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FOREWORD

We are 15 companies representing different industries. Together in the Haga Initiative, we have reduced our emissions and continue to do so. We see that we benefit from being proactive and taking a leading role. All companies in the Haga Initiative have ambitious programmes that take us closer to zero net emissions by 2030.

Reducing emissions is not a burden, on the contrary! When the Haga Initiative asked 300 Swedish companies how climate action affects profitability, 85 percent responded that it has a positive impact on brand and customer loyalty. Only 15 percent see that such efforts leads to increased costs and 97 percent sees no, or a positive, impact on the income statement. We can only agree - to reduce emissions creates new opportunities and strengthen our businesses.

When we started the Haga Initiative eight years ago, we set goals to reduce emissions by at least 40 percent by 2020. Several companies have already achieved the target and set new ones. Last year we decided that our new goal by 2030 is to reach net zero emissions and, if possible, become fossil fuel free in our own operations (or contribute to emission reductions in our value chain that correspond to our own emissions). These are ambitious goals.

But there are still challenges. Among other things, to include the entire supply chain (scope 3), to create dialogue with customers and to strengthen our business cooperation is even more important in the future. By setting goals and being transparent, we show how the goals can be achieved. We want to see more companies adopting their own climate targets and be inspired to make decisions on halving emissions, in accordance with Global Carbon Law (read more under the heading Carbon Law below). Together we are stronger!

The low-carbon transition creates new business opportunities and strengthens our competitiveness and profitability. We hope that more companies see opportunities in becoming winners in the transition.

Lars Andersson.

Director Nordics AkzoNobel

Klas Balkov CEO Axfood

Pierre Decroix CFO Coca-Cola

Jens Henriksson

CEO Folksam

European Partners Sverige

Anders Egelrud

CEO Stockholm Exergi

Jan Kilström CEO Green Cargo

Sofia Hyléen Toresson CEO HKScan Sverige

Johan Skoglund CEO JM

Per Olof Nyman

CEO Lantmännen

Lars Appelqvist

CEO Löfbergs

Thomas Kelly CEO McDonald's Sverige

Petter Holland

CEO Preem

Ulf Troedsson

CEO Siemens

Kristofer Sundsgård CEO Stena Recycling

Per-Olof Wedin CEO Sveaskog

THE HAGA INITIATIVE'S GREENHOUSE GAS EMISSIONS DISCLOSURE

The Haga Initiative's vision is a profitable business sector without climate impact. The companies realise that climate effort is profitable and want to inspire other companies to do the same.

The Haga Initiative wants to show opportunities to reduce climate impact and at the same time work actively on creating the right conditions for the business sector to contribute. Business has a central role to play when it comes to acting against climate change, they are well positioned to drive development in the right direction. Companies can be innovative and bring about rapid changes.

An initial step in the right direction is knowing the company's status by calculating its greenhouse gas emissions. In addition to calculating and continuously reporting the emissions, each company also report its most important actions taken in 2017 which resulted in reduced climate impact. To update the world on the company's climate impact is an important act to create customer demand towards climate-smart products and goods, as well as to show other companies that climate issues are an important part of corporate responsibility.

When the Haga Initiative was founded in 2010, climate targets were set to reduce emission by at least 40 percent by 2020 compared to a post-1990 base year of their choice. The member companies' climate targets cover the Haga scope as a minimum. The Haga scope is defined as emissions in scope 1, scope 2 and business travel in scope 3. Many of the companies have reached, or are on track to reach, the target for 2020. When the target was set, it was ambitious but the progression to reduce emissions has been much faster than many expected.

When the climate target was set for 2020, the full scope 3 standard (Corporate Value Chain Accounting and Reporting Standard) did not yet exist. Today, there is an increasing focus on greenhouse gas emissions throughout the supply chain: upstream and downstream. According to Greenhouse Gas Protocol, more than 70 percent of total emissions for an average company are in scope 3. For the companies in the Haga Initiative as well as for other companies, continuously accounting for and reporting on the significant emissions in scope 3 is a major challenge. Companies in the Haga Initiative recognise the importance of more comprehensive reporting and thus greater transparency for ensuring a fair description of the companies' total environmental impact.

