

# **Sustainability Report 2016**

SCA's vision is "Dedicated to improving well-being through leading hygiene and health solutions"

### CONTENT

### PART 1

This is SCA

- 2 SCA in brief
- 4 Dialog with SCA's President and SVP Group Sustainability
- 6 A sustainable strategy
- 10 Targets and outcome
- 12 Customers and Consumers
- **14** People and Nature innovation
- 16 Hygiene Solutions
- 20 Code of Conduct
- 22 Health and Safety
- 24 Community relations
- 26 Climate and Energy
- 29 Waste
- 30 Fiber sourcing and biodiversity
- 32 Water

### PART 2

- 35 Stakeholder dialog
- 37 Materiality analysis
- 38 Economic value creation
- 42 Value creation for people
- 49 Value creation for nature

### Control and assurance

- 54 Sustainable governance
- 56 Environmental data
- 64 Social data
- 65 About the report
- 66 Assurance report
- 67 GRI index
- **70** Glossary

# This is SCA

### **SCA'S VISION**

Dedicated to improving well-being through leading hygiene and health solutions

### **MISSION**

To sustainably develop, produce, market and sell value-added hygiene and forest products and services

**NET SALES** 

117 SEKbn

**SALES IN** 

100

**EMPLOYEES** 

countries

46,429
As of December 31, 2016

### 2016 AT A GLANCE

MILLION
PEOPLE RECEIVED
HYGIENE EDUCATION









ACCIDENTS
RECORDED AT
23 SCA SITES



PERCENT
RECEIVED CODE OF
CONDUCT TRAINING



500

MILLION
PEOPLE USED SCA'S
PRODUCTS EVERY DAY

# SCA in brief

















SCA is a global leader in personal care. The company develops, produces, markets and sells incontinence products, baby diapers and feminine care products. Within these product segments, SCA also offers such products as wet wipes, soap, lotion, baby oil and cotton pads. The products are sold under SCA's global and regional brands, such as Libero, Libresse, Nosotras, Saba and TENA, as well as under retailers' brands. Distribution channels for the products are the retail trade, online sales, pharmacies and care institutions.







TORK









### Tissue

SCA is a global leader in tissue. The company develops, produces, markets and sells consumer tissue and Away-from-Home (AfH) tissue. The consumer tissue product portfolio comprises toilet paper, household towels, handkerchiefs, facial tissues, wet wipes and napkins. In the consumer tissue segment, products are sold to retailers under SCA's own brands, such as Lotus, Regio, Tempo and Zewa, as well as under retailers' brands. In the AfH tissue segment, SCA develops and markets complete hygiene solutions, including toilet paper, paper towels, napkins, hand soap, hand lotion, hand sanitizers, dispensers, cleaning and wiping products, sensor technology, service and maintenance for institutions and companies, under the globally leading brand Tork. Distribution channels for the products are the retail trade, online sales and distributors.

**29**% of SCA's pet sales for 201

**57**% of SCA's pet sales for 2016





### Forest Products

SCA is Europe's largest private forest owner, with 2.6 million hectares of environmentally certified forest land, and produces forest products with a strong environmental profile. SCA's forest asset is a unique growing resource that represents the core of the business area's operations and enables the supply of wood raw materials and energy at a competitive cost to the company's forest products operations. The company has a well-integrated value chain with production facilities close to its forest holdings. SCA develops, produces, markets and sells solid-wood products, pulp, kraftliner, publication papers, pellets and other biofuels as well as district heating and green electricity.

### AWARDS AND MEMBERSHIPS

SCA's initiatives and results have gained recognition – SCA is included in a number of sustainability indexes and has received several prestigious awards.























WWF Environmental Paper Index

**14%** of SCA's net sales for 2016

### About the report

SCA's annual Sustainability Report outlines the Group's sustainability efforts during the 2016 calendar year from an environmental, social and economic perspective. The report has been prepared in accordance with the G4 Guidelines of the Global Reporting Initiative (GRI), Core option, and is also SCA's Communication on Progress to the UN Global Compact. The report has been reviewed in its entirety by EY. For further information regarding the Sustainability Report and its reporting principles, see page 65.



Magnus Groth, SCA's President and CEO, and Kersti Strandqvist, SCA's SVP Group Sustainability, can look back on an eventful 2016. It was the year when SCA initiated work to divide the company to form one hygiene and one forest products company, the year we signed an agreement to acquire the medical solutions company BSN medical, the year we completed and integrated the acquisition of the tissue company Wausau Paper and the year when we began the journey toward becoming the thought leader in hygiene.

### Magnus, what are your thoughts on the past year?

MG: If the Annual General Meeting approves the separation of SCA into one hygiene and one forest products company, then this would signal the start of a new era in the history of the company. This will entail new business opportunities and each company can focus on its operations in a completely different way. A separation is the best method to create shareholder value and customer benefits in the future.

The acquisition of Wausau Paper involves a significant strengthening in the North American Away-from Home market and the integration has exceeded expectations, both in terms of synergies and margins. The announced acquisition of BSN medical at the end of the year will be our largest ever acqui-

sition. This means we are entering the field of medical technology, which opens up new business opportunities.

During the year, we developed a new vision and our strategic framework based on the needs of our stakeholders, which of course includes customers and consumers. It is pleasing to have so many satisfied customers, which resulted in a number of awards (refer to page 13). All this, at the same time as we have generated growth and profitability and launched 23 innovations in the market.

Health and safety are always a top priority and it is with deep regret that I note one fatality in our operations during the year.

Occupational safety will remain high on the agenda and I welcome a 27% decrease in our accident frequency rate in 2016.

### Why have you revised the strategic framework?

KS: We are proud that sustainability has been an integral part of our operations for many years and the new strategic framework will make it much clearer. Our new vision pursues the long-term goal, "Dedicated to improving well-being through leading hygiene and health solutions", and we have formulated Group targets where we clarify our ambitions for customers and consumers, society and our employees. We are thereby strengthening our ambitions to raise the hygiene standards in the markets where we are active and consolidate our environmental ambitions under the objective to contribute to a sustainable and circular society.

In 2015, the United Nations introduced its global Sustainable Development Goals (SDGs) and in 2016 the world attempted to decide how these can be converted into action. What does this mean for SCA?

**KS:** Work aimed at fulfilling the SDGs will make the world a little better at the same time as they create good business opportunities for companies around the world. Not least in the fields of health, hygiene and sanitation, where we have outstanding expertise. We are determined to do what we can to contribute to achieving the 17 SDGs.



# We are determined to do what we can to contribute to achieving the 17 UN Sustainable Development Goals."

MG: For us, it is important to contribute with our business operations but also to take part in the global debate, which we mainly do via our Hygiene Matters initiative. Through Hygiene Matters, we want to raise hygiene standards worldwide, increase awareness of the link between hygiene, health and well-being and break the taboos surrounding areas such as incontinence. During the year, this took the form of a global hygiene survey and a hygiene report that we produced in cooperation with the UN's Water Supply and Sanitation Collaborative Council (WSSCC). We presented the report in conjunction with the UN General Assembly Session in New York in September. We have also collaborated with the United Nations Foundation, which aims to bring together businesses, authorities and NGOs to cooperate on the UN SGDs (refer to page 17).

### One of your new Group targets aims to contribute to a circular society, what does this mean for you?

MG: We have a long tradition of working in many areas, such as resource efficiency and innovation. We have reduced the environmental impact of all of our product categories and have worked with energy efficiency enhancements as part of our ESAVE program since 2010. We have now also initiated MSAVE, where we will optimize our raw material use at the same time as we minimize environmental impact and waste, and introduced a new target for production waste (refer to page 29).

KS: Innovation has a crucial role to play in achieving a circular society, both our own activities and those we conduct in cooperation with others. To inspire new innovations and business solutions, we have joined the Circular Economy 100 (CE 100), an Ellen Mac-Arthur Foundation program established to work toward a circular economy. We work with people and nature innovations where the criteria are that they should give rise to social and/or environmental improvements. Last year, 40% of innovations were for people and nature. The compact tissue Okay Compressé and Tork SmartOne, which reduces the consumption of toilet paper, are two examples of innovations that are good for both the environment and your wallet and where we help consumers make good choices.

KS: Post-consumer waste will be one of the major challenges we face in the future and we believe that cross-boundary cooperation, with customers, businesses and organizations, will contribute to new solutions. We are already running some projects together with our customers, where we collect and recycle paper towels, but we need to continue working to find other solutions, such as for baby diapers.

### Any other important issues over the past year?

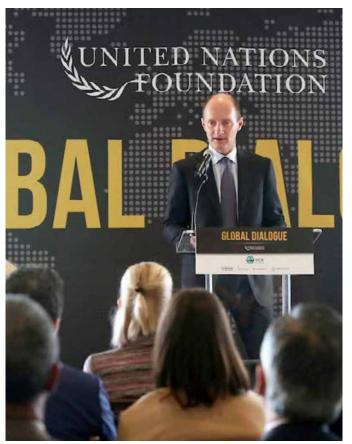
MG: We were fined for cartel activities in Colombia and Spain. I wish to emphasize that we have zero tolerance for this type of unethical behavior and we have intensified our efforts to help our employees do the right thing. In addition to mandatory e-learning courses, we have introduced a concept we call "Ethical Dilemmas", where we offer employees the opportunity to participate in an in-depth discussion about challenges in day-to-day work. The concept aims to increase understanding and create a culture characterized by integrity (refer to page 20).

### Any thoughts about next year?

MG: 2017 will be an intensive and exciting year, with the proposed separation of SCA into two companies and the integration of BSN medical. We will continue to develop innovations that can help people in their everyday lives and work to establish ourselves as a thought leader in hygiene.



Kersti Strandovist participated in a panel discussion at the launch of the Hygiene Matters report, which took place in conjunction with a session of the General Assembly of the United Nations in New York in September



Magnus Groth gave the opening speech when SCA and the UN Foundation held a dialog in October at the UN Headquarters in New York on the UN's global agenda for sustainable development.

# How SCA creates value, today and in the future

SCA's business operations are based on a sustainable business model with a focus on value creation for people and nature. The basis for our targets and our strategy is an insight into market trends and remaining receptive to the needs of our stakeholders.



#### **EXTERNAL TRENDS AND DRIVERS**

Global macrotrends, from population growth and higher living standards to resource scarcity and climate change, have a major impact on SCA's business operations. We

have identified a number of macro-economic drivers that we believe are most relevant to our business. By analyzing our operating environment and these drivers, we can leverage opportunities and avoid the risks associated with them.



















Climate change





**DIALOG WITH** THE WORLD Millions of people across the globe have an impact on, and an interest in, our busi-

ness. We have to act in harmony with the society in which we operate in order to be relevant, and a continuous and responsive dialog with our stakeholders helps us understand the expectations on us as a company and how we can continuously develop and improve. It also helps us to understand the needs of our customers and consumers, build long-term relationships and to formulate and implement our business strategy.

READ MORE ON PAGE 35 →









### **OUR CROSSROADS**

Our materiality analysis highlights the issues that are significant to SCA and our stakeholders. It forms the basis of SCA's strategy and sustainability program. The analysis is based on a survey of 1,100 internal and external stakeholders.

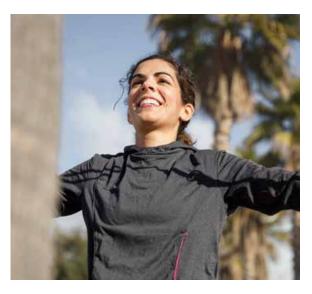
READ MORE ON PAGE 37 →







### A SUSTAINABLE BUSINESS STRATEGY CREATES VALUE



Large-scale sustainable solutions based on innovative, new thinking are needed if we are to leave a sustainable society behind for our children. We must leverage business opportunities and address the challenges that arise in a changing world in order to create real value for people and nature. SCA updated its strategic framework in 2016, keeping in mind future opportunities and challenges and based on the needs and expectations of stakeholders.

SCA's new, purpose-driven vision is "Dedicated to improving well-being through leading hygiene and health solutions". The updated framework also includes the following three new Group objectives: "Enable more people every day to enjoy a fuller life", "Contribute to a sustainable and circular society" and "Enable our employees to realize their full potential, as part of one winning team".

Sustainability has been an integral part of our strategy and business model for some time and this is even clearer in the updated strategy with the new Group objectives. The objective to "Generate increased shareholder value through profitable growth" has been retained, with growth in the

hygiene area being an important part of SCA's financial value creation.

However, SCA not only creates value for its shareholders. The objective to "Enable more people every day to enjoy a fuller life" shows how we, through our hygiene and health solutions, create value for customers and consumers. The objective to "Contribute to a sustainable and circular society" includes how we want to minimize our environmental impact and develop products and services that function in a circular society and to "Enable our employees to realize their full potential, as part of one winning team" includes programs for current and potential employees.

The strategy is based on a number of international regulatory frameworks and guidelines that will be highly significant for the business community in the future. SCA supports the United Nations' 17 Sustainable Development Goals and we want our business operations to contribute to the goals. The goals that we have defined as most relevant for our operations are:

No. 3 Good health and well-being – we provide access to innovative solutions and educate and provide information to millions of people about hygiene and health. Business value is also created by meeting societal needs. This offers more people an opportunity to work, better conditions to provide for their families and increased well-being.

**No. 5 Gender equality** – we are breaking the taboos surrounding subjects such as menstruation and incontinence and offer women, girls and family carers an opportunity to fully participate in society. A key role is played by our Hygiene Matters initiative.

**No. 6 Clean water and sanitation** – access to sustainable hygiene solutions. Every day, about 1,000 children under the age of five die from diarrhea caused by insufficient access to water, sanitation and hygiene.

No. 12 Sustainable consumption and production – we work with resource efficiency, design our products for a circular society and develop sustainable models to manage waste.

### **VISION**

Dedicated to improving well-being through leading hygiene and health solutions

### **LONG-TERM OBJECTIVES**

Generate increased shareholder value through profitable growth

Enable more **people** every day to enjoy a fuller life

Contribute to a sustainable and circular **society** 

Enable our **employees** to realize their full potential as part of one winning team

### **FINANCIAL TARGETS**

### **PEOPLE AND NATURE TARGETS**

- Organic sales growth
- Return on capital employed
- Capital structure
- Hygiene solutions
- People innovations
- Nature innovations
- Code of Conduct
- Climate and energy
- Fiber and biodiversity
- Water
- Production waste
- Employee health and safety
- Code of Conduct

**No. 7 Clean energy** and **no. 13 Climate action** – we work to reduce climate impact in the entire supply chain and guarantee the origin of the wood fiber we use. We invest in renewable energy, including wind power and biofuel.

**No. 15 Life on land** – we conduct responsible forest management and preserve biodiversity in our forests.

A reduction in greenhouse gas emissions to the levels that researchers believe necessary will require an extensive shift to clean, energy-efficient technology and companies that lead this field will benefit most. The agreement by the international community to limit global warming to well below 1.5 degrees at the COP 21 meeting in Paris in 2015 provides guidance on the issue. The European Commission's action plan for a circular economy has influenced us when we developed our objective for a circular society.

# Targets and outcome



### TARGET

Our aim is zero workplace accidents, and we will decrease our accident frequency rate by 50% in the 2014–2020 period.

OHSAS 18001 will be implemented at all main sites by 2016.

### **OUTCOME 2016**1)

The accident frequency rate was 4.6 per million hours worked, a decrease of 31%. Compared with 2015, the decline was 27%. A tragic fatality occurred at the Mannheim site in Germany.

By the end of 2016, 87% of SCA's 68 main sites were certified according to OHSAS 18001.

Reduction in accident frequency rate

-31%

Accident frequency rate
OHSAS

18001

) (







#### TARGET

We will deliver better, safe and environmentally sound solutions to our customers. We strive to continuously improve resource efficiency and environmental performance considering the whole life cycle for new innovations.

#### OUTCOME 20161)

40% of SCA's innovations improved in terms of social and/or environmental criteria.

Examples of SCA's people and nature innovations include TENA Lady Pants, Tork SmartOne and Okay Compressé.

Share of people and nature innovations

40%

O







### TARGET

We will make our knowledge about hygiene available to customers and consumers and ensure access to affordable, sustainable hygiene solutions to help them lead a healthy and dignified life. In markets in which we operate we will:

- Provide information on hygiene matters around our products and services.
- Strive to implement education programs for girls, women and care-givers.
- Strive to offer the best value for consumers, making hygiene solutions affordable to everyone.

### **OUTCOME 2016**1)

SCA held the number one or two position in at least one hygiene product segment in about 90 countries. Around 500 million people used SCA's products every day.

The hygiene educational programs SCA conducts worldwide reached 2,000,000 people.

We offered a broad portfolio of products, ranging from the premium segment to the economy segment.

Millions of people who used SCA products every day

500

0





### TARGET

We will maintain compliance with our SCA Code of Conduct. All employees will receive regular training in the Code.

We evaluate all of our supply streams from a total risk perspective. By 2020, we aim to source 100% of our procurement spend from suppliers committed to the criteria specified in our Global Supplier Standard.

### **OUTCOME 2016**1)

91% of employees have received Code of Conduct training.

At year-end, 46% of the hygiene operations' procurement spend was sourced from suppliers committed to the criteria specified in SCA's global supplier standard. Of Forest Products' 23 largest suppliers, 87% had signed the Global Supplier Standard.

Employees trained in the Code of Conduct

91%

0





1) Excluding Vinda

<sup>2)</sup> Excluding the sites in Munksund and Östrand, Sweden.

**Code of Conduct** 

= Not according to schedule

= Not according to schedule, actions identified

= According to schedule



### **TARGET**

We will reduce CO<sub>2</sub> emissions from fossil fuels and from purchased electricity and heating by 20% by 2020, with 2005 as reference year.

We will triple our production of biofuels from our forests by 2020, with 2010 as the reference year.

The production of wind power on SCA forest land will increase to 5 TWh by 2020.

### **OUTCOME 2016**<sup>1)</sup>

At year-end 2016, CO<sub>2</sub> emissions in relation to the production level had declined by 18.4%.

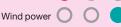
SCA's production of biofuel from its own forests amounted to 740 GWh. Wind energy from SCA forest land totaled 2.3 TWh.

Reduction in CO<sub>2</sub> emissions

-18.4

CO<sub>2</sub>

Biofuel





#### **TARGET**

All fresh wood fiber-based raw material in our products will be FSC® or PEFC™ certified, or fulfill the FSC's standard for controlled wood.

We will preserve the biodiversity of our forests. A minimum of 5% of our productive forest land will be set aside from forestry in our ecological landscape plans and a further 5% will be set aside as part of our consideration for nature in our managed forests.

#### **OUTCOME 20161)**

In 2016, 6.5 million tons of fresh fiber were delivered as timber, pulp, packaging, mother reels and products from a third party. 57% of fiber was FSC/PEFC certified, 42% fulfilled FSC criteria for controlled timber and 1% came from controlled suppliers.

7% of SCA's productive forest land has been set aside from forestry in the long term in our ecological landscape plans. In 2016, 13% of the area in planned harvesting sites was set aside for preservation.

Share of fiber that is FSC/PEFC certified or fulfils the FSC's standard for controlled wood









### **TARGET**

Our plants will reduce suspended solids by 10%.

Our tissue operations will reduce the water usage by 10% and organic content (BOD) by 10%.

Our forest products operations will reduce phosphorous emissions by 10%.

All targets will be achieved by 2020 (reference year 2014).

### OUTCOME 20161)2)

Our plants reduced suspended solids by 12.5%.

Our tissue operations reduced the water usage by 1.5% and organic content (BOD) by 3.3%.

Our forest products operations increased phosphorous emissions by 35.6%.

Reduction in suspended solids

-12.5%







### TARGET

The target for return on capital employed is 13% over a business cycle. The target is 30% for Personal Care, 15% for Tissue and to be in the top quartile of the industry for Forest Products.

Personal Care is to deliver annual organic growth of 5–7%, while the figure for Tissue is 3-4%. Forest Products is to grow in line with the

SCA is to maintain a solid investment grade rating.

### **OUTCOME 2016**

The adjusted return on capital employed, excluding items affecting comparability, was 12.5%. The adjusted return on capital employed was 31.8% for Personal Care, 13.5% for Tissue and 5.7% for Forest Products. Organic sales increased by 3% for Personal Care and 3% for Tissue, while Forest Products decreased by 3%. SCA had a solid investment grade rating.

Adjusted return on capital employed

12.5%



# Satisfied customers and consumers

SCA's products and services contribute to simplify everyday life for many people. We are there for our customers and consumers. To succeed, we must understand their needs and how we can best meet them through our offering.

Customer understanding and consumer insight determine the innovations we develop and how we deliver finished products and services to the market. Under the right circumstances, we can contribute to improved quality of life, health and well-being among our target groups.

We study the world around us and identify trends and new needs, and we enter into a dialog with our customers and consumers.
We learn a great deal from SCA's sales repre-

sentatives and we conduct regular customer satisfaction surveys.

We engage in a dialog with consumers through focus groups and in-depth interviews. We observe consumer and customer behavior, for example, through home visits. We also gain insight into the needs of consumers and their perceptions of our products by following the discussions on such websites as www.libero.com and www.girls1st.se, and on social media.



The Red.fit campaign was a viral success.

### Red.fit challenges preconceptions about menstruation and exercise

Menstruation and exercise is still surrounded by stereotypes and taboos. The idea is common that exercise during menstruation is injurious and that performance deteriorates, and many women are worried that you can see when they are menstruating.

Libresse, SCA's feminine care brand, wants to change this. The Red.fit initiative offers advice and guidance on exercise, nutrition and diet as well as motivation, to feel at your best, regardless of the time of the month.

Red.fit was first launched in the UK with the film "Blood", which became a viral success with more than 4 million viewings. Libresse and Red.fit is breaking the silence about menstruation in sport with the help of the footballer Lotta Schelin and the freestyle skier

Tiril Sjåstad Chrisiansen in Sweden and Norway respectively.

Red.fit is the result of a research project, financed by SCA and Libresse, which studies the impact of the menstrual cycle on physical performance and health. The project is supported by the researcher and long-distance athlete Georgie Bruinvels at St. Mary's University in the UK.

"Red.fit is the perfect expression of our brand strategy 'Live fearless'. Menstruation is the last taboo for women in sport, simply because we lack knowledge and a dialog. The collaboration with St. Mary's will help us to challenge stereotypes and to change attitudes toward menstruation and exercise," says Martina Poulopati, Global Brand Communications Manager at SCA.

Red.fit has already yielded results. As a result of the campaign, the Norwegian Olympic and Paralympic Committee have included questions about menstruation in its health check routines for women athletes.

# SCA supports new center for international incontinence research

The Gothenburg Continence Research Center, a new center for international incontinence research, has been established at the Sahlgrenska Academy at the University of Gothenburg. SCA has provided economic support to enable the initiative. Approximately 100 researchers in various disciplines are associated with the Center, including Adrian Wagg, one of the world's leading researchers in elderly care and incontinence.

The first research projects began at the end of the year, among these a project to ascertain why some men suffer from incontinence after undergoing a prostate operation.



"The new research center will provide us with important insights into incontinence care and help us to develop even better products and services,"

Hans Bergh, Global Brand Director at SCA and responsible for cooperation with the research center.



Pregnant couples can feel a stronger connection by using Libero's pregnancy bracelet.

### Joint pregnancy with the world's first pregnancy bracelet

Libero, SCA's brand for baby diapers, has launched the "pregnancy bracelet" Baby-Buzz, which introduces a new way to experience pregnancy, also for the parent who is not actually pregnant.

"Like a text message, but from the baby" – this is how some of the first couples to test the product have described it. Simply by pressing her bracelet, the mother sends a vibration, a buzz, to her partner's bracelet when the child kicks or makes its presence felt in some other way.

Libero had the idea for the bracelet from its own parent forum where couples wrote that

they wished pregnancy could become more of a joint experience. Various technology and prototypes were tested over two years and resulted in a product that was launched in Sweden in autumn 2016.

"Our studies have confirmed that there is a gap between the pregnant and the non-pregnant parent. Both want the same things but do not quite reach each other. We are happy to contribute to a good start for new parents," says Camilla Svensson, Marketing Manager at Libero.

BabyBuzz can be borrowed free of charge via libero.se/babybuzz.

### A SELECTION OF CUSTOMER AWARDS IN 2016

### "Supplier of the Year"

in North America from the distributor Bunzl

### "Best Sustainability Performance"

from the distributor Lyreco

### "Best Supplier of Non-food Groceries"

from Wal-Mart in Mexico

### "Manufacturer of the Year"

from the UK's Foodservice Packaging Association (FPA)

"Supplier of the Year" from Cardinal Health Canada

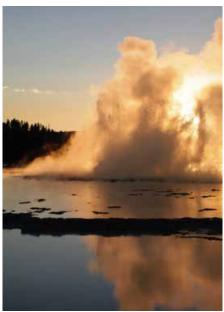
"North American VIP Partner Award"

in Canada and "North American Cornerstone

### Partner Award"

in the US from Gordon Food Service (GFS)





Our work with sustainability convinced the Yellowstone National Park to choose SCA as supplier.

# Yellowstone National Park protecting precious resources by using Tork products

The Yellowstone National Park in the northwest of the US is the oldest national park in the world and is included on the UNESCO World Heritage List. The park is run by Xanterra Parks and Resorts, a company that puts care for the environment and natural resources first and which wants to cooperate with suppliers who share its values. SCA fulfilled the criteria and delivers tissue to Yellowstone's restaurants and washrooms. SCA was the first manufacturer in the US to receive the EcoLogo certification for its 100% recycled tissue, but above all our holistic approach to sustainability throughout the value chain convinced Xanterra to choose

us as supplier. We have a program we call SmartFit, where we look at everything from product packaging to transport from a sustainability perspective. This enables us to maximize transport capacity, reduce fuel usage and cut energy consumption within warehouse storage.

"SCA is environmentally accountable in every step of its manufacturing process, from using recycled raw materials, conserving energy and eliminating the release of chlorine compounds," says Chris Lane, Vice President of Environmental Affairs at Xanterra. "Much like our own company mission, SCA doesn't just talk green, it acts upon green".

# Challenges become business opportunities

SCA has the opportunity to meet social and environmental needs and improve well-being for millions of people. Through the innovation of products and business models, challenges can be transformed into business opportunities and form the basis for our future offerings.

SCA develops innovations for people and nature. These new solutions offer improvements for the user or for the environment thanks to superior materials, function of design, or more efficient processes or logistics. Innovations that meet needs in new and sustainable ways will give us a competitive advantage.

### Systematic creativity

SCA's innovation process starts with insight about a need or with a new technical solution. By maintaining close proximity to our customers and consumers, understanding their needs and transforming this knowledge into products and solutions, SCA makes a positive contribution to people's everyday lives. By integrating environmental issues and social needs into the innovation process, we can monitor how we improve the sustainability profile of our innovations.



**TARGET** We will deliver better, safe and environmentally sound solutions to our customers. We strive to continuously improve resource efficiency and environmental performance considering the whole life cycle for new innovations.

**OUTCOME 2016** 40% of SCA's innovations improved in terms of social and/or environmental criteria.

Examples of SCA's people and nature innovations include TENA Lady Pants, Tork SmartOne and Okay Compressé.

# Big for being small

During the year, SCA launched a new household towel in France, Okay Compressé. What's clever is the size: the compact household towel is as effective and has as many sheets as a normal Okay towel but is only half the size of a standard towel.

"Okay Compressé is just as good in the kitchen and is better for the environment", says Nicolas Estrella, Global Technical Innovation Manager at SCA.

The household towel has been compacted using innovative technology that has been patented. Packaging is 30% smaller and truck transportation has fallen by 36%. This helps to reduce greenhouse gas emissions by 8% in the product's whole life cycle. Being small really is big news.





Through the use of a patented compression technology, Okay Compressé's household towels are half the size of standard household towels.

# New Tork SmartOne reduces paper consumption

The Tork SmartOne toilet paper dispenser is designed for use in schools, hospitals, stadiums, railway stations and other environments with stringent demands on cost control and hygiene. Consumption of toilet paper can be reduced by up to 40% compared with traditional jumbo roll dispensers. Only one sheet is dispensed at a time, which also reduces the risk of pipe blockages.



# Reduced climate impact from packaging paper

SCA produces kraftliner, a fresh fiberbased packaging paper, at its plants in Obbola and Munksund in Sweden. During 2006–2016, the carbon footprint of the product decreased by 30% as the result of a long-term investment program to develop the kraftliner mills and a continuous, highly prioritized program to replace fossil fuels with biofuels. One example is an investment in a new lime kiln that is fueled with pellets instead of oil at the Munksund facility, which reduced annual CO<sub>2</sub> emissions from fossil fuels by 20,000 tons or 75%.

### **CIRCULAR OPPORTUNITIES**

Companies and society will need to think in new and innovative ways as part of the transfer from a linear economy, where we manufacture new and dispose of the old, to a circular economy, where we minimize resource consumption and waste, and instead recycle and reuse.

SCA has become a member of the Ellen MacArthur Foundation's Circular Economy 100 program (CE100), which was started to help companies and organizations develop new circular solutions. Membership offers SCA new insights and ideas that can be converted into innovations and business solutions which contribute to creating a circular society. SCA places considerable emphasis on the problem of post-consumer waste and is working to solve this issue.



### Like everyday underwear

Protection is of course the first consideration when you use incontinence products, but why compromise on discretion or appearance? TENA's innovation team has taken this wish and created TENA Lady Pants, the TENA product that is closest yet to everyday underwear.

TENA Lady Pants is an absorbent, disposable pant with a feminine design and cotton feel, it looks like your everyday underwear and protects against leakage, odor and moisture. A thinner core and anatomic fit combine with the cotton feel to offer greater comfort and discretion. In addition, the thinner design makes the product better for the environment by reducing its climate impact by 19%.





Improved hygiene is a central focus area in most of what SCA does. Every day, some 500 million people use our hygiene products. The more SCA grows, the more people have an opportunity for improved hygiene and well-being. SCA has the knowledge, solutions and ambitions to make a difference.

### Simpler everyday life

SCA's products and services cover all phases of life and benefit both individuals and society as a whole. We are happy to share our knowledge of hygiene, for example, by educating girls about menstruation, or nurses about incontinence.

SCA's products are available in about 100 countries and we adapt our practices to meet specific market needs. Sometimes social entrepreneurship and new strategies are required in order to operate in certain markets. It is also possible to create a market in regions with more limited purchasing power. For example, SCA sells smaller packages with only one or two products in each package. These packages cost less, which increases the availability of hygiene and sanitation solutions since more people can afford them. This results in improved hygiene and health among new groups.



TARGET We will make our knowledge about hygiene available to customers and consumers and ensure access to affordable, sustainable hygiene solutions to help them lead a healthy and dignified life. In markets in which we operate we will:

- Provide information on hygiene matters around our products and services.
- Strive to implement education programs for girls, women and caregivers.
- Strive to offer the best value for consumers, making hygiene solutions affordable to everyone.

**OUTCOME 2016** SCA held the number one or two position in at least one hygiene product segment in about 90 countries.

Around 500 million people used SCA's products every day.

The hygiene educational programs SCA conducts worldwide reached 2,000,000 people.

We offered a broad portfolio of products ranging from the premium segment to the economy segment.

16



Amina Mohammed, Deputy Secretary-General of the UN and chair of the WSSCC, was one of the keynote speakers when the Hygiene Matters report was launched in New York in September.

### Hygiene matters

Poor hygiene and sanitation constitute a barrier for the health, livelihood and development of millions of people. Through the Hygiene Matters initiative, we want to increase awareness of the importance of hygiene and its link to health and wellbeing and break the taboos about issues such as menstruation and hygiene.

SCA is helping to raise hygiene standards worldwide through its business model and hygiene solutions. Two integral components of the Hygiene Matters initiative are a global consumer survey and the Hygiene Matters report. The 2016/2017 report looked at the economic value of investing in hygiene, breaking taboos and stigma surrounding menstruation and incontinence, and also innovative solutions for the future. For the first time the report was created in collab-

oration with the WSSCC (Water Supply and Sanitation Collaborative Council). The WSSCC is the only UN body that works solely with sanitation and hygiene issues.

The report was launched in conjunction with the UN General Assembly Session in New York at the end of September. The main speaker was Amina Mohammed, chair of the WSSCC and Deputy Secretary-General of the United Nations, and Ewa Björling, former trade minister in Sweden and member of the SCA Board. An interesting debate was held with leading representatives from the UN Sustainable Development Solutions Network and CEO Water Mandate, among others.

In October, companies, authorities and non-governmental organizations gathered in New York to take part in the UN Foundation's fourth annual dialog, convened by SCA, about the UN's global agenda for sustainable development. The UN Foundation acts as a link to the UN – the organization gathers the business community and civil society to help the UN tackle some of the world's most pressing issues, one of which is global health.

SCA's representatives at the meeting included President and CEO Magnus Groth, who also gave the opening speech. He emphasized the key role the business community has to play, and that cooperation between the public and private sector is important if the world is to succeed in reaching the UN's Sustainable Development Goals.

Several panel debates emphasized cooperation between sectors as a way to inspire decision-makers to move the world forward. SCA contributes through its extensive commitment to hygiene and health, and by sharing our insights with others.

SCA had also invited a number of customers to discuss how the UN's Sustainable Development Goals will impact the business community, as a means to support its customers in their sustainability work.

### SCA AND VINDA STRENGTHEN ELDERLY CARE IN CHINA

During the year, SCA, Vinda and the city council of Jiangmen signed an agreement that SCA and Vinda would help to improve elderly care in Jiangmen, in south-eastern China.



The world's population is becoming older. Already today, persons aged 60 and above account for approximately 15% of China's population of 1.4 billion. This development means elderly care is becoming a higher priority.

The first stage in the partnership will be a pilot program to train care providers to offer individualized incontinence care and to provide a good environment for elderly care in Jiangmen. The project includes establishment of a unit for developing relevant products for incontinence and elderly care.

Several senior representatives for SCA, Vinda and Jiangmen were present at the signing of the agreement. SCA's CEO Magnus Groth spoke of how important correct healthcare and care is for individuals with incontinence. Jiangmen's mayor Deng Weigen stressed the value of cooperation and that China can benefit from the experiences of others in order to make the most of its investments in elderly care. Representatives for Sweden's Ministry of Health and Social Affairs were also present when the agreement was signed. They welcomed the cooperation and emphasized the importance of concrete health initiatives within the framework for the partnership between Sweden and China

SCA operates in China's market for hygiene products through its majority shareholding in the hygiene company Vinda. Jiangmen is located in the south-eastern Chinese province of Guangdong and has 4.5 million inhabitants.

### Knowledge contributes to making a better world

We share our hygiene expertise as this will help raise living standards, improve health and increase well-being in the world. Last year, we educated 2,000,000 girls, women, children, parents, caregivers and care providers around the world.



**1,485,400** young women were educated about menstruation and puberty, mainly in Latin America and Asia. The courses in schools are intended to teach girls about what happens to their bodies during puberty, to break the silence and taboo surrounding menstruation and to build a market for SCA's brands.



