also receive training on how to deliver a great customer experience through positive and professional conduct and communication.

## **QUALITY ACHIEVEMENTS**

- In our annual employee survey,
   Pulse, the questions about quality
   received high scores
- We audit all of the main suppliers that deliver direct materials to KONE distribution centers or factories on a regular basis

# USING THE NEWEST TECHNOLOGY IN RIDE COMFORT

KONE is investing more than ever in the latest technology. We are, for example, testing robot-aided systems for precision installation together with VTT Technical Research Centre of Finland with the aim of achieving better quality in ride comfort and faster installation times. With the tool, our installation technicians can adjust guide rail brackets in a more precise way, faster than before. It provides better accuracy compared to manual adjustments. Improved accuracy helps reduce the lateral quaking of the car, which in turn increases ride comfort. The new tool is currently in the pilot phase, and it is being tested in KONE's R&D laboratories and in selected customer

## Read more about KONE's

- supply chain on p. 44
- suppliers on p. 46

SAFETY KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT SAFETY

## SAFETY IS IN OUR CULTURE

KONE employs over 52,000 people and works with thousands of subcontractors globally. Our 20,000 service technicians around the world take pride in maintaining the safety of elevators, escalators and automatic building door equipment 24/7. The safety of the millions of people who use them is our first priority.

It is our strong belief that all accidents are preventable, and we want everyone to return home safe at the end of each day.

## A proactive approach

At KONE, safety is embedded in everything we do. We are committed to developing a culture where people actively promote safe practices and colleagues look after each other. We improve our processes and promote a safety mind-set among our own employees, our partners, and the general public. By shifting from a reactive to proactive safety approach, we have successfully reduced workplace and end user injuries.

Safety is an integral part of our strategy. We have policies, processes, and tools in place to enable all our business activities to be organized and conducted in a structured and globally harmonized way. In 2016, KONE developed a safety tool for collecting and analyzing workplace and end user incidents and near misses. The tool will be rolled out globally during 2017.

All this supports our ultimate goal of zero accidents - for all our employees, partners, and the people using our equipment. Read more about workplace safety on page 36.

## Working closely with customers and the general public

Safety is a joint effort that involves everyone, from technology and maintenance service providers to building owners and equipment users. We actively communicate about safety with our customers and with the users of our equipment.

We organize activities in different parts of the world and provide educational material to our customers and the general public to help equipment users stay safe. Our safety mascots,

We work closely with our customers to help them recognize and deal with situations that could lead to safety risks. Building owners and maintenance service providers are responsible for making sure equipment is professionally maintained and kept in good condition. Building owners should, for example, inform service providers if they identify any recognizable hazards, such as abnormal noises or debris on the equipment.

Everyone who uses an elevator or escalator needs to be conscious of their own behavior, for example, by making sure to hold children by the hand when riding escalators, refraining from blocking closing elevator doors, and stepping away from the doors when they are opening or closing.

## An active contributor in standard development

The safety requirements of elevators, escalators, and automatic building doors are largely determined by national and international safety codes and standards. KONE is a strong contributor to the development of codes and standards that aim to further improve equipment safety. We also promote safety through our involvement in industry trade associations. Our experts have, for example, been involved in the planning and development of the extensively revised main European safety standards for elevators, EN 81-20 and EN 81-50, introduced in 2014; and the new European Lifts Directive 2014/33/EU, enforced from April 20,

The aging of urban infrastructure systems in cities around the world is a major concern for our industry. Several countries in Europe have adopted strict standards for improving safety through modernization. Elevator modernization enhances safety, for example, by improving leveling accuracy, adding electronic sensors to doors, and providing a voice link to the service center. We work with customers to find the modernization solutions that best meet the requirements of their buildings.

As a technology provider, KONE manufactures equipment that meets applicable codes and standards, and often includes additional safety features that exceed the minimum requirements.

#### Convenient access for all users

As populations age, the demand for accessible, safe and convenient People Flow® solutions increases. Buildings and transportation hubs, need to be designed and built in a way that enables people with impaired mobility to move around easily. With our elevator solutions we also help improve accessibility.

For example, increased elevator cabin size improves building access for people with baby strollers and those using wheelchairs. Elevators equipped with seats increase comfort for elderly and disabled passengers. Automatic doors that stay open longer and elevators with accurate leveling make entry and exit easier and safer. In addition, mirrors provide wheelchair users with better visibility, and help them back out of elevators safely.

## 5 ways to improve safety

- Adequate lighting prevents accidents and makes people feel safer
- 2. A two-way voice communication system improves safety and passengers' peace of mind
- landing doors prevent accidents
- Accurate stopping prevents
- 5. An emergency system includes an alarm with two way phone and an emergency power

## 5 ways to improve accessibility

- 6. By modernizing an elevator, the space inside the car can be increased by 50%
- 7. Wide-opening doors make entry and exit easier for passenger using a wheelchair or pushing a stroller
- and help to improve visibility
- announcements help people with hearing and vision impairments
- a building previously without one, in the stairwell or attached to an outside wall



## **RIDING SAFELY**

Habits learned young tend to stick. That is why KONE sees children as an important target group when it comes to using equipment safely.

Our safety mascots Max the mouse and Bob the elephant teach children how simple, everyday considerations can make a big difference in safety when riding elevators or escalators.





Read more at www.KONE.com/safety.

Bob and Max, help teach children about the safe use of equipment through events, leaflets, and an animated video and computer game.

- Interior doors and automatic and improve accessibility
- people from stumbling on the door sill
- supply

- Accessories such as handrails and mirrors provide support
- 9. Braille signalization and audio
- 10. An elevator can be installed in

about KONE's workplace safety on p. 36.

Read more

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## PARTNERSHIP WITH A SAFETY FOCUS IN THE US

KONE has a long relationship with Miller Park, a professional baseball stadium located in Milwaukee, Wisconsin. Over the years, the service of the escalators and elevators was lost to a competitor.

In 2015, with the opening of baseball season weeks away, KONE managed to win back the service contract with the help of its KONE Care Passenger Safety program. Based on an assessment using the Escalator Technical Survey tool, KONE recommended significant work and increased maintenance be done to improve the condition and reliability of the equipment. The customer saw a significant reduction in the number of callouts within the first year under KONE maintenance.

During KONE's 2016 Global Safety Week, KONE conducted a safety event at a baseball game at Miller Park. The event utilized KONE's safety mascots Max and Bob to help educate young children who were attending the game about the safe use of elevators and

## SAFETY IS AN INTEGRAL PART OF **OUR SOLUTIONS AND OPERATIONS**

We enhance the safety of our products and services through rigorous attention to our design, manufacturing, installation, and maintenance processes. Safe practices are promoted for our employees, subcontractors and suppliers, as well as for customers and people who use our equipment.

## SUPPLIERS

KONE's Supplier Code of Conduct requires all of our suppliers to protect the health and safety of their employees.

KONE has defined clear

quality requirements which are continuously measured and followed. (Read more about quality on p. 24-25.).

Safety is embedded in the product development process. Potential safety hazards affecting the products' full life-cycle are systematically identified and eliminated before products are introduced to the market.

Existing products are

#### PRODUCTION SITE

KONE enhances the quality and safety of all components used in production by carefully controlling raw materials and production processes. All of KONE's major production sites are certified to ISO 9001, 14001 and OHSAS 18008

standards

#### OFFICE

KONE promotes the safety awareness of its employees through health and safety training as well as safety-related internal communication. **Building managers** 

promote and maintain safe and healthy working environments in KONE

### **INSTALLATION**

KONE's installation methods and processes are designed to enhance the safety of installers and third parties whilst enabling product quality and reliability. KONE follows the 5S methodology\* in all of its installation processes.

KONE uses continuous training, installation safety &

KONE communicates actively about safety issues, and organizes events for end users and customers to promote the safe use of

KONE supports customers

promoting the safe use of

elevators, escalators and

automatic building doors.

and building owners in

## **MODERNIZATION**

**KONE** develops modernization solutions for upgrading or replacing existing equipment with new solutions that meet or exceed the latest safety standards, improving equipment reliability and user safety.