During the spring of 2017 the The Haga Initiative therefore set new targets by 2030. At that time the Cross-Party Committee on Environmental Objectives presented a climate law proposal to the government, with net zero emissions through 2045, of which 85 percent of the emissions reductions occur within Swedish borders. The Haga initiative's target is to reduce the emissions to net zero emissions by 2030 in scope 1, purchased energy in scope 2 should be renewable or recycled and emissions in scope 3 are to be mapped out, identified and reduced. In this disclosure, the targets are reported by 2020. As an initial step to monitor the targets for 2030, we have chosen to report the most significant emissions in scope 3 not covered by the present climate target.

ABOUT THE HAGA INITIATIVE

The Haga Initiative consists of fifteen well-known companies: AkzoNobel, Axfood, Coca-Cola European Partners Sverige, Folksam, Green Cargo, Lantmännen, Löfbergs, JM, McDonald's, HKScan Sweden, Preem, Siemens, Stena Recycling, Stockholm Exergi and Sveaskog.

The member companies of the Haga Initiative make the following commitments:

- ➤ A climate-committed CEO/ management that takes active responsibility for the climate.
- A broad-based, ambitious climate strategy.
- Regular measurement and accounting of the company's climate impact according to the GHG Protocol.
- A clearly diminishing emissions trend.
- A defined emissions target in the company to reduce CO₂e by at least 40 percent by 2020 or an equivalent level of ambition.
- Net zero emissions within own operations by 2030

THE HAGA INITIATIVE AND GHG

The Haga Initiative currently follows the GHG protocol, allowing members to choose whether to set absolute or relative targets. The first alternative reflects the company's absolute emissions in tonnes CO_2e .

However, the companies in the network all operate in growing markets, which in many cases makes relative objectives the more appropriate option. In some cases, greater absolute emission figures for a company can even mean that total emissions for its products are lower i.e. because of increased materials recycling or a switch to rail transportation and district heating. In the emissions disclosures, the companies present their targets, outline the measures they have taken and plan to take to achieve their targets, and the progress they have made so far towards meeting these targets. The members can choose absolute or relative targets to achieve at least 40 percent reduction until 2020.

GREENHOUSE GAS PROTOCOL

The GHG Protocol is the international accounting standard that is most frequently used by nations and companies as a calculation tool for understanding, quantifying and managing emissions of greenhouse gases. For more than ten years, the GHG Protocol has been working in partnership with the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), and with companies, nations and environmental groups around the world to build a new generation of credible and effective programs for managing climate change.

THE HAGA INITIATIVE'S CALCULATION METHOD AND THE GHG PROTOCOL

All calculations and reporting under the Haga Initiative conform to the guidelines set out in the GHG protocol. The GHG protocol (Greenhouse Gas Protocol) is an international calculation standard guided by the following principles:

Relevance – the reporting shall reflect the emissions of the company or organisation in a relevant manner, so that it can be used as a basis for decisions both internally and externally.

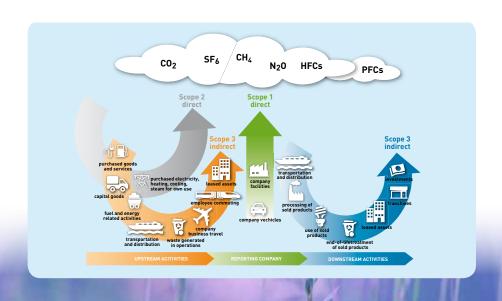
Completeness – the reporting shall cover all emissions within the stated system boundaries. Any exceptions shall be described and explained.

Consistency – the calculation methodology shall be consistent to allow comparisons to be made over time. Changes in data, system boundaries, methods or similar shall be documented.

Transparency – all background data, methods, sources and assumptions shall be documented.

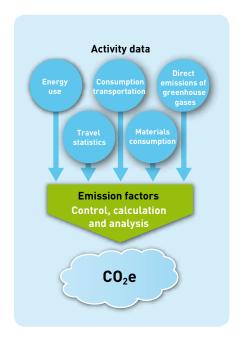
Accuracy – the calculated emissions shall be as close to actual emissions as possible.