**95,500** nurses and other caregivers were trained in incontinence, individualized incontinence care, skincare and dementia across the globe.



**34,900** people were educated in hand washing. Using the cartoon characters Max and Ella, children carried out experiments, solved problems and learned practical tips about hand hygiene in a fun and inspiring way. "Ella's hand washing adventure" is available as a smartphone app for the iPad and Android.

## Strong commitment to a dignified life

**4-8% of the world's population**, or approximately 400 million people, suffer from incontinence. SCA offers solutions to manage incontinence and works to combat taboos and stigma, to ensure that as many people as possible are given the right care and a dignified existence.

One of SCA's most important initiatives is the Global Forum on Incontinence (GFI), a conference that attracts patients, experts in care and health and decision makers such as politicians, regulators or payers, as well as caregivers and NGOs from around the world. It is a unique opportunity for participants with differing perspectives and opportunities to influence and discuss how incontinence can be addressed, prevented and cured.

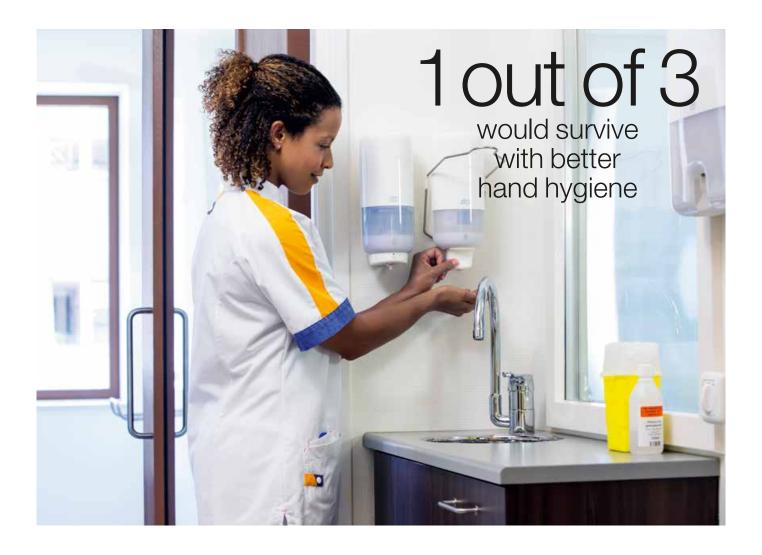
The sixth GFI Conference was held in Berlin over two days in April. Meetings focused on how life can become better and more dignified for people with incontinence. In total, about 350 participants from more than 30 countries took part.

Read more at gfiforum.com.

"About 400 million people suffer from incontinence."

Adrian Wagg, professor in healthy aging, was one of the speakers at the Global Forum on Incontinence, where the main theme concerned living a dignified life with incontinence





### Clean hands save lives

Every year, healthcare-associated infections affect millions of patients worldwide, many of whom die (about 140,000 in Europe and the US alone). Studies show that approximately a third of those who die from healthcare infections could survive through the use of something as basic as better hand hygiene.

SCA is taking part in the Private Organizations for Patient Safety (POPS), an initiative from the WHO, to save patient lives and protect employees in the healthcare sector. POPS comprises businesses that together provide information and create awareness about the correct routines for hand hygiene.

One of SCA's contributions in 2016 was a research-based recommendation about where hand hygiene products should be available in hospitals. The actual location of these products has proven to be important for their use and thereby how well hand hygiene routines are followed.

## NEW CONTINENCE CARE GUIDELINE PUTS THE PATIENT AT THE CENTER

Hungary has introduced a national clinical guideline that recommends a patient-centered continence care strategy also for absorbent products. This will mean that not only treatments and medications are selected according to a consistent framework, but also medical devices will be selected based on each patient's individual needs. The guideline is entirely in line with SCA's approach to individual continence care.

"A ministry-level guideline is the strongest possible official recommendation for doctors, nurses, pharmacists and other decision makers. Given that SCA has a full range of quality products, it provides us with a great advantage when positioning our portfolio. Once implemented, it will lead to more dry days for more patients, at a lower total cost," says Dr. Gyula Markovics, SCA's Public Affairs Manager for Hungary, Slovenia and Croatia.

The new guideline is a result of a multi-stakeholder process, including patients, health care professionals, policy makers and payers.



# The Code shows the way



**TARGET** We will maintain compliance with our SCA Code of Conduct. All employees will receive regular training in the Code.

We evaluate all of our supply streams from a total risk perspective. By 2020, we aim to source 100% of our procurement spend from suppliers committed to the criteria specified in our Global Supplier Standard.

**OUTCOME 2016** 91% of employees have received Code of Conduct training.

At year-end, 46% of the hygiene operations' procurement spend was sourced from suppliers committed to the criteria specified in SCA's global supplier standard. Of Forest Products' 23 largest suppliers, 87% had signed the Global Supplier Standard.

SCA works intensively to increase awareness of ethical issues and its Code of Conduct in the organization. Sound business practices, good working conditions and respect for human rights are some of the company's focus areas. Training and supplier audits are tools to help the company achieve its targets.

### Training in the Code

SCA's Code of Conduct is a tool for creating confidence and translating SCA's core values of respect, responsibility and excellence into action. All new employees are trained in the Code of Conduct as part of their induction program. Continuous follow up takes place to ensure that all employees have sound knowledge and awareness of the Code (refer to page 42). SCA has a system where employees can report breaches of the Code. In 2015, the system was supplemented with third-party hotlines for reporting in the UK and Mexico. During 2016, hotlines were

introduced in a number of countries in Latin America, the Nordic region and in Eastern Europe.

### Choosing the right partners

The more SCA grows at global level, the more important it becomes for the Group to review its local suppliers and choose responsible business partners. The aim is to identify risks and develop the social and environmental performance of suppliers.

SCA's objective is to drive shared values and priorities throughout the supply chain in line with SCA's Global Supplier Standard.

## Ethics – from compliance to leadership

During the year, we developed our position on ethics and integrity. We wanted to move beyond regulations and controls in order to also understand the sociological and psychological factors behind rule breaches. Or to put it simply; why good people sometimes exhibit inappropriate behavior.

A culture characterized by integrity begins with two key insights: that surroundings have a major impact on the actions of individuals and that it is necessary to understand and handle ethical gray areas. It requires in turn that ethics becomes an issue of leadership rather than a question of obeying rules. This approach is advocated by Guido Palazzo, professor in business ethics at the Lausanne School of Economics, and the person who helped SCA with a training initiative that began during the year.

The initiative was in two parts: a lecture on culture, peer pressure and other environmental factors, and a card game about ethical dilemmas. By playing the game, participants were asked to discuss difficult situations, such as relationships toward customers and



A game with ethical dilemmas helped participants discuss complex situations where there is not always a clear-cut right or wrong.

suppliers, conflicts of interest and issues concerning coworkers. By showing that there is rarely one correct answer, we wanted to strengthen the ability of participants to handle various situations. These discussions also helped the participants to feel more comfortable in sharing dilemmas they had faced themselves.

The training initiative began with the Executive Management Team and was then taken to SCA's management conference with 150 of the company's top managers. About 1,000 managers will have taken part in the project by the beginning of 2017. It will then be incorporated into SCA's ordinary leadership development activities.

### Extensive antitrust program

Free and undistorted competition is a cornerstone in every society and a precondition for every sustainable business operation. SCA conducts extensive operations in a large number of countries with different cultures. SCA is therefore exposed to the risk of violating competition rules and is also subject to certain investigations (refer to page 43) by national competition authorities. Violating these rules is never acceptable and is in direct

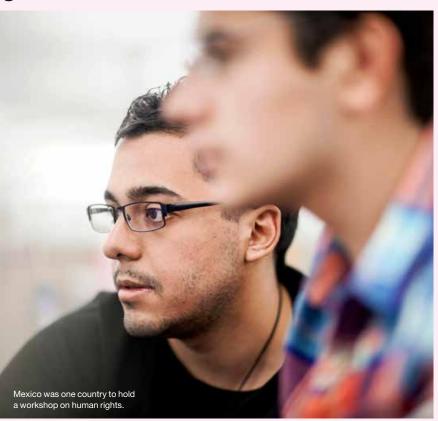
conflict with SCA's values. SCA takes a very serious view of this and has therefore created an extensive internal training program, which was strengthened in 2016. The program includes a risk analysis, various forms of training (e-learning, workshops), guidelines, an approval requirement for certain competitor contacts and recurring reminders.

## Focus on human rights

**Human rights was** an important theme for the year. To ensure that human rights are respected in all aspects of SCA's business, we are constantly working to understand and manage the risks in the area.

During the year, we developed a model to help SCA's various units to map the risk of rights violations. SCA's business unit in Latin America was the first to use the model. This work began with a workshop for SCA management in Latin America. Participants received an introduction to the UN's Guiding Principles on Business and Human Rights and then drew up an overall risk map for the region. The second step included similar workshops and risk mapping for Mexico, Chile, Brazil and Central America. Action plans will also be drawn up to manage high-risk areas. The plans will be finalized in early 2017.

The mapping of Latin America is a continuation of the global review carried out in cooperation with BSR (Business for Social Responsibility) in 2014. We will evaluate the results in Latin America and decide on the continued roll-out.



### Improving knowledge within SCA's purchasing organization

During the year, SCA defined new, ambitious targets for the Group's supplier base. SCA should promote sustainable and responsible business by choosing and rewarding partners that share our values. We want to ensure the safety and quality of our products and that they are manufactured and supplied with respect for people and nature.

- All SCA suppliers will be assessed on the basis of social and ethical risk.
- By 2020, all sourcing of SCA's raw materials, goods and services will derive from suppliers that comply with SCA's global supplier standard.

The earlier focus was on SCA's global, regional and other strategically important suppliers, which together accounted for about 70% of our purchasing costs. The risk analysis mainly looked at the country of purchase.

The new target means we will look at all purchases, even in other categories, such as local sourcing, services and logistics. The risk analysis has become stricter with regard to several risk parameters and has a stronger link to current sourcing work.

In real terms, this means that about 28,000 suppliers, compared with 600–700 suppliers previously, will be gradually included in SCA's risk analysis and supplier assessment.

The purchasing organization was offered training in the Code of Conduct in conjunction with SCA's new goals for its supply chain. During the year, we trained 16 of our 19 sourcing teams in the Americas, Europe and Asia. The purpose was to increase understanding among our purchasers about what sustainability means to SCA, what role the Code of Conduct plays for SCA's sourcing and how they should integrate the Code into their daily work. We also discussed SCA's new goals for its supplier base and how risks can be identified and managed.

21

# Raised safety ambitions



**TARGET** Our aim is zero workplace accidents, and we will decrease our accident frequency rate by 50% in the 2014–2020 period.

OHSAS 18001 will be implemented at all main sites by 2016.

**OUTCOME 2016** The accident frequency was 4.6 per million hours worked, a decrease of 31%. Compared with 2015, the decline was 27%.

By the end of 2016, 87% of SCA's 68 main sites were certified according to OHSAS 18001.

The working environment and safety of its employees are of paramount importance to SCA and the company wants everyone to feel safe at work. This relates not only to the physical work environment, but also to promoting a culture in which safety always comes first.

### Vision of zero workplace accidents

SCA has a vision of zero workplace accidents at all of its units. The target for 2014–2020 is that the accident frequency rate, meaning the number of accidents per million hours worked, will decrease by 50%.

Regrettably, one employee was fatally injured during the year in Mannheim, Germany. The fatal accident emphasizes how important it is that health and safety efforts must always be prioritized and developed.

### Creating a safety culture

Policies, management systems, follow-up and control are examples of tools that facilitate initiatives for improving health and increasing safety. However, perhaps the most important step will be to create a culture that always places health and safety first. Our annual Global Safety Week is an example of an activity designed to promote such a culture

SCA's control system also includes minimizing risk by providing training for managers, employees and partners. Each SCA plant has procedures in place to increase workplace safety. The international OHSAS standard also serves as a tool to help SCA promote a systematic approach and continuous improvement of the work environment.





## Stronger safety culture with ZERO

ZERO is a program launched to develop a safety culture within SCA's forest products operations. Despite targeted initiatives and a systematic approach to health and safety, too many accidents are still taking place.

The situation must be reversed and ZERO will help us to achieve this. The first milestone is to halve the number of workplace accidents by 2018, compared with 2014. We must change our behavior if we are to reach the first milestone and subsequently reach our ultimate objective that no one should be injured at work. It means that each of us must put health and safety first and show this through our actions every day. Key success factors are commitment from management,

concrete and challenging targets, as well as sustained commitment from the employees.

Work on ZERO began with a situational assessment. Based on the analysis, we then drew up action plans to develop our safety culture and began activities. In addition, we developed a joint toolkit with important routines, our own policy for behavior-based safety and a leadership development program.

"We have now run the program for one year and can see a positive impact. Figures for this year show a reduction of 26% in the number of accidents resulting in absence and a 29% reduction in the accident frequency rate. There has been a strong commitment to reach our target, a safe and secure workplace," says Katarina Kolar, Program Manager for ZERO.



### **ACCIDENTS**

50%

Our goal is to halve the accident frequency rate by 2020.

### **SCA's VISION**



SCA has a zero-accident vision for its operations.

23 sites with zero workplace accidents in 2016

Finland: Nokia

Germany: Logistics Kiel, Witzenhausen

India: Ranjangaon Netherlands: Suameer

Poland: Olawa Russia: Sovetsk Spain: Telde

**Sweden:** BioNorr Härnösand, Mölnlycke, Obbola Packaging

Taiwan: Kao Hsiung UK: Chesterfield,

Manchester, Oakenholt, Skelmersdale,

Stoke, Welshpool

**US:** Bellemont, Bowling Green, Greenwich, Harrodsburg,

South Glens Falls

### Fatal accident at Mannheim

On July 24, a tragic fatal accident took place at SCA's tissue plant in Mannheim, Germany, when an employee was fatally injured during maintenance work at the plant's power facility. One other colleague was injured.

SCA carried out simulations of the accident, reviewed the processes involved and investigated the equipment to understand the causes of the accident and to take measures to ensure that similar accidents are not repeated. SCA is cooperating with relevant authorities.



# SCA in society

SCA wants to help solve social challenges. These challenges are a source of innovation and change. In some cases, SCA can contribute to solutions as part of its business, while in others, SCA adopts a corporate citizen approach.

Over time, the social dimension has become an increasingly important part of companies' CSR strategies – and this has also been the case for SCA. The social needs of communities are growing, and many of these can only be solved through cooperation between companies and communities.

At the same time, these needs are a source of inspiration and development for companies' business models and product offerings. There are ample opportunities to create shared value between companies and the community, where business value for the company and social value for the community go hand in hand.

SCA prioritizes social initiatives with a clear link to the company's values, expertise, operations and geographic presence. Many initiatives are in hygiene and health, often related to women and children.

The projects vary over time and between regions. They range from hygiene programs to emergency relief or support for local projects and organizations. These projects strengthen SCA's position in the community and build loyalty and goodwill. They contribute to our reputation as an attractive employer, and make our employees proud to be working for SCA. In 2016, SCA invested SEK 32m in approximately 400 projects.



# Living life to the fullest

Age should never be an obstacle when it comes to new experiences and living your life to the fullest. Partnering with the North American organization Wish of A Lifetime, SCA is committed to enriching the lives of seniors. 78-year-old Jenny Bond lives an active life, including whitewater rafting, paragliding skydiving and scuba diving. Yet, a memory that has stayed with her is meeting an elephant at the Munich Zoo in 1960 and ever since, she has wished to help care and feed an elephant. Thanks to SCA and Wish of A Lifetime, her wish came true when Jenny got to meet and care for Tupelo the elephant at the Houston Zoo in the US.

# SCA and UNICEF support adolescent girls in Mexico

SCA initiated a collaboration with UNICEF in Mexico in conjunction with the UN's International Day of the Girl Child on October 11. The cooperation aims to disseminate information in order to tackle problems that often affect adolescent girls and to finance the UNICEF program for girls and boys in Mexico.

The cooperation concerns pressing problems. In Mexico, a country with 15.6 million adolescent girls, challenges include teenage pregnancies, violence and early school dropout. Mexico has most teenage pregnancies among OECD countries and many of these young mothers suffer from serious complications related to pregnancy and childbirth. Violence is also common among young people in Mexico: 36 of 1,000 young people aged 10–17 report being affected by some kind of violence or aggression (ENSANUT:2012).

SCA and UNICEF are targeting young girls and also their parents as teenage years are such an important period. The skills, abilities and resilience capacity acquired



SCA entered into a partnership with UNICEF in Mexico to support adolescents and to work for improved gender equality.

during this time are crucial for the potential of people in adult life. The #hablemostodo (let's talk about everything) campaign was run in social media during the autumn. SCA will also share key messages via Saba Teens packaging (SCA's feminine care brand in Mexico) and through the brand's other channels. The messages will focus on the importance of violence prevention, completing school and not becoming a parent at too young an age.

"SCAs motto 'Care of life' extends beyond our products. We promote hygiene and health, and want to increase our commitment to also influence equal opportunities and the well-being of women. Our reach will be greater together with UNICEF," says Atilano Sanchez, Vice President Sales & Marketing for SCA in Mexico and Central America.



Children cope better with tough medical treatment if their parents are nearby, and this is possible at the Bethesda Children's Hospital in Hungary

## Sick children need their parents

In Hungary, SCA has a strategic cooperation with the Bethesda Children's Hospital. One of the outcomes of the cooperation is the foundation of the Bethesda Family House, a dormitory for parents who want to stay with their children when in hospital.

Children can endure hard medical treatment and recover more quickly close to their parents. Family accommodation in hospitals is hardly available anywhere else in Hungary.

A Hungarian tax law allows people to donate 1% of their income tax to a dedicated CSR project. In its long-term cooperation with Bethesda, SCA has shared its

marketing expertise and communication channels to encourage individuals to donate their 1% to the Bethesda Foundation. In addition, SCA has cooperated with key customers to support this initiative and to help raise funds through joint campaigns. As a result, more than HUF 10m was collected and the number of people supporting the project with their income tax increased by 25%, which enabled the building of the Bethesda Family House. SCA also supports the hospital with hygiene products. By not just donating money but helping Bethesda raise money, we have created a sustainable process that will also work in the future without the support of SCA.

### HELP FOR COMMUNITIES STRUCK BY NATURAL DISASTERS

In 2016, a series of devastating natural disasters affected many people across the world. SCA and its employees have tried to help and alleviate the effects.

An earthquake that struck central Italy in August killed about 300 people. SCA in Italy supported the affected locations in cooperation with the Italian Red Cross. Employees could donate money via their salary, which was matched by SCA. In October, yet another earthquake occurred. SCA delivered construction materials for 40–50 cabins from the Tunadal sawmill, intended to build temporary houses for those affected.

Similar initiatives were carried out in North America following flooding in Texas and Louisiana and wildfires in California.

Ecuador was hit by an earthquake measuring 7.8 Mw on the Richter scale in April. It was the worst natural disaster in the country for 67 years and it claimed about 700 lives and made 30,000 people homeless. Employees at SCA's joint venture Familia in Colombia gathered COP 8,355,000 for the Red Cross and donated hygiene products, food, medicines, water and clothes that were delivered to Ecuador. 22 Familia employees work in the area of which two had their homes destroyed and three had their houses damaged. Familia offered their employees psychological and financial support and assistance in the reconstruction of the houses.

25

# Comprehensive climate work



**TARGET** We will reduce  $CO_2$  emissions from fossil fuels and from purchased electricity and heating by 20% by 2020, with 2005 as reference year.

We will triple our production of biofuels from our forests by 2020, with 2010 as the reference year.

The production of wind power on SCA forest land will increase to 5 TWh by 2020.

**OUTCOME 2016** At year-end 2016, CO<sub>2</sub> emissions in relation to the production level had declined by 18.4%.

SCA's production of biofuel from its own forests amounted to 740 GWh.

Wind energy from SCA forest land totaled 2.3 TWh.

740 Gwh

SCA's production of biofuels from its own forests amount 740 GWh.



SCA is working in many ways to reduce its climate impact. We continuously work with energy efficiency and to reduce the climate impact of our products. We invest in the production of renewable energy, such as biofuels and wind power. Our forests also net absorb 4.1 million tons of CO<sub>2</sub>.

Reductions in climate impact are mainly through larger investments in facilities or by continuously making our work slightly better and slightly more efficient, for example, through the ESAVE energy-saving program

(see page 49). We take our products' entire lifecycle into consideration to minimize their impact as much as possible.

Our forests absorbed 4.1 million tons of  $CO_2$  in 2016, which is more than SCA's emissions from its entire production. Forests also play a key role in our efforts to increase the availability of renewable energy. Raw material and by-products are converted into biofuels, thereby becoming valuable energy. Our forest land is also an important foundation for our wind power projects.



Tork Smartone reduces paper consumption by up to 40%.

### Minimized product impact

Reducing climate impact is not only about investing in new production technology. Equally important is a reduction in the product's impact and, through this, to contribute to the UN's Sustainable Development Goal 12 for sustainable consumption.

Since the beginning of the 1990s, SCA has worked with life cycle assessments, which involve a complete environmental analysis of a product's value chain, from raw material, production and transport to use and waste management. Our hygiene products have reduced their carbon footprint in recent years (see pages 14, 15 and 40) and SCA continues to work with resource-efficient products and new services for customers.

Designing products that cut consumption is an effective way to reduce the climate impact. The Tork XPressnap dispenser is designed so consumers can only take one napkin at a time and we guarantee a 25% reduction in napkin consumption. Tork SmartOne is another example that offers a reduction in tissue consumption by 40%. TENA Solutions is a service through which we can help nursing homes to optimize their incontinence care through an extensive analysis of operations. The result is improved well-being for care recipients, less waste and lower total cost.



SCA's upgrade of the biodigester in Mannheim will reduce carbon emissions and increase production efficiency.



# Reduced emissions and costs through more efficient power production

SCA is upgrading the biomass boiler at its tissue plant in Mannheim, Germany. Biomass is a waste product from the production of tissue and the 1,100 GWh produced here makes Mannheim the Group's second largest power facility.

SCA is upgrading and replacing large parts of its biomass boiler in order to comply with the Industrial Emissions Directive, IED. The upgrade requires a EUR 10m investment and has several advantages. The boiler is expected to be 10% more efficient with new components and new technology. Carbon dioxide emissions are also expected to fall by about 20,000 tons at the same time as operating costs are reduced by EUR 4,000 per year. The biomass boiler upgrade is scheduled to be complete in late 2017.

# Doubling of green electricity

The multi-million SEK investment in SCA's pulp mill in Östrand, Sweden, will make it the world's largest producer of bleached softwood sulfate pulp and will more than double its production capacity, from 430,000 to 900,000 tons. The SEK 7.8bn investment makes the expansion one of the largest ever industrial investments in Sweden.

Construction began immediately after approval of the investment in August 2015, and is scheduled to take three years to complete. The new wood house will be completed first and will begin operating during the second quarter of 2017.

The investment means SCA will supply products of world-class quality and environmental performance. We can also offer pulp bleached using the latest techniques (ECF and TCF) produced using raw materials from responsible forestry. In addition, the plant will be fitted with the latest technology to increase energy efficiency and minimize emissions to air and water.

Finally, Östrand will more than double its deliveries of green electricity and district heating to 1.2 TWh electricity per year, which is sufficient to provide electricity for 240,000 households.



SCA's pulp mill in Östrand will double its production capacity, from 430,000 to 900,000 tons and double its deliveries of green electricity and district heating to 1.2 TWh.



### Fuel from the forest

Black liquor, a by-product from pulp manufacturing, will be made into renewable gasoline and diesel when SCA's pilot plant in Obbola near Umeå begins operating early in 2017. SCA is the first company to use a technology that enables the production of biofuel from the lignin contained in black liquor.

Simply put, this means copying nature: "What took nature 100 million years to create, SCA can achieve directly using by-products from the forest industry," explains Anders Hultgren, Development Manager at SCA.

The manufacturing process is reminiscent of what happens at oil refineries. It is therefore possible to manufacture other petrochemical products, such as raw materials for the production of plastics and pharmaceuticals.

All of this offers access to a new market which is in principle insatiable – the world needs an enormous amount of energy. Customers of the future for SCA's new product could be oil companies, distributors or bus companies. One major advantage is that vehicles and filling stations and other infrastructure do not need to be rebuilt or replaced, which means substantial savings in time and money.

"Our new product also increases the value of the pulp mill, which can increase production as we get better at utilizing by-products. And in a wider perspective, this transfer from fossil to renewable means we are contributing to solving global warming," says Anders Hultgren.

The goal is large-scale fuel production, but before SCA can make a decision on a continuation, the pilot plant must be completed, begin operating and be evaluated. If everything runs smoothly, it may be interesting for other pulp plants, in Sweden and in the rest of the world.



Fill the tank with trees? Anders Hultgren illustrates the principles behind the production of biofuels from by-products in pulp manufacturing.



# Scandinavia's largest wind power area inaugurated

The Björkhöjden and Ögonfägnaden wind farms in northern Sweden were inaugurated on June 1. The wind farms comprise 123 wind turbines in total.

Together with the Stamåsen wind farm, Björkhöjden and Ögonfägnaden form the largest wind power area in Scandinavia. The wind farms will generate the equivalent of 1% of Sweden's total energy consumption, or household electricity for 220,000\* houses or 560,000\* apartments.

The wind farms, which are located in the municipalities of Ragunda, Sollefteå and Strömsund, were inaugurated with the theme "Wind Farm for the People". Approximately 850 participants were served with food and coffee and offered guided tours, music and a performance by the vaudeville group Karneval.

The wind farms are operated by Statkraft SCA Vind, a joint venture where Statkraft owns 60% and SCA 40%. Statkraft is responsible for financing the wind farms and SCA for the land.

\* Source Statkraft.se

# Toward a circular society

One of our largest challenges in our work to contribute to a circular society is the responsible handling of production and post-consumer waste. SCA has adopted a new and ambitious target for production waste and has launched a service to recycle paper towels.

One challenge is that SCA's hygiene product portfolio primarily comprises disposable products. It is difficult to find business models that include the efficient collection of used products or a technology that separates the different materials used in the products in a way

that creates new, attractive, recycled materials. Material recycling of baby diapers and incontinence products, for example, is complicated by concerns about used products not being hygienic. This is an obstacle that must be overcome to ensure that SCA continues to be a relevant company in a sustainable and circular society and we are working intensively to find new solutions.



### A new waste target

**Production at our sites should not generate waste.** Everything should be taken care of as part of an efficient ecocycle.

The new target states that materials and energy should be recovered from waste from all production units by 2030. In practice, this means we need to find new ways for an additional 600,000 tons of waste. Nothing should be sent to landfill after 2030.

19 units already report zero production waste. The new target will require a series of measures to find suitable ways to recover SCA's various types of waste. Waste management is relatively local – circumstances are different depending on the type of waste and infrastructure for waste management. The new solutions must also be adapted to local conditions.

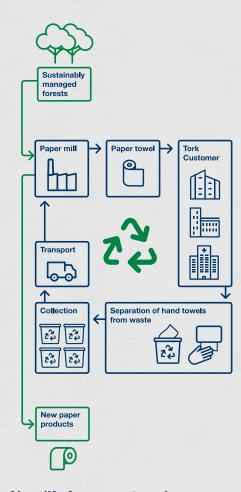
Distribution of production waste 2016



Recovery, 64.9%
Landfill, 34.7%

Hazardous waste, 0.4%

**19 sites with zero production waste in 2016:** Ortmann, Austria; Stembert, Belgium; Drummondville, Canada; Le Theil, France; Kostheim, Neuss and Witzenhausen, Germany; Hoogezand and Suameer, Netherlands; Valls, Spain; Manchester, UK; Bollsta, Gällö, Lilla Edet, Mölnlycke, Rundvik and Tunadal, Sweden; Istanbul 1 and 2, Turkey



### New life for paper towels

SCA and its tissue brand Tork have made it their responsibility to convert the environmental ambitions of customers into concrete measures and results. The latest contribution is a new and unique service for recycling paper towels from customers such as large offices, universities and airports. Until now, it has been difficult to recycle hand towels, mainly because of hygiene requirements and technical barriers.

The new service means that hand towels are collected from customers and sent to a local SCA mill to be transformed into new paper products. In 2016, two pilot projects were conducted in Germany and the Netherlands with highly favorable results. The service will be offered to more customers in 2017.

The recycling service is an important contribution to a more circular and sustainable society.

# Safely sourced fiber



**TARGET** All fresh wood fiber-based raw material in our products will be FSC® or PEFC™ certified, or fulfill the FSC's standard for controlled wood.

We will preserve the biodiversity of our forests. A minimum of 5% of our productive forest land will be set aside from forestry in our ecological landscape plans and a further 5% will be set aside as part of our consideration for nature in our managed forests.

**OUTCOME 2016** In 2016, 6.5 million tons of fresh fiber was delivered to SCA as wood, pulp, packaging, mother reels and third-party supplied articles. 57% of the fiber was FSC/PEFC certifierad, 42% fulfilled the standard for controlled wood, and 1% originated from controlled suppliers.

7% of SCA's productive forest land has been set aside from forestry in the long term in our ecological landscape plans. In 2016, 13% of the area in planned harvesting sites was set aside for preservation.

Consumers must feel confident that all components of an SCA product and all fiber are derived through responsible forest management. This is the basis of SCA's target for fiber. SCA's own forests are cultivated with a focus on biodiversity, and they contribute a valuable, renewable raw material.

### Responsible fiber sourcing

Illegal felling is an industry that generates billions. Illegal felling can refer to felling forests without the knowledge or permission of the landowner, felling in areas with high conservation value or felling that breaches the law of the country in question. Irresponsible companies that trade in illegal timber can dump prices since they avoid paying taxes, fees and many other costs.

For SCA, it is therefore of the utmost importance to ensure that the wood raw material used in the company's operations is not sourced from controversial sources.

### Sustainable silviculture

Forests contribute significant value for many stakeholders. They provide habitats for countless species of animals and plants. They serve as a renewable raw material for the forest industry, which creates thousands of jobs. Forests bind  $\mathrm{CO}_2$  and are one of the most important tools in the world when it comes to eliminating the climate threat. Forests give us the opportunity to enjoy recreational activities, to hunt and fish.

Preserving the biodiversity of our forests is the most important environmental target for the management of our forests, which cover an area nearly the size of Belgium.



The Alsatian Aska sniffs a tree to investigate whether it has bark beetles.

## WITH A NOSE FOR BARK BEETLES

Dogs and their keen sense of smell can be very useful in the fight against spruce bark beetle and save substantial wood value. SCA employed four-legged partners to help forest owners in Medelpad in Sweden to handle the problem of harmful insects. The beetles live on spruce and often inhabit residual wood but can also affect live spruce trees.

The dogs are from SnifferDogs Sweden. They have been training to recognize the scent of spruce bark beetles and track down affected spruce trees. This means the forest owner can fell the spruce when it is still healthy and be fully paid for it. It also reduces the risk of additional infestations as the beetles are transported in the tree out of the forest and cannot reproduce.

It takes the sniffing dogs about one hour to search through a ten-hectare area, which is far faster than a person can check. The dogs can also find infested areas that are difficult to locate using standard search methods.



SCA's links to the Forest Stewardship Council (FSC®) are strong and we prioritize FSC certification. We play an active role in developing the FSC and finance and participate in the Value and Impact Analysis (VIA), a special evaluation of the FSC. Work began in earnest in 2016.

The aim of VIA is to identify how the FSC's influence on forestry and people can be measured and how the value of the certifica-

tion can be communicated in the best way. A number of stakeholders are taking part, including the forest industry, non-profit organizations and researchers.

"It is time for our industry to shift focus from compliance and instead highlight the real advantages with the FSC and responsible forest management," says Hans Djurberg, Sustainability Director at SCA and a member of the FSC international board. The use of certified fiber has a positive impact on the environment and on people who are dependent on forests. We have a responsibility to communicate this and help consumers make better and more sustainable choices.

SCA hopes that the VIA and the ongoing comprehensive investigation will help us to convey our positive impact on forestry and people through the FSC. It is also satisfying to develop a method that will be used to evaluate other certification systems from a sustainability perspective.

# Innovative student accommodation on water

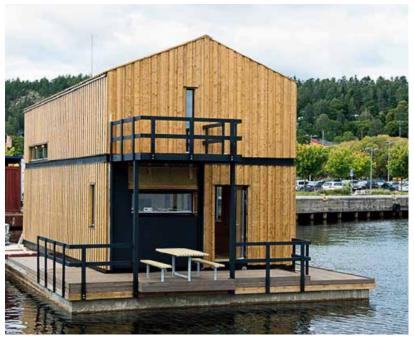
The design company "Imorgon Innovation" and SCA have created a new type of student accommodation that is located on a floating landing stage in the Port of Sundsvall in Sweden.

A demonstration house was completed in autumn 2016 and the first tenants have moved in. Three students will live in the floating house for one year. They will evaluate the design, functionality and other quality aspects and also share their views on a new way of communal living.

"It feels exciting and luxurious to live like this. You can't find a better sea view," says Tove Gulliksson, who was first to move in.

The project is testing new innovative materials. The floating houses are built from wood that has been impregnated with Royal, i.e. treated with linseed oil. This treatment is less of a burden on the environment compared with conventional alternatives. The wood also retains its shape better and splits less, which makes it more durable.

So far, the response has been positive and the plan is to build up to 25 houses in Sundsvall. When finished, the ambition is to spread this way of living to other towns.



In autumn 2016, the first students moved into the floating houses made with wood from SCA.

# Vital water



**TARGET** Our plants will reduce suspended solids by 10%.

Our tissue operations will reduce the water usage by 10% and organic content (BOD) by 10%.

Our forest products operations will reduce phosphorous emissions by 10%. All targets will be achieved by 2020 (reference year 2014).

**OUTCOME 2016** Our plants reduced suspended solids by 12.5%.

Our tissue operations reduced the water usage by 1.5% and organic content (BOD) by 3.3%.

Our forest products operations increased phosphorous emissions by 35.6%.

SCA has met its previous water targets and has therefore introduced new targets that are adapted to local conditions, as water is a local issue. The new targets apply to all mills and focus on treating water as effectively as possible, as well as reducing water usage.

Water is a critical resource and, along with climate change, is one of the most critical sustainability issues facing the world today. We have every reason to treat, reduce and rationalize water usage at every SCA plant.

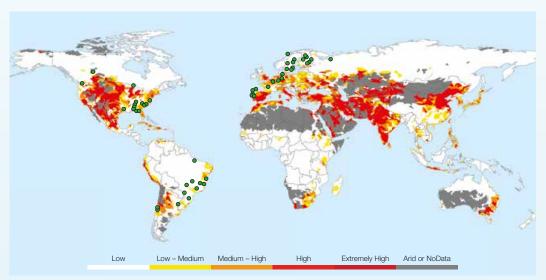
SCA mainly uses water to transport fibers, and for cooling in the production process. Most of our plants, which account for 97% of our water usage, are located in areas with a plentiful supply of water.