Products are installed by professional technicians following strict modernization processes

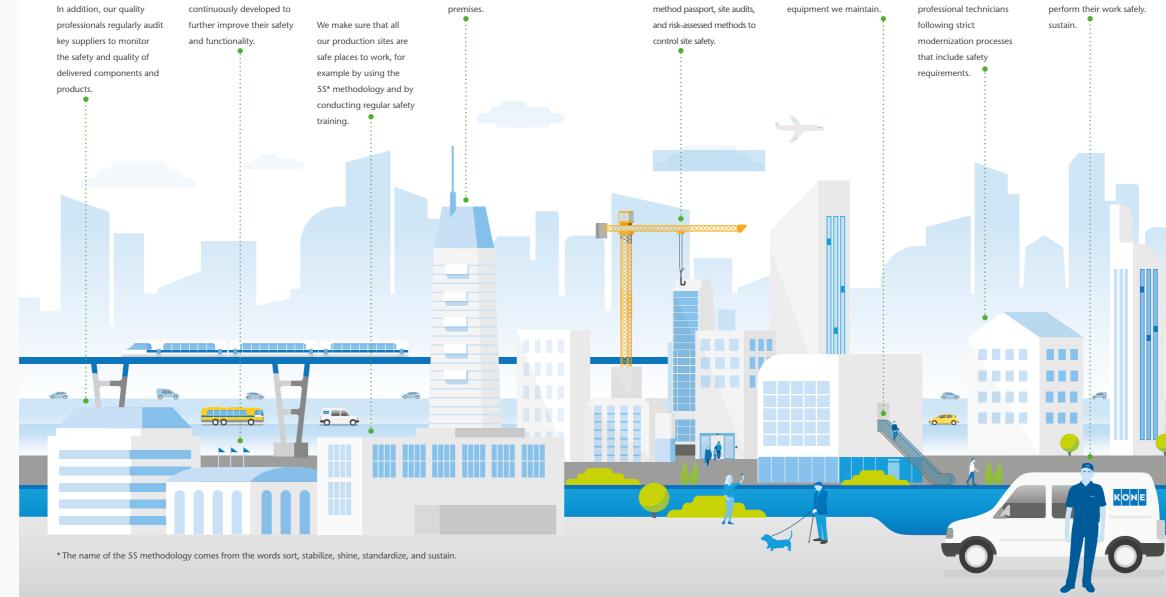
## **MAINTENANCE**

KONE maintains the safety of elevators, escalators, and automatic doors using preventive maintenance

We train our maintenance technicians regularly and provide them with mobile tools to ensure they have the required competence to perform their work safely. sustain.

## SAFETY IN THE SPOTLIGHT

KONE has organized a global Safety Week for all employees annually since 2012. As most accidents are caused by the things that people don't worry about because they seem too minor and too familiar, the week-long event focuses on paying attention to the little things that matter when it comes to safety.



**ENVIRONMENT - SOLUTIONS** KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT **ENVIRONMENT - SOLUTIONS** 

## **ENERGY EFFICIENT SOLUTIONS** FOR GREENER BUILDINGS

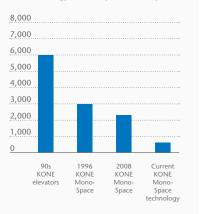
## LONG-TERM **ENVIRONMENTAL TARGETS**

PRODUCTS AND SERVICES: Leader in low-carbon People Flow® solutions for smart eco-cities

OPERATIONS: Efficient low-carbon operations

## **ENERGY CONSUMPTION OF KONE ELEVATORS**

Annual energy consumption (kWh/year)



Calculation is based on: Speed: 1 m/s, load: 630 kg Since 2008 also: 150,000 starts per year, travel height 9 m, 4 floors Due to historical reasons, the data for starts, travel height and floors is not available for the 1990s elevators.

The biggest environmental impact of our solutions stems from the amount of electricity elevators and escalators use over their lifetime. This underlines the importance of focusing on energy efficiency innovations. KONE is a pioneer in developing eco-efficient solutions in the elevator and escalator industry.

The KONE MonoSpace®500, our current machine-room-less volume elevator, is up to 90% more energy efficient than KONE's elevators from the 1990s. This has been made possible by the completely renewed low-rise volume KONE EcoDisc® hoisting machine, a highly efficient drive, enhanced standby solutions, and LED lighting. Our revolutionary KONE UltraRope® high-rise hoisting technology cuts the energy consumption of a 500-meter elevator ride by 15%.

Elevators and escalators currently in operation are aging, especially in Europe. In this market, equipment over 20 years is expected to increase from 2.2 million units to 3.2. million units by 2020, representing 60% of the equipment base (Source: European Lift Association ELA). Elevator modernization can

bring vast energy savings. According to the **Energy Efficiency of Elevators and Escalators** (E4) study supported by the European Commission, energy savings of up to 63% can be achieved by modernizing elevators installed in 1985 or earlier with the best available technology. On the European level this would amount to 11.6 TWh.

Over the years, KONE has also worked on further improving the safety, quality, and reliability of our escalators. We have set a target of further improving the energy efficiency of KONE solutions in our Environmental Excellence program for 2014-2016 (Read more on page 23).

Eco-efficiency in every phase of a building's life-cycle

We provide services that help our customers achieve their eco-efficiency goals in every phase of their buildings' life-cycle - from designing and constructing buildings to maintaining and modernizing them. We pay careful attention to the way our services are produced and delivered to ensure that they are environmentally efficient.

# 1. Supporting green

building design Calculating our products' energy use and enabling green building construction. We publish the environmental impact of KONE products and contribute to developing global energy management standards.



2. Eco-efficient installation Considering the environment when installing new equipment Our well-planned and efficient installation processes minimize the adverse environmental impacts of installation work, and our systems ensure we reduce our chemical use and handle waste efficiently on site.

## Up to 70% energy savings by modernizing an elevator

### 4. Eco-efficiency through modernization

Applying a range of solutions to make the biggest difference with the lowest possible environmental impact. Our modernization solutions range from retrofitting LED lights to a completely new elevator with energy-regeneration technology

# 3. Efficient maintenance

3% annual carbon footprint

reduction target relative to net sales

Using smart technologies and a green vehicle fleet to minimize emissions and maximize efficiency. Remote monitoring solutions reduce unnecessary technician callouts. By carrying optimized spare part stocks in our vehicles we reduce warehouse visits, further decreasing emissions.

Top-class energy efficiency In 2014 KONE was the first company to achieve the best A-class energy efficiency classification for as many as eight volume elevator installations, according to the new international standard ISO 25745 Energy performance of lifts, escalators and moving walks. In 2016, KONE extended the classification coverage of its product range

according to the ISO 25745 energy efficiency

standard. KONE E MonoSpace® and KONE Z

MiniSpace™ elevators achieved the highest

classified earlier. Also KONE TransitMaster™ 140 escalator achieved the highest A+++ classification for escalators in addition to KONE TravelMaster™ 110 escalator classified already in 2015. All the ratings have been granted and measurements made by external third parties at customer reference locations. In addition, KONE is the only elevator company to offer the best VDI 4707 A-class energy efficiency rating for its volume elevator range.

Energy efficiency

(A)

class (Ato G)

A-class classification in addition to ten elevators

#### Best-in-class energy efficiency according to ISO 25745 Elevator Building type Load (kg) Speed (m/s) KONE EcoSpace® Office 630 0.63

(A) Residential 630 1.0 KONE MonoSpace® 500 (A) 1.75 KONE E MonoSpace® Residential 1,000  $\bigcirc$ KONE Z MiniSpace™ Residential 1,000 2.0 (A) KONE E MiniSpace™ Residential 1,000 2.0 (A) KONE S MiniSpace™ Residential 1.000 2.0 (A) KONE N MiniSpace™ Hotel 1,000 2.5  $\bigcirc$ KONE MiniSpace™ 1,000 2.5 Office  $\bigcirc$ 

1.75 KONE N MonoSpace® Retail 1,150 (A) KONE S MonoSpace® Office 1,150 2.5 (A) KONE MiniSpace™ 1,200 4.0 Hotel (A) KONE MiniSpace™ 5.0 Observation tower 2,500

Escalator	Building type	Rise (m)	Inclination°	Step width (mm)	Speed (m/s)	Energy efficiency class (A+++ to E)
KONE TravelMaster™ 110	Retail	5.0	30	1,000	0.5	A+++
KONE TransitMaster™ 140	Public trans- portation	5.0	30	1,000	0.65	A+++

## GREEN LABEL IN SINGAPORE

KONE was the first elevator company to receive the Green Label from the Singapore Green Building Council for its KONE N MiniSpace™ and KONE N MonoSpace® elevators in 2013. Through the Green Label, the KONE N MiniSpace™ and KONE N MonoSpace® elevators are recommended for Green Mark certified green buildings. Green Mark is a green building certification scheme of the Singaporean Building and Construction Authority, promoting sustainability in the construction and real estate sectors

## A-CLASS ENERGY EFFICIENCY **ACCORDING TO VDI 4707\***



KONE EcoSpace® KONE MonoSpace® 500 KONE MonoSpace® 700 KONE N MonoSpace® KONE S MonoSpace® KONE E MiniSpace™ KONE N MiniSpace™ KONE S MiniSpace™ KONE MiniSpace™ **KONE** Double Deck

\*VDI 4707 is a guideline published by the Association of German Engineers (Verein Deutscher Ingenieure), which classifies elevators based on their energy consumption.

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In 2016, KONE created externally verified Environmental Product Declarations for all KONE's 11 building door models, published on www. ibu-epd.com \*\*.

\*\*Institut Bauen und Umwelt (IBU) is the program operator for building door FPDs

# 90% OF THE MATERIALS USED IN ELEVATORS AND ESCALATORS ARE METALS

According to KONE's Life-cycle
Assessment data and products
ordered in 2016, almost 90% of the
materials used for manufacturing and
packaging KONE elevators, escalators
and building doors consist of metals
that can be recycled at the end of
the product life-cycle. During 2016,
we managed to improve the material
efficiency relative to orders received by
1.8% compared to 2015.