The Haga Initiative's calculation method describes the methodology used by the Haga Initiative for the emission sources that are relevant to the calculation of climate impact. The scope or scopes in the GHG Protocol to which the emissions belong are detailed in each description. Emissions are classified as either scope 1 (direct emissions), scope 2 (indirect emissions from purchased energy) or scope 3 (other indirect emissions). ◆



HAGASCOPE

The Haga scope is defined as emissions under scope 1, 2 and business travel under scope 3. The member companies have climate targets that encompass or exceed the Haga scope.



COMPANY REPORTS ACCORDING TO THE GHG PROTOCOL

In the greenhouse gas emissions disclosure, each company reports the emissions generated during the year, in previous years, and in its chosen base year. The companies also report the climate targets they have set and how they intend to achieve these targets. The Haga Initiative has two target years; 2020 and 2030. In this greenhouse gas emissions disclosure, the targets are reported by 2020. The scope of the target is described as "Haga scope", see box.

Each year, the Haga Initiative aims to become more transparent and more consistent in its reporting. As part of this, emissions in each company's disclosure table have been broken down into the three scopes set out in the GHG Protocol. Emissions in scope 3, which are generated upstream and downstream in the value chain, have also been linked to the categories in the broadened scope 3 standard (Corporate Value Chain Accounting and Reporting Standard).

EXTERNAL FACTORS AFFECTING EMISSIONS

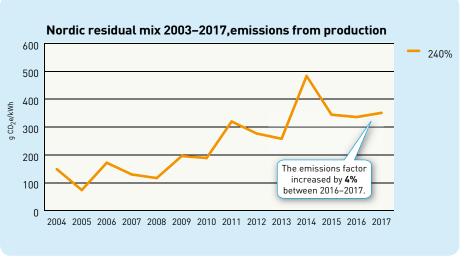
The calculation of emissions is based on activity data such as energy use and fuel consumption. These figures are then converted into emissions of greenhouse gases (CO2) using emission factors for each emissions source.

Sometimes a company's emissions may increase even though it has made its operations more efficient.

Companies can do a lot to influence their consumption of resources, but sometimes there are external factors that cause emissions to rise despite the company's efficiencies. For example, a cold winter may force district heating companies to use fossil fuels for peak production, or changes in social functions may result in different logistics flows.

Changes in the emission factors cannot be influenced by the companies. The emission factors for electricity and district heating vary from year to year because of changes in production. In fuel, different combinations

of renewables are resulting in decreasing emission levels.



Companies can use different types of electricity: origin-labelled or unspecified electricity. For origin-labelled electricity, an emission factor for the chosen energy source is used. In the case of unspecified electricity, an emission factor for what is known as the Nordic residual mix is used, see chart below. Since 2014, emissions from purchased energy should be reported where no distinction is made between origin-labelled and unspecified electricity, see Appendix 2.

RESULTS: THE HAGA INITIATIVE'S GREENHOUSE GAS DISCLOSURE 2017

The Haga Initiative's total emission reductions in 2017 are presented below in absolute terms compared with the selected base years. The companies in the Haga Initiative are diverse. Some have their major emissions in scope 1 and others in scope 2 and 3. This means that their power to affect emissions differ. Emissions in scope 1 (Direct GHG) are emissions from sources that companies own or control. Emissions in scope 2 (Energy indirect GHG) are emissions that occur when a company purchases electricity or district heating. Emissions in scope 3 (Other indirect GHG) are divided into 15 categories and are those that arise upstream and downstream in the value chain.

Many of the companies in the Haga Initiative are in growing markets, which makes it appropriate for some companies to set relative instead of absolute emission targets. It can therefore be difficult to compare the companies with each other. Many of the companies have set both relative and absolute targets for emission reductions. More information about the companies' own goals can be found on the respective company page.

Emissions reduction Haga scope

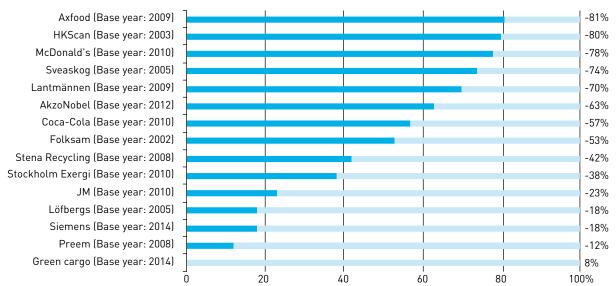
The Haga scope covers emissions in scope 1, 2 and business travel in scope 3. 14 out of 15 companies have reduced their emissions and 9 out of 15 companies have already reached the target of reducing emissions by 40 percent by 2020 compared to their base year. In total, the companies have reduced emissions in the Haga scope by 30 percent compared to the respective base year, equivalent to more than 1.4 million tonnes CO2e.