This is the first year we are reporting in accordance with our new water targets. The targets have been established based on what is most relevant. Water usage is not as big an issue in Sweden as it is in water-stressed regions, such as Colombia or Spain. However, it is important in Sweden to reduce phosphorous emissions as they can have a negative impact on the Baltic Sea.



The increase in phosphorous emissions during the year resulted from disruptions and problems with measurement equipment at the Obbola facility in Sweden.





Red color indicates a high water stress, white a low. SCA's plants are generally located in areas with favorable access to water.

Source: WRI, GADM

### Water risk assessment

For the first time, SCA has conducted a water risk assessment at all of its pulp suppliers. In total, 54 suppliers were evaluated, and most are located in low-risk areas or regions.

Pulp production requires large volumes of water and we therefore need to ensure that our suppliers' production is not associated with high water risks. We used the external tool WRI Aqueduct that considers multiple risk factors but mainly risks related to water quantity, water quality and regulatory risks. Only a few suppliers are located in areas with medium to high risk.

"We have no high-risk pulp suppliers with regards to water," says Armin Benner, environmental specialist at SCA. "Now we will evaluate the results and based on this thorough analysis, we will decide if it is necessary to replace or reduce volumes from any supplier."

The water risk assessment will be updated on a regular basis and we will also look into other key supply streams. SCA has evaluated water risks at its own production sites since 2011.

### ÖSTRAND DOUBLES EFFLUENT TREATMENT

SCA is expanding effluent treatment at its Östrand pulp mill in Sweden, as part of a major investment at the facility. The investment will double production capacity and this will also require a higher water flow. Östrand's hydraulic capacity will increase from 2,000 to 4,000 cubic meters of water per hour. This increase will primarily be through an expansion of existing technology, as this has been functioning effectively.





# Content

| Stakeholder dialog                | 35 |
|-----------------------------------|----|
| Materiality analysis              | 37 |
| Economic value creation           |    |
| Management approach               | 38 |
| Satisfied customers and consumers | 39 |
| People and nature innovations     | 40 |
| Product safety                    | 41 |
| Hygiene solutions                 | 41 |
|                                   |    |
| Value creation for people         |    |
|                                   | 42 |
| Code of Conduct                   | 42 |
| Supply chain management           | 44 |
| Health and Safety                 | 45 |
| Employees                         | 46 |
| Community relations               | 48 |
| Value creation for nature         |    |
| Management approach               | 49 |
| Climate and energy                | 49 |
| Wind power                        | 50 |
| Biofuels                          | 50 |
| Waste management                  | 51 |
| Fiber sourcing                    | 51 |
| Forest management                 | 52 |
| Water                             | 53 |
| Environmental complaints          | 53 |

### **Control and assurance**

| Sustainability governance |    |
|---------------------------|----|
| Environmental data        | 56 |
| Social data               | 64 |
| About the report          |    |
| Assurance report          |    |
| GRI index                 |    |
| Glossary                  |    |
| Addresses                 |    |
| , 1991 00000              |    |

# Stakeholder dialog

SCA's stakeholder dialog helps us understand the needs and expectations of stakeholders and to develop long-term relationships. It also provides valuable input for continuous improvements and ways of working.

We seek to actively engage with customers, consumers, suppliers, employees, investors, media, NGOs, governments, politicians, decision-makers, regulators and academics. An active stakeholder dialog is a means of ensuring that our priorities and methods are relevant in today's society.

#### Customers

SCA has a broad product portfolio and many different customers, both end-consumers and customers such as the retail trade, distributors, printing houses and health and medical care services. All SCA business units maintain a close dialog with their customers and follow up customer satisfaction through surveys, face-to-face meetings and third-party assessments.

In-depth consumer insights reveal areas of improvement. SCA conducts market and consumer surveys, visits consumers' homes to learn about their lives and interests, and arranges focus groups to gain insights into consumer preferences, behaviors and attitudes. Valuable insights are also gained through SCA's many help lines for consumer contact and through customer service's handling of queries and complaints. Read more on page 40.

#### Other

SCA regularly meets investors and analysts, including socially responsible investors (SRIs). It conducts employee surveys and employee performance management reviews. Moreover, SCA communicates with other groups and individuals in matters that have a major impact on society in general and local communities in particular. SCA regularly meets with NGOs, journalists and people living close to the Group's mills.

In Northern Sweden, there is an ongoing dialog in relation to SCA's wind power investments. SCA's wind farms are generally located

in sparsely populated areas, but there have still been local protests against some of the wind farms. SCA arranges regular information meetings, open to all stakeholders.

SCA is a member of several networks, including the UN Global Compact, the Consumer Goods Forum and a number of different national and regional industry organizations. SCA participates in the WWF Environmental Paper Company Index, and SCA Forest Products participates in the WWF Global Forest & Trade Network (GFTN). SCA has a partnership with the United Nations' Water Supply & Sanitation Collaborative Council (WSSCC). In 2016, SCA produced its fourth Hygiene Matters report in cooperation with WSSCC and the report was launched at a side event to the UN General Assembly in New York in September.

SCA works actively to build partnerships with policy-makers in countries where new healthcare systems are under development. In 2015, representatives from SCA, Vinda and the Chinese city of Jiangmen signed a memorandum of understanding (MoU) concerning the joint development of a pilot program for elderly care in Jiangmen. The MoU was renewed in September 2016 at a ceremony in Stockholm. In conjunction with the signing ceremony, SCA – together with the Sweden-China Trade Council – arranged a China seminar that was attended by 140 people.

SCA also works to raise awareness of incontinence as a medical condition, and to contribute to better conditions for people who suffer from incontinence within the scope of the health and medical care systems in various countries. One important platform for communication is through the Global Forum on Incontinence (GFI). GFI is a global platform for education and debate on incontinence for stakeholders, such as medical experts, politicians and payers. The

sixth GFI Conference took place in Berlin in 2016, see page 18.

In 2015, SCA organized a patient roundtable to discuss incontinence and the provision of better continence care at home and in the community. The roundtable was co-hosted by two leading pan-European civil society groups – AGE Platform Europe and Eurocarers – and resulted in a 2016 joint position statement, agreeing on a set of key policy recommendations and actions to improve the management of care for people with incontinence and their carers.

In 2016, the EU presented its new circular economy package, with a goal to make Europe more competitive and resource efficient. The action plan will affect several sectors, including waste, and SCA is aware of the need to pinpoint solutions in this area while working with others and in its operations to find ways to achieve a more circular society. Consequently, SCA joined the Circular Economy 100 (CE100), an Ellen MacArthur Foundation program established to enable organizations to develop new circular opportunities, see page 15.

At the end of 2016, the EU Commission presented its review of the EU ecolabel certification criteria, in which SCA had been actively involved. In April, a delegation from the EU Commission visited SCA's Ortmann site in Austria, Europe's largest tissue Ecolabel manufacturer in Europe, to study technical aspects of tissue making.

SCA encourages sustainable forest management and supports the two international certification schemes for forests and wood raw materials, the Forest Stewardship Council (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC®). SCA also works to raise awareness of how active forest management and increasing the use of forest products can help to combat climate change.

| Stakeholder group         | Main areas  | How we work with the issues/Activities in 2016 (page reference)   |
|---------------------------|---|---|
| Customers                 | Environmental footprint Ecolabelling Working conditions Fiber sourcing Human rights compliance Customer insight Innovation  | Customer surveys (40) People and nature innovations (40) Life cycle assessments (40) Hygiene solutions (41) Code of Conduct audits and Business Practice Audits (42, 44) Human rights assessments (43) Global supplier standard (44) Sourcing targets (44) CO₂ targets (49) FSC® and PEFC™ certification (51) |
| Consumers                 | Impact of products on nature, for example, environmental footprint, ecolabelling Product safety Consumer insight Innovation | Consumer surveys and focus groups (40) People and nature innovations (40) Hygiene solutions (41) Life cycle assessments (41) Product safety (41) Eco Actions (www.tena.com/ecoactions)  |
| Employees                 | Recruitment and succession planning Training Compensation and benefits Business ethics Health and Safety Working conditions | Code of Conduct training (42) Human rights assessments (43) OHSAS 18001 certification (46) Global Performance Management System (47) Global All-Employee Survey (47) Diversity survey (48)  |
| Investors                 | ESG (Environment, Social, Governance)<br>integration into business strategy<br>Resource efficiency<br>Risk management       | Investor/analyst meetings (39) Conference participation (39) Inclusion in sustainability indexes and funds (39) ESAVE (49) Risk analysis (AR 76)  |
| Suppliers                 | Supplier audits<br>Raw material sourcing<br>Human rights  | Sedex reporting (42, 44) Sourcing targets (44) Global supplier standard (44) Ethical supplier audits (45)   |
| Stakeholder organizations | Forest management CO <sub>2</sub> emissions Energy utilization Water consumption Human rights                               | Stakeholder dialogs (35) Membership in industry initiatives and organizations such as Consumer Goods Forum, CEPI, FSC (www.sca.com)   |
| Society                   | Health and hygiene Environmental issues Local issues Human rights Community relations                                       | Public affairs (35) Hygiene solutions (41) Ongoing dialog with policymakers, authorities and local communities (35) Hundreds of community relations initiatives (48)  |

# SCA's materiality analysis

The materiality analysis provides insight into the issues that are significant to SCA's stakeholders and forms the basis of the company's strategy and operations.

SCA conducts a materiality analysis biannually, with the most recent conducted in 2015. A total of 1,100 customers, consumers, suppliers, investors, representatives of the media and stakeholder organizations as well as SCA employees participated in the online survey that formed the basis of the materiality analysis.

SCA previously conducted materiality analyses in 2008, 2010, 2012 and 2013. While the analyses performed between 2008 and 2012 were focused on sustainability, the 2013 and 2015 analyses took a broader approach. Stakeholder opinions are highly significant to SCA's strategic priorities, which is why the scope has been broadened beyond environmental and social aspects, and now encompasses the entire operation. The results are also included on page 11 of the Annual Report.

The selection of subject areas to be included in the materiality analysis was guided by such governing documents as the Global Reporting Initiative, the UN Global Compact, SCA's Code of Conduct and on the basis of SCA's own assessment. The 2015 survey included 20 topics and all selected areas are material for SCA. Two topics - transparency and digital excellence were new in the 2015 survey. Transparency is defined as open communication and accountability, and digital excellence as digital strategy and related activities to maximize business benefit. Financial risks was replaced with risk management. The respondents were able to select the ten areas they considered to be most important from the list of 20. The stakeholders' order of priority of the areas was combined with SCA's own assessment of how important the areas are to the company's business strategy and were placed in the materiality analysis as coordinates. The stakeholder groups' results were weighted to provide a balanced view of the results. SCA's own assessment was based on the evaluation of the top 150 senior executives.

There is a high degree of consensus between the views of stakeholders and those of SCA in terms of the material areas, with innovation, customer satisfaction and business ethics receiving a clear top ranking. The group that deviates somewhat comprises investors and analysts, who instead rank corporate governance in second place, while customer and consumer

The materiality analysis is a tool used to understand the issues that are most important and relevant to SCA. The horizontal axis shows the degree of importance stakeholders attach to the various topics, while the vertical axis represents SCA's assessment of how important the topics are to our business strategy and operations. In most cases, the assessments of stakeholders and SCA coincide.

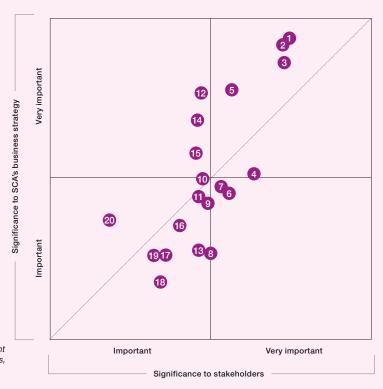
satisfaction is ranked fifth. The results of the survey appear to be reasonable and relevant and provide us with a basis for our strategy and operations, and for the content of the Annual Report and Sustainability Report.

## The factors considered most material to SCA's stakeholders

- 1 Innovation
  2 Customer and consumer satisfaction
  3 Business ethics
  4 Transparency
  5 Health and Safety
  6 Human rights
  7 Resource efficiency
  8 Forest assets
  9 Corporate governance
  10 Product safety
- 11 Supply chain efficiency
- 12 Human capital
- 13 Carbon emissions
- 14 Brands
- 15 Market positions 16 Risk management
- 17 Water use and water purification
- 18 Distribution
- 19 Post-consumer waste
- 20 Digital excellence
- 1. Innovation is ranked number one by stakeholders and SCA, which confirms the relevance of the choice of innovation as one of SCA's strategic priorities. The aspect of sustainability is integrated in the innovation process, and we launched 23 innovations in 2016.
- 2. Customer and consumer satisfaction is assessed as the most important area by SCA's customers and consumers and as the second

most important by other stakeholders and SCA. We conduct regular customer and consumer surveys and feedback opinions and complaints to the business as a basis for improvements.

- **4. Transparency** is valued higher by stakeholders than by SCA. This may be because SCA already considers itself to be a transparent company, but could also be because stakeholders include product safety in transparency. Product safety fell from fourth to tenth place in the 2015 survey.
- 8. Forest assets are assigned greater importance by stakeholders than by SCA. One explanation for this may be that stakeholders see the forest from a global deforestation perspective, while we refer to our own, sustainably managed forest assets in Sweden.
- 12. Human capital is assigned less importance by stakeholders than by SCA. It appears reasonable that we have greater insight into how crucial employee attitudes and expertise are to the Group's success. Our All Employee Survey provides valuable knowledge about employee opinions and constitutes a tool for improvement activities.
- 13. Stakeholders assign greater importance to CO<sub>2</sub> emissions than SCA does. This may be because climate change is a global issue and involves the survival of our planet, while SCA views CO<sub>2</sub> from a corporate perspective. SCA has established ambitious CO<sub>2</sub> targets and owns a forest holding that net absorbed 4.1 million tons of CO<sub>2</sub> in 2016.



SCA Sustainability Report 2016 37

## Economic value creation

## Management approach

SCA's overall management approach to economic value creation is based on the premise that maintaining financially sound business operations is dependent on these operations being environmentally and socially sound. Economic strength and stability is a prerequisite for environmental investments and socially responsible decisions that generate long-term financial growth. SCA's aim is to achieve maximum value for its shareholders and other stakeholders, such as employees, customers and society, with minimum adverse effects. SCA has a number of policies and management systems in place to achieve and follow up its economic value creation. This chapter describes SCA's work related to its most important economic and financial aspects.

| Strategic components                            |   |
|---|---|
| Policy  | Sustainability Policy<br>Code of Conduct                          |
| Targets and KPIs                                | Financial targets People and nature innovations Hygiene solutions |
| Data  | See Annual Report<br>See Life cycle assessment                    |
| Management systems, programs and certifications | IFRS Innovation processes Life cycle management                   |
| External charters or initiatives                | UN SDGs<br>UN Global Compact                                      |

#### **Economic performance indicators**

Net sales increased by 2% compared with the same period a year ago, to SEK 117,314m (115,316, 104,054). Emerging markets accounted for 32% of net sales (16% in 2007). Adjusted operating profit rose 7% to SEK 13,989m (13,014, 11,849). In Personal Care, net sales decreased by 2% and emerging markets accounted for 41% of sales. Net sales in Tissue increased by 5% and emerging markets accounted for 32% of sales. Net sales in Forest Products decreased by 4%.

#### **Employees**

SCA offers its employees development opportunities and remuneration based on market rates. Remuneration comprises salary, pensions and other benefits.

SCA's Remuneration Policy stipulates that the company is to offer competitive compensation. SCA follows local remuneration structures, provided they do not conflict with internationally established rules for minimum wages and reasonable compensation. In all the reporting countries, SCA pays above the legislated minimum salaries. France, Germany and Sweden are the wholly owned subsidiaries with most employees. In France, female managers' salaries ranged between 96% and 105% of men's. For women on non-managerial levels, the corresponding figures were 102-113%. In Germany, female managers' salaries ranged between 87% and 90% of men's. For women on non-managerial levels, the corresponding figures were 99% and 130%. In Sweden, female managers' salaries ranged between 87% and 94% of men's. For women on non-managerial levels, the corresponding figures were 97-104%.

In 2016, salaries totaled SEK 15,763m (14,880, 13,592), and social security costs, including pension costs, amounted to SEK 4,749m (3,246, 2,929). The Group's pension costs totaled SEK 1,392m (1,403, 1,179) and comprised costs for defined-benefit and defined-contribution pension plans. The defined-benefit plans are based on length of service and the employee's salary on the date of retirement and, in 2016, the net cost was SEK 612m (669, 541). The cost of defined-contribution plans amounted to SEK 780m (734, 638). More information is available in Note C1 and Note C5 in SCA's 2016 Annual Report.

#### Suppliers

SCA strives to promote long-term relationships characterized by transparency, high quality and financial stability. We support our suppliers and work together with them to improve their overall performance in areas such as quality, safety, the environment and social responsibility.

Global commodities, such as pulp, superabsorbents, electricity and chemicals, are purchased centrally while other input goods, such as wood, are procured locally and thus contribute to local suppliers and local industry. Almost all of the fresh fiber purchased for the Swedish mills is sourced locally.

In 2016, the cost of purchased raw materials and services totaled SEK 79,171m (74,832, 67,559), making sourcing SCA's single largest cost item, corresponding to 67% (65, 65) of sales, and a key investment in the value chain.

#### Society

SCA creates job opportunities and tax revenues in the local economies where the Group operates. In 2016, the tax expense, excluding items affecting comparability, was SEK 4,775m (3,306, 2,644). The reported tax expense corresponds to a tax rate of 36.5%. The tax rate, excluding items affecting comparability and a tax provision of approximately SEK 1.3bn related to ongoing tax cases in Sweden and Austria, was 26%. In addition. SCA's total tax contribution includes social security costs, property taxes and VAT. SCA assumes a long-term and responsible approach, voluntarily committing to promote and develop local communities through a number of community relations initiatives with a focus on health, hygiene and education, see pages 24-25.

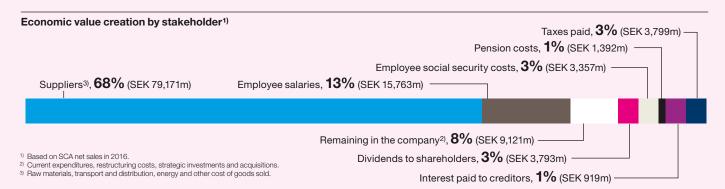
#### **Emerging markets**

SCA's strategy is to maintain and grow its positions in core mature markets and to increase emerging markets' share of the hygiene business' net sales and profit. China, Southeast Asia, Latin America, Eastern Europe and Russia are prioritized markets.

Historically, SCA has entered new emerging markets through joint ventures. In recent years, SCA has also expanded through wholly owned companies and greenfields, of which the greenfield in Brazil is an example. The incontinence site in Brazil was inaugurated in 2016.

SCA has a "cure or kill" strategy for unprofitable markets or categories. The first choice is to establish a plan to achieve reasonable profitability. If this fails or is deemed impossible, SCA will exit the market. As a consequence of this strategy, SCA left the Mexican diaper market in 2016.

When SCA acquires companies, or enters into a joint venture in emerging markets, the company adopts an approach that involves great respect for the local management's in-depth knowledge of the market and prevailing conditions. Accordingly, to the greatest possible



extent, the management is retained while SCA adds knowledge about innovation, brands, technology and economies of scale. Local growth creates local jobs.

SCA actively strives to deliver product offerings in emerging markets that are adapted to the market conditions. This includes offering affordable value products as well as packages containing fewer products in order to give low-income consumers living on a day-to-day budget the opportunity to buy for example a single diaper. It also includes distribution to small, stores where many low-income consumers make their purchases. All of SCA's solutions, products and services are adapted to consumer and customer needs, whether they are economic, social or environmental.

#### Due diligence

Prior to initiating/establishing operations or acquiring a company, SCA conducts a feasibility study, including market and consumer studies, a review of the legal requirements in the market, including environmental legislation, and an assessment of the business climate and business practices. The recruitment of personnel with the appropriate values is crucial. SCA has well-defined procedures to ensure social, environmental and governance matters are part of the due-diligence process.

#### Our global tax principles

SCA strives to be a good corporate citizen and comply with the laws in all countries where we operate. Where laws need interpretation, and where appropriate interpretation so requires, we comply with the spirit of the law and not only to the letter of the law. The overall goal of our tax management is to provide SCA with the most favorable possible tax position, albeit risk-adjusted.

We acknowledge the legitimate interest of tax collection and believe taxation is important to advance economic development. We look to establish good working relationships with tax authorities in countries where we operate and never intentionally or knowingly take financial advantage of weaknesses in institutional structures or shortcomings in the tax collection process.

We comply with all statutory requirements in terms of reporting and disclosure of tax information without considering the balance between the burden on our business of doing so and the relevance of the required information. We understand the value of financial reporting to investors and society, and work to provide transparent and balanced disclosure in communicating our tax affairs.

#### Tax paid by region 2016



Our approach to risk requires that we consider the implications of our tax management on the Group's brand and reputation. We refrain from transactions unrelated to the context of our business and only take tax positions that can be sustained after full and correct disclosure. We utilize local tax incentives where this is not in conflict with our commitment to comply with local laws, but we do not use tax havens to gain tax advantages and we refrain from engaging in practices that would constitute prohibited state aid or other unlawful competition by governments. In our cross-border transactions, we aim to apply pricing and other conditions that are in compliance with both local laws and the OECD Transfer Pricing Guidelines for Multinational Enterprises.

#### **Shareholders**

Sustainability, with an emphasis on business value, is part of SCA's investor dialog. In 2016, SCA met with SRIs (Socially Responsible Investors) on several occasions, and participated in SRI conferences in Paris and Frankfurt.

Investors with sustainability criteria hold at least 13% (14, 14) of SCA's shares, according to a study conducted by the ESG (environment, social, governance) rating company Vigeo. This figure includes both investors with a best-inclass approach and investors who conduct some form of sustainability screening. The decrease in the percentage of capital held by SRIs is partly explained by the increase in SCA's total floating shares. At year-end 2015, floating shares accounted for 83.17%, while the figure was 88.34% at year-end 2016. The results for SCA's peers show a similar trend.

Vigeo also conducted a benchmark study in which SCA was compared with two key peer consumer products companies and one Swedish large-cap company recognized as a sustanability leader. SCA had a significantly higher share of investors with sustainability criteria than its peers and was on par with the sustainability

**Tax paid**Tax payments by SCA units in different countries

| SEKm            |        |        |        |
|-----------------|--------|--------|--------|
| Country         | 2016   | 2015   | 2014   |
| Sweden          | -1,313 | -79    | -65    |
| Germany         | -516   | -358   | -271   |
| Spain           | -405   | -90    | -90    |
| Netherlands     | -215   | -59    | -191   |
| China           | -146   | -236   | -51    |
| Belgium         | -144   | -80    | -91    |
| UK              | -136   | -115   | -92    |
| Austria         | -94    | -100   | -60    |
| Italy           | -94    | -87    | -77    |
| Mexico          | -88    | -121   | -107   |
| Columbia        | -83    | -72    | -179   |
| Ecuador         | -67    | -41    | -21    |
| Russia          | -64    | -59    | -81    |
| Slovakia        | -61    | -30    | -39    |
| Japan           | -57    | -35    | -45    |
| Denmark         | -40    | -26    | -36    |
| Finland         | -37    | -41    | -34    |
| Norway          | -30    | -48    | -8     |
| Costa Rica      | -26    | -14    | -12    |
| Poland          | -26    | -2     | -26    |
| Other countries | -157   | -515   | -525   |
|                 | -3,799 | -2,208 | -2,101 |

leader. SCA's share was included in 147 (131, 128) sustainability funds in 2016. Most of these are domiciled in the Netherlands, followed by Germany and the US. Of these, 12 had invested more than 2% of their assets in SCA shares.

#### Share performance

SCA generates shareholder value through dividends and share price appreciation. SCA aims to provide long-term stable and rising dividends to its shareholders. When cash flow from current operations exceeds what the company can invest in profitable expansion over the long term – and under the condition that the capital structure target is met – the surplus shall be distributed to the shareholders.

The Board has proposed a dividend of SEK 6.00 (5.75, 5,25) for 2016, an increase of 4.3%. In the past five-year period, the dividend has increased an average of 7.4% annually.

During the year, the SCA share price rose 4% to a closing price of SEK 257.30. In comparison, the OMX Stockholm 30 Index rose 5%.

At year-end 2016, SCA had 81,849 registered shareholders.

#### Indexes and funds

- The FTSE4Good Global index and FTSE-4Good Europe Index, which measure earnings and performance among companies that meet globally recognized norms for corporate responsibility. SCA has been included in the index since 2001.
- SCA is included in the CDP 2016 Climate A List for climate change leadership and recognition as a world leader for corporate action on climate change. SCA also qualified for a position on the CDP 2016 Forest A List and received an A-rating (leadership level) in CDP's 2016 Global Water Report.
- SCA was recognized at the WWF Environmental Paper Awards 2016 (Category "Transparency") for publishing the forest, climate and water footprint of more than 50% of its paper products. Ten SCA products were recognized at the WWF Environmental Paper Awards 2016 in the category "Best Environmental Performance Paper Brands".
- Vigeo assesses companies' environmental, social and governance (ESG) performance.
   SCA is included in the following sustainability funds of Vigeo: Ethibel Sustainability
   Excellence Europe and Ethibel Sustainability
   Excellence Global.
- EPCI Euro Ethical Equity and EPCI Global Ethical Equity.
- The OMX GES Sustainability Nordic and OMX GES Sustainability Sweden.

## Satisfied customers and consumers

Customer understanding and consumer insight are at the core of determining which products and services SCA develops and how it delivers innovations to the market. Customer and consumer satisfaction is a measure of how well

these products and services meet or exceed customer and consumer expectations. SCA has different methods to gain customer understanding and consumer insight, such as monitoring macro trends to identify changes in behavior, home visits, focus group meetings, in-depth interviews, interviews with SCA sales representatives and monitoring activities on SCA's online and social media sites.

#### **Customer surveys**

Customer feedback enables SCA to offer better products and solutions. Every business unit has methods to investigate customer satisfaction.

The hygiene operations conduct a systematic customer follow-up. This includes both external reports, independent surveys and global systems for customer feedback.

SCA also offers expertise and support for the development of operations at such institutions as nursing homes, where SCA can make a difference and create value for its customers and users. SCA places high value on opportunities for direct customer contact.

The retail trade accounts for a significant part of SCA's sales. The Group uses external comparison reports in which the largest retail chains assess their suppliers based on customer service, logistics, sales support, marketing and product development. Consumers who purchase retail products are followed up through general brand and product recognition surveys.

#### Complaints procedures

SCA has a global SAP-based complaint handling system that was introduced in 2011. The Group seeks to compensate unsatisfied customers directly and determine whether a need exists for further measures beyond the individual case. For example, production personnel receive feedback to determine whether a production fault was the underlying cause. User complaints and opinions provide valuable consumer insight and it is important that the knowledge gathered is transferred to the organization.

Complaints have remained at a stable and low level in recent years. For Personal Care products, the complaint frequency is lower than one in a million supplied products. In the Tissue operations, the corresponding figure is 3.2 per thousand tons.

#### People and nature innovations

Innovations that improve social and environmental performance also make financial sense. For SCA, such innovations are linked to an in-depth understanding of customers and consumers.

#### SCA's innovation process

SCA's innovation process originates in an understanding of a customer or consumer need and is divided into four phases:

 Feasibility: Innovation concepts based on customer or consumer insight are elaborated and validated. The market situation and the global business potential are assessed, and high-level technological and commercial feasibility are evaluated.

- Development: A cross-functional project team is engaged in the development of a proposed solution, including a specific product, service or business model. Requirements of the product, packaging, service and technology are developed and verified with customers and consumers, and communication materials are prepared. Product safety assessments for materials, life cycle assessments (LCAs) and social assessments are performed by experts to ensure product safety and environmental and social performance.
- Capacity: The project works toward market launch and building the capability to deliver.
   Launch campaign materials are created, the production solution is verified against requirements, and all product and packaging specifications are finalized. The fulfilment of the regulatory requirements governing products in all markets is secured.
- Launch: The innovation is introduced to customers/consumers in the market. The intended benefits are weighed against market feedback; the supply chain is adjusted accordingly. Supply and demand balance is optimized in production to ensure efficiency and the feedback drives the roll-out plan.

In 2016, SCA invested SEK 1,258m (1,093, 1,050) in research and development. This corresponds to 1.1% of total sales.

#### Open innovation

SCA has a portal for open innovation. Inventors, entrepreneurs and small companies are invited to submit solutions in response to various challenges from SCA. The solutions should be patented so that there are no outstanding issues regarding intellectual property rights should the proposal result in a licensing agreement or other type of business arrangement. A number of proposals have been submitted this way and some of them have led to further collaboration or product launches.

SCA launched an internal innovation platform in 2013 called ICON (Idea Collaboration Online). ICON is not limited to product innovations. Proposals may include manufacturing, logistics or marketing solutions. ICON complements other platforms and initiatives to spur innovation and is frequently used in early phases of the innovation process to gather solutions and ideas from employees.

#### Life cycle management

Life cycle management is about effectively combining value, social and environmental aspects in every part of the life cycle. This enables SCA to deliver products and services that meet customers' needs and exceed their expectations. We promote life cycle thinking in our sourcing, production and development of innovations.

 Responsible sourcing involves seeking high-quality, safe, socially and environmentally sound raw materials. SCA's suppliers adhere to strict standards, including criteria for quality, product safety, environment, chemicals and business responsibility.

- Resource-efficient production focuses on an efficient use of resources and on reducing energy consumption, water and waste. The production units apply management systems such as ISO 9001, ISO 14001 and OHSAS

  19001
- Sustainable solutions are defined as innovative, socially and environmentally sound hygiene products and services. SCA's innovations are based on consumer and customer insight with a focus on meeting needs in daily life. It is essential to optimize products and services during use to control consumption and reduce waste.
- After-use management of products is a common responsibility with consumers and customers. Energy recovery through incineration of hygiene products is a good alternative to landfill. SCA is actively exploring waste treatment methodologies, such as recycling of materials, composting and anaerobic digestion.

#### Life cycle assessments

SCA has used life cycle assessments (LCAs) since the early 1990s. An LCA illustrates the complete environmental impact of a product based on the ISO 14040 and 14044 standards. It is a standardized measurement of environmental impact in every phase of the product, from raw materials, product development, production and use to disposal of waste.

For each activity in the life cycle, an LCA calculates the input of resources, energy and transportation and the output of, for example, emissions to air and water.

The result of an LCA is expressed in environmental impact categories. The LCAs conducted by SCA cover the main impact categories that describe the potential impact on global warming/climate change, meaning the product's carbon footprint, acidification of rivers and lakes, and eutrophication of land or water systems.

| Product                   | Carbon footprint reduction 2008–2015, % |
|---------------------------|---|
| TENA Flex                 | -13                                     |
| TENA Lady                 | -15                                     |
| TENA Men                  | -2                                      |
| TENA Pants                | -23                                     |
| TENA Slip                 | -15                                     |
| TENA Comfort              | -19                                     |
| TENA Bed                  | 5                                       |
| Libero open diaper        | -25                                     |
| Libero pants              | -15                                     |
| Feminine Ultra towels     | -20                                     |
| Feminine Maxi towels      | -2                                      |
| Feminine Absorbent liners | -7                                      |
| Feminine Light liners     | -10                                     |
| Tork hand towels*         |   |
|                           |   |

<sup>\* 2011–2014</sup> 

LCAs are used both to calculate the environmental performance of new innovations and to measure the gradual improvements over time for product assortments. The carbon footprint calculations above cover the majority of sales for all assortments in Europe and are third-party verified by the Swedish Environmental Research Institute (IVL) or Swerea. Assortment LCAs are calculated biannually.

In addition, an assortment LCA has been calculated for Tork excelCLEAN, a cleaning cloth for which the carbon footprint was reduced by 14%

in Europe and North America between 2012 and 2016.

#### **Definition of People and nature innovations**

SCA's People and nature innovations are defined as inventions that lead to social or environmental improvements. The social assessment criteria include health, hygiene, working conditions, ergonomic improvements, as well as dignity and confidence in social situations. With respect to the environmental assessment, performance and resource efficiency are measured using life cycle assessments and/or third-party labels are taken into account.

#### People and nature innovations 2016

In 2016, SCA launched 23 innovations. People and nature innovations accounted for 40% of total innovation sales. Read about some of these on pages 14–15.

## **Product safety**

SCA follows strict requirements and procedures to ensure that all materials in the company's products are safe for consumers, employees and the environment. SCA has a global product safety position in place for all products to ensure that they are safe for their intended purpose. SCA's Global Supplier Standard (GSS) includes responsible business operations, quality, product safety, environmental and social requirements, and SCA works closely with its suppliers to ensure that its high standards are met.

In recent years, there has been an increased focus on issues related to product safety, a trend that continued in 2016.

The food industry is an influential customer for SCA's kraftliner business (packaging papers) and imposes stringent requirements on product safety. SCA ensures that all fibers in its packaging materials meet these requirements, regardless of whether they are fresh or recovered fibers.

The chemicals used in the production process are managed under strict controls, and potential exposure to employees, customers and the environment is evaluated. Only chemicals that meet SCA's stringent safety requirements are chosen.

The regulations most relevant to SCA concern product safety, medical devices, materials for food contact, chemical substances, cosmetics, biocide products and electronics. SCA monitors the development of all relevant regulations and ensures the environmental and human safety of all its products.

#### **Animal testing**

SCA has a restrictive view on the use of animal testing and is committed to reducing animal testing to the very minimum. SCA does not test its products or materials on animals unless required by law, which for SCA is relevant in Brazil and China. SCA actively supports development of alternative testing methods and is an

industry partner of the European Partnership for Alternative Approaches to Animal Testing (EPAA).

#### Palm oil

SCA's tissue, baby, feminine and incontinence care products do not intentionally contain palm oil or palm oil derivatives. A small share of the Group's products, including wet wipes and cosmetic products such as soaps, lotion or creams, may contain palm oil or palm oil derivatives.

SCA frequently reviews its product portfolio and its supply chain in relation to palm oil usage. The company is a member of the Roundtable on Sustainable Palm Oil (RSPO) and actively supports the development of sustainability criteria. SCA plants and suppliers that use palm oil and/or palm oil derivatives are requested to achieve RSPO certification. SCA strives to have only certified palm oil and palm oil derivatives in its supply chain.

In 2016, most of the palm oil used in SCA's cosmetic products was derived from certified sources. The work to ensure that all palm oil and palm oil derivatives in cosmetic products come from certified sources is continuing.

#### **GMO**

SCA recognizes the existing long-term uncertainties regarding environmental and health risks in relation to the use of genetically modified organisms (GMOs) and takes a precautionary approach to using materials derived from GMOs.

SCA actively monitors ongoing research and an alternative GMO-free material should always be considered.