Reducing the carbon footprint of our products
KONE's environmental responsibility covers the full life-cycle of its products from design and manufacturing to installation, maintenance, modernization, and end-of-life treatment. KONE's life-cycle assessments, carried out in accordance with the ISO 14040 standard, show that our biggest

environmental impact stems from the

energy consumed by our elevators and escalators during their operational lifetime. By reducing energy consumption we reduce the environmental impact of KONE solutions during their operational lifetime. KONE is an active member of the European Lift Association (ELA) working group that in 2015 published a set of new Product Category Rules (PCR) for use in Environmental Product Declarations (EPD) of elevators.

Carbon footprint of KONE's elevators, escalators and			
building doors tCO <sub>2</sub> e	2014	2015	2016
Production of materials for products (calculated)*	2,295,000	2,320,000	2,364,000
Lifetime energy consumption of products ordered from KONE during the reporting year (calculated)	4,554,000	5,017,000	5,034,000
*2013 and 2014 restated			

Materials used, tonnes	Materials	2014	2015	2016
Manufacturing (calculated)	Metals (steel, aluminum, copper)	586,700	622,900	604,100
	Electronics	28,800	29,500	29,400
	Miscellaneous	3,600	3,200	2,900
	Plastics	4,000	4,100	3,900
	Glass	4,100	4,800	5,500
	Rubber	600	700	700
Packaging (calculated)	Wood	37,900	38,000	37,100
	Plywood	14,200	16,000	14,800
	Plastics	1,100	1,200	1,100
	Cartonboard	900	800	700
	Miscellaneous	500	500	400
Office consumables (actual data)	Paper	700	800	600
Total*		683,100	722,500	701,200

<sup>\*</sup>Building doors added to the scope in 2016.

Calculations are based on Life-cycle Assessment data and ordered from KONE (2014: 154,000; 2015: 161,000, 2016: 159,000)

## Eco-innovation milestones





KONE becomes the first company to utilize regenerative drives in its elevators. Regenerative solutions can provide energy savings of 20–35% by recovering the energy that is released when the elevator is used.

The first machine-room-less elevator, the KONE MonoSpace®, is launched, providing up to 70% energy savings compared to conventional technology.



The first KONE destination control

system is delivered. It optimizes traffic,

allowing to reduce the size and number of elevators needed in the building.

2003

The first KONE JumpLift is delivered. KONE JumpLift uses the building's permanent shaft during the construction and 'jumps' upwards as construction progresses, bringing huge efficiency gains as no separate construction-time shaft or elevator is needed.



The KONE EcoMod™ solution is launched, enabling escalator modernization without removing the truss, saving construction time and materials.

KONE MonoSpace® 500 is the first elevator to include LED lighting as a standard feature. LED lighting is up to 80% more energy efficient compared to halogen lighting and lasts ten times longer.





KONE achieves FIDE certification for the KONE
MonoSpace® 500 and KONE MiniSpace™ elevators
as the first elevator company. FIDE is an official
Mexican organization that certifies energy-efficient
equipment. FIDE evaluation is based on the European
VDI 4707 energy efficiency classification.

The eco-efficient sliding door solution is launched. It regulates the door's opening width and opening time based on the outside temperature, wind speed, and pedestrian volumes.





KONE elevators are delivered to netzero energy buildings in Finland, USA and Canada. KONE launches the completely renewed and more energyefficient KONE EcoDisc® hoisting machine. It delivers the best VDI 4707 and ISO 25745 A-class energy efficiency on the market. Its innovative copper winding system reduces heat losses and the braking system reduces the power consumption during steady run.





KONE's revolutionary high-rise hoisting technology, KONE UltraRope®, is launched. It cuts the energy consumption of a 500-meter elevator ride by 15%.





KONE NanoSpace™ elevator full-replacement solution is launched. Its HybridHoisting™ system incorporates a unique combination of belt and rope technologies, thin balancing weights that enable adaptive balancing and the optimization of energy consumption, and the highly energy efficient and compact KONE EcoReel™ motor.

KONE achieved as the first elevator company the best A-class classification for KONE MonoSpace® and KONE MiniSpace™ customer references according to the new ISO 25745-2 standard for the energy classification and calculation of elevators.



In 2016, KONE introduced a renewed KONE MonoSpace®500 elevator to the to the markets in USA and Canada. The new solution offers KONE's customers with greater eco-efficiency, better ride comfort and innovative design options.

## DESIGN FOR ENVIRONMENT IN KONE'S R&D PROCESS

KONE R&D aims to maximize the positive environmental impacts and minimize the adverse ones throughout the life-cycle of our solutions. This extends from raw material extraction to end-of-life treatment such as recycling the materials. We focus on:

- reducing energy consumption
- developing new smart technologies for green buildings
- reducing material use, including packaging and waste
- avoiding the use of hazardous substances
- maximizing material durability and recycled content
- maximizing recyclability
- minimizing water consumption
- ensuring that our products meet green building requirements

# BEING THE BEST EMPLOYER AND ATTRACTING TALENT

We want KONE to be a great place to work, and we aim to inspire, engage, and develop our employees to deliver great results. Our employees have the right to a safe and healthy working environment where discrimination is prohibited and personal well-being is promoted.

At KONE, we see diversity as a strength. We employed over 52,000 people at the end of 2016, and most of our employees are on the field every day, serving customers in more than 60 countries.



## **G4 INDICATORS RELATED TO THIS SECTION**

G4-LA1: Total number and rates of new employee hires and employee turnover by age group, gender and region

G4-LA6: Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender

G4-LA10: Programs for skills management and lifelong learning

G4-LA11: Percentage of employees receiving regular performance and career development reviews, by gender and by employee category

G4-LA12: Composition of governance bodies and breakdown of employees per employee category according to gender and age group

## A GREAT PLACE TO WORK

At KONE, we foster a collaborative culture where co-workers trust and respect each other. We encourage colleagues, customers and partners to innovate together to deliver the best results. Our personnel strategy aims to ensure the availability, engagement, motivation, and continuous development of our employees. We want KONE to be a great place to work – this is one of our strategic targets.

For us, creating a great place to work means treating every employee fairly and providing a safe working environment. High ethical principles guide all our activities. As an employer, KONE is committed to an equal opportunity approach that places people in the positions that best suit their abilities. We prohibit discrimination of any kind and do not differentiate between job applicants based on their gender, race, or other aspects of their personal backgrounds.

We actively encourage diversity at KONE, and our values guide us in nurturing an inclusive culture. To strengthen our global approach and deepen our insights on customers and markets, we have set goals for cultural diversity in our headquarter teams.

During the reporting year, KONE's workforce included 119 nationalities. The majority of our employees are male, with men representing 88% of our people globally. Nevertheless, women accounted for 16% of management team members in 2016, and we continue our efforts towards raising that proportion to our goal of 20%.

## Cultivating our people's skills

A Winning Team of True Professionals was one of KONE's five development programs between 2014-2016. The program aimed to enable all employees to perform at their best, to develop field competencies, and to attract the best talent to KONE.

In 2016, we continued to focus strongly on competence development, with over 3,400 training programs and online modules in our training offering. KONE has over 30 training

centers around the world, and in 2016 special emphasis was given to local trainer capabilities, active school collaboration, training facilities, and simulator development.

In addition, we continued rolling out konelearning.com, our global learning management system, making training options more visible, and simplifying the management of certifications, training requirements, and personnel development.

Konelearning.com also supports our online and field training and facilitates better collaboration and material sharing. At the end of the reporting year, 88% of KONE personnel were covered by the system, making the management of their learning and certifications possible online.

Over 124, 000 online courses in 29 different languages were completed using konelearning.com in 2016. Mobile learning is in active use in several countries, and we launched several exciting learning pilots with gamification and augmented reality. These continue to be deployed in 2017.

Job rotation is an important way for KONE employees to develop their skills and knowledge. It also helps boost collaboration. Visit-a-job is our concept to drive short-term job rotation across units and countries. In 2016, Visit-a-job remained popular, with over 400 rotations during the year.

KONE continued to carry out global learning programs for leaders. These programs cover all leaders at KONE, from executives to first line managers. In 2016, together with the International Institute for Management Development, we completed a three year program "Competing for the Future", which covered our senior leaders around the world.

#### Professional growth

At KONE, we strive to have the best possible professionals with the right competencies in each position. We facilitate this effort through regular performance discussions between individual employees and their managers, which take place at least twice a year. In 2016, over 97% of eligible staff and over 94% of eligible operatives took part in performance and development discussions.

In addition to using these discussions to set goals and review job content, KONE managers are advised to discuss employee well-being, as well as career development and growth opportunities. In 2016, we provided practical guidance that has improved the quality of performance conversations. We actively encourage all employees to prepare individual development plans, and in 2016, we achieved a record level of 97% of eligible employees with their development plans in place.

## Attracting the best talent

KONE's apprentice programs in key countries are a good way for us to recruit new professionals. We also collaborate actively with schools. In 2016, we started a collaboration with several new schools world-wide with a significant increase of co-operation in Middle East. We also continued our promoters program to provide information about KONE in schools, universities, and other relevant sites.

The KONE International Trainee Program offers students and graduates opportunities to work on projects at different KONE units around the world. In 2016, we received more than 2,000 applications to the program and had trainees representing 10 nationalities pursuing their internships at eight different KONE locations. KONE also offers various summer traineeships and thesis opportunities in several countries.

## Measuring workplace satisfaction

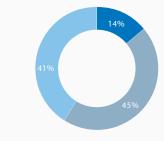
We conduct our Pulse survey every year to measure the level of employees' workplace satisfaction. The survey offers our people an opportunity to give feedback and provides insights into their engagement with KONE's core values. In the reporting year, 46,803 employees provided feedback, and we reached a record high response rate of 93%.

The Pulse survey covers topics such as employee engagement, performance enablement, sustainability, strategy and values, leadership, communication and involvement, customer relationships, and growth and development opportunities. In addition, the survey examines how respondents view their jobs, managers, and performance reviews

In 2016, KONE's employee engagement score remained on a good level surpassing external benchmarks. The scores for some themes saw a slight decline against 2015. During 2017 we will focus more on collaboration and survey follow-up. The biggest global improvements in the 2016 survey related to the perceived learning, development, and training opportunities available to employees. The highest score continued to be KONE's commitment to safety.

## Employees by market, 2016

OUR PEOPLE

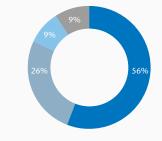


Americas: 14% (13%)

■ Asia-Pacific: 45% (45%)

■ EMEA: 41% (42%) (2015 figures in brackets)

## Employees by job category, 2016



Maintenance and

New equipment, sales and installation 26% (26%)

Manufacturing 9% (9%)

Administration, IT and R&D 9% (9%)

(2015 figures in brackets)

## TOOLBOX TALKS TURN DIGITAL IN THE NETHERLANDS

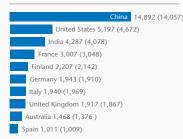
KONE Netherlands set out in 2016 to improve the learning opportunities of its field technicians. All field employees were given tablets that allowed them to access konelearning.com and complete e-learning modules during their normal working day, wherever their job site happened to be.

One of the first training modules to become mobile was the monthly safety toolbox talk. Now the Netherlands team has a simpler way to make sure that all field employees have completed the toolbox talk and have received important safety messages.

OUR PEOPLE KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT OUR PEOPLE

Personnel by country Dec. 31, 2016 10 largest countries

(2015 figures in brackets)



Average workforce tenure in years (2015 figures in brackets)



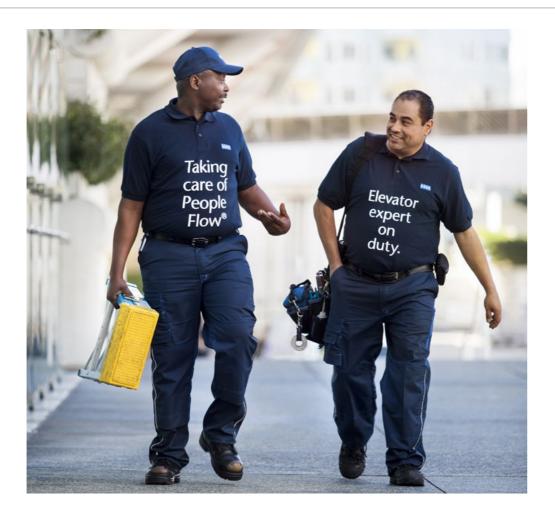
## TRAINING HIGHLIGHTS

# 46,000 employees from 50 countries

had access to trainings via Konelearning.com

124,000 e-learnings completed in the konelearning.com

3,456 courses available in 30 different languages



## Clear rewards

Our reward framework is intended to inspire, motivate and engage employees through easy-to-understand policies, guidelines, and practices that are aligned with our business strategy and development programs. We invest significantly in a range of monetary and non-monetary rewards offered to employees, and we call this total reward. This framework focuses on pay for performance and our aim is to make it transparent and to communicate about it clearly. While reward policies are consistent across KONE, the practices are flexible to meet local needs.

The compensation and other benefits of the Board of Directors, President and CEO, and the Executive Board are disclosed in KONE's Annual review 2016 (p. 55-56).

## Safety is our highest priority

KONE's safety and well-being programs continued during the reporting year. At KONE safety is our highest priority. This means making sure each of our employees has the necessary competence, tools and instructions to perform their work professionally and safely.

KONE employees receive training on health and safety, and safety is a key element in all our

product and operations training. A wide variety of training solutions are used, from classroom based training and eLearning to on-the-job training. Toolbox talks serve to communicate short refreshers and safety messages to field employees.

KONE established a new operating model for managing safety during 2016. The KONE Way for Safety model was developed using benchmarking from outside the industry to identify best safety practices. It provides a harmonized structure for safety management across KONE, for all our employees and subcontractors. These globally defined rules and methods are to protect the safety of our workers and that of anyone else who may be affected.

Every leader is responsible for providing their team with all the necessary means for working safely. Managers perform regular audits to measure compliance with KONE's policies, rules, and defined working methods. Corrective actions are taken if deviations are identified. KONE also conducts process audits to identify possible obstacles to work safety. If any are found, the work in question is stopped until a safe method is approved.

Employees, 2016	
Total number of employees, year end	52,152
Share of women in employees, %	12
Share of women in management teams (492 persons), %	16
Share of women in the Executive Board, %	7
Share of women in the Board of Directors, %	38
Total turnover rate, %, compared to 12 month average headcount	7.34

Employees per contract type, 2016	
% of employees with Permanent contract	98
% of females with Permanent contract	97
% of males with Permanent contract	98

Age distribution, 2016	30 and under	31–50	51 and above
All KONE employees	33%	52%	15%
Executive Board	0%	29%	71%
Board of Directors	13%	13%	75%

Incidents, lost days per incident, and the number of near misses are part of each unit's monthly reporting to global functions. The root causes are identified and corrective actions are implemented to prevent the incident or near-miss from being repeated. Lessons learned from incidents and near misses are shared in quarterly safety network meetings. In addition, safety managers gather monthly to discuss concerns and share best practices.

KONE's Supplier Code of Conduct requires all our suppliers, including subcontractors, to protect the health and safety of their employees.

KONE's well-being programs continued globally during the year. These well-being programs support the physical, social and mental well-being of our employees.

## Listening to employees

KONE organizes the European Employee Forum every year to bring together employee representatives and top management to discuss issues ranging from safety to business development. A smaller working group meets two to four times a year to ensure continuous consultation and communication on important developments affecting KONE employees. In 2016, the theme of the Forum was service culture development. Twenty-one employees from 15 European countries participated.

Employee agreements are managed on a national level, and there are differences in national legislations. Approximately 40% of KONE's employees are covered by collective bargaining agreements.

Open communication and sharing
At KONE, we believe employee engagement
is built on open and timely communication
about the company's goals and ways of
doing business. We use multiple channels
to interact with employees, motivate them,
and encourage collaboration. KONE's global
intranet, for example, acts as both a news
channel for all the latest news and events as
well as a virtual teamwork site.

The latest KONE news is also shared through employee magazines and newsletters. In 2016, KONE published two editions of its global employee magazine, Move, in nine different languages.

Gender distribution per market, 2016\*

EMEA Men 86% Women 14% Asia Pacific Men 89%

\*Excluding Americas

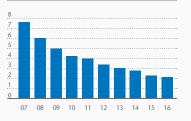
## EMPLOYEE SAFETY TARGETS AND ACHIEVEMENTS

- KONE's ultimate goal is zero accidents
- In 2016 our Industrial Injury
  Frequency Rate (IIFR) fell 7.2% to
  2.1. Our average lost days per injury
  decreased by 14.2%
- Employees see KONE as highly committed to employee safety, according to the 2016 results of the annual Pulse employee survey

## IIFR DEVELOPMENT

As key safety performance indicators, KONE tracks the number of lost time injuries of one day or more per million hours worked, as well as the average number of lost days per incident. In 2016, the Industrial Injury Frequency Rate (IIFR) for KONE's employees was down by 7.2%, and the average lost days per incident fell by 14.2%.

Industrial Injury Frequency Rate development among KONE employees



KONE tracks the number of lost time injuries of one day or more, per million hours worked, as a key performance indicator. The IIFR covers KONE's own employees.

# **ENABLING OUR PARTNERS** AND SOCIETIES TO PROSPER

KONE directly contributes to economic development in the over 60 countries where we operate. In addition, we work with approximately 20,000 suppliers who provide us with for example raw materials, components and modules, and logistics and installation services. As a responsible corporate citizen and business partner, we are committed to making a positive impact throughout the whole value chain.



### **G4 INDICATORS RELATED TO THIS SECTION**

G4 EC1: Direct economic value generated and distributed

G4-EC6: Proportion of senior management hired from the local community at significant locations of operation

G4-S04: Communication and training on anti-corruption policies and

G4-S07: Total number of legal actions for anti-competitive behavior, antitrust, and monopoly practices and their outcomes

G4-S08: Monetary value of significant fines and total number of nonmonetary sanctions for non-compliance with laws and regulations

G4-EN32: Percentage of new suppliers that were screened using environmental criteria

G4-LA14: Percentage of new suppliers that were screened using labor practices criteria

## **ECONOMIC** RESPONSIBILITY

Our business model is based on a life-cycle approach. This means that we provide value for our customers, every step of the way for the entire lifespan of the building. We offer innovative and sustainable new equipment solutions, ensure safety and availability of the equipment in operation, and offer modernization solutions for aging equipment. The life-cycle nature is one of the strengths of our business model. The new equipment business is more cyclical in nature and fuels the growth of our maintenance business in the long term. Maintenance, on the other hand, brings stability to the business over economic cycles, whereas the aging equipment in maintenance creates potential for modernization. We believe that megatrends such as urbanization, aging population, and growth of the global middle class provide a strong basis for the continued demand for our solutions.