SCA does not use GMOs in its forest management practices and does not use wood fibers derived from GMO trees. SCA's forest land is FSC® certified, and the Forest Stewardship Council Standards do not currently permit use of GMOs in forestry.

SCA uses recycled fiber in its cotton products which could potentially contain GMOs. SCA is redirecting its cotton sourcing to Turkey where GMO cotton is not permitted. At year-end 2016, about 80% of SCA's cotton usage was sourced from Turkey.

#### Triclosan

Triclosan is commonly and globally used as an antibacterial ingredient or preservative in many consumer products such as soaps, detergents, toothpaste and medical devices. It is a chlorinated organic compound and has been safely and effectively used for over 30 years.

In recent years, questions have been raised concerning the potential environmental impact of Triclosan and whether there is a relationship between Triclosan and the development of bacterial resistance. To address customer and consumer concerns, together with our commitment to support safe and environmentally sound products, SCA has decided to not include Triclosan in any new products and has phased out Triclosan in basically all SCA products.

Some SCA joint ventures use Triclosan in a small number of products.

## **Hygiene solutions**

SCA offers hygiene solutions for all phases and aspects of life across markets all over the world. Our products are available in about 100 countries and we adapt our practices to meet specific market needs. We share our knowledge of hygiene and emphasize the link between hygiene, health and well-being. We educate about two million people in hygiene annually. SCA's offerings include:

TENA Solutions: An integrated offering including innovative products, best-practice care routines, tools, training and expert support.

Together, with individualized care at heart, SCA and the care homes improve and document resident well-being, working atmosphere, budget and the environmental footprint. The advantages include improved well-being for the residents, better working environments, a reduction in resource consumption and lower overall costs.

Looking at the nursing homes that have implemented TENA Solutions around the world, the results show clear care improvements in 95% of care homes\*.

- 81% of staff agree that recommended TENA continence care routines improve residents' overall well-being compared with their previous practices\*\*.
- 77% of staff agree that recommended TENA continence care routines give residents a better night's sleep compared with their previous practices\*\*.
- 79% of staff agree that recommended TENA continence care routines result in better care routines compared with their previous practices\*\*.

Tork Solutions: A new, connected way to improve efficiency, hospitality and communications through intelligent washrooms, using the Internet of Things. Washroom solutions that provide real-time data on paper and soap consumption via a mobile or tablet give facility managers an overview of when toilets need to be cleaned or dispensers need to be refilled. The end result is increased quality and user satisfaction, improved efficiency of washroom management and improved cost control.

- Statistics based on 181 TENA Solutions case studies around the world, mainly in Europe but also in the US, Canada and China, 2011–2013
- \*\* Statistics based on results from 85–105 TENA Solutions case studies around the world, mainly in Europe but also in the US and Canada 2012–2014.

# Value creation for people

## Management approach

SCA's overall social management approach is to assess how the company impacts and interacts with people where it operates, and to develop strategies for establishing good relations with key stakeholders everywhere. SCA's main steering document in social responsibility, the SCA Code of Conduct, defines relevant areas for the company to manage and excel in, thereby contributing to social sustainability in the Group's operations, and for various stakeholders along our value chain. This chapter describes SCA's work related to its most important social aspects.

| Strategic components                            |   |
|---|---|
| Policies  | Sustainability Policy Code of Conduct Global Supplier Standard Group Health and Safety Instruction Community Relations' instruction   |
| Targets and KPIs                                | Code of Conduct<br>Employee Health and Safety   |
| Data  | See Supply chain management<br>See Employee relations<br>See Community relations<br>See Social data   |
| Management systems, programs and certifications | Sedex OHSAS 18001 Global System for Performance Review and Development Planning SCA Leadership Platform   |
| External charters or initiatives                | UN SDGs UN Guiding Principles on Business and Human Rights UN Global Compact European Works Council Industri ALL OECD Guidelines for Multina- tional Enterprises ILO Core Conventions |

#### **Code of Conduct**

The SCA Code of Conduct is the Group's key social management policy. A number of systematic activities, such as risk analyses, training, audits and monitoring processes, are closely aligned with the Code of Conduct to ensure compliance. The implementation of the Code is a continuous process.

#### SCA's Code of Conduct

SCA's Code of Conduct was first introduced in 2004, and most recently updated in 2015. The Code is a tool to transform SCA's core values of respect, responsibility and excellence into action. SCA's Code of Conduct applies to all employees within the Group.

SCA's Code of Conduct is based on international standards, including the UN Declaration of Human Rights, the ILO Core Conventions, the OECD Guidelines for Multinational Enterprises, the UN Global Compact Principles and related legislation. All employees are provided with the necessary knowledge and other prerequisites to comply with SCA's values and Code of Conduct.

#### **Code of Conduct training**

SCA implements its Code of Conduct and verifies compliance through training, Code of Conduct audits and business practice audits. All employees are regularly trained in Code of Conduct compliance, including guidelines on business practices, human rights, anti-corruption, unethical behavior and how to deal with ethical dilemmas that may arise. In 2014, SCA launched a Group-wide training initiative aimed at all employees. Employees were able to participate either online or via face-to-face training. At year-end 2014, 91% of employees had undergone training in SCA's Code of Conduct.

In addition, we are also making sure that the Code of Conduct is included in all on-boarding programs across the company. By year-end 2016, 93% of all new employees had completed the training.

To further develop and deepen the understanding and importance of the Code of Conduct, SCA launched a new training concept in 2016. The purpose of the training is to make compliance and integrity a leadership and company culture topic. More about the initiative can be found on page 20.

#### Sedex

The database provided by Sedex (The Supplier Ethical Data Exchange) has been central to SCA's internal risk management and Code of Conduct monitoring since 2011. SCA and other Sedex members use the database to store, share and report on information pertaining to working conditions, health and safety, the environment and business ethics. Thanks to SCA and other companies sharing information with each other, efforts related to workplace inspections and audits are made more efficient, at the same time as transparency increases.

The Sedex system includes an extensive self-assessment questionnaire (SAQ) and a risk assessment tool. The tool has been developed by Maplecroft and is based on a balance between risk data at the country level and in the relevant industry, and on responses to the SAQ.

SCA's facilities perform the self-evaluation in Sedex. The answers are then used for the purpose of risk classification of the units. In the 2016 Sedex assessment, all of SCA's main facilities received a low to medium risk classification and no facility was classified as high risk. The Sedex system has enabled SCA to assess its own operations, and the results help determine the focus of the company's audits and other initiatives aimed at improving conditions at our facilities. Many customers also request information about SCA's supply chain via the Sedex system and this enables them to compare SCA with other companies in the industry.

65 SCA facilities and one joint-venture facility in Tunisia and Algeria, respectively, use the Sedex system to report information.

#### Complaint procedure

SCA offers its employees a number of channels for reporting breaches of the Code of Conduct, such as through their line manager, HR Director, legal counsel or union representative. There is also a dedicated e-mail address managed by the Group's corporate sustainability function. In 2016, SCA decided to further expand the availability of third-party-operated reporting hotlines, where employees can file anonymous reports through a confidential channel outside SCA. Hotline services are being made available in many locations such as the Nordic and Baltic countries, Russia, the UK, several countries in Central and Eastern Europe and Latin America. The aim is to successively expand its availability to all SCA employees.

#### Reported breaches in 2016

In 2016, there were a total of 82 reported cases of potential breaches of the Code of Conduct, of which 16 were still under investigation at year-end. Among the reported complaints, the most common types were alleged discrimination and harassment (37), corruption (12) and misuse of assets (11). The remainder of the complaints involved anti-trust, management practice grievances, conflicts of interest, health and safety and various other company policies (22). Approximately 70% of complaints came from identified company employees, 20% from external stakeholders, such as a customer, supplier or contractor and 10% were made anonymously.

Following review and investigation, a total of 66 cases were closed and a total of 28 cases were defined as a breach of SCA's Code of Conduct or company regulations. Of the confirmed violations, 15 cases related to harassment and discrimination, ten cases related to corruption and misuse of company assets, two cases related to labor practices and the remaining case related to other SCA policies. Disciplinary action was taken in all cases of verified violations. A total of 12 employees were dismissed. SCA takes all complaints seriously, which is why preventive measures are taken in most cases even when a breach cannot be proven. In the event of allegations that employees have been subject to harassment in the company, training initiatives are often arranged to raise awareness of personal behavior and the behavior of others.

#### **Code of Conduct audits**

SCA uses audits to monitor compliance with the Code of Conduct. Audits are carried out to satisfy customer requests, as well as to improve SCA's operations.

The facilities to be audited are determined by such factors as the social and environmental risks in the country of operation, whether the facility is a recent acquisition or if there are any indications of non-compliance with SCA's policies.

The content of the audits emanates from SCA's Code of Conduct, while the approach and methods are based on the SA8000 standard. The audits are conducted by cross-disciplinary teams from SCA, and include representatives from the internal audit, human resources and sourcing functions. The audits involve a review of documentation, inspection of the facility with a focus on health and safety, and interviews with managers, employees and union representatives. SCA dedicates a great deal of time to interviewing employees, since these conversations are highly relevant to understanding how SCA's policies are perceived and put into practice.

Every audit results in a report and action plan for the audited unit, which are followed up. In the event that deviations are identified, these are to be corrected immediately and measures taken to prevent future deviations. The results of the audits are reported to SCA's Board via the Audit Committee.

#### Results 2016

In 2016. Code of Conduct audits were conducted at one site in each of the following countries: Spain, Mexico, Germany and India. In Spain, the site was instructed to make improvements with respect to overtime and improve the frequency of fire drills. In Mexico, employment forms contained information that was deemed discriminatory, aspects that were immediately removed from the recruitment form. Documentation and implementation of fire drills was lacking and the site needs to improve its handling of overtime and conflicts of interest. The German site showed deficiencies in worker safety adherence and needs to improve its process for monitoring Code of Conduct training. The site in India complied with the SA 8000 standard with only minor changes.

#### Joint ventures

SCA encourages its joint-venture companies to adopt a code of conduct and policies that are in line with the principles stated in the SCA Code of Conduct. SCA's largest joint-venture company, Familia in Colombia, updated and adopted its code of conduct in 2015. In 2016, all employees received training in the Code.

In 2015, SCA joint-venture partner Sancella in Tunisia adopted a new code of conduct. A comprehensive training program has been launched to raise awareness about the code of conduct and by year-end 2016, about 80% of Sancella's employees had received training. The remainder will be trained in 2017.

In addition, Vinda, in which SCA is a majority shareholder, has adopted a new Code of Conduct with the support of SCA. Vinda's new Code of Conduct is similar to SCA's Code and was adopted by the Board of Directors in April 2016. A majority of Vinda's employees were trained in

2016 and the Code has become a central tool within the Vinda policy framework.

#### Risk management

SCA assesses and manages its operations to address social, environmental and other operational risks. SCA monitors the Code of Conduct through reporting systems and auditing of specific operations.

SCA's human rights and corruption risk analysis is based on assessments carried out by Amnesty, Sedex and Transparency International. Approximately 11% (11, 12) of SCA's revenues are generated in countries with a relatively high risk of human rights violations. About 30% (28, 27) derive from countries with a relatively high risk of corruption.

SCA's risk assessments are also included in the Group's audits in connection with acquisitions.

SCA regularly revises its business practices in various parts of the organization and these reviews contribute to SCA's risk control.

#### **Human rights**

SCA's approach to human rights is based on the United Nation's Guiding Principles on Business and Human Rights (UNGP). The UNGP stipulates that as part of their commitment to respect human rights, companies must exercise due diligence in understanding and managing the actual and potential negative impact on human rights of their various stakeholders. In 2014, SCA, together with the non-profit organization BSR, mapped and identified its human rights risks through a Group-wide human rights impact assessment process. The risks were graded not by the impact on business but the impact on the rights holder. The assessment revealed three salient issues:

- Labor-related risks, including occupational health and safety, discrimination, forced labor and right to equal work for equal pay in SCA's direct and indirect operation (supply chain).
- Land rights risks associated with the sourcing of timber, fiber, and pulp – especially where indigenous communities are present.
- Risks related to water use by SCA operations located in water-stressed regions that may infringe on the rights of local communities to water and sanitation.

In 2016, an operational human rights risk mapping methodology was developed and piloted in Latin America, see page 21. All forms of violations of human rights are taken very seriously. These are reported and managed in the same way as other breaches of the company Code of Conduct, see page 42.

Committed to supporting and advancing children's rights, SCA has also joined the Global Child Forum, a multi-stakeholder platform for leaders from business, governments, academia

and civil society in a joint effort to implement children's rights.

#### **Anti-corruption**

Anti-corruption is included in SCA's Code of Conduct. In 2013, SCA introduced a new Anti-corruption Policy, aligned with legislation such as the UK Bribery Act, for increased focus and transparency. SCA must conduct all activities in accordance with applicable laws and regulations, and all corrupt activity is strictly prohibited.

SCA conducts regular corruption risk assessments. This includes due diligence audits of suppliers and other business partners.

SCA has developed an anti-corruption e-learning course translated into 21 languages which has been implemented in onboarding programs. In 2016, about 700 new employees completed the training program.

#### Anti-trust

SCA is committed to full compliance with competition laws (also called "anti-trust" laws) as set out in the SCA Code of Conduct. These laws generally prohibit agreements or understandings between competitors that undermine competition, including price fixing, allocation of customers or geographic markets, bid rigging or abuse of a dominant position.

SCA has anti-trust programs in place and, in 2015, the Group launched an anti-trust e-learning training course with the aim of improving employees' understanding of competition laws and how these impact their daily work. It is mandatory for specified groups of employees to complete the training, such as employees with an interface toward trade associations, customers and competitors. In 2016, about 900 employees completed the EU competition e-learning course and 800 completed the US anti-trust e-learning course.

#### Ongoing anti-trust cases

During 2016, the Colombian competition authority (SIC) issued its final decisions concluding that Productos Familia S.A., the joint venture in which SCA owns a 50% equity stake, was involved in cartel activities related to tissue products and baby diapers. SIC fined Familia approximately SEK 170m in the tissue products investigation and SEK 100m in the baby products investigation. Familia has appealed both decisions to the courts.

The competition authority of the Andean Community of Nations (CAN) has launched its own independent investigation into the tissue products market in Ecuador and Colombia. Familia is actively cooperating with CAN in that investigation.

At present, competition authorities are reviewing SCA's wholly owned businesses in Chile and Hungary. In all instances, SCA is cooperating with the authorities and providing requested information.

The Spanish National Commission for Markets and Competition (CNMC) issued a decision and fined a number of companies, including SCA, for alleged improper market conduct between 1996 and 2014. The fine imposed on SCA amounts to approximately SEK 325m. SCA does not agree with the CNMC's decision and has submitted an appeal to the Spanish courts.

SCA has also been part of an investigation by the Polish Anti-Trust Authority. The authority issued its decision in December 2016 and imposed a fine of approximately EUR 700,000 for alleged improper market conduct. SCA intends to appeal the decision.

#### **Business practice audits**

SCA's business practice audits (BPA) are conducted by the internal audit unit. The audits focus on business ethics and SCA's relationships with customers, suppliers and authorities. In 2015, the audit process was updated and the scope was extended. Additional interviews are performed to ensure the effectiveness of the control environment and greater consideration is given to challenges in the local environment.

Since the beginning of 2008, 24 audits have been performed in 16 countries. In the past five years, 77% (41, 40) of SCA's operations in risk countries have been investigated. The countries are selected on the basis of Transparency International's corruption index in combination with SCA's net sales in the country.

#### Results 2016

In 2016, BPAs were conducted in Greece, Romania, Germany, Costa Rica/Nicaragua and Italy. The BPAs in Greece and Romania showed a need for improvement with respect to performance reviews with employees. The German business needs to improve its process concerning customer events and Code of Conduct training monitoring. Costa Rica/Nicaragua needs further refresher training on Group policies. The Italian operation needs to improve its risk assessment of third parties. Management in all countries agreed upon action plans to be completed in 2017. Additionally, the internal audit unit reviewed payments to suppliers in tax havens. The outcome was that SCA has relatively few suppliers active in tax havens, they involve only minor amounts and none of them, after controls by SCA's global or business units, required further investigations.

## Supply chain management

SCA's ambition is to promote sustainable and responsible business practices in its supply chain by choosing and rewarding partners who share the same values as SCA and comply with SCA's Code of Conduct and Global Supplier Standard. SCA wants to ensure safe and high-quality goods and services for its customers and consumers delivered with respect for people and nature.

#### New supply-chain target

To strengthen SCA's commitment to responsible and sustainable sourcing, a new supply-chain target was launched in 2016. While the former target was limited to global and strategic suppliers, the new target aims to cover all suppliers of raw materials, services and non-production material on a global, regional and local level. It also includes a stricter risk assessment procedure

The new target is defined as:

"We will evaluate all of our supply streams from a total risk perspective. By 2020, we aim to source 100% of our procurement spend from suppliers committed to the criteria specified in our Global Supplier Standard."

Based on risk assessment, the focus areas for 2016 and 2017 have been identified as suppliers located in Eastern Europe and Latin America, and in particular suppliers of recycled fibers, cotton and logistic services.

In 2016, 16 of 19 global hygiene sourcing teams received social ethical training. More about the new supply-chain target and training is available on page 21.

#### SCA's supplier base

In its previous target, SCA focused on global, regional and strategically important suppliers, which accounted for about 70% of its purchasing costs. The risk analysis mainly looked at the country of purchase.

In its new target, SCA will include all purchases, even in other categories, such as local sourcing, services and logistics. The risk analysis includes more risk parameters and has a stronger link to current sourcing work. As a consequence, about 28,000 suppliers of goods and services, accounting for more than 80% of SCA's procurement spend, will gradually be included in SCA's risk analysis and supplier assessment compared with 600 to 700 in the previous target.

All suppliers are required to sign the Global Supplier Standard, to report on working conditions, health and safety and business ethics through Sedex, and, depending on the outcome of the risk review, potentially be subject to an ethical audit.

#### Results 2016

At year-end, 46% of the hygiene operations' procurement spend was sourced from suppliers committed to the criteria specified in SCA's Global Supplier Standard. Of forest products' 23 (29, 30) largest suppliers, 87% (86, 83) had signed the Global Supplier Standard.

#### Supply chain management tools

SCA measures its progress in terms of securing social and ethical compliance throughout its supply chain using four KPIs:

 Global Supplier Standard: All suppliers to the hygiene and forest products operations undertake to comply with SCA's policies by signing the Group's Global Supplier Standard (GSS).

- 2. Risk assessment: To secure a continuous and proactive approach to identifying and managing any critical social/ethical issue in the supply chain, an enhanced approach to risk assessment has been implemented.
- Sedex database: Selected suppliers are required to register in Sedex for risk assessment.
- 4. Ethical audits: Suppliers who receive a highrisk rating in SCA's risk assessment might be subject to social audits.

#### **Global Supplier Standard**

SCA has applied a Global Supplier Standard (GSS) for many years. The hygiene and forest products operations have previously applied individual versions of the GSS. In 2016, the two versions were consolidated into a single version valid for the entire SCA business and, in addition, the GSS was updated to reinforce sustainability criteria and to secure global coverage. The standard includes requirements governing quality, product safety, the environment, energy and chemicals. The GSS also includes a section entitled "Responsible business operations". This section includes SCA's expectations of its suppliers with regard to human rights, business practices, employee relations and health and safetv.

As a consequence of the extended supplier scope, SCA's Global Supplier Standard was translated into 10 languages in 2016 and compliance-demand documents have been designed to be applicable for certain suppliers, such as service providers.

Approximately 83% of the hygiene operations' supplier base is located in Europe, 17% in the Americas and 0.6% in Asia/Middle East. Many of the global, strategic suppliers' production facilities located in Asia and Latin America belong to large multinational corporations based in Europe and the US, a conscious choice by SCA to reduce ethical risks within our supply chain.

Of the wood raw materials purchased by SCA, 88% is from Sweden (of which half from the company's own forests), 9% from central Europe and 3% from the Baltic countries and Finland. SCA strives to further integrate procurement practices with the requirements of the SCA Global Supplier Standard.

#### Reporting in Sedex

Sedex is an online database that enables suppliers to share information with their customers on their trading practices (health and safety, labor standards, the environment and business ethics) in order to promote ethical and responsible practices in the supply chains. SCA requires selected suppliers to perform a self-evaluation in Sedex and share their status. The answers are used for risk assessments (see below).

#### Improved processes for supplier risks

During the year, SCA developed its supplier risk assessment to include sustainability criteria. From a focus on political, financial and legal risks, the scope has been broadened to provide a more nuanced risk assessment. The aim was

not to create new structures but rather to incorporate sustainability criteria, such as respect for human rights and working conditions, into existing processes. Sustainability issues are taken into consideration both when evaluating potential suppliers and in the continuous risk assessment of suppliers and purchased materials, products and services. One source of input is the supplier data registered in Sedex, but other risk-related input is also considered.

#### Ethical supplier audits

Global and regional suppliers of raw materials and merchandise represent about 50% of the hygiene operations' procurement spend, of which 21% (12) are located in high-risk countries according to the Maplecroft Human Rights Index. These suppliers are in scope for ethical audits with a focus on health and safety, human rights, employee relations and corruption. An ethical audit of a supplier can also be triggered by other indicators, such as a low rating in Sedex, a low health and safety score in SCA's supplier qualification audit or the outcome from SCA's risk assessments. The goal is to audit all high-risk suppliers, based on SCA's risk assessment procedure. SCA has engaged a Swiss-based external partner, SGS, to perform the audits. The method used to evaluate suppliers is the same as SCA uses to monitor its own production units and is based on the SA8000 standard. SCA also accepts independent audits or audits performed on behalf of other clients if the topics covered match the SCA audit protocol and information about corrective and preventive action (CAPA) closing is shared. At the end of 2016, about 150 ethical supplier audits had been conducted since 2013.

The Group evaluates potential suppliers prior to contracting and continues to review suppliers at regular intervals. All new suppliers must sign the GSS and preferably also register in Sedex prior to any business activities. SCA also conducts chain of custody audits of fiber suppliers, see page 52.

Some of SCA's customers with high ethical standards require SCA's suppliers (their sub-suppliers) to register in Sedex or conduct on-site ethical audits. SCA supports these customers in their ambitions.

#### Ethical audit results 2016

During the year, SCA evaluated the outcome from 17 ethical supplier audits, of which 13 were carried out by SGS on SCA's behalf in India, Saudi Arabia, Brazil, Russia and Mexico. In addition, four ethical audits performed by another customer of the supplier were approved by SCA.

Suppliers and SCA receive feedback in connection with the audits. Depending on the outcome of the audit, an improvement plan may be established involving SGS and the supplier. In most cases, the findings involve minor health and safety issues.

If critical findings are identified, SCA is informed within 24 hours. To date, findings triggering this kind of reaction have consisted of rare cases of excessive overtime, overtime

not being paid at a premium, no evidence of fire drills being conducted in the last 12 months or insufficient or non-existing procedures for verifying workers' age upon recruitment. Two agreements with global suppliers were terminated on the grounds of sustainability-related non-compliance in 2016.

#### Control of cotton providers

Some of SCA's hygiene products contain cotton fibers. The volumes are exceedingly small but since cotton agriculture is associated with social and environmental risks, SCA pays particular attention to cotton farming. If there is an intent to use cotton fibers in any product, the fibers must be sourced in a responsible manner to reduce the environmental and social impact.

SCA is shifting its sourcing from potential high-risk areas to suppliers with greater transparency and lower risks. This is because SCA's purchasing levels do not provide the company with sufficient influence further down the supply chain. At the end of 2016, SCA had shifted approximately 80% of its volumes to areas with a lower risk level, i.e. Turkey.

To further promote improvements in the cotton industry, SCA has decided that any cotton sourced must be part of a recognized certification scheme. BCI (Better Cotton Initiative), Fair Trade and GOTS (Global Organic Textile Standard) are certification schemes recognized by SCA, with BCI as the preferred option. At the end of 2016, SCA decided to become a member of BCI, a non-profit organization stewarding the global standards for better cotton. The transition to certified volumes will take place in stages.

#### Conflict minerals

There has been a significantly increased focus on conflict minerals in recent years due to the introduction of the US Dodd-Frank Act and the EU regulation on conflict minerals. SCA markets a very limited range of products that are likely to contain conflict minerals, mainly electronic dispensers for the AfH tissue business and some articles within the Tena Identifi range. SCA is in close contact with the suppliers and has shared its expectations of them. If SCA deems that a supplier's due diligence does not fulfill the regulatory requirements, a corrective action plan is established or the supplier is phased out. SCA has also adopted a position paper on conflict minerals and both supplier qualification and product innovation processes have been updated to include conflict minerals in the normal risk assessment.

#### Recovered fiber risk assessment

SCA is aware of the risks related to occupational health, forced labor, child labor and human rights in general that may occur in connection with recovered fiber sourcing in potential high-risk regions. A report from the risk strategy consultant Maplecroft identified Latin America as a high-risk area and SCA has initially chosen to focus on risk management in its Mexican operations since these are conducted by a wholly-owned company with substantial sales.

In 2015, SCA developed a voluntary Supplier Recognition Program that was rolled out in Mexico in 2016. The program includes a supplier commitment to SCA's Global Supplier Standard, health and safety requirements, hygiene requirements and recovered fiber criteria. For example, SCA does not approve fiber materials from landfill. Nine suppliers have joined the program, corresponding to 63% of volumes. The program is appreciated by suppliers, thus not only mitigating risk but also increasing supplier loyalty and securing supplies.

#### **Control of forest contractors**

SCA's forest operations almost exclusively use contractors for harvesting and silviculture. Contractors hired by SCA undertake to comply with applicable laws and regulations, including collective agreements and SCA's Supplier Standard. In recent years, SCA has significantly strengthened the requirements imposed on contractors. Among other stipulations, the following are included in agreements with contractors:

- The contractor must be a member of an employers' organization or have a local collective agreement in place with the GS union (the Swedish union of forestry, wood and graphical workers).
- The contractor must adhere to the rules under the forest worker agreement relating to work environment, working hours and pay.
- The contractor must comply with the guidelines relating to employees' rights as stipulated in the FSC® (Forest Stewardship Council) and PEFC™ (Programme of the Endorsement of Forest Certification) forest standards
- The contractor must practice a systematic health and safety program and must have carried out at least one follow-up during the past year.

SCA has also further developed and simplified its assessment methods for health and safety and employment terms.

#### Monitoring in 2016

SCA follows up compliance with the above standards together with its contractors. In addition, field spot checks are performed by both the GS union and SCA.

In summer 2016, SCA carried out extensive controls of its silviculture contractors with regard to working conditions, work permits, salaries, and so forth. Visits were made to 25 teams with a total of 120 employees. 70% of the employees were from another EU/EES country than Sweden, and 1% came from countries outside the EU/EES. All work conditions were compliant with SCA's requirements, as well as applicable laws. In one case, a contractor has used employees through a subsidiary in Lithuania that did not have Swedish collective agreements. The case is subject to proceedings between the contractor and the GS trade union. SCA has demanded corrective actions

## **Health and safety**

Health and safety is fundamental to SCA's operations. SCA has a zero-accident vision and safety in the workplace is highly prioritized. In addition to promoting health and safety at its sites, SCA checks suppliers' practices and collaborates with them to improve safety performance.

#### Health and safety target

SCA has established a health and safety target to reduce the accident frequency rate by 50% in the 2014–2020 period.

We are sad to report one fatality in Mannheim, Germany, reinforcing the need for consistent focus on safety improvements. In addition, one contractor lost his life in connection with elevator maintenance in the office building in Mannheim.

In 2016, the accident frequency rate declined by 27% year-on-year to 4.6 (6.3, 6.7) and 31% compared with the base year of 2014. In particular, statistics improved for the forest products business, which reduced its frequency rate by 29%. The forest products' business has intensified its occupational safety efforts under its zero-accident program, see page 23.

#### **OHSAS 18001 certification**

SCA implements the international OHSAS 18001 (Occupational Health and Safety Assessment Series) standard to ensure that uniform processes are deployed across the Group, and that SCA units continuously improve their workplace health and safety. OHSAS specifies requirements for an organization's occupational health and safety management systems.

SCA has established a target that all whollyowned and joint-venture operations will be OHSAS 18001 certified by 2020. At the end of 2016, 87% (68, 52) of SCA's 68 main sites were certified.

#### Safety policy and governance

SCA has a Group Health and Safety Instruction and the Group's governance system encompasses risk assessment, training, targets and monitoring in the safety sphere. There are health and safety committees on which representatives of about 96% (94, 96) of the production workforce serve. 76% (78, 74) of employees are covered by formal trade union agreements in which health and safety issues are addressed on a regular basis. In addition, a reference team has been in place since 2009 with responsibility for coordinating Group health and safety matters. All SCA facilities have procedures in place to increase workplace safety.

## **Group-wide key performance indicators (KPIs)** In recent years, SCA has worked intensively to

In recent years, SCA has worked intensively to systematize and improve its safety work. SCA uses the following Group-wide KPIs:

- Number of Lost Time Accidents (LTA): accidents that result in an employee missing the next regularly scheduled work day or shift.
- Days Lost due to Accidents (DLA): number of work-days lost due to an LTA.
- · Accident Severity Rate (ASR): The DLA / LTA.
- Frequency Rate (FR): LTA / 1,000,000 hours worked.
- Incident Rate (IR): LTA / 200,000 hours worked.

#### Safety statistics

|  | 2016   | 2015   |
|--|--------|--------|
| Average headcount                                | 29,408 | 28,001 |
| Lost Time Accidents, LTA                         | 265    | 360    |
| Contractor Lost Time Accidents, CLTA             | 71     | 76     |
| Days Lost due to Accidents, DLA                  | 6,204  | 7,545  |
| Accident Severity Rate, ASR                      | 23.4   | 21.0   |
| Frequency Rate, FR (LTA /1,000,000 WH)           | 4.6    | 6.3    |
| Incident Rate, IR (LTA/200,000 WH)               | 0.9    | 1.3    |
| Fatalities                                       | 1      | 0      |
| Main sites certified according to OHSAS 18001, % | 87     | 68     |
| Number of zero-accident sites                    | 23     | 19     |

During the year, 68 accidents (76, 51) were reported among contractors.

#### Near miss/risk reporting

Reliable near miss and accident reporting is key; it is vital to analyze both serious and less serious occurrences to ensure that they are not repeated.

SCA has a reporting system for accidents and risk observation in place. Employees use it to report accidents and close calls, meaning events that could have led to an accident. The system significantly improves SCA's ability to

perform risk assessments, analyze and improve working methods, and continuously monitor performance.

In the event of a critical incident, information is communicated to the entire Group, enabling all units to gain access to the recommendations and learn from the occurrence. Another part of the unit procedures involves gathering data from the reporting system on a weekly basis so that safety can be addressed at staff meetings. The system also allows for best practices to be disseminated throughout the Group.

Since the introduction of the system several years ago, it has been noted that, to all appearances, many LTAs are the result of trivial causes. For example, accidents may be caused by slips, trips and falls of a less serious nature, which should be preventable. It was also observed that some units need to increase their focus on manual work and ergonomics.

#### Joint industry action

Health and safety risks in the forest products industry tend to be higher than those in the engineering industry. Therefore, SCA's forest industry operations participate in several industry collaboration projects to promote safety.

A working group focusing on occupational health and safety has been formed within the Swedish Forest Industries Federation. The objective is to support the safety programs of member companies by offering various resources for raising awareness and sharing knowledge.

Another valuable contribution is being made by the SSG (Standard Solutions Group) safety committee, through which companies in the pulp industry come together to learn from one another. SSG sets technical standards and recommendations and provides information and advice.

SCA's forest products business area has initiated a program to improve health and safety for its employees, read more on page 23.

## **Employees**

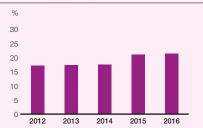
SCA's global human resource strategy aims to secure long-term capabilities and ensure that SCA is a safe and healthy workplace based on

#### Accident Frequency Rate (FR)



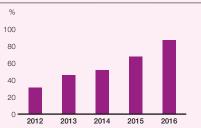
The accident frequency rate declined by 27% in 2016. Compared with 2012, the decline was 54%.

#### Accident Severity Rate (ASR)



The accident severity rate rose in 2016, a common consequence when the frequency rate declines.

#### OHSAS 18001 certified sites



12 main sites were certified under OHSAS during 2016. A main site is defined as a production site wholly owned by SCA with 100 or more employees.

ethical business practices and perceived as a great place to work.

SCA comprises on average 46,171 (44,000, 44,247) employees in some 60 countries, of whom 31% (31, 32) are women. The employee turnover rate is 12% (11, 16).

## Secure access to the right people and capabilities

SCA recruits and develops employees in line with its strategic workforce plan. This plan is based on future capability needs and demographics, and defines the strategic areas and activities SCA will focus on from an employer branding perspective.

#### Individual development

SCA strives to ensure that all employees have an individual development plan that is defined and followed up during annual performance reviews. The reviews identify the capabilities necessary for employees to achieve stated targets. The employees and managers agree on the manner in which these skills should be secured, primarily through internal development opportunities. The objective is to follow up the performance of every employee twice a year. In 2016, 89% (96, 89) of white-collar employees participated in performance management reviews. The corresponding number for blue-collar employees is 86% (86, 75). The performance reviews are sometimes conducted individually and sometimes in teams.

#### **Training**

In 2016, 418 people participated in the mandatory one-day onboarding program for all newly appointed leaders. 440 participated in Core 1, a six-day program to develop leaders that have been in their role for six to 12 months. 35 leaders participated in Core 2, a leadership program to develop people's capabilities to lead in a complex environment, engage people and drive change. Creating Value and Driving Business Performance are two programs with the aim to further strengthen participants' capabilities in strategic leadership areas. In 2016, 44 and 37 people, respectively, participated in these programs.

Other programs include the Hygiene Academy, which offers branding training, and the Dig-

ital Academy. In total, 2,464 people participated in the two programs. SCA also has sustainability training programs in place that focus on innovations, claims and communication with the aim of improving the understanding of sustainability's impact on product and services, customers and consumers.

The average number of training hours per employee was 19 (25).

## A safe and healthy workplace based on ethical business practices

SCA works proactively with employee health and well-being. Each business unit is responsible for formulating a structure for health that suits their own operations. SCA's efforts encompass measures such as better ergonomics, quit-smoking campaigns, dietary training, support in work-life balance and advice in handling difficult illnesses.

Since 2008, SCA's North American operation has had a health program that includes encouraging a healthy lifestyle and regular, voluntary health check-ups, as well as early identification of health risks. The European hygiene operations prioritize efforts to improve employee lifestyle and health, particularly when older employees are concerned. The goal is good health, fewer sick days and higher productivity.

#### Workplaces for all ages

With an ageing workforce in some markets, SCA will face new challenges since absence related to musculoskeletal problems increases with age. This insight resulted in a workplace program where technical, behavioral and organizational improvements were made to create a more ergonomic work environment and production lines. In 2015 and 2016, pilot studies were implemented at the sites in Hoogezand in the Netherlands and Neuss in Germany, including awareness training, training in ergonomics and new technical solutions. Based on the lessons learned during the pilots, a program was developed and rolled out in Germany, Sweden and the US in 2016. A global rollout for all sites will be launched in 2017.