## Financial performance in 2016

In 2016, KONE's orders received declined by 4.2% (at comparable rates by -1.6%), and stayed at a good level of EUR 7,621 million (2015: 7,959 MEUR). New equipment orders received declined somewhat, while in modernization, orders received grew clearly. Orders received in the new equipment business amounted to approximately 158,000 units (2015: approximately 161,000 elevator and escalator units), whereas our maintenance base was clearly over 1.1 million units at the end of 2016 (close to 1.1 million units at the end of 2015). In 2016, KONE's net sales grew by 1.6% (at comparable rates 3.9%), and totaled EUR 8,784 million (2015: 8,647 MEUR). The share of new equipment sales out of total sales was 55%, whereas maintenance accounted for 31% and modernization 14%. In terms of geographical distribution, 40% of net sales came from the EMEA region (Europe, Middle East and Africa), 19% from the Americas and 41% from Asia-Pacific. China, the United States, France and Germany were the largest individual countries

in terms of sales. In 2016, China's share was approximately 30%, the United States' share was approximately 15%, while France and Germany accounted for approximately 5% of total net sales each. KONE's operating income (EBIT) continued to grow, reaching EUR 1,293 million (2015: 1,241 MEUR) or 14.7% (14.4%) of net sales in 2016. Operating income grew, driven by positive development in all businesses. The growth was driven by broadbased positive development across geographic regions, in particular in Europe and North America. Unfavorable translation exchange rates burdened the growth in operating income with a negative impact of EUR 44 million. KONE's financial position was strong at the end of December 2016. The cash flow generated from operations during January–December 2016 before financing items and taxes was strong at EUR 1,509 million (2015: 1,474 MEUR). The cash flow was driven by the growth in operating income and continued favorable development in net working capital.

## Creating stakeholder value

Our positive financial performance in recent years has enabled us to generate stakeholder value for our customers and suppliers, local communities, employees and shareholders alike.

## Customers and suppliers

Sales by market 2016

**Americas** 

19%

Our strategy 'Winning with customers' means that everything we do focuses on helping our customers succeed in their businesses.

**EMEA** 

40%

We seek to build long-term relationships with our suppliers and customers. Our supplier relationships provide business opportunities and employment for thousands of suppliers globally. Read more about our supplier management on p. 46-47.

#### Local communities

KONE is committed to operating as a responsible corporate citizen in all the countries in which we are present. We are committed to paying all taxes that are legally due, and to meeting all disclosure requirements in the countries where we operate. Our objective is to ensure predictability in all tax matters. In addition, every transaction must have a solid business rationale without compromising tax compliance principles. The location of KONE's group entities is driven by business reasons, such as the location of customers, suppliers, raw materials and know-how. We insist on transparency in all our activities, including our relationships with tax authorities. KONE has been collaborating with the Finnish Tax Authorities in promoting tax transparency since 2015. KONE's income taxes globally amounted to EUR 307.7 (311.4) million in 2016, with the ten largest countries by sales accounting for 78% of the corporate taxes. Income taxes of the Finnish KONE companies totaled EUR 56.7 (37.2) million in 2016.

## **Employees**

Our largest direct economic impacts come provide. KONE is a global company with

New equipment

Maintenance

55%

31%

14%

from the employment opportunities we

## Sales by business 2016



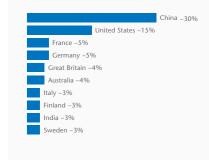
Modernization

Our geographic regions are Europe, the Middle East and Africa (EMEA), Americas, and Asia-Pacific. The service business accounts for 45% of KONE's revenue, while the new equipment business represents the remaining 55%

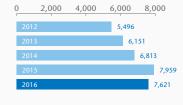
Asia-Pacific

41%

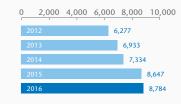
## 10 biggest countries by sales, 2016



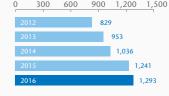
## Orders received 2012-2016 (MEUR)



## Sales 2012-2016 (MEUR)



## Operating income 2012-2016 (MEUR)





about KONE's financial performance from our Annual Review 2016 available at kone.com/investors.

<sup>\*</sup>For a list of KONE's top 10 countries by sales, please see page 40.

ECONOMIC RESPONSIBILITY KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT SUPPORTING LOCAL COMMUNITIES

## LONG-TERM FINANCIAL TARGETS

GROWTH: Faster than the market

PROFITABILITY: 16% EBIT margin

CASH FLOW: Improved working capital rotation

Our positive financial performance in recent years has enabled us to generate stakeholder value for our customers and suppliers, local communities, employees and shareholders alike.

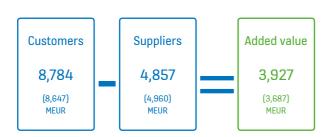
KONE's largest individual shareholder is Antti Herlin, Chairman of KONE's Board of Directors, who controls over 20% of the share capital and over 60%

For KONE's domestically registered major shareholders, see monthly updated list on our website.

#### Read more

about our economic performance at www.kone.com/investors.

## KONE's economic impacts in 2016



Stakeholders

Employees	<b>1,962</b> (1,825) MEUR
Creditors	-36 (-122) MEUR
Public sector	<b>979</b> (932) MEUR
Shareholders	<b>795</b> (718) MEUR
Economic value retained in the company	<b>226</b> (334 MEUR

(2015 figures in brackets)

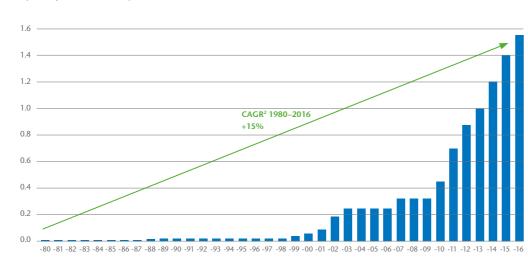
global processes and guidelines, but our operations are at the same time very local. In our subsidiaries, management and field personnel are predominantly local. KONE had over 52,000 employees in over 60 countries at the end of 2016. In 2016, the largest KONE countries by the number of employees were China, the United States and India. Read more about our people on p. 34-37.

### Shareholders

KONE's strong financial performance has enabled increasing dividends to our shareholders. In total, KONE distributed approximately EUR 795 million in dividends for the financial year 2016. Also with a longer-term perspective, our track record on dividend distribution has been sustainable. During the last ten years the, dividends have grown by 20% per year on average. KONE had over 57,000 shareholders at the end of December 2016. (Dec. 2015: over 56,000 shareholders)

Ensuring added value in the future KONE has three long-term financial targets: growing faster than the market, achieving an EBIT margin of 16%, and improving working capital rotation. We have achieved two of these three targets: KONE has grown faster than the market in recent years, and we have improved our working capital rotation at the same time. For the 16% EBIT margin, no target date has been set. With our lifecycle business model, the short-term focus is on growing absolute EBIT while achieving improved relative profitability over time with growth and productivity gains. KONE's philosophy is to continuously develop the business with a long-term outlook. We are focused on maintaining our challenger attitude and we are constantly developing our competitiveness in order to strengthen our position as one of the global leaders in the elevator and escalator industry.

## Split-adjusted dividend per class B share, EUR, 1980-20161



<sup>1)</sup> Note: Includes the basic dividend. Adjusted for share splits in 1999 (1:3), 2002 (1:3), 2005 (1:2), 2008 (1:2) and 2013 (1:2). 1 EUR= 5.9 FIM; not adjusted to constant exchange rate. Additional extraordinary dividends: for 2009, a double dividend was paid; for 2011, an extraordinary dividend of EUR 0.75 was paid and for 2012, an extraordinary dividend of EUR 0.65 was paid.

## SUPPORTING LOCAL COMMUNITIES

The KONE Centennial Foundation (KCF), an independent, non-profit organization founded by KONE in celebration of its 100th anniversary in 2010, focuses on innovative programs that advance and support developmental, educational, and cultural activities for children and youth around the world. KCF cooperates closely with local partners to plan projects, aiming to ensure efficient resource allocation and respect for local culture and priorities. Wherever possible, KCF chooses projects where local KONE units can contribute practical support and KONE volunteers can support project activities in their spare time.

The Foundation announced its first project, a mobile library serving children of migrant workers in China's cities, in the spring of 2011. Now in its sixth year of operation, the mobile library continues to bring the joy of reading to thousands of children with severely limited access to books. Cooperation with the Hangzhou Children's Library and the Beijing Normal University has introduced new resources to the traveling library's program.

In India, KCF has completed its 3-year support of the Rotary Nagar Youth Center in the center of Chennai and is undertaking a new project in the countryside surrounding the new KONE India factory north of the city. KCF and KONE India are each funding 10 Single Teacher Schools in impoverished villages, where children either fail to attend regional schools or the schools provide inadequate developmental opportunities for their students. The STS organization trains local residents to run creative educational programs in the early evening, enabling all children in the village to attend. KONE India has hired an experienced coordinator to ensure the delivery of quality services in all 20 villages.