#### WASH pledge

As a hygiene company, SCA wants its employees to enjoy first-class standards when it comes

to workplace hygiene. To this end, SCA signed the WASH (Water, Sanitation and Hygiene) pledge in 2015. The pledge is an initiative linked to the World Business Council for Sustainable Development (WBCSD). By signing the pledge, SCA undertakes to comply with a prescribed workplace WASH standard for its wholly owned units within three years. This includes areas such as workplace sanitation and health issues, as well as training to improve employees' awareness. By the end of 2016, 61% of SCA's wholly owned hygiene products' production sites complied with the standard.

#### Leveraging a strong winning culture

SCA carries out an All-Employee Survey every second year for employees at wholly owned companies. The latest survey was conducted in 2015, and received a response rate of 88.3% (86.3) of the workforce.

The survey covers a total of 47 aspects in nine dimensions. The results are expressed as indexes for leadership, innovation, customer orientation and engagement, as well as an overall SCA index. The SCA index for 2015 was 72 (70, 69) on a scale 0–100.

All managers are expected to prepare action plans together with their employees based on the outcome of the survey. The next employee survey will be carried out in 2018.

#### **Diversity**

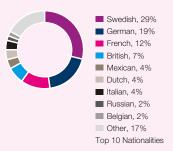
Diversity is part of a winning culture. For SCA, diversity extends beyond typical attributes, such as gender and ethnicity, and we value a mix of diverse personalities, experiences and knowledge.

SCA strives for a higher proportion of women in management positions and has started several initiatives to address this. One example is "Women in IT services", a program aimed at understanding mechanisms standing in the way of women's career development.

In 2016, the proportion of women among SCA's senior management\* was 25% (24, 28) and 27% (29, 29) among senior/middle management\*. Since 2007, the share of female managers has increased by almost 70%.

Senior management comprised 21 (28, 25) different nationalities and the corresponding figure was 32 (42, 42) for senior/middle management.

## SCA's senior and middle management\* by nationality 2016



Senior management comprises the highest level of management group below the Executive Management Team. The number varies over time due to organizational changes and consists of 110–150 managers. Middle management consists of 750–1,000 managers.

## SCA's senior and middle management\* by gender 2016



## Employee age distribution SCA Group 2016



Encouraging greater diversity is part of SCA's leadership platform and succession planning.

#### Recognized as a great place to work

The competition for talent is intense in many key markets. SCA is working on employer branding to attract, engage and retain the best talents and to deliver needed human capital to support its strategy. SCA uses research to understand its target groups' preferences and is active on selected social media channels to reach them.

SCA has identified six "critical" and seven "challenging" markets with regards to demographics and/or competences. In every critical and challenging market, SCA has partnered with selected universities to strengthen its employer branding through focused activities. The business school ESSEC and the engineering school ENSAM in France are examples of this.

#### **Employee relations**

Transparent communication is fundamental to the trust between SCA and its employees, as well as their representatives. Employees are encouraged to raise issues relating to employment and health and safety with their line manager. SCA recognizes the right of all employees to join unions and to partake in union activities. Union involvement varies among SCA's countries of operation, but on average 62% (64, 65) of SCA's employees are covered by collective agreements.

#### The European Works Council (EWC)

The European Works Council (EWC) represents about 20,000 of SCA's employees. SCA meets the EWC and other employee representatives on a regular basis to inform them of and discuss matters such as the Group's performance and earnings, as well as health and safety and employment terms and conditions. The aim is to communicate changes well ahead of time.

Since 2013, SCA has also had an agreement with IndustriALL Global Union. IndustriALL represents 50 million employees in 140 countries in the mining, energy and manufacturing sectors. The organization was formed in 2012, combining several union organizations, including the

International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM), which previously represented SCA employees. The content of the agreement with IndustriALL largely coincides with the previous arrangement with ICEM. The Swedish Paper Workers Union is also encompassed by the agreement with EWC and IndustriALL.

#### Alternative forms of dialog

In parallel with SCA's expansion, the Group encounters new circumstances and challenges, including challenges pertaining to its employee dialog. When there is no union representation, SCA establishes other channels where possible, such as workers' councils.

In companies where SCA is not the sole or majority owner, efforts are made to exert an influence through the Board. The aim is to ensure that these companies also apply the principles of SCA's Code of Conduct and thus respect each employee's entitlement to freedom of association.

#### Organizational changes

The notice period in connection with organizational changes in the Group varies, but averages about five weeks. In connection with organizational changes, SCA works to support the employees affected. This is done through discussions with labor unions at an early stage and by preparing a social action plan that is adjusted to local conditions. The action plan normally includes assistance in seeking employment and/or education. Other tools include severance pay, early retirement and financial incentives for those who find new jobs before the end of the period of notice. Support services may comprise individual career counseling or administrative support.

In 2016, 669 people were affected by restructuring measures in Mexico, Brazil, Chile, France, Sweden and Spain. Out of these, 360 people were redeployed to other sites or lines, retired early or left the company voluntarily.

The closure of the baby diaper business in Mexico affected 79 people, the closure of the Osasco site in Brazil (due to a transfer to a

greenfield site) affected 310 people, restructuring of the St Etienne du Rouvray and Hondouville sites in France affected 157 people and the closure of the Mediona mill in Spain affected 67 employees.

All affected employees received severance pay in line with or exceeding legal requirements.

## **Community relations**

SCA strives to be a dedicated partner in the local communities in which it operates.

In accordance with SCA's guidelines for community relations, the company prioritizes initiatives with a clear link to SCA's values, expertise, operations and geographic presence. Much of SCA's efforts are related to hygiene and health, and are often directed at women and children.

SCA's initiatives include both large-scale investments and small projects with a local focus. Apart from adding valuable experience and knowledge to SCA, the company's community efforts add value by boosting employee pride in the Group and strengthening customer loyalty.

In 2016, SCA invested approximately SEK 32m (37, 24) in about 400 projects, corresponding to 0.2% of operating profit. Most of the projects were related to hygiene and health. Read more on pages 24–25.

Its Community Relations instruction states that SCA will remain politically and religiously neutral and will not make payments or donations in kind to political parties or candidates, or their institutions, agencies or representatives, or religious institutions/organization or their representatives. SCA did not support any political or religious organizations or projects in 2016.

#### Community relations by region



#### Community relations by focus area



## Value creation for nature

## Management approach

SCA's overall environmental management approach is to enhance the operations' positive environmental contributions, while minimizing their negative environmental impact. This chapter describes SCA's work related to its most important environmental aspects.

| Strategic components                            |  |
|---|--|
| Policy  | Sustainability Policy<br>Code of Conduct   |
| Targets and KPI                                 | Climate and energy<br>Fiber sourcing and Biodiversity<br>Water<br>Production waste   |
| Data  | See Resource Management<br>System (RMS)<br>See Environmental Data  |
| Management systems, programs and certifications | ISO 9000 ISO 14001 Resource Management System (RMS) ESAVE (Energy) MSAVE (Raw materials) Chain of Custody – FSC® and PEFC™ Life cycle assessments (LCAs) |
| External charters or initiatives                | UN SDGs<br>UN Global Compact   |

## Climate and energy

SCA's efforts to reduce its climate impact and energy use are manifested through numerous projects, investments and modifications of processes, all of which contribute individually to the target of reducing  $CO_2$  emissions.

#### Results 2016

At year-end 2016,  $CO_2$  emissions in relation to the production level had declined 18.4%, compared with the reference year of 2005.

#### Science-based carbon target

SCA has committed to a science-based target for the reduction of greenhouse gas emissions in its hygiene operations. This will be established in 2017 and SCA expects that extensive investments and action will be required to achieve the target.

Reduction targets are considered science-based if they are in line with what is needed in order to keep the global temperature rise below 2 degrees Celsius, as agreed by world leaders at the UN climate change conference (COP 21) in Paris in 2015. The Science Based Targets initiative is a partnership between CDP (formerly known as the Carbon Disclosure Project), the UN Global Compact, the WRI (World Resources Institute) and the WWF (World Wide Fund for Nature). Science Based Targets help companies determine which emission reductions they need to achieve in order to prevent the worst impact of climate change. Read more at sciencebasedtargets.org.

#### Investments

Investments in new technologies and upgrades to existing solutions play a significant role in SCA's ability to achieve its CO<sub>2</sub> target.

In cooperation with local partners, SCA has invested in a new biofuel power plant that provides SCA's tissue plant in Nokia, Finland, with a low-cost, renewable and reliable energy supply. The investment has reduced annual carbon emissions by 29%, equivalent to 7,000 tons. The biofuel plant meets most of the paper mill's steam requirements.

Together with external partners in the Netherlands, SCA is pioneering the use of pyrolysis technology to extract energy from sludge in its tissue plants. The technology has huge potential to reduce waste and carbon emissions. SCA will also reduce cost by converting waste into a carbon-neutral energy and minerals that can be sold as raw material. In December, a mobile pilot unit, which will be used for testing in the European and US mills, was finalized.

The company's investments in a biofuel plant in Mannheim, Germany and in pulp production in Östrand, Sweden are described on page 27.

#### ECAM

Since 2003, SCA's ESAVE energy-efficiency program has contributed to energy savings and improved efficiency in all operative business units. In 2010, SCA adopted a target for ESAVE: to reduce energy consumption per ton of product produced by 14% by 2020. In 2016, 101 ESAVE projects were implemented, resulting in a 0.9% (0.5) year-on-year reduction in energy

used per ton of product produced. The accumulated energy savings in the 2010–2016 period amounted to 9.0%, corresponding to a 1.8 TWh reduction in energy consumption.

Energy-efficiency improvement is an integral part of daily life at SCA and ESAVE is a process, not a project. It encompasses investments in energyefficient technical solutions, the involvement of employees in daily improvement activities and a general change in attitude toward the use of energy at SCA. Knowledge sharing is leveraged across the company through training and network events and ESAVE is part of several onboarding programs for young engineers. Best practices are shared online, in real time, to achieve energy-efficiency excellence by learning from others. SCA also cooperates with external stakeholders, such as machinery suppliers, to ensure continued leadership in energy efficiency and continuous improvements. All new equipment is energy efficient by design and ESAVE is part of the planning criteria.

A typical ESAVE project could involve reducing electricity consumption by improving or replacing pumps, compressors, fans or lighting, or by optimizing thermal drying processes.

Experiences are documented and provide effective support for future improvement efforts.

#### MSAVE

SCA has also introduced a material savings program, MSAVE, using the same philosophy and methodology as in ESAVE. The program aims to achieve the best overall cost and minimize the environmental impact from raw materials and waste. Best practice is shared across the sites worldwide.

Examples of MSAVE initiatives include optimizing the tissue machine fiber mix and chemical dosage scheme, reducing the amount of packaging materials used in our products, re-using the tissue waste in our processes as well as converting waste into by-products to be used as raw materials in other industries and partnering with local industries.

#### **Electricity consumption 2016**



# Electricity consumption 2016: 7,850 GWh The majority of SCA's electricity, 84%, comes from national grids, while 16% derives from electricity produced in the Group's co-generation plants.

#### Fuel consumption 2016



#### **Fuel consumption 2016:** 61,322 TJ A total of 42% of SCA's fuel consumption comes from natural gas and 53% from biofuel. Oil and coal account for 5% all together.

#### Use of biofuel, 2006-2016



SCA is working systematically to replace oil and coal with biofuel and natural gas, which has substantially increased biofuel's share of the energy supply.

#### **Transport**

SCA monitors the environmental impact of its transport activities and is working on a broad front to reduce emissions. These efforts include increasing the fill ratio, applying various techniques to reduce fuel consumption, prioritizing transport means with less environmental impact, reducing distances travelled and strengthening purchasing procedures. The Group's total carbon emissions from transport activities in 2016 amounted to 0.87 million tons (0.87, 0.87).

#### Shipping

Shipping accounted for 69% of SCA's total transport activities. The Group owns three roll-on roll-off (RoRo) vessels which operate in Northern Europe between Sweden, Germany, the UK and the Netherlands. Other shipping services are mainly carried out with container vessels, but also with other cargo ships. European traffic was reorganized mid-2016, which means a larger share of transport is carried out with container vessels. The changes have cut costs, increased energy efficiency and reduced environmental impact. RoRo vessels account for about 9% of SCA's transport usage by ship, with a total capacity to transport about 1,300,000 tons.

#### Road transport

25% of SCA's freight is transported by road. SCA engages in a number of collaboration projects to cut transport emissions, including tests of vehicles using biomass-based fuels.

SCA was one of initially ten companies in France that signed a charter called FREIGHT21 with the Ministry of Sustainable Development in 2015 with the aim to reduce its CO<sub>2</sub> emissions from (mainly road) transportation by 5% by 2018, corresponding to 1,500 tons. Half-way through, SCA in France has already fulfilled over 80% of its objective and reduced CO<sub>2</sub> by about 1,300 tons. A cross-functional team, including logistics, CSR and communications, has focused on key aspects such as (1) drop-size and truck-fill rates. (2) multimodal transportation (use of rail transportation for deliveries from Sweden or the Netherlands to Spain), (3) distance and product flow optimization, and (4) product specifications (launch of compressed household towels).

#### Rail transport

Rail transport accounts for 6% of SCA's total freight – this small share is partially due to restrictions in the rail network. Because rail transport is a carbon-efficient alternative, it is a prioritized transport means. SCA uses multimodal transport for distances exceeding 1,000 km. If there is no direct rail connection, SCA requests that its suppliers use rail to the greatest extent possible, supplemented by truck transport. If there is no, or a very small, price difference between alternatives, SCA will choose the solution with the least impact on the environment

#### The EU Emissions Trading Scheme (ETS)

SCA had 31 mills and plants included under the ETS in 2016. SCA's operations in the Nordic region will continue to produce a surplus, while its operations in the rest of Europe will have a certain deficit during the third phase of ETS (2013–2020). This balance provides an estimated total surplus of almost 2 million tons of carbon dioxide equivalents. The surplus is the result of the measures implemented by SCA over an extended period in the form of energy-saving activities, process optimization, choice of fuel and major investments. The average market price for emission rights in 2016 was about EUR 5.35 per ton and SCA sold 405,000 emission rights.

## Wind power

SCA's forest land in Sweden is well suited for wind power ventures. Energy and green certificate prices remained at a low level in 2016, resulting in few investment decisions for new wind power projects.

#### Results 2016

A total of 768 MW of wind power is installed on SCA's forest land, corresponding to 12% of the total installed wind power in Sweden. In 2016, 2.3 TWh (1.9, 1.1) was produced on SCA's forest land.

#### Wind power strategy

SCA's wind power strategy is based on three main pillars.

- Joint venture with energy producers: SCA can be a co-owner in a wind power project, which is the case in the collaboration with the Norwegian companies Statkraft and Fred. Olsen Renewables. Statkraft and Fred.Olsen Renewables are funding the projects and SCA is providing the land.
- SCA independently develops wind power projects: In certain cases, SCA is the initiator of wind power projects that may be divested, form part of a future collaboration or be operated independently by SCA.
- SCA leases land to energy producers: This could involve leasing sites for smaller wind farms or cases in which a larger wind farm uses a small part of SCA's land, but could also involve larger projects.

#### Joint ventures

Statkraft SCA Vind AB, SCA's joint venture with Statkraft, operates 186 wind turbines, of which 163 are located on SCA land. The production capacity at the end of 2016 was 1.6 TWh (of which 1.4 TWh on SCA land). Wind power production at the four wind parks accounts for 1% of Sweden's total energy consumption – equivalent to the electricity use of 300,000 homes. See also page 28.

In July 2016, SCA's joint venture with Fred. Olsen Renewables, FORSCA, was granted an

initial permit to build 98 turbines. Another 50 turbines were granted a final permit in January 2017.

#### Other wind power projects

SCA has a collaboration with E.ON Wind according to which E.ON Wind is developing two wind power projects together with SCA. A total of 92 turbines were granted a permit in late 2014 and another 50 turbines are expected to be granted a final permit in 2017.

A wind project independently developed by SCA was granted a permit for the construction of 20 wind turbines. The project has been prepared for due diligence with possible realization in 2019. Permit applications for another project, comprising 130 turbines, were submitted for assessment.

#### Leasing land for wind power

SCA has leased land to various energy producers for more than 1,000 planned wind turbines. 134 turbines are already in operation with a total annual production of 0.89 TWh.

#### **Biofuels**

Developing and producing biofuels is both an efficient use of resources and beneficial for a low-carbon economy.

#### Results 2016

In 2016, SCA produced approximately 2.85 TWh (2.69, 2.75) of biofuel-based energy, of which the production of forest-based biofuels accounted for approximately 740 GWh (610, 687). The market situation, with a plentiful supply of competing fuels and low energy prices, held back deliveries.

The forest-based biofuels comprise felling residue such as branches, tops and stumps as well as fuel from peatland. Other biofuels are produced from the by-products of the mills, mainly sawdust, for pellet production.

#### Fuel pellets

SCA produces fuel pellets at its pellet plants in Härnösand and Stugun in Sweden using sawdust from its own mills. SCA sources electricity for the two pellet plants from its Björkhöjden wind farm. In 2016, SCA produced 231,000 tons of pellets of which 53% was sold to customers outside the Group. Fuel pellets are used in boilers of varying sizes, ranging from industrial scale to those used in private homes. The market is currently characterized by narrow margins due to overcapacity. As a result of this situation, SCA is focusing on improving quality and increasing the internal use of pellets as a substitute for fossil fuels. SCA BioNorr also produces stall bedding pellets manufactured from sawdust.

## Waste management

SCA takes a life cycle approach and promotes resource efficiency in relation to its production, products, services and innovations. SCA initiates partnerships and evaluates solutions to minimize waste, find alternative uses and/or create new resources – from raw materials to end-consumer.

#### A new production waste target

SCA has adopted a new production waste target stating that "all solid production waste will be recovered by 2030."

In 2016, SCA's production waste amounted to a total of 1.87 Mtons. In SCA's production process, waste is generated in the form of ash, sludge, organic waste and/or plastic. The production sites proactively work to reduce waste and to find alternative solutions for their waste. In 2016, a significant part (1.2 million tons or 65%) was recovered as raw materials in other industries, such as the construction industry, or as an energy source. The remainder was sent to landfill or classified as hazardous waste (0.4%).

SCA's tissue plant in Barton in the US turns production waste into a soil additive for local farmers. The product is spread over agricultural land to adjust the pH level in the soil. Since the start of the initiative in April 2016, 40 farmers have started using the land application and there are 15 more farmers on a waiting list.

#### **Products and services**

SCA uses life cycle assessments (LCAs) to minimize waste, all the way from the product design stage to manufacturing and after-use. Reducing the environmental impact of products throughout the product cycle, including the post-user phase, is part of SCA's innovation process. Compared with 2008, Libero diapers weigh on average 20% less, TENA products on average 12% less and feminine ultra towels 9% less.

TENA Solutions is an example of how a holistic perspective in relation to incontinence care has resulted in 31% less waste.

SCA's tissue and forest products consist of wood fibers that, in addition to being renewable, can also be recycled. Recycling of materials from personal care products, such as baby diapers, is currently limited by the available technology, hygiene requirements and a lack of viable business models. Energy recovery through incineration of hygiene products is a good alternative to landfill, since 23–86% of the material in personal care products and up to 100% in tissue products is renewable.

Another solution for tissue products is composting and SCA has several products in the US market that are certified as compostable, such as Tork Advance and Tork Universal.

An efficient way to reduce tissue waste is to focus on the user perspective. SCA develops dispensers that reduce consumption during use, such as Tork Xpressnap, which reduces consumption by at least 25% compared with a traditional dispenser.

The packaging component normally accounts for 3–7% in a product life cycle. SCA has achieved a substantial packaging reduction in some of its products. Between 2008 and 2015, packaging was reduced by 3–21% for TENA products and by 5–20% for feminine hygiene products. Packaging for open diapers was reduced by 23%, while it increased 15% for pant diapers. The rise was due to storage problems, which required packaging to be increased.

#### Post-consumer waste

SCA recognizes the need for solutions to address post-consumer waste and the materials we use should be compatible with current and future waste management systems.

In Europe, SCA has initiated a service where used paper handtowels are collected at customer facilities and turned into new products, see page 29.

In North America, SCA educates and partners with customers to reduce waste. Many large cities have ambitious zero-waste-to-landfill goals since this not only reduces their negative environmental impact on climate change, but also has financial benefits. SCA supports these zero-waste efforts with closed loop recycling in proximity to SCA's six North American plants. SCA's used Tork products are collected from customers such as universities, healthcare facilities and corporations, and used as raw material for the production of new products in SCA's plants. This process reduces the customer's cost, since recycling rates are often lower than solid waste collection and disposal fees, supports the local economy and jobs and contributes to a circular economy.

Additionally, a majority of the Tork products in North America are verified as compostable in commercial systems. Compostable paper hygiene products can be composted with food waste. SCA helps large customers to further divert waste from landfill by educating them on how to separate and collect used paper towels in restrooms, napkins and paper towels in break rooms and cafeterias.

#### Fiber sourcing

Responsible sourcing is key for SCA and includes ensuring the Group's fiber comes from responsible sources.

#### New fiber sourcing target

SCA has introduced a new target for controlling the use of fresh fiber in its products. The new target states that "all fresh wood fiber-based raw material in our products will be FSC® or PEFCTM certified, or fulfill the FSC's standard for controlled wood." The target includes all deliveries of fresh wood fiber (timber, pulp, packaging, mother reels and articles supplied by third parties) to SCA's production sites.

#### Results 2016

In 2016, 6.5 million tons of fresh fiber were delivered to SCA as wood, pulp, packaging, mother reels and third party supplied articles. 57% of the fiber was FSC/PEFC certified, 42% fulfilled the FSC standard for controlled wood, and 1% originated from controlled suppliers.

Wood (67%) and pulp (32%) were the two dominating fresh fiber sources, while packaging, externally supplied mother reels and third party supplied articles accounted for 1%.

**Wood:** 10.8 Mm<sup>3</sup> was delivered to SCA, of which 50.7% was FSC or PEFC certified and the remaining share fulfilled the FSC Controlled Wood standard.

**Pulp:** 70% of the global pulp deliveries was FSC or PEFC certified and the remaining 30% fulfilled the FSC Controlled Wood standard.

Packaging: Approximately 0.25 Mtons of packaging material was delivered to SCA, of which 75% consisted of recycled fibers. A minor share of the virgin fiber (<15%) was purchased as FSC certified (Mix) while the majority came from FSC Controlled Wood sources or other controlled sources.

Mother reels: SCA purchased approximately 12,000 tons of which 2,000 tons were FSC certified and 7,000 tons fulfilled the FSC Controlled Wood standard or came from controlled suppliers. The remaining volumes were of known origin, through a non-chain of custody certified supply chain.

Third-party supplied articles: More than one-third of SCA-branded wet wipes were FSC-certified. The fresh fiber in the remaining two-thirds came from FSC Controlled Wood sources or other controlled sources. 100% of the fiber in other outsourced products is controlled and 90% of the total value is supplied directly from FSC or PEFC chain of custody certified suppliers.

#### Site certifications

SCA prioritizes the FSC certification system and encourages all suppliers to work toward certification. We recognize several systems for forestry management, including the PEFC, SFI (Sustainable Forestry Initiative) and CSA (Canadian Standards Association). Other certification systems may be considered on a case-by-case basis. SCA continued to roll out FSC® and PEFCTM chain of custody in manufacturing sites, adding a further eight sites to the list of chain of custody sites. In total, 46 of the 56 sites within the scope of the roll-out have been chain of custody certified. SCA's intention is to roll out the chain of custody to all remaining wholly owned manufacturing sites during 2017.

#### A global fiber database

SCA has a Global Fiber Sourcing Policy in place and a shared business system – the Global Fiber Database – for the assessment and purchase of fiber in compliance with SCA's forest management policies. The database includes all of the Group's pulp, recovered fiber and alternative fiber suppliers. It provides the purchasing function, environmental department, R&D department and production facilities with fast and easy access to important information about suppliers, region of supply, wood species, pulp specifications, bleaching methods and life cycle assessment data.

The information also includes the suppliers' product certification status: FSC® (Forest Stewardship Council), PEFC™ (Programme for the Endorsement of Forest Certification), Controlled Wood, ecolabels, ISO 9000, etc. As a result, SCA can ensure traceability, the R&D department can check the availability of a certain raw material and the mills can show customers exactly what has been purchased. The database is continually updated to support SCA's global operations.

#### Supplier verification

SCA requires pulp suppliers to guarantee that they have robust systems and documented procedures in place to ensure traceability and compliance throughout the supply chain. In 2016, SCA had 31 (38, 33) pulp suppliers, of which the ten largest accounted for 83 % (83, 72) of purchases.

All pulp suppliers are Chain of Custody (CoC) certified according to the FSC and/or PEFC. SCA's Fiber Sourcing Policy includes a step-by-step process to support suppliers in their transition to third-party certification.

#### Supplier audit results 2016

SCA audits its suppliers to verify their compliance with the Fiber Sourcing Policy and supplier requirements. All suppliers were assessed to ensure continued compliance with the chain of custody certification. In addition, all suppliers received questionnaires in order to update fiber and ecolabel information. Visits were also made to nine sites in 2016. All suppliers demonstrated

continued compliance with SCA's sourcing policies and were retained for continued supply. In addition to the pulp supplier audits, support has been provided to some raw material suppliers where fiber may be part of the raw material (i.e. non-wovens) to help them achieve FSC chain of custody certification.

#### Recovered fiber

SCA uses 42% fresh fiber and 58% recovered fiber in its operations. For a further breakdown at the product level, see "Distribution of raw materials" on page 57. The proportion varies between regions due to differences in consumer preferences and fiber supply and demand. The North American operations use almost 100% recovered fiber, while the proportion of recovered fiber is 79% in Latin America and 44% in Europe.

The declining use of publication papers in North America and Europe has led to limited supplies of recovered fiber. SCA partners with trade organizations and recycled paper operators to expand and improve the collection of recycled paper and board, thereby increasing the availability of recovered fiber. SCA is part owner in several paper-recycling companies, such as Bunzl & Biach in Austria, Paperinkerays in Finland and AFS in the US.

## Forest management

As Europe's largest private forest owner, SCA takes a long-term approach to its responsible forest management.

#### **Biodiversity**

Around 2 million of SCA's 2.6 million hectares of forest land are managed for timber production. The remaining 600,000 hectares of less productive forest, such as bogs, are still valuable as a living environment for flora and fauna.

Areas that provide vital habitats for sensitive fauna and flora are exempted from forest management or are managed with the aim of enhancing the existing environmental values and biodiversity. Approximately 200 species in SCA's forests – over 100 species of insects, nearly 50 types of fungi and about 50 different

kinds of mosses and lichens – are disadvantaged by forest management and require special consideration.

SCA has set aside nearly 7% of its managed forests to benefit biodiversity in its ecological landscape plans. SCA also takes extensive conservation measures in managing forest areas that do not contain any particular conservation value. During felling operations, individual trees, groups of trees and buffer zones are set aside to ensure that the conservation values inherent in older forests are preserved and become an integrated part of the new growing forest. In 2016, 13% of the 19,000 hectares planned for harvesting were preserved for nature consideration.

#### Seedlings

In 2016, SCA's forest-tree nursery delivered 77 million seedlings, of which 48% were planted in SCA's own forest land. The remainder of the seedlings was sold to other forest owners.

#### **Conservation parks**

Biodiversity is a key environmental consideration for SCA's forest operations. SCA has established a total of five conservation parks, comprising a total of more than 10,000 hectares of forest land. At least half of the forest land must be earmarked for or managed in a manner that promotes biodiversity and cultural heritage. The parks are often located near other nature reserves in order to create large areas of protected forest. SCA uses the knowledge it gains in these parks in its other forest operations.

#### Forest management and certifications

The management of SCA's forest land is certified in accordance with FSC's and PEFC's forest management standards and ISO 14001.

The 2016 FSC audit showed one minor deviation and three observations and the PEFC audit showed two minor deviations and two observations.

The minor deviation from the FSC standard was for the control of natural regeneration of lodgepole pine, which had previously been conducted in conjunction with surveying for thinning. As thinning of lodgepole pine has become less extensive, the control of natural

regeneration has also decreased and must be replaced with another control method.

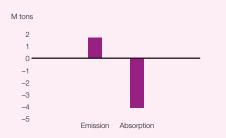
The auditors received one complaint ahead of the audit. A private individual had questioned whether SCA's use of the Canadian tree species lodgepole pine complies with FSC standards. The audit firm has concluded that SCA complies with the requirements imposed by the FSC standard on the use of foreign tree species.

In summary, the audit firm concluded that all business operations at SCA Skog comply to a great extent with the requirements of ISO 14001 for the environmental management system and working methods, as well as the FSC's and PEFC's standards for responsible and sustainable forest management.

#### Forest as carbon sinks

SCA's 2.6 million hectares of actively and responsibly managed forests provide an impressive carbon sink. Young, growing trees need 1.375 tons of carbon dioxide to produce each cubic meter of wood, making them one of the most effective means to reduce carbon dioxide levels in the atmosphere. SCA forests have a net growth of 1.4%, resulting in a net carbon sequestration of SCA's forests equivalent to 4.1 million tons in 2016. If half of the world's forests were managed like SCA's and deforestation was stopped, much of the climate change problem would be solved.

## SCA's carbon dioxide emissions from own production and absorption in SCA's forests



The 2016 net uptake of carbon dioxide in SCA's forests was about 4.1 million tons, exceeding the carbon dioxide emissions from fossil fuel of 1.7 million tons generated by all of the Group's production.

#### Water

#### New water targets

In 2015, SCA adopted new water targets with a focus on both effluent water volume and quality. The new targets take a more holistic view on water, targeting the areas most material for the different business units:

"Our plants will reduce suspended solids by 10%. Our tissue operations will reduce the water usage by 10% and organic content (BOD) by 10%. Our forest products operations will reduce phosphorous emissions by 10%. The target will be achieved by 2020 (base year 2014)".

#### Results 2016

In 2016, our plants reduced suspended solids by 12.5%. Our tissue operations reduced the water usage by 1.5% and organic content (BOD) by 3.3%. Our forest products operations increased phosphorous emissions by 35.6%. The increase was due to technical problems at the Obbola mill in Sweden. The mills in Munksund and Östrand were not included in the target follow-up.

#### Approach to water usage

The issue of water is being dealt with systematically – SCA monitors the volume and origin of the water it uses, as well as the quality of its effluent water. Most SCA mills, accounting for 97% of the Group's water usage, are located in areas of water abundance. About 60% of the Group's water usage is used to transport fibers during production processes and the remainder is mainly used as cooling water. 84% of the water used is drawn from surface sources.

SCA's reporting encompasses all production sites (excluding Vinda) and, in 2016, the Group used 216 million cubic meters of water (206) in pulp and paper production.

#### Effluent water treatment

SCA works continuously to enhance its effluent treatment and thus the quality of the effluent water discharged from its plants. Mechanical treatment removes suspended solids, sand and particles, while biological treatment extracts dissolved solids and organic impurities that affect biological oxygen demand (BOD) and chemical oxygen demand (COD).

## **Environmental complaints**

A few of SCA's production facilities are located in residential areas where it is important to engage in active dialog with the surrounding community. For example, this dialog may be conducted in the form of large meetings or by providing information on how complaints can be made. All environmental complaints are investigated and measures are taken where necessary. In 2016, 101 (104, 125) cases were reported to the plants. Complaints usually relate to noise, bad smells or vibrations. In a small number of cases, reports were received regarding exceedance of effluent limit values. Local authorities are always involved in such instances.

# Sustainability governance

The main purpose of all governance at SCA is to guarantee the Group's commitments to its stakeholders: shareholders, customers, employees, suppliers, lenders and communities.

#### Sustainability governance

SCA's Executive Management Team bears the overall responsibility for the control of SCA's business in the sustainability field.

SCA has a Group Function in charge of sustainability, led by the Senior Vice President Group Sustainability, who reports to the CEO and is a member of the Executive Management Team. Apart from social and environmental affairs, the function is also responsible for SCA's public affairs and its compliance function. In close collaboration with the business unit presidents, the approved strategy and objectives are broken down into specific targets and activities to ensure compliance with the Group's objectives and business plans.

The Environmental Committee and the Social Responsibility Committee draft proposals for policies and principles for governing the sustainability work, as well as objectives and action programs at Group level. They also coordinate and

follow up the Group's initiatives and objectives in the environmental and social area. The Social Responsibility Committee is responsible for preparing documentation regarding management of human rights. Conclusions and proposed actions are reported to SCA's Compliance Council and the President and Board of Directors, who approve the strategic priorities and objectives. The committees include members of all business units and representatives of the Sustainability, Human Resources, Communications and Legal Group Functions.

The Compliance Council consists of SCA's CEO (attends twice a year), SVP Group Human Resources, SVP Group Sustainability (chair), General Counsel, VP Compliance and Ethics, VP Internal Audit and business unit presidents by invitation. The Compliance Council will ensure an effective SCA Group compliance framework and program and secure a systematic approach to implementation. It oversees

implementation of and compliance with SCA's Code of Conduct and other Group policies.

Responsibility for implementation rests with the operational organization. A number of networks operate horizontally across SCA's different business units to guarantee a consistent approach.

#### **SCA Group networks**

Water management network: Establishes the Group's aspiration level for reductions in emissions and water usage. The network also analyzes the impact of the EU's Water Framework Directive on SCA's operations.

**FSC® network:** Disseminates information on responsible forest management throughout the organization, and coordinates the Group's position and activities in relation to the FSC.

## Corporate Governance at SCA



**RMS network:** Compiles information and makes calculations and presentations relating to resource use and environmental data.

Chemicals management network: Leads and supports development for harmonized chemical procedures and proposes group policies, priorities and objectives.

**ESAVE network:** Coordinates the Group's projects aimed at reducing SCA's energy consumption and environmental impact.

**Energy network:** Identifies cost-efficient solutions and synergies in connection with energy sourcing. The network also handles emissions trading.

**Public Affairs network:** Leads and coordinates the work aimed at influencing legislation, decisionmakers and stakeholders in prioritized areas with potential impact on SCA's operations.

**Health and Safety network:** Proposes goals and activities, follows up initiatives and highlights health and safety best practices.

**Supplier Code of Conduct network:** Identifies ethical and social supply chain risks.

#### Monitoring

In addition to being reviewed by SCA's external auditors, its operations are subject to external reviews and monitoring by, among others, the Swedish Financial Supervisory Authority and Nasdaq Stockholm. Life cycle assessments are another example of third-party assessments.

SCA's own control systems include segregation of duties in critical processes and defined management responsibilities with regard to internal control. There is also a separate internal audit function at SCA that works to evaluate and improve the effectiveness of SCA's governance processes, risk management and internal control. SCA's Internal Audit organization contributes to the maintenance of high standards of business practice and is involved in

the monitoring of Code of Conduct compliance through such activities as Code of Conduct audits at manufacturing sites and Business Practice audits. To support its work, the Internal Audit unit has a number of steering documents and policies.

#### Risk and risk management

SCA is exposed to various risks with a greater or lesser potential impact on the Group. The responsibility for long-term and overall management of material risks follows the company's delegation scheme, from the Board to the President, and from the President to the business unit presidents.

A description of the most significant risks that impact SCA's ability to achieve its established targets and its risk management is presented on pages 76–81 of the 2016 Annual Report.

#### **Corporate Governance Report**

The complete Corporate Governance Report is available on SCA's website www.sca.com and in the 2016 Annual Report.

#### SCA's sustainability governance



SCA Sustainability Report 2016 55

# The Resource Management System, RMS

SCA operates an extensive system for gathering and presenting data for individual production facilities and entire business units. The Resource Management System (RMS) allows SCA to analyze data, describing how the company uses energy, water, transport and raw materials, and to monitor waste and emissions levels.

The RMS data is used for internal control and monitoring, external benchmarking and as a tool for evaluating acquisitions and major investments. This year's RMS data includes two new tissue plants. One tissue plant and three personal care plants were excluded from the data.

#### Resources

This section describes SCA's use of raw materials, water, energy and transport in 2016.

#### Raw materials

A typical SCA product is made from various types of wood fiber. It also contains small amounts of inorganic and fossil organic materials.

Renewable raw materials (fresh fiber and recycled fiber) account for the largest share of the material used in an average SCA product. Inorganic materials (kaolin clay and calcium carbonate) are used as filler and coating pigment in certain types of paper in order to satisfy high customer quality requirements. Synthetic materials are used in highly absorbent hygiene products to improve quality and function. The

diagram to the right shows the raw material distribution of SCA's products.

#### Water

SCA's water supply is presented in the table "Raw materials, energy and emissions". The figures stated are totals for surface water, groundwater and municipal water systems.

SCA's total water intake amounted to 216 Mm<sup>3</sup>.

#### Energy

Energy use includes purchased energy (heating, electricity and fuel) supplied to production units, energy generated from wood, liquor, bark, sludge and waste paper, and electricity generated on site. A large portion of the energy used by SCA comes from the incineration of wood residuals and from on-site co-generation of electricity. The energy data figures stated therefore include both a fuel component and an electricity component.

Any excess electricity produced at an SCA facility that is not used internally is supplied to

the national grid. In 2016, SCA delivered 33.8 GWh of electricity to the national grid.

SCA supplies secondary heat derived from effluent hot water to district heating systems, mainly in Sweden, which is an effective way of saving energy. In 2016, SCA delivered heat to district heating systems equivalent to 47,142 cubic meters of fuel oil.

#### Transport

Raw materials are transported to SCA's production plants and finished products are delivered to SCA's customers. SCA uses external suppliers for most of its transportation needs. SCA's use of transportation is equivalent to 30.3 billion ton-kilometers. Sea freight accounts for the greatest portion of SCA's transport and the remainder consists of road and rail. Transportation of SCA's raw materials and products uses the equivalent of 11,852 TJ of fuel and electricity.

Transport work declined 4% compared with 2015, mainly due to the closure of a paper machine at the Ortviken mill in early 2016.

#### **Emissions**

The company's total emissions are determined by fuel consumption, which in turn is determined by the level of production. Changes in production volumes over the past few years is measured in tons and cubic meters. The SCA Group's emissions are shown in the tables that present Group emissions in 2014, 2015 and 2016.

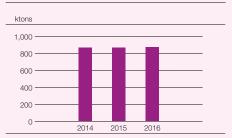
#### Distribution of water supply



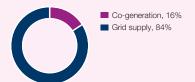
#### Distribution of transport usage



#### Emissions from transport, CO<sub>2</sub>



#### Distribution of electricity supply



#### Distribution of fuel supply



#### Emissions from transport, NO<sub>X</sub> and SO<sub>2</sub>



#### Emissions to air

Air emissions comprise emissions from all combustion units at SCA's production sites, including fossil fuel and biofuel emissions and emissions from purchased thermal energy. When energy (primarily thermal energy and/or electricity) is supplied to an external facility, air emissions are reduced in relation to the energy amount delivered and the reduction is distributed among SCA's main products.

Three chemical compounds are measured and reported in relation to air emissions:  $NO_X$ ,  $SO_2$  and fossil  $CO_2$ .

SCA uses Group-wide established procedures and principles for calculating RMS data so as to create comparability.

 $CO_2$  emissions from SCA's use of fossil fuels corresponded to 1,672 ktons and purchased electricity to 1,451 ktons during the year.

The increase in  $SO_2$  was due to the acquisition of North American tissue company Wausau and the expansion investment in the Östrand pulp mill in Sweden.

#### Air emissions from transport

A large portion of SCA's air emissions is generated by transport, rather than the company's production activities. Transport emissions are not included in the table "Raw materials, energy, and emissions" on page 58, but are presented in the diagrams on page 56.

#### Emissions to water

SCA's effluent water is divided into cooling water and process water. Cooling water has simply been heated and is not contaminated in any way. The total volume of discharged process water is 116 Mm³. This water is treated using methods similar to those employed at municipal wastewater treatment facilities. The figures for 2016 refer to process water emissions.

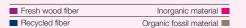
The emissions to water stated in the tables comprise COD, BOD, suspended solids, AOX, P and N. Measurement methods differ in some respects.

During the year, SCA's emissions to water (COD, BOD, suspended solids and N) increased due to installation of a new water treatment plant in Munksund, Sweden, rebuilding of a biological water treatment plant in Östrand, Sweden and technical problems at the Obbola plant in Sweden.

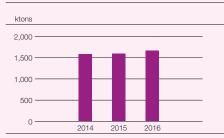
#### Solid waste

The solid waste reported by SCA is waste that is sent to landfill, recycled waste and hazardous waste. Recycled waste refers to materials that can be used as raw materials in other industries, such as the cement, brick-making and construction industries. The main types of recycled waste are ash, sludge, organic waste and plastics. Hazardous waste is primarily waste oil as well as organic solvents, batteries and strip lights.

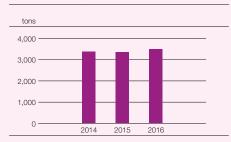
# 



#### Air emissions, $CO_2$ fossil



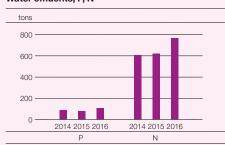
#### Air emissions, NO<sub>X</sub>



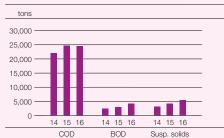
#### Air emissions, SO<sub>2</sub>



### Water effluents, P, N



#### Water effluents, COD, BOD and suspended solids



#### Distribution of solid waste



SCA Sustainability Report 2016

# Environmental data<sup>1)</sup>

## Raw materials, energy and discharges

|  |                     | Fo      | rest Product                            | s       |           | Tissue  |           | Pe     | ersonal Care |        | SCA Group total |           |           |  |
|--|---------------------|---------|---|---------|-----------|---------|-----------|--------|--------------|--------|-----------------|-----------|-----------|--|
|  |                     | 2016    | 2015                                    | 2014    | 2016      | 2015    | 2014      | 2016   | 2015         | 2014   | 2016            | 2015      | 2014      |  |
| Production                             |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Paper and pulp                         | kton                | 2,206   | 2,358                                   | 2,351   | 3,200     | 3,097   | 3,033     |        |              |        | 5,407           | 5,455     | 5,384     |  |
| Personal Care products                 | kton                |         | , | ,       |           |         |           | 642    | 761          | 708    | 642             | 761       | 708       |  |
| Timber and solid-wood products         | 1,000m <sup>3</sup> | 2,139   | 2,075                                   | 2,187   |           |         |           |        |              |        | 2,139           | 2,075     | 2,187     |  |
| 1. Raw materials                       |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Wood/sawmill chips <sup>2)</sup>       | kton                | 4,183   | 4,302                                   | 4,710   | 435       | 460     | 439       | 0      | 0            | 0      | 4,618           | 4,761     | 5,150     |  |
| Purchased pulp                         | kton                | 54      | 69                                      | 72      | 1,358     | 1,402   | 1,316     | 350    | 383          | 364    | 1,763           | 1,855     | 1,752     |  |
| Purchased paper                        | kton                | 0       | 0                                       | 0       | 206       | 124     | 123       | 0.5    | 0            | 0      | 206             | 124       | 123       |  |
| Recovered paper                        | kton                | 281     | 301                                     | 328     | 2,156     | 1,972   | 1,982     | 5      | 5            | 4      | 2,442           | 2,278     | 2,314     |  |
| Inorganic material                     | kton                | 202     | 206                                     | 214     | 0         | 0       | 0         | 0      | 0            | 0      | 202             | 206       | 214       |  |
| Organic fossil material                | kton                | 12      | 12                                      | 13      | 0         | 0       | 3         | 340    | 560          | 404    | 352             | 572       | 420       |  |
| Water                                  | Mm <sup>3</sup>     | 105     | 108                                     | 110     | 110       | 97      | 95        | 1      | 1            | 1      | 216             | 206       | 206       |  |
| 2. Energy                              |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Electricity                            |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Co-generation                          | GWhe                | 709     | 802                                     | 819     | 547       | 532     | 505       | 0      | 0            | 0      | 1,256           | 1,334     | 1,324     |  |
| Grid supply                            | GWhe                | 2,306   | 2,496                                   | 2,485   | 3,822     | 3,687   | 3,733     | 466    | 518          | 497    | 6,595           | 6,702     | 6,716     |  |
| Total                                  | GWhe                | 3,015   | 3,298                                   | 3,304   | 4,369     | 4,219   | 4,238     | 466    | 518          | 497    | 7,850           | 8,036     | 8,039     |  |
| Energy - Fuels                         |                     |         | 0,200                                   |         | .,000     | .,      | .,200     |        |              |        | .,555           |           | 0,000     |  |
| Biofuel                                | TJfuel              | 27,599  | 27,794                                  | 25,971  | 4,923     | 4,485   | 4,442     | 0      | 0            | 0      | 32,523          | 32,279    | 30,414    |  |
| Fossil fuel                            | TJfuel              | 1,306   | 1,104                                   | 1,287   | 26,843    | 26,313  | 25,902    | 318    | 304          | 305    | 28,467          | 27,721    | 27,494    |  |
| Electric boiler and hood               | TJfuel              | 244     | 235                                     | 122     | 88        | 65      | 55        | 0      | 0            | 0      | 332             | 300       | 177       |  |
| Total                                  | TJfuel              | 29,150  | 29,133                                  | 27,380  | 31,854    | 30,863  | 30,400    | 318    | 304          | 305    | 61,322          | 60,300    | 58,085    |  |
| of which co-generation                 | TJfuel              | 3,006   | 3,393                                   | 3,466   | 2,236     | 2,238   | 2,843     | 0      | 0            | 0      | 5,241           | 5,631     | 6,310     |  |
| 3. Discharges                          |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| To air                                 |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| NO <sub>x</sub> as NO <sub>2</sub>     | tons                | 1,544   | 1,698                                   | 1,592   | 1,942     | 1,649   | 1,772     | 25     | 23           | 24     | 3,511           | 3,370     | 3,388     |  |
| SO <sub>2</sub>                        | tons                | 413     | 328                                     | 352     | 768       | 321     | 262       | 0      | 0            | 0      | 1,180           | 649       | 615       |  |
| Dust                                   | tons                | 92      | 175                                     | 219     | 139       | 133     | 140       | 0      | 0            | 0      | 232             | 308       | 358       |  |
| CO <sub>2</sub> fossil                 | ktons               | 93      | 84                                      | 99      | 1,560     | 1,491   | 1,465     | 18     | 17           | 17     | 1,672           | 1,592     | 1,581     |  |
| CO <sub>2</sub> grid electricity       | ktons               | 24      | 28                                      | 31      | 1,304     | 1,199   | 1,284     | 123    | 156          | 146    | 1,451           | 1,383     | 1,461     |  |
| CO <sub>2</sub> biogenic               | ktons               | 2,513   | 2,706                                   | 2,664   | 524       | 500     | 490       | 0      | 7            | 0      | 3,037           | 3,214     | 3,154     |  |
| To water                               |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| COD                                    | tons                | 16,587  | 15,262                                  | 13,614  | 7,860     | 9,434   | 8,423     | 37     | 36           | 33     | 24,483          | 24,732    | 22,070    |  |
| BOD                                    | tons                | 2,942   | 1,678                                   | 1,293   | 1,156     | 1,326   | 1,158     | 1      | 1            | 1      | 4,099           | 3,005     | 2,452     |  |
| Suspended solids                       | tons                | 4,038   | 2,853                                   | 1,891   | 1,323     | 1,282   | 1,231     | 1      | 1            | 1      | 5,362           | 4,137     | 3,123     |  |
| AOX                                    | tons                | 14      | 10                                      | 11      | 4         | 5       | 5         | 0      | 0            | 0      | 17              | 16        | 16        |  |
| P                                      | tons                | 60      | 40                                      | 47      | 43        | 35      | 41        | 1      | 1            | 0      | 104             | 76        | 88        |  |
| N                                      | tons                | 385     | 387                                     | 341     | 379       | 230     | 263       | 2      | 2            | 1      | 766             | 619       | 605       |  |
| Effluent water                         | Mm <sup>3</sup>     | 41      | 45                                      | 45      | 75        | 68      | 69        | 0      | 0            | 0      | 116             | 113       | 115       |  |
| Solid waste                            |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Landfill                               | tons                | 3,464   | 11,024                                  | 8,846   | 641,226   | 608,334 | 574,218   | 3,946  | 1,855        | 2,944  | 648,636         | 621,212   | 586,008   |  |
| Recovery                               | tons                | 108,733 | 121,905                                 | 143,335 | 1,047,121 | 993,370 | 1,078,083 | 55,116 | 60,407       | 53,905 | 1,210,970       | 1,175,681 | 1,275,324 |  |
| Hazardous                              | tons                | 3,450   | 1,187                                   | 1,217   | 3,821     | 1,933   | 1,900     | 161    | 213          | 166    | 7,433           | 3,333     | 3,284     |  |
| 0.00                                   |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| Certified volumes,<br>SCA's main sites |                     |         |   |         |           |         |           |        |              |        |                 |           |           |  |
| ISO 9001                               | %                   | 91      | 91                                      | 91      | 77        | 77      | 77        | 96     | 82           | 84     |                 |           |           |  |
| ISO 14001                              | %                   | 89      | 85                                      | 83      | 86        | 87      | 85        | 85     | 90           | 91     |                 |           |           |  |

 $<sup>^{1)}</sup>$  Figures in tables are rounded, hence some differences in totals.  $^{2)}$  Partly internal deliveries.

## Facts about the plants - Personal Care

|   |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    | Total                     |
|---|-----------------|-------------------------|-------------------|------------------|-----------------------|------------------|-------------------|--------------------------|---------------------|---------------------|------------------------|----------------|-------------------|---------------|-------------------|---------------------|---|-------------------|--------------------|--------------|----------------|--------------------|---------------------------|
|   |                 | Buenos Aires, Argentina | Bowling Green, US | Caloto, Colombia | Drummondville, Canada | Ecatepec, Mexico | Falkenberg,Sweden | Gemerskà Hôrka, Slovakia | Gennep, Netherlands | Hondouville, France | Hoogezand, Netherlands | Lasso, Ecuador | Mölnlycke, Sweden | Olawa, Poland | Ranjangaon, India | Rio Negro, Colombia | San Christobal, Domeni-<br>can Republic | Sao Paolo, Brazil | Istanbul 1, Turkey | Valls, Spain | Veniov, Russia | Istanbul 2, Turkey | Personal Care<br>21 sites |
| 2016  | Unit            |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| Production                                      | kton            | 7                       | 20                | 52               | 35                    | 41               | 76                | 39                       | 87                  | 4                   | 92                     | 4              | 3                 | 87            | 2                 | 21                  | 1                                       | 12                | 6                  | 14           | 19             | 20                 | 642                       |
| Timber and solid-<br>wood products              | m <sup>3</sup>  | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0                         |
| Energy  |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| Electricity                                     |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| Co-generation                                   | GWh             | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0                         |
| Grid supply                                     | GWh             | 9                       | 25                | 38               | 26                    | 35               | 47                | 39                       | 40                  | 14                  | 77                     | 2              | 4                 | 55            | 2                 | 16                  | 0.7                                     | 4                 | 2                  | 8            | 15             | 6                  | 466                       |
| Total   | GWh             | 9                       | 25                | 38               | 26                    | 35               | 47                | 39                       | 40                  | 14                  | 77                     | 2              | 4                 | 55            | 2                 | 16                  | 0.7                                     | 4                 | 2                  | 8            | 15             | 6                  | 466                       |
| Fuels   |                 | ,                       |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| Biofuel   | TJ              | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0                         |
| Fossil fuel                                     | TJ              | 0                       | 13                | 1                | 4                     | 0                | 0                 | 26                       | 27                  | 100                 | 85                     | 0              | 12                | 9             | 0                 | 1                   | 0                                       | 0                 | 0.3                | 0            | 33             | 8                  | 318                       |
| Electric boiler                                 |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| and hood  | TJ              | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0                         |
| Total   | TJ              | 0                       | 13                | 1                | 4                     | 0                | 0                 | 26                       | 27                  | 100                 | 85                     | 0              | 12                | 9             | 0                 | 1                   |   | 0                 | 0.3                | 0            | 33             | 8                  | 318                       |
| of which co-gen.                                | TJ              | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.0                       |
| Discharges                                      |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| To air  |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| NOS as NO <sub>2</sub>                          | tons            | 0.0                     | 1                 | 0.1              | 0.4                   | 0                | 0                 | 3                        | 3                   | 3                   | 8                      | 0              | 1                 | 0.9           | 0                 | 0.1                 | 0                                       | 0                 | 0                  | 0            | 3              | 0.8                | 25                        |
| SO <sub>X</sub>                                 | tons            | 0.0                     | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0.2                 | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.2                       |
| Dust  | tons            | 0.0                     | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0.3                 | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.3                       |
| CO <sub>2</sub> fossil                          | kton            | 0.0                     | 0.7               | 0.1              | 0.2                   | 0                | 0                 | 1                        | 2                   | 6                   | 5                      | 0              | 0.8               | 0.5           | 0                 | 0.1                 | 0                                       | 0                 | 0                  | 0            | 2              | 0.4                | 18                        |
| CO <sub>2</sub> electricity CO <sub>2</sub> bio | kton            | 0.0                     | 12                |                  | <u>4</u><br>0         | 16<br>0          | 0.5               | 6<br>0                   | 19                  | 0.6                 | 36                     | 0.5            | 0                 | 0             | 0                 | 3<br>0              | 0.1                                     | 0.7               |                    | 0            | 6              | 0                  | 123                       |
| -   | KIOH            | 0.0                     |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   | - 0                 |   |                   |                    |              | - 0            | 0                  | 0                         |
| To water  | -               |                         |                   |                  |                       |                  |                   |                          |                     | 07                  |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    | 07                        |
| BOD   | tons            | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 37                  | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 37<br>1                   |
| Suspended solids                                | tons            | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 1                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 1                         |
| AOX   | tons            | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0.1                 | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.1                       |
| P   | tons            | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0.6                 | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.6                       |
| N   | tons            | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 2                   | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 2                         |
| Effluent water                                  | Mm <sup>3</sup> | 0                       | 0                 | 0                | 0                     | 0                | 0                 | 0                        | 0                   | 0.4                 | 0                      | 0              | 0                 | 0             | 0                 | 0                   | 0                                       | 0                 | 0                  | 0            | 0              | 0                  | 0.4                       |
| Solid waste                                     |                 |                         |                   |                  |                       |                  |                   |                          |                     |                     |                        |                |                   |               |                   |                     |   |                   |                    |              |                |                    |                           |
| Landfill  | tons            | 824                     | 9                 | 155              | 0                     | 480              | 467               | 259                      | 5                   | 274                 | 0                      | 85             | 0                 | 242           | 287               | 200                 | 28                                      | 622               | 0                  | 0            | 11             | 0                  | 3,946                     |
| Recovery  | tons            | 782                     | 2,604             | 4,332            | 2,882                 | 5,800            | 4,366             | 8,970                    | 2,661               | 2,005               | 6,235                  | 133            | 280               | 7,562         | 0                 | 2,698               | 100                                     | 90                | 694                | 445          | 1,808          | 672                | 55,116                    |
| Hazardous                                       | tons            | 1                       | 4                 | 2                | 1                     | 0                | 0.3               | 5                        | 0.9                 | 122                 | 0                      | 0              | 0                 | 0             | 0                 | 2                   | 0                                       | 0                 | 0                  | 0.6          | 0              | 22                 | 161                       |

SCA Sustainability Report 2016 59

## Facts about the plants - Tissue

|                                    |                 | Barton, US        | Cajica, Colombia     | Flagstaff, US | Harrodsburg, US | Lasso, Ecuador  | Medellin, Colombia | Menasha, US | Middletown, US | Monterrey, Mexico | Santiago, Chile | Sahagùn, Mexico | South Glens Falls, US | Uruapan, Mexico     | Allo, Spain |  |
|------------------------------------|-----------------|-------------------|----------------------|---------------|-----------------|-----------------|--------------------|-------------|----------------|-------------------|-----------------|-----------------|-----------------------|---------------------|-------------|--|
| 2016                               | Unit            |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| Production                         | kton            | 170               | 50                   | 54            | 56              | 24              | 35                 | 189         | 102            | 59                | 42              | 59              | 63                    | 54                  | 129         |  |
| Timber and solid-wood products     | m <sup>3</sup>  | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0           |  |
| Enormy                             |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| Energy<br>Electricity              |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| Internal hydro power               | GWh             | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0           |  |
| Co-generation                      | GWh             | 0                 | 0                    | 0             | 0               | 0               | 13                 | 0           | 9              | 0                 | 0               | 0               | 0                     | 36                  | 0           |  |
| Grid supply                        | GWh             | 280               | 87                   | 65            | 106             | 32              | 38                 | 312         | 142            | 72                | 68              | 85              | 101                   | 28                  | 152         |  |
| Total                              | GWh             | 280               | 87                   | 65            | 106             | 32              | 51                 | 312         | 151            | 72                | 68              | 85              | 101                   | 64                  | 152         |  |
| Fuels                              |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| Biofuel                            | TJ              | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0           |  |
| Fossil fuel                        | TJ              | 1,209             | 492                  | 464           | 665             | 209             | 437                | 1,412       | 1,333          | 396               | 508             | 485             | 536                   | 678                 | 742         |  |
| Electric boiler and hood           | TJ              | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0           |  |
| Total                              | TJ              | 1,209             | 492                  | 464           | 665             | 209             | 437                | 1,412       | 1,333          | 396               | 508             | 485             | 536                   | 678                 | 742         |  |
| of which co-generation             | TJ              | 0                 | 0                    | 0             | 0               | 0               | 99                 | 0           | 0              | 0                 | 0               | 0               | 0                     | 413                 | 0           |  |
| Discharge                          |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| Discharges<br>To air               |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| NO <sub>S</sub> as NO <sub>2</sub> | tons            | 37                | 18                   | 20            | 29              | 7               | 0.5                | 64          | 377            | 11                | 51              | 21              | 12                    | 49                  | 14          |  |
| SO <sub>X</sub>                    | tons            | 0.3               | 0.8                  | 0.1           | 0.2             | 15              | 0.0                | 0.5         | 467            | 0                 | 0               | 0.1             | 0.1                   | 0                   | 0           |  |
| Dust                               | tons            | 4                 | 0                    | 1             | 2               | 5               | 0                  | 35          | 0              | 1                 | 0               | 2               | 0                     | 0                   | 0           |  |
| CO <sub>2</sub> fossil             | kton            | 68                | 28                   | 26            | 37              | 16              | 24                 | 79          | 110            | 22                | 41              | 27              | 30                    | 38                  | 42          |  |
| CO <sub>2</sub> electricity        | kton            | 136               | 16                   | 32            | 52              | 0               | 7                  | 152         | 69             | 33                | 27              | 39              | 49                    | 13                  | 39          |  |
| CO <sub>2</sub> bio                | kton            | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0           |  |
| To water                           |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
| COD                                | tons            | 0                 | 74                   | 157           | 0               | 132             | 761                | 0           | 0              | 0                 | 45              | 335             | 0                     | 557                 | 91          |  |
| BOD                                | tons            | 103               | 29                   | 13            | 0               | 38              | 194                | 38          | 33             | 0                 | 26              | 84              | 155                   | 62                  | 15          |  |
| Suspended solids                   | tons            | 178               | 43                   | 56            | 0               | 27              | 180                | 57          | 139            | 0                 | 14              | 91              | 68                    | 60                  | 20          |  |
| AOX                                | tons            | 0                 | 0                    | 0             | 0               | 0               | 0                  | 0           | 0              | 0                 | 0               | 0               | 0                     | 0                   | 0.4         |  |
| P                                  | tons            | 6                 | 4                    | 0.9           | 0               | 0               | 0.8                | 7           | . 2            | 0                 | 1               | . 3             | . 0                   | 1                   | 0.8         |  |
| N                                  | tons            | . 77              | 5                    | 2             | 0               | 0               | 0                  | 48          | 2              | 0                 | 17              | 28              | 45                    | 14                  | 6           |  |
| Effluent water                     | Mm <sup>3</sup> | 10                | 0.7                  | 0.3           | 0.6             | 0.7             | 0.6                | 8           | 6              | 0.7               | 2               | 1               | 3                     | 1                   | 2           |  |
| Solid waste                        |                 |                   |                      |               |                 |                 |                    |             |                |                   |                 |                 |                       |                     |             |  |
|                                    |                 |                   |                      |               |                 |                 |                    |             | 117.015        | 10.101            | OF 174          | 30,924          | 10,372                | 00 001              | 0.010       |  |
| Landfill                           | tons            | 111,491           | 2,661                | 46,886        | 9,282           | 3,780           | 1,590              | 166,148     | 117,915        | 13,194            | 35,174          | 30,924          | 10,372                | 23,291              | 3,318       |  |
| Landfill<br>Recovery               | tons            | 111,491<br>67,425 | 2,661<br>48,568<br>7 | 46,886<br>971 | 9,282           | 3,780<br>18,392 | 1,590<br>20,455    | 166,148     | 2,079          | 8,978             | 59              | 42,052          | 64,119                | 23,291<br>447<br>76 | 591         |  |

|   | Altopascio, Italy   | Chesterfield, UK   | Collodi, Italy  | Cuijk, Netherlands   | Gien, France  | Hondouville, France  | Kostheim, Germany   | Kunheim, France  | Le Theil, France   | Lilla Edet, Sweden  | Lucca, Italy   | Manchester, UK  | Mannheim, Germany  | Mediona, Spain   | Neuss, Germany  | Nokia, Finland   |
|---|---|--|---|--|---|--|---|--|--|---|--|---|--|--|---|--|
| 1 |   |  |   |  |   |  |   |  |  |   |  |   |  |  |   | ,  |
|   | 25  | 23   | 35  | 52   | 137   | 64   | 136   | 50   | 65   | 98  | 118  | 47  | 313  | 12   | 113   | 62   |
|   | 0   | 0  | 0   | 0  | 0   | 0  | 0   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0   | 0  |
|   |   |  |   |  |   |  |   |  |  |   |  |   |  |  |   |  |
|   |   |  |   |  |   |  |   |  |  |   |  |   |  |  |   |  |
|   | 0   | 0  | 0   | 0  | 0   | 0  | 0   | 0  | 0  | 0   | 0  | 0   | 0  | 0  | 0   | 0  |
|   | 31  | 0  | 0   | 0  | 6   | 0  | 37  | 0  | 0  | 3   | 78   | 0   | 257  | 0  | 0   | 0  |
| - | 3   | 33   | 34  | 71   | 232   | 113  | 149   | 64   | 58   | 131   | 35   | 86  | 262  | 12   | 142   | 92   |
|   | 34  | 33   | 34  | 71   | 237   | 113  | 186   | 64   | 58   | 134   | 112  | 86  | 519  | 12   | 142   | 92   |
|   |   |  |   |  |   |  |   |  |  |   |  |   |  |  |   |  |
|   | 0   | 0  | 0   | 7  | 0   | 0  | 0   | 0  | 0  | 465   | 0  | 0   | 4,228  | 0  | 0   | 204  |
|   | 391   | 204  | 229   | 353  | 1,381   | 479  | 1,359   | 364  | 363  | 174   | 1,374  | 556   | 3,541  | 92   | 625   | 255  |
|   | 0   | 0  | 0   | 0  | 0   | 0  | 0   | 0  | 0  | 88  | 0  | 0   | 0  | 0  | 0   | 0  |
|   | 391   | 204  | 229   | 359  | 1,381   | 479  | 1,359   | 364  | 363  | 727   | 1,374  | 556   | 7,769  | 92   | 625   | 459  |
| • | 205   |  |   |  |   |  |   |  |  |   | 000  |   |  |  |   |  |
|   | 295   | 0  | 0   | 0  | 85  | 0  | 0   | 0  | 0  | 0   | 936  | 0   | 0  | 0  | 0   | 0  |
|   | 295   | 0  | 0   | 0  | 85  | 0  | 0   | 0  | 0  | 0   | 936  | 0   | 0  | <u> </u>   | 0   |  |
|   | 35  | 8  | 14  | 11   | 29  | 12   | 54  | 9  | 20   | 47  | 132  | 14  | 581  | 3  | 20  |  |
|   |   |  |   |  |   |  |   |  |  |   |  |   |  |  |   | 26   |
|   | 35  | 8  | 14  | 11   | 29  | 12   | 54  | 9  | 20   | 47  | 132  | 14  | 581  | 3  | 20  | 26   |
|   | 35  | 8  | 14  | 11 0   | 29<br>0.6   | 12   | 54<br>0.4   | 9 0.6  | 20   | 47<br>0.2   | 132  | 14  | 581<br>275   | 3 0  | 20  | 26<br>0  |
|   | 35<br>0<br>0.2  | 8<br>0<br>0.4<br>11<br>13  | 14<br>0<br>0<br>13<br>11  | 11<br>0<br>0   | 29<br>0.6<br>2<br>77<br>9   | 12<br>0.9<br>1<br>27<br>5  | 54<br>0.4<br>0  | 9 0.6 0  | 20<br>0.2<br>0   | 47<br>0.2<br>1  | 132<br>0<br>0  | 14<br>0<br>0  | 581<br>275<br>58   | 3 0 0  | 20<br>0.7<br>0.1  | 26<br>0<br>0<br>17<br>14   |
|   | 35<br>0<br>0.2<br>22  | 8<br>0<br>0.4<br>11  | 14<br>0<br>0  | 11<br>0<br>0<br>20   | 29<br>0.6<br>2<br>77  | 12<br>0.9<br>1<br>27   | 54<br>0.4<br>0<br>76  | 9<br>0.6<br>0<br>20  | 20<br>0.2<br>0<br>20   | 47<br>0.2<br>1<br>10  | 132<br>0<br>0  | 14<br>0<br>0<br>31  | 581<br>275<br>58<br>199  | 3<br>0<br>0<br>5   | 20<br>0.7<br>0.1<br>35  | 26<br>0<br>0   |
|   | 35<br>0<br>0.2<br>22<br>0.9   | 8<br>0<br>0.4<br>11<br>13  | 14<br>0<br>0<br>13<br>11  | 11<br>0<br>0<br>20<br>33   | 29<br>0.6<br>2<br>77<br>9   | 12<br>0.9<br>1<br>27<br>5  | 54<br>0.4<br>0<br>76<br>71  | 9<br>0.6<br>0<br>20<br>3   | 20<br>0.2<br>0<br>20<br>2  | 47<br>0.2<br>1<br>10<br>2   | 132<br>0<br>0<br>77<br>11                                    | 14<br>0<br>0<br>31<br>35  | 581<br>275<br>58<br>199<br>124   | 3<br>0<br>0<br>5<br>3                                    | 20<br>0.7<br>0.1<br>35<br>67  | 26<br>0<br>0<br>17<br>14   |
|   | 35<br>0<br>0.2<br>22<br>0.9   | 8<br>0<br>0.4<br>11<br>13  | 14<br>0<br>0<br>13<br>11  | 11<br>0<br>0<br>20<br>33   | 29<br>0.6<br>2<br>77<br>9   | 12<br>0.9<br>1<br>27<br>5  | 54<br>0.4<br>0<br>76<br>71  | 9<br>0.6<br>0<br>20<br>3   | 20<br>0.2<br>0<br>20<br>2  | 47<br>0.2<br>1<br>10<br>2   | 132<br>0<br>0<br>77<br>11                                    | 14<br>0<br>0<br>31<br>35  | 581<br>275<br>58<br>199<br>124   | 3<br>0<br>0<br>5<br>3                                    | 20<br>0.7<br>0.1<br>35<br>67  | 26<br>0<br>0<br>17<br>14   |
|   | 35<br>0<br>0.2<br>22<br>0.9   | 8<br>0<br>0.4<br>11<br>13  | 14<br>0<br>0<br>13<br>11  | 11<br>0<br>0<br>20<br>33<br>0.6                                  | 29<br>0.6<br>2<br>77<br>9   | 12<br>0.9<br>1<br>27<br>5  | 54<br>0.4<br>0<br>76<br>71  | 9<br>0.6<br>0<br>20<br>3   | 20<br>0.2<br>0<br>20<br>2  | 47<br>0.2<br>1<br>10<br>2<br>62   | 132<br>0<br>0<br>77<br>11                                    | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453  | 3<br>0<br>0<br>5<br>3                                    | 20<br>0.7<br>0.1<br>35<br>67  | 26<br>0<br>0<br>17<br>14<br>7  |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0                                    | 8<br>0<br>0.4<br>11<br>13<br>0   | 14<br>0<br>0<br>13<br>11<br>0   | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4                       | 29<br>0.6<br>2<br>77<br>9<br>0  | 12<br>0.9<br>1<br>27<br>5<br>0   | 54<br>0.4<br>0<br>76<br>71<br>0                                     | 9<br>0.6<br>0<br>20<br>3<br>0                                      | 20<br>0.2<br>0<br>20<br>2<br>0   | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37                          | 132<br>0<br>0<br>77<br>11<br>0                               | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453  | 3<br>0<br>0<br>5<br>3<br>0                               | 20<br>0.7<br>0.1<br>35<br>67<br>0   | 26<br>0<br>0<br>17<br>14<br>7  |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0                                    | 8<br>0<br>0.4<br>11<br>13<br>0   | 14<br>0<br>0<br>13<br>11<br>0   | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5                  | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6                 | 12<br>0.9<br>1<br>27<br>5<br>0   | 54<br>0.4<br>0<br>76<br>71<br>0                                     | 9<br>0.6<br>0<br>20<br>3<br>0                                      | 20<br>0.2<br>0<br>20<br>2<br>0<br>2<br>0                                 | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2                   | 132<br>0<br>0<br>77<br>11<br>0                               | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4                  | 3<br>0<br>0<br>5<br>3<br>0                               | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4                           | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4                  |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0                                    | 8<br>0<br>0.4<br>11<br>13<br>0   | 14<br>0<br>0<br>13<br>11<br>0<br>0<br>0<br>0<br>0                     | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0             | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6                 | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5                 | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2             | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3             | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2             | 47<br>0.2<br>1<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4       | 132<br>0<br>0<br>77<br>11<br>0                               | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8             | 3<br>0<br>0<br>5<br>3<br>0                               | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2                    | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4                  |
|   | 35<br>0.2<br>22<br>0.9<br>0   | 8<br>0<br>0.4<br>11<br>13<br>0   | 14<br>0<br>0<br>13<br>11<br>10<br>0<br>0<br>0<br>0<br>0<br>0          | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0             | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6                 | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5                 | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2<br>0.4      | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3<br>0.2      | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2             | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4            | 132<br>0<br>0<br>77<br>11<br>0<br>0<br>0<br>0<br>0           | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8             | 3<br>0<br>0<br>5<br>3<br>0<br>0<br>0<br>0<br>0<br>0      | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2<br>0.2             | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4<br>0.6           |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0                                    | 8<br>0<br>0.4<br>11<br>13<br>0   | 14<br>0<br>0<br>13<br>11<br>0<br>0<br>0<br>0<br>0                     | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0             | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6                 | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5                 | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2             | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3             | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2             | 47<br>0.2<br>1<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4       | 132<br>0<br>0<br>77<br>11<br>0                               | 14<br>0<br>0<br>31<br>35<br>0   | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8             | 3<br>0<br>0<br>5<br>3<br>0                               | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2                    | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4                  |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 8<br>0<br>0.4<br>11<br>13<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 14<br>0<br>0<br>13<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0<br>0.1<br>2 | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6<br>1            | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5<br>1<br>10      | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2<br>0.4<br>4 | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3<br>0.2<br>7 | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2<br>1        | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4<br>10<br>2 | 132<br>0<br>0<br>77<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 14<br>0<br>0<br>31<br>35<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8<br>44       | 3<br>0<br>0<br>5<br>3<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2<br>0.2<br>7        | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4<br>0.6<br>4      |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 8<br>0<br>0.4<br>11<br>13<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 14<br>0<br>0<br>13<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0<br>0.1<br>2 | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6<br>1<br>11<br>2 | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5<br>1<br>10<br>2 | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2<br>0.4<br>4 | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3<br>0.2<br>7 | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2<br>1<br>0.4 | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4<br>10<br>2 | 132<br>0<br>0<br>77<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 14<br>0<br>0<br>31<br>35<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8<br>44<br>13 | 3<br>0<br>0<br>5<br>3<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2<br>0.2<br>7<br>0.8 | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4<br>0.6<br>4<br>3 |
|   | 35<br>0<br>0.2<br>22<br>0.9<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 8<br>0<br>0.4<br>11<br>13<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 14<br>0<br>0<br>13<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 11<br>0<br>0<br>20<br>33<br>0.6<br>42<br>4<br>5<br>0<br>0.1<br>2 | 29<br>0.6<br>2<br>77<br>9<br>0<br>97<br>11<br>14<br>0.6<br>1<br>11<br>2 | 12<br>0.9<br>1<br>27<br>5<br>0<br>196<br>5<br>8<br>0.5<br>1<br>10      | 54<br>0.4<br>0<br>76<br>71<br>0<br>138<br>5<br>3<br>0.2<br>0.4<br>4 | 9<br>0.6<br>0<br>20<br>3<br>0<br>98<br>24<br>11<br>0.3<br>0.2<br>7 | 20<br>0.2<br>0<br>20<br>2<br>0<br>24<br>9<br>1<br>0.1<br>0.2<br>1        | 47<br>0.2<br>1<br>10<br>2<br>62<br>231<br>29<br>37<br>0.2<br>0.4<br>10<br>2 | 132<br>0<br>0<br>77<br>11<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 14<br>0<br>0<br>31<br>35<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0      | 581<br>275<br>58<br>199<br>124<br>453<br>3,913<br>171<br>203<br>0.4<br>8<br>44       | 3<br>0<br>0<br>5<br>3<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 20<br>0.7<br>0.1<br>35<br>67<br>0<br>89<br>4<br>4<br>0.2<br>0.2<br>7        | 26<br>0<br>0<br>17<br>14<br>7<br>162<br>12<br>19<br>0.4<br>0.6<br>4      |