KONE Centennial Foundation and KONE India are funding Single Teacher Schools near Chennai,

In South Africa, the Westbury Youth Centre has continued to grow and strengthen its multiple programs, including training in entrepreneurship, computer use, media production, life skills and leadership development. With completion of three years of financial support from the government of Finland, a big challenge for program administrators is to obtain replacement funding from South Africa's public and private sectors. As its training programs have become more rigorous and helped young people obtain scholarships, training positions and jobs, the Centre has attracted support from KONE South Africa, Investec and Phillips as well as the City of Johannesburg and the South African Department of Social Development.

KCF's support for the Xico Arte art-against-violence initiative in Mexico City is focusing in 2017 on helping the program organize as an official not-for-profit entity. Xico Arte is a group of young people from a community burdened by crime and unemployment. They work with schools in the Valle de Chalco, using archeological artifacts unearthed in local construction work to teach local history and traditions. The archeological objects are also used to inspire children's artwork.

KCF is also supporting - for the first time - the Zero-to-Hero child development program in villages of the rural Na Yom region of Thailand north of Bangkok. This innovative program brings together Finnish early childhood development best practices with a deep understanding of local Thai culture and traditions to involve entire villages in providing educational opportunities for local children and ensuring a healthy start to their lives. As the program gains traction, it will expand into primary schooling.



Children use archeological artifacts to learn local history and traditions in Xico Arte project in Mexico.

## SUPPORT ON A WIDE SCALE

In addition to the programs mentioned here, KCF continues to support teacher exchanges and exceptional schools such as the Dandelion School in Beijing as well as providing matching funds for appropriate fund-raising initiatives by KONE employees. Although the Foundation is an independent entity, cooperation with KONE companies and the participation of KONE volunteers are cornerstones of successful operations.

<sup>&</sup>lt;sup>2)</sup> Compound annual growth rate

ETHICAL BUSINESS PRACTICES KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT ETHICAL BUSINESS PRACTICES

## COMMITTED TO INTEGRITY, HONESTY AND FAIR PLAY



The KONE Code of Conduct is an integral part of the company's corporate culture and values and sets out our commitment to ethical business practices.

The Code of Conduct and Competition Compliance e-learnings are available in **30 languages** 

The number of Supplier Code of Conduct language versions is **24** 

The Distributor
Code of Conduct is available in
5 languages

KONE has operations in over 60 countries and collaborates with authorized distributors in over 80 countries around the world. As a global corporate citizen, we are fully committed to the laws and regulations of the countries where we operate. Our global presence makes it crucial for us to ensure that we have clear rules and guidance in place for ethical business practices. It is equally important that these are easily accessible to all our employees, our suppliers, and our distributors, thereby enabling us to conduct business in an ethically and socially responsible manner throughout our entire value chain. The KONE Code of Conduct sets out our company's commitment to integrity, honesty, and fair play.

## The KONE Code of Conduct

The KONE Code of Conduct (the Code) is an integral part of KONE culture and defines our standards of ethical conduct. The Code addresses what is expected of KONE employees and KONE companies. The topics covered in it include compliance with the laws and rules of society, work environment and human rights, anti-bribery, health and safety, discrimination, fair competition, risks and conflicts, marketing of products and services, and environment and sustainability. All KONE employees are expected to understand and abide by the Code and to report any violations using the channels

available for this purpose. The Code is available in over 30 languages and applies to every employee of KONE and KONE companies.

KONE's Competition Compliance Policy KONE's Competition Compliance Policy promotes the principles of fair competition that are presented in the Code of Conduct. The policy details our unambiguous position against anti-competitive practices. It sets out the rules and principles that all KONE employees must follow to ensure that we comply fully with competition laws. Also, the Competition Compliance policy is available in over 30 languages.

## KONE Supplier and Distributor Codes of Conduct

KONE's Supplier Code of Conduct sets out the ethical business practice requirements that we expect from our suppliers. It covers areas such as legal compliance, business conduct, anti-bribery, labor and human rights, health and safety, and environment. KONE expects its suppliers to conform to the requirements of the Supplier Code of Conduct in their dealings with KONE, their own employees and suppliers, as well as third parties including government officials and others. The Supplier Code of Conduct is available in over 20 languages and is explained in more detail on pages 46-47 of this report.

The KONE Distributor Code of Conduct was renewed during 2016. As our business partners, our distributors are expected to conform with the requirements of the Code in their dealings with KONE, their own employees, customers and suppliers, as well as third parties including government officials and others. The KONE Distributor Code of Conduct is available in five languages.

# Training and awareness building continued during 2016

KONE renewed its Code of Conduct and Competition Compliance eLearning programs and began training employees in 2015 with continued roll-outs during 2016 reaching a total of 47 countries with a completion rate of 97% among the target group. All KONE employees who have daily access to a computer are required to complete the Code of Conduct online training program, which covers topics such as conflicts of interest,

fighting bribery, respect for people and assets, and excelling in sustainability. A selected group of employees is also required to complete the Competition Compliance online training program due to their role and position in the company. They include members of KONE's Executive Board and employees involved, for example, in management, sales, sourcing, and trade association related activities. Individual business units can nominate additional participants when necessary.

Enforcement of Codes and Policies

Dedicated Compliance Officers help employees
comply with KONE's Code of Conduct, and
global and regional compliance committees
oversee the functioning of the compliance
management system. Employees have several
ways in which they can contact KONE's
Compliance Officers. They also have the right to
make contact in their native language. This can
be done anonymously, if the employee so wishes.



During 2016, over 6,000 Service Technicians in China received faceto-face training sessions on the KONE Code of Conduct during weekly preshift meetings.

Topics covered in KONE's Code of Conduct

# Compliance with laws and rules of society

- KONE is committed to full compliance with all applicable laws and regulations.
- KONE respects prevailing cultural norms and practices, but where there
  are conflicts, KONE's employees are required to follow the KONE Code of
  Conduct.

## Work environment and human rights

- KONE prohibits all forms of discrimination.
- KONE prohibits offensive behavior, including sexual harassment.
- KONE does not use child or forced labor and does not do business with suppliers or subcontractors who use these practices.
- KONE is committed to ensuring a safe and healthy working environment for all employees.

# Risks and conflicts

- KONE prohibits direct and indirect bribes and unethical payments as well as excessive gifts and hospitality.
- KONE has a zero tolerance for corruption of any kind. The Code of Conduct prohibits improper payments or benefits.

## Competition law

 KONE is strongly committed to the promotion of fair and healthy competition, and prohibits any violations.

# Environment and sustainability

- KONE is committed to minimizing the environmental impact of its solutions, products, services, and operations.
- KONE employees must avoid all conflicts of interest.

## Handling of information

- KONE safeguards the confidentiality, integrity and availability of its proprietary information.
- KONE is committed to protecting personal data.

### Reporting concerns or violations of the Code of Conduct

- There are various channels available for employees to seek advice and report any real or potential violations of KONE's Code of Conduct to local management, the KONE Legal Function or KONE's Compliance Function. KONE shall not retaliate against employees raising concerns in good faith.
- Suppliers and distributors can also report concerns to the KONE Compliance Function at compliance@kone.com.

SUPPLY CHAIN KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT

## AN INDUSTRY-LEADING SUPPLY CHAIN



Each year, KONE delivers over 3.3 million packages from distribution centers to installation sites, and around 1.3 million packages of spare parts from distribution centers to customer sites. 3.3 million packages amount to a weight of 1,150 million kilograms, or 2.8 million cubic meters in volume.

In 2016 KONE had nine production sites for elevators, escalators and building doors, 10 global distribution centers for elevators, and five distribution centers for spare parts.

KONE's supply chain operations cover new equipment production, modernization, and spares supply. We also work closely with selected key material suppliers and logistics service providers. Approximately 4,700 people keep KONE's supply operations running. We aspire to develop the best supply chain in the industry

Quality, responsiveness, and efficiency are the cornerstones of our supply chain, which consists of all the actions and processes that precede the delivery of KONE equipment to a customer's site. The chain ends when a customer accepts installation. Leading up to this, our job is to ensure that the right items are delivered to the right places at the right times throughout all the phases of manufacturing, distribution, installation, including our suppliers' processes.

Our aim to make KONE's supply chain the best in the industry requires that we continuously analyze and fine-tune our processes. KONE's supply chain improvement program, 10x Better Factory continued in 2016. The program aims to further enhance the quality of our in-house production and support harmonization of process control activities in production lines. During 2016 solid and up-to-date control plans were created for each workstation and critical standard processes began to be managed by real-time statistical process control.

To strengthen production quality competencies staff and key operatives in all production units have completed specific eLearning training programs. Furthermore, each production unit completed many corrective actions as part of continuous improvement program to further align their operations with newly established quality quidelines.

In 2016, we started the implementation of a new manufacturing execution system.

The system strongly supports operative production quality improvements.

During the reporting year we invested in machine tools, replacing those using earlier hydraulic systems with more advanced electromechanic technology. The new tools are more environmentally sustainable because in addition to bringing energy savings, oil is no longer required in their operation.

In 2016, we opened a new 16,000 square meter facility in Allen, Texas, US, to house North Americas' supply operations. The facility includes a light manufacturing unit, major project engineering, research and development department, and other product and installation support functions. It also features a 40-meter tall test tower with six elevator shafts for evaluating prototypes and new components before they go into production.

## Responding to customers' needs

We take customers' different requirements into account by adapting our supply chain to meet their demands. For example, we collect customer feedback on our quality performance systematically and analyze it using Six Sigma tools before taking corrective action. Additionally, we set targets and monitor key performance indicators (KPIs) such as the early failure rate of our products.

At the end of the day, our customers' opinions on our performance are what count. According to the global NPI Customer Loyalty Survey we carry out each year, our efforts to achieve supply chain excellence have been succesful, with the 2016 results for both product quality and installation quality remaining on a good level.

# Better quality and productivity through learning

We at KONE employ a set of techniques and tools to improve the productivity and quality of our operations. By applying Lean and Six Sigma philosophies, we are able to reduce waste and control process variation throughout the entire supply chain as well as in product and process transitions. We

implement the 5S\* method in our offices, factories, installation sites, and distribution centers. Furthermore, we have developed a Lean manual and a management model of continuous improvement in implementing these principles. Another new development is the establishment of Lean capability teams on a global level.

A large number of employees gained new capabilities when they received Kaizen training as part of Kaizen events.

More than 800 Lean and Six Sigma projects were completed successfully in 2016. To date, hundreds of KONE employees have qualified as Six Sigma Green Belts and Black Belts.



KONE's new facility in Allen, Texas features a test tower for evaluating prototypes and new components before they go into production.

## KAIZEN ACTIVITIES TO IMPROVE THE USE OF PACKAGING MATERIALS

KONE organized Kaizen activities in 2016 to think of ways to reduce packaging in our deliveries and speed up installation at construction sites.

Currently the components found inside packages and containers are not fully arranged in the order the installer needs them when unpacking materials on-site and installing the elevator. The packaging materials also take up additional space both during transportation and on-site, increasing emissions and costs.

To inspire out-of-the-box ideas, the workshop participants were from different KONE units. The team came up with lots of innovative suggestions on how to reduce the amount of packaging materials needed and to make them more environmentally sustainable. For example, participants recommended using the car panels as part of the packaging, removing "box in a box" packaging. The ideas have already been tested in the field.

Kaizen philosophy involves everyone in making practical improvements. It is an integral part of the way we work at KONE.

Read more

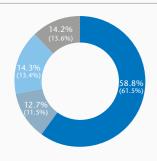
about our logistics on p. 19.

<sup>\*</sup>The name of the 5S methodology comes from the words sort, stabilize, shine, standardize, and sustain

SUPPLY CHAIN KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT SUPPLY CHAIN

## DEVELOPING PARTNERSHIPS WITH OUR SUPPLIERS

Breakdown of material and service costs



Total 4,786 MEUR

- Direct materials and supplies
- Subcontracting
- Other production costs\*
- Other indirect costs\*\*
- \* Mainly freight and packaging costs as well as other variable costs such as utilities, tools and operatives related
- \*\* Relate to for example administration expenses, covering IT, marketing, trainings, and insurances.

Figures for 2015 have been adjusted due to a change in allocation of costs.

## TOP 10 SUPPLIER LOCATIONS<sup>1)</sup>

China Italy United States Austria Finland India Czech Republic

Estonia

Mexico Germany

1) Suppliers that provide products for new equipment to KONE distribution centers and factories. Our suppliers and their sub-tier suppliers are a critical part of KONE's supply chain. Without them, we would not be able to provide high-quality products and services to our customers. Just as internal efficiency is essential, so is working effectively with the approximately 20,000 suppliers who provide KONE with raw materials, components, modules, and logistics and installation services. Not to mention other suppliers who deliver indirect materials and services to KONE.

We only produce selected components in-house, and our own production consists largely of the assembly of sourced components. The main raw materials used in our elevators, escalators, and automatic building doors are various types of steel and stainless steel as well as aluminum and copper.

We purchase approximately 80% of our raw materials, components, and systems supply for new equipment production from approximately 120 suppliers, the majority of whom are located in the same countries as KONE factories or distribution centers (see Top 10 Supplier Locations).

Managing relationships with our suppliers We work closely with our suppliers to develop our business, and our aim is to build long-term relationships with them. We manage our suppliers according to a tailored approach that evaluates their importance to KONE. This is done through the regular, critical assessment of multiple factors such as the business scope and spend with the supplier, their innovation potential, the criticality of the materials or services they provide, the supply chain situation, and KONE's investment or integration level with the supplier.

Based on the supplier's status, our management and measurement techniques include audits, assessment and mitigation of supplier-related risk, the employment of standardized contractual agreements that include the KONE Supplier Code of Conduct, the assessment of supplier performance, and supplier certification.

## **Supplier Audits**

All of the main suppliers of direct materials to KONE distribution centers or factories undergo regular audits. Of KONE's strategic suppliers,

93% were audited in 2016. We review our audit plan every year to prioritize and schedule audits according to our business needs. The audits are scheduled to check on changes in products or production processes, to validate follow-through on improvement initiatives, to assess quality and environmental management systems – especially when suppliers are not ISO certified; or to preaudit the suitability of potential suppliers.

#### Assessing supplier risks

KONE's sourcing risk monitoring system is based on a thorough assessment of suppliers, including analyses of their financial and business viability and their dependence on business from KONE. We also work closely with our strategic suppliers to find competitive raw material price levels.

## Supplier Code of Conduct

KONE expects all of its suppliers to commit to KONE's Supplier Code of Conduct. The Code sets forth KONE's global values. Suppliers are expected to adhere to the Code in their dealings with KONE, their employees, and suppliers, as well as third parties. KONE may terminate its contracts with suppliers if they fail to adhere to the Code.

The Supplier Code of Conduct includes the following key elements:

Legal compliance – Compliance with local laws and regulations.

Business conduct – Compliance with ethical conduct with respect to human rights; zero tolerance for bribery and corruption; avoidance and active disclosure of conflicts of interest; and fair conduct in business with regard to competition laws and regulations.

Labor and human rights – Fair and equal treatment of employees; non-usage of child or forced labor; ensuring a harassment-free environment for employees; compliance with any applicable wage-related laws and regulations; and respect for employee's rights to freely associate and bargain collectively in compliance with all applicable laws.

Health and Safety – Provision of a safe and healthy environment to employees; availability of appropriate health and safety information, training, and equipment for employees; active pursuit of safety programs covering at least human safety, emergency preparedness, and exposure to dangerous chemicals and biological substances; and ensuring that employees are not working under the influence of alcohol or illegal drugs while working for KONE.

Environment – Efforts to reduce the impact on the environment from operations and products; compliance with environmental laws and regulations and obtaining necessary environmental permits; monitoring, controlling, and treating wastewater, air emissions, and other waste appropriately; a systematic approach to considering environmental aspects; adhering to any applicable laws and regulations as well as KONE's own requirements regarding the prohibition or restriction of specific substances.

IPR and publicity – Compliance with laws and international treaties on intellectual property rights; refraining from publication of information regarding cooperation with KONE or the use of KONE's trademarks without permission.

Monitoring – Monitoring of compliance with the KONE Supplier Code of Conduct; provision of documentation upon request to KONE; the right of KONE to audit the supplier in case of a suspected breach of the Supplier Code of Conduct; and active communication with KONE regarding non-compliance.

The complete KONE Supplier Code of Conduct can be found at www.kone.com/suppliers.

Assessing supplier performance

We monitor the performance of our main suppliers of our direct production materials through a monthly KPI measurement and follow-up process. We also run a supplier scorecard system that evaluates key suppliers of direct materials. The results of the scorecards represent a balanced view of quantitative and qualitative performance criteria from a number of angles, such as quality, cost and logistics, for example.

We regularly discuss performance evaluations with our suppliers. When their performance does not meet our expectations, we initiate corrective actions or development projects and conduct follow-ups.

High-quality production processes
KONE's supplier development and supplier
quality management function continuously
strives to coach our suppliers to implement
best-practice quality management
methods in their factories. This includes the
implementation of process quality control
points in manufacturing lines to check specific
product and process characteristics that
are considered critical to the end product's
quality.

When new KONE products or changes to our products are implemented, KONE's supplier operations project managers follow-up the implementation with the suppliers' quality and production managers. This helps ensure that aspects related to product and process quality are taken care of and KONE's requirements are met from day one. When suppliers make changes to their products or processes affecting products delivered to KONE, they need to inform KONE about these changes. On a case-by-case basis, KONE's supplier quality engineers evaluate what kind of evidence is requested in order to check that the change is made in a controlled manner.

Supplier Excellence Certification
KONE's Supplier Excellence Certification
Program assesses key suppliers' sites, examining
aspects that include environmental and quality
management systems, performance scorecards,
and supplier audit results. ISO 14001 and ISO
9001 compliance are also assessed. We aim
to maintain a supply base that complies with
international quality and environmental standards
as well as the standards of KONE.

In 2016, 97% of our strategic supplier factories were ISO 9001 certified, and 93% of them had ISO 14001 certifications. We expect all of our key suppliers' factories to attain Supplier Excellence Certifications.

All our new suppliers must sign KONE's Supplier Code of Conduct.