Cont. > > >

## Facts about the plants - Tissue, cont.

|  |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          | Total                      |
|--|-----------------------------|-----------------------|---------------------|---------------------------|--------------------|------------------------|------------------|----------------------|-----------------------|---------------|--------------------------|----------------------------|
|  |                             | Oakenholt, UK         | Ortmann, Austria    | Prudhoe, UK               | Sovetsk, Russia    | Stembert, Belgium      | Stubbins, UK     | Suameer, Netherlands | Svetogorsk, Russia    | Valls, Spain  | Witzenhausen,<br>Germany | <b>Tissue</b><br>40 sites  |
| 2016   | Unit                        |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| Production   | kton                        | 70                    | 130                 | 124                       | 66                 | 70                     | 60               | 7                    | 53                    | 153           | 31                       | 3,200                      |
| Timber and solid-wood products                             | m <sup>3</sup>              | 0                     | 0                   | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 0                          |
| Timber and solid weed products                             |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| Energy   |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| Electricity  |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| Internal hydro power                                       | GWh                         | 0                     | 0                   | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 0                          |
| Co-generation  | GWh                         | 0                     | 78                  | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 547                        |
| Grid supply  | GWh                         | 47                    | 63                  | 135                       | 81                 | 74                     | 72               | 11                   | 61                    | 163           | 27                       | 3,822                      |
| Total  | GWh                         | 47                    | 141                 | 135                       | 81                 | 74                     | 72               | 11                   | 61                    | 163           | 27                       | 4,369                      |
| Fuels  |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| Biofuel  | TJ                          | 0                     | 20                  | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 4,923                      |
| Fossil fuel  | TJ                          | 458                   | 1,296               | 918                       | 502                | 467                    | 495              | 48                   | 356                   | 829           | 168                      | 26,843                     |
| Electric boiler and hood                                   | TJ                          | 0                     | 0                   | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 88                         |
| Total  | TJ                          | 458                   | 1,315               | 918                       | 502                | 467                    | 495              | 48                   | 356                   | 829           | 168                      | 31,854                     |
| of which co-gen.   | TJ                          | 0                     | 409                 | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 2,236                      |
| Discharges   |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| To air   |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| NO <sub>S</sub> as NO <sub>2</sub>                         | tons                        | 25                    | 46                  | 26                        | 12                 | 23                     | 37               | 0.7                  | 12                    | 26            | 8                        | 1,942                      |
| SOx  | tons                        | 0.1                   | 0                   | 4                         | 0                  | 0.1                    | 0                | 0                    | 0                     | 0             | 0                        | 768                        |
| Dust   | tons                        | 0                     | 0                   | 4                         | 12                 | 4                      | 0                | 0                    | 4                     | 0             | 0                        | 139                        |
| CO <sub>2</sub> fossil                                     | kton                        | 26                    | 73                  | 51                        | 28                 | 26                     | 28               | 3                    | 20                    | 46            | 9                        | 1,560                      |
| CO <sub>2</sub> electricity                                | kton                        | 19                    | 0                   | 56                        | 31                 | 15                     | 30               | 5                    | 23                    | 41            | 13                       | 1,304                      |
| CO <sub>2</sub> bio  | kton                        | 0                     | 1                   | 0                         | 0                  | 0                      | 0                | 0                    | 0                     | 0             | 0                        | 524                        |
| To water   |                             |                       |                     |                           |                    |                        |                  |                      |                       |               |                          |                            |
| COD  | tons                        | 70                    | 250                 | 218                       | 61                 | 77                     | 0                | 0                    | 0                     | 43            | 0                        | 7,860                      |
| BOD  | tons                        | 14                    | 10                  | 19                        | 10                 | 34                     | 0                | 0                    | 0                     | 5             | 0                        | 1,156                      |
| Suspended solids   |                             |                       |                     |                           | 6                  | 4                      | 0                | 0                    | 0                     | 3             | 0                        | 1,323                      |
|  | tons                        | 15                    | 32                  | 27                        |                    |                        |                  |                      |                       |               |                          |                            |
| AOX  | tons                        | 15                    |                     | 0                         | 0                  | 0.2                    | 0                | 0                    | 0                     | 0.1           | 0                        | 4                          |
| AOX<br>P   |                             |                       | 0.1                 |                           |                    |                        |                  | 0                    | 0                     | 0.1           | 0                        | 43                         |
|  | tons                        | 0                     | 0.1                 | 0                         | 0                  | 0.2                    | 0                |                      |                       |               |                          |                            |
| Р  | tons<br>tons                | 0.7                   | 0.1                 | 0                         | 0.6                | 0.2                    | 0                | 0                    | 0                     | 0             | 0                        | 43                         |
| P<br>N<br>Effluent water                                   | tons<br>tons<br>tons        | 0<br>0.7<br>12        | 0.1<br>2<br>14      | 0<br>1<br>6               | 0<br>0.6<br>4      | 0.2<br>0.1<br>2        | 0 0              | 0                    | 0                     | 0             | 0                        | 43<br>379                  |
| P<br>N   | tons<br>tons<br>tons        | 0<br>0.7<br>12        | 0.1<br>2<br>14      | 0<br>1<br>6<br>3          | 0<br>0.6<br>4      | 0.2<br>0.1<br>2        | 0 0 0 1          | 0                    | 0 0 1                 | 0             | 0                        | 43<br>379                  |
| P<br>N<br>Effluent water<br><b>Solid waste</b><br>Landfill | tons<br>tons<br>tons<br>Mm³ | 0<br>0.7<br>12<br>0.5 | 0.1<br>2<br>14<br>4 | 0<br>1<br>6               | 0<br>0.6<br>4<br>1 | 0.2<br>0.1<br>2<br>0.8 | 0 0              | 0 0 0.2              | 0                     | 0<br>0<br>0.4 | 0 0 0                    | 43<br>379<br>75<br>641,226 |
| P N Effluent water Solid waste                             | tons tons tons Mm³          | 0<br>0.7<br>12<br>0.5 | 0.1<br>2<br>14<br>4 | 0<br>1<br>6<br>3<br>7,758 | 0<br>0.6<br>4<br>1 | 0.2<br>0.1<br>2<br>0.8 | 0<br>0<br>0<br>1 | 0 0.2                | 0<br>0<br>1<br>45,525 | 0 0.4         | 0 0 0                    | 43<br>379<br>75            |

## Facts about the plants – Forest Products

|  |  |  |  |   |  |   |   |  |  |   |  |   |   |  | Total  |   |
|--|--|--|--|---|--|---|---|--|--|---|--|---|---|--|--|---|
|  |  | Munksund, Sweden   | Obbola, Sweden   | Ortviken, Sweden  | Östrand, Sweden  | BioNorr, Sweden   | Stugun, Sweden  | BM Skandinavia,<br>Tunadal, Sweden             | Bollsta, Sweden  | Gällö, Sweden   | Munksund, Sweden   | Rundvik, Sweden   | Tunadal, Sweden   | Pulp and paper<br>4 mills  | Forest business  | Forest Products   |
| 2016   | Unit   |  |  |   | ·  |   | •   |  | •  |   |  |   |   |  |  |   |
| Production   | kton   | 389  | 423  | 720   | 500  | 159   | 15  | 0  | 0  | 0   | 0  | 0   | 0   | 2,032  | 174  | 2,206   |
| Timber and solid-wood products   | 1,000 m <sup>3</sup>   | 0  | 0  | 0   | 0  | 0   | 88  | 71   | 546  | 306   | 389  | 306   | 434   | 0  | 2,139  | 2,139   |
| Energy   |  |  |  |   |  |   |   |  |  |   |  |   |   |  |  |   |
| Electricity  |  |  |  |   |  |   |   |  |  |   |  |   |   |  |  |   |
| Internal hydro power   | GWh  | 0  | 0  | 0   | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 0  | 0  | 0   |
| Co-generation  | GWh  | 175  | 141  | 66  | 326  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 709  | 0  | 709   |
| Grid supply  | GWh  | 180  | 180  | 1,600   | 165  | 30  | 9   | 3  | 42   | 14  | 26   | 21  | 35  | 2,126  | 180  | 2,306   |
| Total  | GWh  | 355  | 322  | 1,666   | 492  | 30  | 9   | 3  | 42   | 14  | 26   | 21  | 35  | 2,835  | 180  | 3,015   |
| Fuels  |  |  |  |   |  |   |   |  |  |   |  |   |   |  |  |   |
| Biofuel  | TJ   | 6,063  | 4,155  | 2,857   | 11,997   | 552   | 66  | 3  | 672  | 196   | 448  | 210   | 381   | 25,071   | 2,528  | 27,599  |
| Fossil fuel  | TJ   | 199  | 352  | 269   | 418  | 2   | 0.3   | 0  | 35   | 0   | 26   | 6   | 0.1   | 1,236  | 70   | 1,306   |
| Electric boiler and hood   | TJ   | 75   | 0  | 170   | 0  | 0   | 0   | 0  | 0  | 0   | 0  | 0   | 0   | 244  | 0  | 244   |
|  |  |  |  |   |  |   |   |  |  |   |  |   |   |  |  |   |
| Total  | TJ   | 6,336  | 4,506  | 3,295   | 12,415   | 554   | 66  | 3  | 707  | 196   | 474  | 216   | 381   | 26,552   | 2,598  | 29,150  |
| Total of which co-gen.   | TJ<br>TJ   |  |  |   |  |   |   |  |  |   | <b>474</b>   | <b>216</b>  | <b>381</b>  | <b>26,552</b> 3,006  | <b>2,598</b>   | <b>29,150</b><br>3,006  |
|  |  | 6,336  | 4,506  | 3,295   | 12,415   | 554   | 66  | 3  | 707  | 196   |  |   |   |  | ·  |   |
| of which co-gen.   |  | 6,336  | 4,506  | 3,295   | 12,415   | 554   | 66  | 3  | 707  | 196   |  |   |   |  | ·  |   |
| of which co-gen.  Discharges   |  | 6,336  | 4,506  | 3,295   | 12,415   | 554   | 66  | 3  | 707  | 196   |  |   |   |  | ·  |   |
| of which co-gen.  Discharges To air  | TJ   | <b>6,336</b> 738   | <b>4,506</b><br>595  | <b>3,295</b><br>298   | <b>12,415</b> 1,374  | <b>554</b>  | <b>66</b>   | 0  | 707  | <b>196</b>  | 0  | 0   | 0   | 3,006  | 0  | 3,006   |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub>   | TJ   | 6,336<br>738<br>340<br>127<br>20   | <b>4,506</b> 595   | 3,295<br>298<br>185   | <b>12,415</b> 1,374 758  | 0.2   | 7<br>0  | 0<br>0   | 707<br>0<br>55<br>0.8<br>1   | 196<br>0<br>21<br>0<br>24   | 5<br>9<br>0.3  | 15<br>0.2<br>12   | 6<br>0<br>0.1   | 3,006  | 110  | 3,006   |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  | tons tons  | 340<br>127<br>20   | 262<br>38<br>20<br>28  | 3,295<br>298<br>185<br>31<br>20<br>19   | 758<br>217<br>33<br>33   | 0.2<br>0<br>45<br>0.1   | 7<br>0<br>0   | 0<br>0<br>0<br>0                               | 707<br>0<br>55<br>0.8<br>1<br>3  | 196<br>0<br>21<br>0<br>24<br>0  | 5<br>9<br>0.3<br>2   | 15<br>0.2<br>12<br>0.5  | 6<br>0<br>0.1   | 3,006<br>1,544<br>413<br>92<br>93  | 110<br>10<br>83<br>5   | 1,654<br>423<br>175<br>99   |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity   | tons tons tons kton  | 340<br>127<br>20<br>15   | 262<br>38<br>20<br>28<br>2   | 3,295<br>298<br>185<br>31<br>20<br>19   | 758<br>217<br>33<br>33<br>2  | 0.2<br>0<br>45<br>0.1<br>0.3  | 7<br>0<br>0<br>0<br>0.1   | 0<br>0<br>0<br>0                               | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5                                 | 196<br>0<br>21<br>0<br>24<br>0  | 5<br>9<br>0.3<br>2<br>0.3  | 15<br>0.2<br>12<br>0.5<br>0.2                                     | 6<br>0<br>0.1<br>0  | 3,006<br>1,544<br>413<br>92<br>93<br>24  | 110<br>10<br>83<br>5   | 3,006<br>1,654<br>423<br>175<br>99<br>26  |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  | tons tons tons kton  | 340<br>127<br>20   | 262<br>38<br>20<br>28  | 3,295<br>298<br>185<br>31<br>20<br>19   | 758<br>217<br>33<br>33   | 0.2<br>0<br>45<br>0.1   | 7<br>0<br>0   | 0<br>0<br>0<br>0                               | 707<br>0<br>55<br>0.8<br>1<br>3  | 196<br>0<br>21<br>0<br>24<br>0  | 5<br>9<br>0.3<br>2   | 15<br>0.2<br>12<br>0.5  | 6<br>0<br>0.1   | 3,006<br>1,544<br>413<br>92<br>93  | 110<br>10<br>83<br>5   | 1,654<br>423<br>175<br>99   |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  | tons tons tons kton  | 340<br>127<br>20<br>15   | 262<br>38<br>20<br>28<br>2   | 3,295<br>298<br>185<br>31<br>20<br>19   | 758<br>217<br>33<br>33<br>2  | 0.2<br>0<br>45<br>0.1<br>0.3  | 7<br>0<br>0<br>0<br>0.1   | 0<br>0<br>0<br>0                               | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5                                 | 196<br>0<br>21<br>0<br>24<br>0  | 5<br>9<br>0.3<br>2<br>0.3  | 15<br>0.2<br>12<br>0.5<br>0.2                                     | 6<br>0<br>0.1<br>0  | 3,006<br>1,544<br>413<br>92<br>93<br>24  | 110<br>10<br>83<br>5   | 3,006<br>1,654<br>423<br>175<br>99<br>26  |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD   | tons tons tons kton  | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641   | 262<br>38<br>20<br>28<br>2<br>448  | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290  | 758<br>217<br>33<br>2<br>1,135   | 0.2<br>0<br>45<br>0.1<br>0.3<br>54                                      | 7<br>0<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0                     | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65                           | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18                          | 6<br>0<br>0.1<br>0<br>0.4<br>37                               | 3,006<br>1,544<br>413<br>92<br>93<br>24<br>2,513   | 110<br>10<br>83<br>5<br>2<br>241                                       | 3,006<br>1,654<br>423<br>175<br>99<br>26<br>2,754   |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  | tons tons tons kton kton   | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891                                 | 262<br>38<br>20<br>28<br>2<br>448<br>1,354   | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49                             | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787                                   | 0.2<br>0<br>45<br>0.1<br>0.3<br>54                                      | 7<br>0<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0                     | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65                           | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 15<br>0.2<br>12<br>0.5<br>0.2<br>18                               | 6<br>0<br>0.1<br>0<br>0.4<br>37                               | 3,006  1,544 413 92 93 24 2,513  16,587 2,873  | 110<br>10<br>83<br>5<br>2<br>241                                       | 3,006  1,654 423 175 99 26 2,754  16,587 2,942  |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids   | tons tons tons kton kton kton tons tons tons                       | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948                        | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557   | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60                       | 12,415<br>1,374<br>758<br>217<br>33<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473 | 0.2<br>0<br>45<br>0.1<br>0.3<br>54                                      | 7<br>0<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0                | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65                           | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18                          | 6<br>0<br>0.1<br>0<br>0.4<br>37                               | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037  | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3                | 3,006  1,654 423 175 99 26 2,754  16,587 2,942 4,038  |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  | tons tons tons kton kton kton tons tons tons tons tons             | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948                        | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557<br>2                                    | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2                  | 758<br>217<br>33<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473                    | 0.2<br>0.2<br>0 45<br>0.1<br>0.3<br>54                                  | 7<br>0<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0                | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69                | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18                          | 6<br>0<br>0.1<br>0<br>0.4<br>37                               | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14                                       | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3                | 1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038                          |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX P  | tons tons tons kton kton kton tons tons tons tons tons tons tons   | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2                   | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557<br>2                                    | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2                  | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8                     | 0.2<br>0.2<br>0<br>45<br>0.1<br>0.3<br>54                               | 66<br>0<br>7<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0                | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0           | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18                          | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0                | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14 60                                    | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0           | 3,006<br>1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038<br>14<br>60     |
| of which co-gen.  Discharges  To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  P  N                                       | tons tons tons kton kton kton tons tons tons tons tons tons tons t | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2<br>23             | 4,506<br>595<br>262<br>38<br>20<br>28<br>2 2<br>448<br>1,354<br>147<br>557<br>2<br>16<br>72      | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2<br>2<br>2<br>56  | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8<br>19               | 0.2<br>0.2<br>0 45<br>0.1<br>0.3<br>54<br>0 0<br>0.3<br>0 0             | 66<br>0<br>7<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0<br>0      | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 0<br>5<br>9<br>0.3<br>2<br>0.3<br>43<br>0<br>0<br>0<br>0           | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18<br>0<br>0<br>0<br>0      | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0<br>0           | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14 60 385                                | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0           | 3,006  1,654 423 175 99 26 2,754  16,587 2,942 4,038 14 60 385                                |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  P  N  Effluent water                        | tons tons tons kton kton kton tons tons tons tons tons tons tons   | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2                   | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557<br>2                                    | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2                  | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8                     | 0.2<br>0.2<br>0<br>45<br>0.1<br>0.3<br>54                               | 66<br>0<br>7<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0                | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0           | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19                               | 5<br>9<br>0.3<br>2<br>0.3<br>43                                    | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18                          | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0                | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14 60                                    | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0           | 3,006<br>1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038<br>14<br>60     |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  P  N  Effluent water  Solid waste           | tons tons tons kton kton kton tons tons tons tons tons tons tons t | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2<br>23<br>118      | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557<br>2<br>16<br>72                        | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2<br>2<br>56       | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8<br>19<br>139        | 0.2<br>0.2<br>0 45<br>0.1<br>0.3<br>54<br>0 0<br>0.3<br>0 0             | 66<br>0<br>7<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0<br>0<br>0 | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19<br>0<br>0<br>0<br>0<br>0      | 0<br>5<br>9<br>0.3<br>2<br>0.3<br>43<br>0<br>0<br>0<br>0<br>0      | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0<br>0<br>0      | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14 60 385 41                             | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0<br>0      | 1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038<br>14<br>60<br>385<br>41 |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  P  N  Effluent water  Solid waste  Landfill | tons tons tons kton kton kton  tons tons tons tons tons tons tons  | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2<br>23<br>118<br>9 | 4,506<br>595<br>262<br>38<br>20<br>28<br>2 2<br>448<br>1,354<br>147<br>557<br>2<br>16<br>72<br>5 | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2<br>2<br>56<br>11 | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8<br>19<br>139<br>15  | 0.2<br>0.2<br>0<br>45<br>0.1<br>0.3<br>54<br>0<br>0<br>0<br>0<br>0<br>0 | 66<br>0<br>7<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0<br>0<br>0 | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>5<br>9<br>0.3<br>2<br>0.3<br>43<br>0<br>0<br>0<br>0<br>0<br>0 | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0<br>0<br>0<br>0 | 1,544<br>413<br>92<br>93<br>24<br>2,513<br>16,587<br>2,873<br>4,037<br>14<br>60<br>385<br>41 | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0<br>0<br>0 | 1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038<br>14<br>60<br>385<br>41 |
| of which co-gen.  Discharges To air  NO <sub>x</sub> as NO <sub>2</sub> SO <sub>x</sub> Dust  CO <sub>2</sub> fossil  CO <sub>2</sub> electricity  CO <sub>2</sub> bio  To water  COD  BOD  Suspended solids  AOX  P  N  Effluent water  Solid waste           | tons tons tons kton kton kton tons tons tons tons tons tons tons t | 6,336<br>738<br>340<br>127<br>20<br>15<br>2<br>641<br>4,483<br>891<br>1,948<br>2<br>23<br>118      | 262<br>38<br>20<br>28<br>2<br>448<br>1,354<br>147<br>557<br>2<br>16<br>72                        | 3,295<br>298<br>185<br>31<br>20<br>19<br>18<br>290<br>2,916<br>49<br>60<br>2<br>2<br>56       | 758<br>217<br>33<br>2<br>1,135<br>7,833<br>1,787<br>1,473<br>8<br>19<br>139        | 0.2<br>0.2<br>0 45<br>0.1<br>0.3<br>54<br>0 0<br>0.3<br>0 0             | 66<br>0<br>7<br>0<br>0<br>0<br>0.1<br>6   | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0           | 707<br>0<br>55<br>0.8<br>1<br>3<br>0.5<br>65<br>0<br>69<br>0<br>0<br>0 | 196<br>0<br>21<br>0<br>24<br>0<br>0.2<br>19<br>0<br>0<br>0<br>0<br>0      | 0<br>5<br>9<br>0.3<br>2<br>0.3<br>43<br>0<br>0<br>0<br>0<br>0      | 0<br>15<br>0.2<br>12<br>0.5<br>0.2<br>18<br>0<br>0<br>0<br>0<br>0 | 0<br>0<br>0.1<br>0<br>0.4<br>37<br>0<br>0<br>0<br>0<br>0      | 3,006  1,544 413 92 93 24 2,513  16,587 2,873 4,037 14 60 385 41                             | 0<br>110<br>10<br>83<br>5<br>2<br>241<br>0<br>69<br>0.3<br>0<br>0      | 1,654<br>423<br>175<br>99<br>26<br>2,754<br>16,587<br>2,942<br>4,038<br>14<br>60<br>385<br>41 |

SCA Sustainability Report 2016 63

# Social data

|   | 2016   | 2015                              | 2014                            | 2013  | 2012                          |
|---|--|-----------------------------------|---------------------------------|---|-------------------------------|
| Average number of employees   | 46,1711)   | 44,0001)                          | 44,2471)                        | 34,004  | 33,775                        |
| of whom female, %   | 31   | 31                                | 32                              | 28  | 29                            |
| Employees leaving the company   | 6,214  | 5,600                             | 8,355                           | 5,143   | 3,993                         |
| of which restructuring  | 312  | 720                               | 1 025                           | _   | _                             |
| of which retirement   | 355  | 211                               | 200                             | _   | _                             |
| Employees joining the company   | 8,026  | 5,988                             | 7,319                           | 4,426   | 6,344                         |
| Employee turnover, excluding restructuring and retirement, %  | 12   | 11                                | 16                              | 13  | 10                            |
| Age distribution, %   |  |                                   |                                 | ,   |                               |
| -20 years   | 1  | 1                                 | 2                               | 2   | 2                             |
| 21–30 years   | 23   | 23                                | 19                              | 18  | 17                            |
| 31–40 years   | 31   | 31                                | 29                              | 28  | 28                            |
| 41–50 years   | 25   | 26                                | 28                              | 29  | 30                            |
| 51–60 years   | 17   | 16                                | 19                              | 30  | 21                            |
| 60- years   | 3  | 3                                 | 3                               | 3   | 2                             |
| Academic degree or similar  | 22   | 22                                | 20                              | 18  | 18                            |
| Competence development, hours per employee  | 19   | 25                                | 22                              | 20  | 17                            |
| Diversity   |  |                                   |                                 |   |                               |
| Women, of total number of Board members and senior executives, %  | 38   | 35                                | 21                              | 21  | 21                            |
| Women, of total number of Board members (excl. members appointed by the employees) and senior executives, % | 42   | 40                                | 37                              | 39  | 24                            |
| Nationalities, senior management <sup>2)</sup> , number   | 21   | 28                                | 25                              | 18  | 23                            |
| Nationalities, senior and middle management <sup>2)</sup> , number  | 32   | 42                                | 39                              | 41  | 39                            |
| Female managers, senior management <sup>2)</sup> , %  | 25   | 24                                | 25                              | 24  | 23                            |
| Female managers, senior and middle management <sup>2</sup> ), %   | 27   | 29                                | 29                              | 25  | 29                            |
| Local hiring of senior and middle management, %   | 85   | 83                                | 78                              | 83  | 81                            |
| Health and Safety <sup>3)</sup>   |  |                                   |                                 |   |                               |
| Average headcount   | 29,408   | 28,001                            | 28,059                          | 28,233  | 27,172                        |
| Lost Time Accidents, LTA  | 265  | 360                               | 375                             | 461   | 520                           |
| Contractor Lost Time Accidents, CLTA  | 71   | 76                                | 51                              | 57  | N/A                           |
| Days Lost due to Accidents, DLA   | 6,204  | 7,545                             | 6,546                           | 7,984   | 8,876                         |
| Accident Severity Rate, ASR   | 23.4   | 21.0                              | 17.5                            | 17.3  | 17.1                          |
| Frequency Rate, FR (LTA /1,000,000 WH)  | 4.6  | 6.3                               | 6.7                             | 8.7   | 10.0                          |
| Incident Rate, IR (LTA/200,000 WH)  | 0.9  | 1.3                               | 1.3                             | 1.7   | 2.0                           |
| Fatalities  | 1  | 0                                 | 0                               | 0   | 1                             |
| Main sites certified according to OHSAS 18001, %  | 87   | 68                                | 52                              | 46  | 31                            |
| Code of Conduct   |  |                                   |                                 |   |                               |
| Business practice audits  | Costa Rica/Nicara-<br>gua, Germany,<br>Greece, Italy | Mexico, Poland,<br>Russia, Taiwan | Brazil                          | Czech Republic,<br>South Korea, Spain         | Hungary,<br>Malaysia          |
| Code of Conduct audits  | Germany, India,<br>Mexico, Spain                     | Mexico, Sweden,<br>US, UK         | China, Russia,<br>Spain, Turkey | Chile, France,<br>Mexico, Slovakia,<br>Taiwan | Russia, US,<br>Sweden, Poland |

Including Vinda.
 Senior management comprises the highest level of management below the Executive Management Team.
 The number varies over time due to organizational changes and consists of 110–150 managers. Middle management consists of 750–1,000 managers.

 Data for 2012, 2013 and 2014 is recalculated for acquisitions and divestments. 100% coverage for production and logistics and excluding sales offices and administration.
 Main sites are defined as wholly owned by SCA with 100 or more employees.
 12 main sites were certified under OHSAS during 2015.

# About the report

This report describes SCA's sustainability initiatives from an environmental, social and financial perspective. SCA publishes a sustainability report each year.

The Sustainability Report and the Annual Report should be viewed as a single unit in which information may be provided in either report or, where appropriate, in both. Corporate governance is an example of a subject that is referred to briefly in the Sustainability Report and a more detailed description is provided in the Annual Report's corporate governance section.

#### Reporting principles

The environmental and social data reported pertains to the 2016 calendar year. The figures included comply with relevant reporting and consolidation principles in accordance with the principles in the financial statements. SCA uses the global Greenhouse Gas Protocol standard for how to measure, manage and report carbon data. The figures cover the SCA Group's wholly owned subsidiaries and subsidiaries in which SCA owns at least 50% of the company. If SCA's ownership of a company is 50% or more, the entire company is included. An exception is made in the case of the Chinese company Vinda, in which SCA owns 51.4% of the votes and which was consolidated as a subsidiary in 2014. The data from Vinda includes the number of employees and their age and gender distribution. Vinda publishes an environmental, social and governance (ESG) report, which is available at www.vinda.com.

Some social data from joint ventures is not included. Code of Conduct data is one example, due to the fact that SCA and its joint ventures do not share a common code. The Colombian Familia Group, which is SCA's largest joint-venture company (refer to Note F1 in the SCA Annual Report), reports in accordance with the GRI G4 guidelines. For more information, visit www. grupofamilia.com.co.

Newly acquired businesses are integrated when they have been part of the Group for one calendar year. Wausau Paper was incorporated as of the closure of the acquisition on January 21, 2016. The historic environmental and social data of newly acquired units is included to the greatest possible extent in order to increase comparability (also refer to the section on comparability below). The data from divested units is excluded in its entirety as of the divestment date. Historic data for discontinued units is used.

When adjustments have been made compared with earlier reports, a note is appended directly beside the text or table. A main site is a

production facility that is wholly owned by SCA and that has 100 or more employees.

#### **Data collection**

Data provided in the report is compiled through various systems, primarily the Group's ABS accounting system, Resource Management System (RMS) and SCA's system for collection of social data.

#### **Environmental data**

The RMS encompasses more than 80 production sites, covering virtually the entire company's environmental impact and resource utilization from production. It includes data from manufacturing operations but not from corporate staffs, offices or joint ventures. Data from stand-alone tissue converting sites is included in the main mother reel supplying site. Each unit reports the following data to the system:

- raw material consumption
- incoming and outgoing shipments
- production volumes
- energy consumption broken down by hydroelectric power, co-generation and power from the grid
- fuel consumption broken down by biofuels, fossil fuels and electric boilers
- air emissions, including data on fossil and biogenic carbon dioxide
- water emissions
- solid waste

The data is reported both internally and externally at the mill level, business unit level and for the Group as a whole.

## Social, Occupational Health & Safety (OHS) and Human Resource (HR) data

Data is provided from different internal systems and tools depending on the nature of the data. HR data resides in SCA's HR system and other qualitative data is collected in SCA's database for social data.

#### Comparability

Certain data is adjusted retroactively to facilitate comparisons. Figures for the preceding year are available in previous publications of SCA's Sustainability Reports. This applies for example to data encompassed by SCA's sustainability targets, such as CO<sub>2</sub> and health and safety.

The results of the Group's CO₂ target and water target are adjusted each year in relation to production levels. Other environmental data is reported in absolute figures.

#### UNGP

As of 2015, this report applies the reporting framework for the United Nations Guiding Principles on Business and Human Rights (UNGPs) and SCA has reported on the overarching aspects contained in the framework.

#### **GRI** reporting

For the ninth consecutive year, SCA has prepared its report in accordance with Global Reporting Initiative (GRI) guidelines. The 2016 report adheres to GRI G4 guidelines at Core level. Accordingly, the Report has been structured in accordance with GRI principles, meaning that the content is determined by the issues that are most material to SCA and its stakeholders, and that the content provides a complete overview of the operations. With a few exceptions, SCA reports in accordance with all GRI indicators and on a level identified as material. The identification of specific standard disclosure GRI aspects to report has been matched with SCA's materiality analysis on page 37. Any omissions or incomplete data are either commented on directly in the GRI index on pages 67-69 or on this page.

The entire Sustainability Report has been reviewed by EY. The report is aimed at specialist audiences with an interest in SCA's sustainability performance, including analysts, investors and NGOs. More detailed information about SCA's work on environmental and social issues is available at www.sca.com.