Strategic suppliers with ISO 9001 certification:

97%

Strategic suppliers with ISO 14001 certification:

93%

Strategic suppliers audited: 93%

REPORTING SCOPE KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT INDEPENDENT ASSURANCE REPORT

## REPORTING SCOPE

KONE has chosen to report using the Global Reporting Initiative (GRI) guidelines in order to facilitate easier comparison of our performance with other companies and to streamline our own corporate responsibility reporting efforts. KONE has published Sustainability Report annually since 2008. The previous report was published in June 2016.

The report follows GRI (G4) reporting guidelines as far as they are applicable, and covers economic, social, and environmental responsibility. A table detailing how this report complies with the GRI guidelines is shown on pages 50–51. We have self-declared our reporting to be in accordance with the Core level.

The reporting period corresponds with the calendar year and with KONE's financial year of January 1–December 31, 2016. When developing the report content and choosing indicators, the driver has been the materiality to KONE's operations. During 2016, we conducted a materiality analysis and defined the focus areas for

• Diversity and equal opportunity

KONE's sustainability work (see more on p. 12-13). KONE's approach to sustainability has also been described in the Interview with the chairman and the president and CEO on p. 4-5, and in the strategy description on p. 8-9.

All major local and regional organizations and all production units are included in the reporting scope. All financial data and a significant proportion of the employee-related data has been collected through KONE's enterprise resource management and financial reporting systems. All financial figures presented in this report are based on KONE Corporation's consolidated and audited Financial Statements for 2015 and 2016.

The personnel data is provided by our HR organization— with the exception of the data relating to gender and age distribution in management.

The environmental data has been collected from KONE's 13 manufacturing units worldwide and from 30 major country organizations with sales, installation, and

service operations in Asia-Pacific, EMEA, and North America. The collected environmental data covers 91% (2015: 86%) of all KONE's employees and 100% of the employees working at our manufacturing units. The facilities related energy data collected from the reporting country organizations has been extrapolated for the entire KONE organization. The goal is to gradually extend our environmental reporting to cover all of KONE.

Business air travel data has been collected from 29 countries and extrapolated to cover the entire KONE organization. Vehicle fleet fuel consumption data has been collected from 22 countries, covering 94% of the total fleet. Product and spare parts logistics data has been collected by KONE's corporate logistics team and calculated using an in-house logistics emission calculation system to replace the previous system. The logistics data covers the transportation of products from KONE's manufacturing units to customers and the transportation of modules that are delivered straight from our suppliers to our delivery centers and onward to

customers. Inbound logistics of materials to KONE's manufacturing sites is excluded from the reporting scope because of its minor impact (KONE prefers material suppliers located close to our manufacturing units, and a large part of the modules are delivered directly from suppliers to KONE distribution centers). The quality and coverage of data provided by our logistics suppliers has over the years continuously improved.

KONE has used an environmental performance software system since 2011. The environmental data has been collected from branch offices using a customized data collection spreadsheet

consolidated on the country level. The country-level data has been entered into the environmental performance system. The data has further been consolidated globally in a combined effort with KONE's global carbon footprint assessment. The environmental performance has been reported in accordance with ISO 14064 and the Greenhouse Gas Protocol Corporate Standard. The Scope 2 emissions for the reporting year 2016 and base year 2015 are calculated according to the dual reporting principles of the GHG Protocol Scope 2 Guidance (marketand location-based method. RES-GO guarantees of origin subject to EECS

(European Energy Certificate System) have been acquired ) for the purchased green electricity. KONE's greenhouse gas emissions for scope 1 and scope 2 (direct and indirect energy consumption) and scope 3 (logistics and business air travel) have been assured by Mitopro Oy. The emission factors are based on the data sources of the International Energy Agency, World Resources Institute GHG Emission Factors Compilation, Statistics Finland Fuel Classification, and DEFRA (UK Department for Environment, Food & Rural Affairs).

## INDEPENDENT ASSURANCE STATEMENT -KONE'S GHG EMISSIONS 2016

To the Management and Stakeholders of KONE Oyi

## Scope and Objectives

The Management of KONE Oyj commissioned us to perform a limited third party assurance engagement regarding greenhouse gas emissions inventory data ("GHG emissions") including Scope 1, 2 and 3 emissions disclosed in KONE's Sustainability Report ("Report") for the period of 1st January to 31st December 2016. The assurance engagement was conducted in accordance with the AA1000 Assurance Standard (2008).

## Responsibilities

KONE is responsible for the collection, calculation and presentation of GHG emissions inventory data according to the Greenhouse Gas Protocol. The Management of KONE has approved the information on GHG emissions disclosed in the Report. Our responsibility as assurance providers is to express an independent conclusion on the GHG emissions disclosures subject to the limited assurance engagement. The reporting criteria used for our assessment include the following guidelines and standards:

- Greenhouse Gas Protocol. A Corporate Accounting and Reporting Standard
- Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting, and

 Global Reporting Initiative's Sustainability Reporting Guidelines (4.0).

# Assurance Provider's Independence and Competence

We have conducted our assessment as independent and impartial from the reporting organisation. We were not committed to any assignments for KONE that would conflict with our independence, nor were we involved in the preparation of the GHG emissions inventory data. Our team consists of competent and experienced sustainability reporting experts, who have the necessary skills to perform an assurance process.

#### Basis of Our Opinion

Assurance providers are obliged to plan and perform the assurance process so as to ensure that they collect adequate evidence for the necessary conclusions to be drawn. The procedures selected depend on the assurance provider's judgement, including their assessment of the risk of material misstatement adhering to the reporting criteria.

Our opinion is based on the following procedures performed:

Our opinion is based on the following procedures performed:

- Interviews with KONE specialists responsible for GHG data collection and reporting at Group level and in selected sites.
- Review of Group-level systems and

procedures to generate, collect and report quantitative data on GHG emissions.

- Assessment of Group-level calculations and data consolidation procedures and internal controls to ensure the accuracy of data.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.

## Conclusion

Based on the work described in this report, nothing has come to our attention that causes us to believe that the GHG emissions inventory data disclosed in KONE Sustainability Report 2016 is not reliable, in all material respects, based on the reporting criteria.

Helsinki, Finland, 7th April 2017 Mitopro Oy

Mikael Niskala

Independent Sustainability Expert

Tomi Pajunen Independent Sustainability Expert

## KONE FOCUS AREAS AND GRI G4 ASPECTS

#### **KONE Focus Areas** GRI G4 Aspect (G4-19) Boundary DRIVING INNOVATION AND • Aspect: Energy Within the Organisation Outside the Organisation IMPROVING RESOURCE EFFICIENCY Aspect: Water • Deep understanding of customer needs · Aspect: Emissions KONE Operations Indirect (Scope 3) Energy use and GHG Sustainable innovations and business models • Aspect: Effluents and Waste (Manufacturing units + 31 Country Resource efficiency and life-cycle thinking • Aspect: Compliance Low-carbon operations Aspect Transports PROVIDING THE MOST SUSTAINABLE OFFERING • Aspect: Materials KONE Operations Customers Customer satisfaction Aspect: Energy Product and service quality • Aspect: Products and services • End user safety • Aspect: Customer Health & Safety Accessibility • Aspect: Product and Service Labeling • Energy efficiency of solutions Aspect: Compliance BEING THE BEST EMPLOYER AND • Aspect: Employment KONE Operations Subcontractors ATTRACTING TALENT • Occupational Health & Safety Fair employment practices • Aspect: Training and Education Competence development • Aspect: Diversity & Equal Opportunity Motivated and engaged employees Diversity and non-discrimination • Employee safety and well-being **ENABLING OUR PARTNERS AND** • Aspect: Economic Performance KONE Operations Suppliers / Strategic SOCIETIES TO PROSPER • Aspect: Market Presence • Creating wealth via taxes and employment Aspect: Anti-corruption Generating long-term returns • Aspect: Anti-competitive Behavior Supporting local communities Aspect: Compliance Ethical business practices • Aspect: Supplier Environmental Assessment • Long-term relationships with our suppliers • Aspect: Supplier Assessment

for Labor Practices

GLOBAL REPORTING INITIATIVE INDEX KONE 2016 | SUSTAINABILITY REPORT KONE 2016 | SUSTAINABILITY REPORT GLOBAL REPORTING INITIATIVE INDEX

## GLOBAL REPORTING INITIATIVE INDEX

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C4 1=	Identified Material Aspects and Boundaries		Association code of the code
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G4-42	Board's role in setting the organisation's purpose, values and strategy		Annual Review 2016, Corporate Governance
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UT"TJ	board 3 forcint the identification and management of fisks		Statement, p. 76-79
	Highest governance body's role in sustainability reporting		
G4-48	Formal approval of the organisation's sustainability report		Sustainability Report is reviewed by KONE's management and approved by the President and CEO.
	Remuneration and incentives		
G4-51	Remuneration policies for the highest governance body and senior executives		Annual Review 2016, Corporate Governance Statement, p. 76-79
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G4-EN30	Significant environmental impacts of transport	19-20	
GT-LIVJU	Supplier Environmental Assessment	DMA: 46-47	
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G4-PR9	·	DIVIA: 26-27	No significant fines during the reporting period

# Dedicated to People Flow K



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