# Auditor's Combined Assurance Report on the Sustainability Report of Svenska Cellulosa Aktiebolaget SCA (publ)

This is the translation of the auditor's report in Swedish.

### To Svenska Cellulosa Aktiebolaget SCA (publ)

#### Introduction

We have been engaged by the Board of Svenska Cellulosa Aktiebolaget SCA (publ) to undertake an examination of SCA's Sustainability Report for the year 2016. The Company has defined the scope of the Sustainability Report to the pages referred to in the GRI index on the pages 67–69.

#### Responsibilities of the Board and Management for the Sustainability Report

The Board of Directors and Group Management are responsible for the preparation of the Sustainability Report in accordance with the applicable criteria, as explained on page 65 in the Sustainability Report, and are the parts of the Sustainability Reporting Guidelines (published by The Global Reporting Initiative, GRI) which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility includes the internal control relevant to the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

#### Responsibilities of the auditor

Our responsibility is to express a conclusion on the Sustainability Report based on the procedures we have performed. We conducted our engagement in accordance with RevR 6 Assurance of Sustainability Reports issued by FAR. The engagement includes a limited assurance engagement on the complete Sustainability Report and audit of environmental data – fossil fuels and grid supply – on page 58. The objective of an audit is to obtain reasonable assurance that the information

is free of material misstatements. A reasonable assurance engagement includes examining, on a test basis, evidence supporting the quantitative and qualitative information in the Sustainability Report. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards in Sweden. Hence, the conclusion based on our limited assurance procedures does not comprise the same level of assurance as the conclusion of our reasonable assurance procedures. Since this engagement is combined, our conclusions regarding reasonable assurance and limited assurance are presented separately below.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our procedures are based on the criteria defined by the Board of Directors and the Group Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

#### Conclusions

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Group Management

In our opinion the information in the Sustainability Report which has been subject to our reasonable assurance procedures have, in all material respects, been prepared in accordance with the criteria defined by the Board of Directors and Group Management.

Stockholm, February 23, 2017

Ernst & Young AB

Hamish Mabon Authorized Public Accountant Auditor in charge

Outi Alestalo Expert member of the Swedish Institute of Authorized Public Accountants (FAR)

# GRI index

SCA's 2016 Sustainability Report adheres to Global Reporting Initiative guidelines, G4 Core. The following index shows where information on the GRI indicators can be found: this Sustainability Report (SR), the Annual Report (AR), or SCA's Group website (sca.com/ GRI), which contains the corresponding GRI index with direct links. This is the ninth report in which SCA applies GRI guidelines, which has been confirmed by EY.

#### **General Standard Disclosures**

|           | Description  | Page               | Comment/Omission |
|-----------|--|--------------------|------------------|
| Strategy  | & Analysis   | 1 101              |                  |
| G4-1      | Statement from the CEO and the Board of Directors  | SR 4-5             |                  |
|           | ational Profile  |                    |                  |
| G4-3      | Name of the organization   | SR 72              |                  |
| G4-4      | Primary brands, products, and services   | AR 2, 48, 54       |                  |
| G4-5      | Location of headquarters   | SR 72              |                  |
| G4-6      | Countries in which operations are located  | AR 120             |                  |
| G4-7      | Nature of ownership and legal form   | AR 33–35           |                  |
| G4-8      | Markets served   | AR 48, 54, 60–61   |                  |
| G4-9      | Scale of the reporting organization  | SR 2-3, AR 2-3     |                  |
| G4-10     | Breakdown of workforce   | SR 64              |                  |
| G4-11     | Coverage of collective bargaining agreements   | SR 48              |                  |
| G4-12     | Description of supply chain  | SR 38, 44–45       |                  |
| G4-13     | Significant changes during the reporting period  | AR 39-40           |                  |
| G4-14     | Addressing the precautionary approach or principle   | SR 41, 49, AR 76   |                  |
| G4-15     | External charters, principles or initiatives endorsed  | SR 3-5             |                  |
| G4-16     | Memberships in associations  | SR3                |                  |
| Identifie | d Material Aspects & Boundaries  |                    |                  |
| G4-17     | Report coverage of the entities in the consolidated financial statements                               | SR 65              |                  |
| G4-18     | Process for defining the report content and the aspect boundaries                                      | SR 37              |                  |
| G4-19     | Material aspects identified  | SR 6-7, 37         |                  |
| G4-20     | Aspect boundary within the organisation  | SR 65, sca.com/GRI |                  |
| G4-21     | Aspect boundary outside the organisation   | SR 65, sca.com/GRI |                  |
| G4-22     | The effect of restatements of information provided in previous reports                                 | SR 65              |                  |
| G4-23     | Significant changes in the scope and aspect boundaries from previous report                            | SR 65              |                  |
| Stakeho   | Ider Engagement  | -                  | 1                |
| G4-24     | List of stakeholder groups engaged   | SR 36              |                  |
| G4-25     | Identification and selection of stakeholders   | SR 7, 35           |                  |
| G4-26     | Approaches to stakeholder engagement   | SR 35              |                  |
| G4-27     | Response to key topics and concerns raised   | SR 35-36           |                  |
| Report F  | Profile  | -                  |                  |
| G4-28     | Reporting period   | SR 65              |                  |
| G4-29     | Date of most recent previous report  | SR 65              | March 2016.      |
| G4-30     | Reporting cycle  | SR 65              |                  |
| G4-31     | Contact point for questions  | SR 72              |                  |
| G4-32     | 'In accordance' option chosen  | SR 65              |                  |
| G4-33     | Policy and current practice regarding external assurance   | SR 65              |                  |
| Governa   | nce  |                    |                  |
| G4-34     | Governance structure   | SR 54–55, AR 66–67 |                  |
| G4-35     | The process for delegating authority for sustainability topics   | SR 54, AR 67       |                  |
| G4-36     | Executive-level positions with responsibility for sustainability topics                                | SR 54              |                  |
| G4-37     | Processes for consultation between stakeholders and the highest governance body                        | SR 35, AR 66       |                  |
| G4-38     | Composition of the highest governance body and its committees  | AR 66-69, 72-73    |                  |
| G4-39     | Position of the chair of the board of directors  | AR 66, 72          |                  |
| G4-40     | Nomination and selection processes for the highest governance body and its committees                  | AR 68              |                  |
| G4-41     | Report processes for the highest governance body to ensure conflict of interest is avoided and managed | AR 68              |                  |
| G4-42     | Highest governance body's role in setting purpose, values, and strategy                                | SR 54, AR 66-67    |                  |
| Ethics &  | Integrity  |                    |                  |
| G4-56     | Values, principles, standards, code of conduct and code of ethics                                      | SR 20, 42          |                  |
|           |  |                    |                  |

SCA Sustainability Report 2016 67

## **Specific Standard Disclosures**

| Material Aspects                      | DMA* and indicator | Description  | Page                      | Comment/Omission  | Topic in SCA's<br>Materiality Analysis    |  |  |
|---------------------------------------|--------------------|--|---------------------------|---|---|--|--|
| Economic                              |                    |  | - 3-                      |   |   |  |  |
| Economic Performance                  | G4-DMA             | DMA  | SR 38-39, AR 76           |   | Risk management                           |  |  |
|                                       | G4-EC1             | Direct economic value generated and distributed  | SR 38                     |   | Resource efficiency                       |  |  |
|                                       | G4-EC2             | Risks and opportunities due to climate change  | SR 26-29, AR 11, 77       | SCA reports into the Carbon Disclosure Project's (CDP) climate change survey and the responses are publicly available on www.cdp.net.   |   |  |  |
| ndirect Economic                      | G4-DMA             | DMA  | SR 38-39, AR 76           |   | Risk management                           |  |  |
| Impacts                               | G4-EC8             | Significant indirect economic impacts  | SR 16-18, 24-25           |   |   |  |  |
| Environmental                         | ,                  |  | ,                         | ,   | ,   |  |  |
| Energy                                | G4-DMA             | DMA  | SR 49–50, AR 11           | SCA adheres to the EU Industrial Emissions Directive (IED) BREF.  | Resource efficiency                       |  |  |
|                                       | G4-EN3             | Energy consumption within the organization   | SR 56, 58                 | Conversion factors from IEA 2014.   |   |  |  |
|                                       | G4-EN4             | Energy consumption outside of the organization   | SR 56, 58                 | Conversion factors from IEA 2014.   |   |  |  |
|                                       | G4-EN6             | Reduction of energy consumption  | SR 49                     |   |   |  |  |
| Water                                 | G4-DMA             | DMA  | SR 32, 53                 |   | Water use and water<br>purification       |  |  |
| D: 1: 1:                              | G4-EN8             | Total water withdrawal by source   | SR 32–33, 53, 58          |   |   |  |  |
| Biodiversity                          | G4-DMA<br>G4-EN12  | DMA  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside patents of the control of the | SR 30, 51–52<br>SR 30, 52 |   | Forest assets                             |  |  |
| Emissions                             | G4-DMA             | protected areas  DMA   | SD 26 40                  | Emission rights are not included in SCA's CO., target   | Resource efficiency                       |  |  |
| LITHOSIUNO                            | G4-DMA<br>G4-EN15  | Direct greenhouse gas (ghg) emissions (scope 1)  | SR 26, 49<br>SR 58-63     | Emission rights are not included in SCA's CO <sub>2</sub> target.   | Carbon emissions                          |  |  |
|                                       | G4-EN16            | Energy indirect greenhouse gas (ghg) emissions (scope 1)   | SR 58-63                  |   | Water use and water                       |  |  |
|                                       | G4-EN17            | Other indirect greenhouse gas (ghg) emissions (scope 2)  | SR 56                     | SCA reports emissions from transport activities.  | purification                              |  |  |
|                                       | G4-EN18            | Greenhouse gas (ghg) emissions intensity   | SR 26                     | SCA's target for CO <sub>2</sub> emission in relation to production is reported as percentage change in relation to base year.  |   |  |  |
|                                       | G4-EN21            | Nox, sox, and other significant air emissions  | SR 58-63                  |   |   |  |  |
| Effluents and Waste                   | G4-DMA             | DMA  | SR 32, 49, 51             |   | Resource efficiency                       |  |  |
|                                       | G4-EN22            | Total water discharge by quality and destination   | SR 53, 56-63              |   | Water use and water<br>purification       |  |  |
|                                       | G4-EN23            | Total weight of waste by type and disposal method  | SR 53, 56-63              | SCA does not subdivide its waste in accordance with the categories suggested by GRI.  |   |  |  |
| Products and Services                 | G4-DMA             | DMA  | SR, 14–15, 40–41          |   | Innovation                                |  |  |
|                                       | G4-EN27            | Mitigation of environmental impacts of products and services   | SR 14–15, 26, 31, 40–41   | Impacts in line with GRI categories are part of SCA's Life Cycle Assessments.   | Digital excellence<br>Resource efficiency |  |  |
| Transport                             | G4-DMA<br>G4-EN30  | DMA Significant environmental impacts of transportation  | SR 56<br>SR 56            | SCA reports primarily transport emissions to air (CO <sub>2</sub> ,   | Carbon emissions                          |  |  |
|                                       |                    |  |                           | SO <sub>2</sub> , NOx).   |   |  |  |
| Environmental<br>Grievance Mechanisms | G4-DMA<br>G4-EN34  | DMA  Grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms   | SR 42, 53<br>SR 53        |   | Business ethics<br>Transparency           |  |  |
| Social                                |                    | and received a reagritornial groval recition in a morning  |                           |   | ļ   |  |  |
|                                       |                    |  |                           |   |   |  |  |
| Labor Pratices and Dec                |                    | DMA  | OD 47, AD 04              |   | [ ]                                       |  |  |
| Employment                            | G4-DMA             | DMA  | SR 47, AR 31              | 5 11 ( 1 1  | Human capital                             |  |  |
|                                       | G4-LA1             | New employee hires and employee turnover   | SR 64                     | Breakdown of employees joining the company is available at a local level.   |   |  |  |
| Labor/Management                      | G4-DMA             | DMA  | SR 47, AR 31              |   | Human capital                             |  |  |
| Relations                             | G4-LA4             | Minimum notice periods regarding operational changes   | SR 48                     |   |   |  |  |
| Occupational Health<br>and Safety     | G4-DMA             | DMA  | SR 22–23, 46              | In some countries, SCA's activities to promote a healthy and safe work environment also include family and community members. However, this data is not collected at a Group level. | Health and Safety                         |  |  |
|                                       | G4-LA5             | Percentage of total workforce represented in formal joint management-worker health and safety committees   | SR 46                     |   |   |  |  |
|                                       | G4-LA6             | Injuries, lost days, absenteeism and fatalities and total number of work-related fatalities  | SR 46                     | SCA's consolidated data includes the most important safety KPIs. Additional data is available at local sites. SCA does not record safety data, for example, on the basis of gender. |   |  |  |
|                                       | G4-LA7             | Workers with high incidence or high risk of diseases related to their occupation   |                           | A detailed survey of the various risks is performed at each site.   |   |  |  |
|                                       | G4-LA8             | Health and safety topics covered in formal agreements with trade unions  | SR 46                     |   |   |  |  |
| Training and Education                | G4-DMA             | DMA  | SR 42, 47                 |   | Human capital                             |  |  |
|                                       | G4-LA9             | Average hours of training per year per employee  | SR 47                     | Training hours are divided equally between men and women. Data is not broken down according to employee categories.   |   |  |  |
|                                       | G4-LA11            | Percentage of employees receiving regular performance and career development reviews   | SR 47                     | Although SCA has statistical data at an individual level, disclosure relates to the total percentage of employees, since this is the internal KPI used.                             |   |  |  |
| Diversity and Equal                   | G4-DMA             | DMA  | SR 38, 47, AR 31          |   | Human capital                             |  |  |
| Opportunity                           | G4-LA12            | Composition of governance bodies and employee breakdown  | SR 47-48, 64, AR 66-67    |   |   |  |  |
| Equal Remuneration for                | G4-DMA             | DMA  | SR 38, 47, AR 31          |   | Human capital                             |  |  |
| Women and Men                         | G4-LA13            | Ratio of basic salary and remuneration of women to men   | SR 38                     | The calculation is based on average salaries in the four career levels with the highest number of permanent employees. Deviations exist within career levels.                       |   |  |  |

<sup>\*</sup> Disclosure on Management Approach

| Material Aspects                 | DMA* and indicator | Description   | Page            | Comment/Omission   | Topic in SCA's<br>Materiality Analysis  |  |  |
|----------------------------------|--------------------|---|-----------------|--|---|--|--|
| Supplier Assessment G4-DMA       |                    | DMA   | SR 20, 38       |  | Supply-chain efficience                 |  |  |
| for Labor Practices              | G4-LA14            | Percentage of new suppliers that were screened using labor practices criteria                                 | SR 44           | SCA's global supplier base must commit to the SCA<br>Global Supplier Standard. New suppliers are audited<br>relative to this standard by SCA staff or third-party<br>auditors. |   |  |  |
|                                  | G4-LA15            | Significant actual and potential negative impacts for labor practices in the supply chain and actions taken   | SR 45-46        |  |   |  |  |
| Labor Practices                  | G4-DMA             | DMA   | SR 20, 42       |  | Business ethics                         |  |  |
| Grievance Mechanisms             | G4-LA16            | Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms | SR 42           |  | Transparency                            |  |  |
| Human Rights                     |                    |   |                 |  |   |  |  |
| Investment                       | G4-DMA             | DMA   | SR 43, AR 78    |  | Business ethics                         |  |  |
|                                  | G4-HR1             | Human rights screening or clauses included in significant investment agreements                               | SR 44-45        |  | Transparency                            |  |  |
|                                  | G4-HR2             | Employee training on human rights   | SR 42           | SCA measures Code of Conduct training, including in the area of human rights, as a percentage of total SCA staff who receive training.   |   |  |  |
| Non-discrimination               | G4-DMA             | DMA   | SR 42           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
|                                  | G4-HR3             | Actions taken in incidents of discrimination  | SR 42           |  | Transparency                            |  |  |
| Freedom of Association           | G4-DMA             | DMA   | SR 42           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
| and Collective Bargaining G4-HR4 |                    | Supporting right to freedom of association and collective bargaining agreement in risk areas                  | SR 42           | No SCA sites were identified as high-risk sites by Sedex.  | Transparency                            |  |  |
| Child Labor                      | G4-DMA             | DMA   | SR 42           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
|                                  | G4-HR5             | Measures taken to eliminate child labor in risk areas   | SR 20-21, 42-44 | No SCA sites were identified as high-risk sites by Sedex.  | Transparency                            |  |  |
| Forced or Compulsory             | G4-DMA             | DMA   | SR 42           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
| Labor                            | G4-HR6             | Measures taken to eliminate forced or compulsory labor in risk areas  | SR 20-21, 42-44 | No SCA sites were identified as high-risk sites by Sedex.  | Transparency                            |  |  |
| Supplier Human Rights            | G4-DMA             | DMA   | SR 44           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
| Assessment                       | G4-HR10            | Percentage of new suppliers that were screened using human rights criteria                                    | SR 44-45        |  | Transparency<br>Human Rights            |  |  |
|                                  | G4-HR11            | Significant actual and potential negative human rights impacts in the supply chain                            | SR 44-45        |  |   |  |  |
| Human Rights                     | G4-DMA             | DMA   | SR 42           |  | Business ethics                         |  |  |
| Grievance Mechanisms             | G4-HR12            | Grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms      | SR 42           |  | Transparency<br>Human Rights            |  |  |
| Society                          |                    |   |                 |  |   |  |  |
| Anti-Corruption                  | G4-DMA             | DMA   | SR 43, AR 9     | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
|                                  | G4-SO3             | Operations assessed for risks related to corruption and the significant risks identified                      | SR 42-43        |  | Transparency                            |  |  |
|                                  | G4-S05             | Actions taken in response to confirmed incidents of corruption  | SR 42           |  | 1                                       |  |  |
| Anti-competitive<br>Behavior     | G4-DMA             | DMA   | SR 42           | Included in SCA's Code of Conduct.   | Business ethics                         |  |  |
|                                  | G4-S07             | Anti-trust and monopoly court cases   | SR 43-44        |  | Transparency                            |  |  |
| Grievance Mechanisms             | G4-DMA             | DMA   | SR 42, 53       |  | Business ethics<br>Transparency         |  |  |
| for Impacts on Society           | G4-S011            | Grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms        |                 |  |   |  |  |
| Product Responsibility           |                    |   |                 |  |   |  |  |
| Customer Health and              | G4-DMA             | DMA   | SR 40-41        |  | Product safety                          |  |  |
| Safety                           | G4-PR1             | Assessment of health and safety impact of products  | SR 41           |  |   |  |  |
| Product and Service              | G4-DMA             | DMA   | SR 40-41        |  | Customer and                            |  |  |
| Labeling                         | G4-PR3             | Product information required by procedures  | SR 41           |  | consumer satisfaction<br>Product safety |  |  |

SCA Sustainability Report 2016 69

<sup>\*</sup>Disclosure on Management Approach

# Glossary

**Anaerobic treatment** Anaerobic wastewater treatment uses biological agents in an oxygen-free environment to remove impurities from wastewater.

**Antitrust, competition laws** Laws and regulations to prevent a restriction of competition and the formation of monopolies that can threaten free competition in trade and business.

**AOX, Absorbable organic halogens** Expresses the amount of chlorine-bound organic substances. Some of these substances accumulate in fish and fish-eating birds.

**ASR (Accident Severity Rate)** The severity of accidents defined as the number of days lost due to accidents (DLA) in relation to the number of lost time accidents (LTA). Refer also to FR, IR and Lost Time Accidents (LTA).

**BAT, Best Available Technology** Officially used terminology to describe the state-of-the-art technology that industry should use in the field of activity concerned (see IED directive and BREF).

**Biodiversity** A term describing the multitude of life forms and species (flora and fauna) in an ecosystem. An ecosystem is a biological community living in a particular physical environment.

**Biofuel** Renewable fuel from wood and process residues.

BOD, Biochemical oxygen demand Water emission factor which describes the amount of oxygen consumed during biodegradation of dissolved organic matter in effluent water, without describing the specific substances present. High BOD values indicate depletion of the normal oxygen content of the water environment. It is measured over seven days in SCA's Swedish mills and five days in the rest of Europe, in accordance with national legislative systems.

**BPA** (Business Practice Audit) An audit of business ethics within SCA carried out by the internal audit function. The audit reviews compliance with policies and relationships with customers, suppliers and authorities.

**BREF** Best Available Technology Reference Document. This document identifies BAT (Best Available Technology) for a number of sectors selected by the EU, including the pulp and paper industry.

**Bribery** Is the giving or receiving of any undue reward by or to any person to influence their behavior in a manner contrary to the principles of honesty and integrity.

Carbon sink As they grow, forests transform gaseous carbon into solid form, thereby absorbing  $CO_2$  whilst simultaneously producing oxygen. Forests, agricultural land and the world's oceans are considered to be "carbon sinks" by current science.

**Chain-of-Custody** The traceability of the origins of a product through all its transformations from raw material to finished product. In the SCA context, Chain-of-Custody certification links SCA's products with its FSC- and PEFC-certified forests.

**Chemical pulp** Pulp from wood fibers processed chemically, normally by cooking.

Chemical Thermo Mechanical Pulp, CTMP A high-yield pulp (about 90–95% yield from the wood) which is obtained by heating and then grinding chemically pre-treated spruce chips in refining machinery.

**Child Labor** Refers to the employment of workers who do not meet the applicable national minimum legal age requirement.

**CHP** See Co-generation or Combined Heat and Power

**Circular economy** Economic models in a company, society or an organization where a circular closed-loop is used instead of a linear model.

Climate Change Also defined as global warming. Human activity contributes to the warming of the global environment and its resulting effects, which range from higher temperatures to eccentric weather patterns and melting of the ice caps.

 ${
m CO_2}$  biogenic The carbon dioxide derived from combustion of biofuel. It is calculated from the carbon content of wood.

CO<sub>2</sub>, Carbon dioxide A gaseous compound emitted naturally through geological activity during the decomposition process and through human activity. Industry and transport and heating/cooling are currently the largest emitters of CO<sub>2</sub>.

CO<sub>2</sub> fossil The carbon dioxide derived from combustion of fossil fuels. It is calculated from the carbon content of each fuel.

COD, Chemical oxygen demand Water emission factor which describes the amount of oxygen consumed when dissolved matter in effluent water oxidizes. High COD values can indicate a risk of depletion of the normal oxygen content in the water environment.

**Code of Conduct** Is a formal statement of the values and business practices of a company. A code is a statement of minimum standards, together with a pledge by the company to observe them and to also require its contractors, subcontractors and suppliers, to observe them.

Code of Conduct Audit An audit of compliance with the Code of Conduct at SCA units, based on the content of the Code and the SA8000 standard.

**Co-generation or Combined Heat and Power, CHP** Combined production of electricity and thermal energy. Co-generation has a high total efficien-

**Conflict minerals** A conflict resource is a raw material that is extracted in a conflict area and the sale of which finances continued fighting, or enables international criminality or serious violations of human rights. The most common conflict minerals are cassiterite, wolframite, coltan and gold ore.

**Dust** Particles in the flue gas created during com-

**Effluent water** Water discharged to water courses after treatment.

**Electric boiler** Electricity supplied for thermal heat (production), for boilers and heat pumps, measured at the site and converted into GJ.

**Environmental Management System** The part of the overall management system which includes the structure, practices, procedures and resources for the systematic implementation of the organization's own environmental policy.

**EPD, Environmental Product Declaration**Quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards but not excluding additional environmental information.

**ESAVE** Structured energy-saving program introduced by SCA in its energy-intensive manufacturing units in 2003. Its aim is to substantially reduce the consumption of energy in production units.

ETS, Emission Trading Scheme (or System)
Greenhouse gas emission allowance trading scheme for the cost-effective reduction of such emissions in the European Union.

**Forced labor** This includes indentured, debt bondage or involuntary labor of any kind.

Fossil fuel Coal, fuel oil and natural gas.

Freedom of Association Refers to the right of employees to lawfully join associations of their own choosing, peacefully associate, organize or bargain collectively.

FR, Frequency Rate The number of accidents/incidents per million hours worked.

**Fresh wood fiber** Also referred to as virgin fiber. First generation use of raw material derived from wood.

FSC®, Forest Stewardship Council An international organization promoting responsible forest management. FSC has developed principles for forest management used for certifying the management of forest holdings, and a system of tracing, verifying and labelling timber and wood products based on FSC-certified forests. SCA is an active supporter of FSC.

FSC's standard for Controlled Wood This standard makes it possible for producers to mix FSC-certified material with uncertified material under controlled conditions. The traceability standard comprises strict rules on how and to what extent mixing may take place. The uncertified material is required to come from controlled and acceptable sources.

**Grid supply** The electricity supplied from the national grid.

**GWh Gigawatt hours** Unit of energy measurement (electricity and heat). 1GWh=1 million kWh.

**Hazardous waste** Material disposed of by authorized contractors, as defined by national laws.

**Human Rights** Are based on the recognition of the inherent dignity and the equal and inalienable rights of all members of the human family, and are the foundation of freedom, justice, and peace in the world. They are defined in the Universal Declaration of Human Rights (1948).

**IED (Industry Emissions Directive)** The EU Directive on integrated pollution prevention and control

**Incidence Rate, IR** Number of incidents per 200,000 working hours.

**Inorganic material** Covers inorganic fillers and coating materials supplied to a site calculated at 100% dry substances (ds).

International Labor Organization (ILO) The International Labor Organization is a United Nations Agency, which establishes Conventions on Labor standards that are binding for member states when ratified. There are over 150 ILO Conventions, eight of which are "Core Conventions" since they embody fundamental human rights and set minimum labor standards.

ISO 14001 The standard published by the International Standards Organization, specifying the requirements of an environmental management system. All SCA European mills are certified ISO 14001

**Kraftliner** Packaging paper primarily made of fresh wood

**Leach/Leachate** The percolation of liquids through the earth. The leaching natural process can pollute underground water or surface water, which is situated below a retention basin of wastewater, or a landfill, which is biologically active, for example.

**Life cycle assessment, LCA** A method of assessing the environmental impact of a product, taking account of its entire lifespan from raw material extraction to waste disposal.

**LTA, Lost Time Accidents** Accidents that cause the absence of an employee from work.

**LWC paper, Light Weight Coated** LWC paper is a coated paper with a high mechanical pulp content. Used for high-quality magazines and advertising materials with demanding color-printing requirements.

**Main site** A production facility that is wholly owned by SCA and that has 100 or more employees.

**Mechanical pulp** Debarked wood that is ground or chipped for mechanical refining to separate the fibers that form pulp.

N, Nitrogen A chemical element, also present in wood, that is necessary for plant and animal life. Excess N in water can cause major increases in the amount of algae, which can lead to oxygen deficiency when the algae decompose.

**Newsprint** Paper for newspapers produced from mechanical pulp based on fresh fiber or recovered fiber.

**Non-Governmental Organizations (NGOs)** Are national, international, and community-based groups that raise awareness about social, environmental, community and human rights issues.

 $NO_X$  as  $NO_2$  The nitrogen oxides NO and  $NO_2$ , calculated as  $NO_2$  derived from combustion. Where  $NO_X$  is not measured, a standard value of 100 mg/MJ fuel is used.

**OHSAS 18001** Management system standard for occupational health and safety.

**Organic fossil material** Covers crude-oil-based materials, such as super-absorbents and adhesives calculated at 100% dry substances.

PEFC™, Programme for the Endorsement of Forest Certification An international organization promoting responsible forest management and certification.

P, Phosphorus A chemical element, also present in wood, that is necessary for plant and animal life. Excess P in water can cause nutrient enrichment

**Post-consumer waste** Waste generated after a product has been used, for example, used diapers, feminine care products and tissue.

**Production waste** To SCA, waste comprises only materials leaving its production units that cannot be used for any further useful purpose. Recovered paper and fiber are excluded, since they form part of SCA's main raw materials.

**REACH, Regulation, Evaluation, Authorization and Restriction of Chemicals** European regulation (1,907/2,000/EC) which address the production and (safe) use of chemical substances and their potential impact on both human health and the environment. Some 30,000 chemicals will have to be registered after testing with the central European Chemical Agency (ECHA) in Helsinki. Companies will have to obtain authorization to use hazardous chemicals.

**RMS** SCA's Resource Management System: a means of collecting and collating all environmental data and resource utilization within the SCA Group.

**Recovered fiber** Paper-making fiber derived from a secondary source, such as used paper and board, used for recycling.

**Renewable** All materials which can be re-grown or produced without depletion of natural resources.

Science-based carbon targets The Science Based Targets initiative is a partnership between CDP (formerly known as the Carbon Disclosure Project), the UN's Global Compact, the WRI (World Resources Institute) and the WWF. Science Based Targets helps companies to determine the level of decarbonization required to keep global temperature increase below 2 degrees Celsius, as agreed at the COP21 UN climate change conference in Paris in 2015.

Sedex (Supplier Ethical Data Exchange) A non-profit membership organization which promotes responsible and ethical supply chains. Companies can report and share information about health and safety, working conditions, the environment and business ethics in a global database.

**SDG** (Sustainable Development Goals) UN's 17 Sustainable Development Goals, including 169 intermediate targets, which were adopted in 2015. They replace the Millennium Development Goals and shall be achieved by 2030.

 ${\bf SO_2}$  Total sulfur calculated as  ${\bf SO_2}$  from processes and combustion at the site. Where  ${\bf SO_2}$  is not measured, the input sulfur in the fuel is calculated.

**SRI, Socially responsible investment** A method of selecting stocks for investment using criteria related to a company's environmental, social and ethical performance.

**Sludge** Residue from the production of paper; consists of inert materials, mainly small fiber debris, filler and other inert materials. It used to be sent to landfill. Nowadays, used as 'new' raw material and incinerated for energy recovery.

**Solid-wood products** Wood sawn into various dimensions and sizes for furniture, joinery and construction uses.

**Stakeholders** Groups of people with whom an organization has active relationships, and with whom effective dialog is necessary to the functioning of the business. Shareholders, authorities, customers, employees and professional associations are all stakeholders in SCA's business activities.

**Suspended solids** Particles that are not dissolved in the effluent water.

**TCF, Totally Chlorine Free** Paper pulp which is bleached without using chlorine in any form.

**TMP, Thermo Mechanical Pulp** A high-yield pulp (about 90–95% yield from the wood) which is obtained by heating spruce chips and then grinding them in refiners.

TJ, Terajoule A unit used to measure energy (fuel).

**Tissue** Creped soft paper which is the basis for hygiene products such as napkins, toilet paper and towels, and toweling products for institutions, hotels. etc.

**TWh, TeraWatt hour** Unit of energy measurement. 1 TWh=1,000 million KWh

**UN Global Compact** A strategic platform for sustainable business. Today, Global Compact is the world's largest voluntary initiative with more than 12,000 signatories from 145 countries who have committed to work according to the Global Compact's ten principles concerning human rights, labor, the environment and anti-corruption.

**Water** Represents the sum of surface water, ground water and tap water for processes and cooling purposes.

Water stress Occurs when the amount of good quality water is no longer enough to cover the community's needs. The definition that is usually used for water stress is if the amount of fresh water available in a country is less than 1,700 cubic meters per person and year. This can be compared with the limits for chronic water scarcity (1,000 cubic meters per person and year) and absolute water scarcity (500 cubic meters per person and year).

## Addresses

#### SVENSKA CELLULOSA AKTIEBOLAGET SCA (publ)

PO Box 200, SE-101 23 STOCKHOLM, Sweden Visiting address: Klarabergsviadukten 63 Tel +46 8 788 51 00, fax +46 8 788 53 80 Corp. Reg. No.: 556012-6293 www.sca.com

#### **Business units**

#### SCA INCONTINENCE CARE

SE-405 03 GOTHENBURG Sweden Visiting address: Mölndals bro 2, Mölndal Tel +46 31 746 00 00

#### **SCA CONSUMER GOODS**

Adalperostrasse 31 DE-85737 ISMANING Germany Tel +49 89 9700 6 600

### SCA AfH PROFESSIONAL

**HYGIENE** 2929 Arch Street Suite 2600 PHILADELPHIA, PA 19104 US Tel +1 610 499 3700

#### SCA LATIN AMERICA

Javier Barros Sierra 555 5to Piso Col. Santa Fe, Del. Alvaro Obregon, Mexico D.F. 01210 Distrito Federal Mexico Tel +52 55 5002 8500

#### SCA FOREST PRODUCTS

SE-851 88 SUNDSVALL Sweden Visiting address: Skepparplatsen 1 Tel +46 60 19 30 00, +46 60 19 40 00

#### GHC

(GLOBAL HYGIENE CATEGORY) SE-405 03 GOTHENBURG

Sweden Visiting address: Mölndals bro 2, Mölndal Tel +46 31 746 00 00

#### **GHS TISSUE** (GLOBAL HYGIENE SUPPLY TISSUE)

Tel +49 89 9700 6 600

Adalperostrasse 31 DE-85737 ISMANING Germany

#### **GHS PERSONAL CARE** (GLOBAL HYGIENE SUPPLY PERSONAL CARE)

SE-405 03 GOTHENBURG Sweden Visiting address: Mölndals bro 2, Mölndal

Tel +46 31 746 00 00

## GBS

(GLOBAL BUSINESS SERVICES) PO Box 200

SE-101 23 STOCKHOLM Sweden Visiting address: Klarabergsviadukten 63 Tel +46 8 788 51 00

#### **Contact persons**

Kersti Strandqvist Senior Vice President, Group Sustainability E-mail: kersti.strandqvist@sca.com Tel: +46 8 788 52 24

Patrik Isaksson Vice President, Environmental Affairs E-mail: patrik.isaksson@sca.com Tel: +46 8 788 51 04

Per Brattberg Director, Sustainability Reporting E-mail: per.brattberg@sca.com Tel: +46 8 788 52 58

Karin Henriksson Vice President, Compliance & Ethics E-mail: karin.henrikson@sca.com Tel: +46 730 95 85 56

Director, Social Affairs E-mail: lulu.li@sca.com Tel: +46 8 788 52 94





















# Hygiene Matters – an initiative to promote a global dialog concerning hygiene, health and well-being

Poor hygiene and sanitation constitute a barrier for the health, well-being, livelihood and development of millions of people. SCA has amassed knowledge and initiated discussions concerning the role and significance of hygiene over a period of many years and via its Hygiene Matters initiative since 2008. Through the Hygiene Matters initiative, SCA wants to increase awareness of the importance of hygiene and its link to health and well-being and break the taboos about issues such as menstruation and hygiene. SCA is helping to raise hygiene standards worldwide through its business

model and hygiene solutions. Two integral aspects of the Hygiene Matters initiative are a global consumer survey and the Hygiene Matters report. The 2016/2017 report looked at the economic value of investing in hygiene, taboos and stigma surrounding menstruation and incontinence, as well as innovative solutions for the future. For the first time, the report was produced in collaboration with the WSSCC (Water Supply and Sanitation Collaborative Council). The WSSCC is the only UN body that works solely with sanitation and hygiene issues.