Green Cargo is the only company which has increased its emissions in the Haga scope, the main reason is increased transports. At the same time, their increased emissions can reduce emissions for other companies when goods are transported via railways. There are three companies that contribute to the largest emission reductions in the Haga scope, measured in tonnes CO2e; Stockholm Exergi, AkzoNobel and Preem.

SIGNIFICANT SCOPE 3

A company may be associated with emissions outside the Haga scope; to be transparent and credible, we have therefore chosen to also report significant emissions in scope 3 not covered by the current climate target (Haga scope). This is reported under the heading "Most significant emissions in scope 3" for each company. Companies have different capacities to influence scope 3 emissions, and can thus address these emissions in different ways. Some strategies to influence are through, for example, marketing, requirements in procurement, substitution, or product improvement, thereby reducing climate impact in scope 3.

Change of emissions in Haga scope- 2017 in comparison with base year



[↑] The graph shows the change of companies' emissions in the Haga scope in 2017 compared to the selected base year. Changes in emissions are reported in absolute figures.

SWEDEN'S NATIONAL EMISSIONS

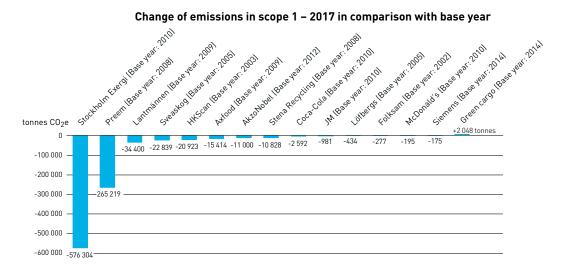
The Swedish Environmental Protection Agency reports Sweden's national emissions per emission source. Statistics Sweden reports Swedish companies' emissions within and outside Sweden's borders and reports emissions per industry. SCB's calculation method is based on assumptions, which simplified comprise the total emissions by Sweden's national emissions and emissions caused by the fuel stored in Sweden for international transports.

Emissions reduction in Scope 1

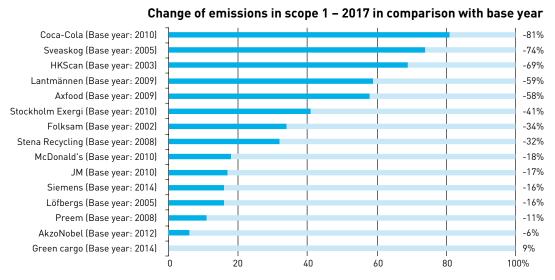
Compared to 2016, the Haga Initiative's emissions in scope 1 have increased with 5 percent, equivalent to 162 000 tonnes of CO2e. The increase comes as a result of Preem's increased emissions from its production by 242 000 tonnes CO2e.

Excluding Preem's increase, the total emissions in scope 1 have reduced by 2,7 percent. This result is despite the increase in scope 1 emissions for Stena Recycling, HKScan, Lantmännen, Löfbergs and JM. The reasons behind the increased emissions is described in each company's profile below.

Compared to the selected base years, the companies' emissions in scope 1 have reduced by 23 percent, equivalent to 960 000 tonnes of CO2e. Between 2010 and 2017, the Haga Initiative has contributed with a reduction of emissions equivalent to approximately eight percent of Sweden's national emission reductions (see box). The companies contributing to the largest emissions reduction (in tonnes CO2e) are Stockholm Exergi, followed by Preem and Lantmännen.



↑ The graph shows the change of companies' emissions in scope 1 in 2017 compared to the selected base year. Changes in emissions are reported in absolute figures in tonnes of CO2e.



↑ TheThe graph shows the change of companies' emissions in scope 1 in 2017 compared to the selected base year. Changes in emissions are reported in absolute figures and percentage.

Emissions reduction in Scope 2

Emissions in scope 2 are emissions arising from the production of purchased electricity or district heating. By purchasing guarentees of origin, companies can reduce their emissions from this category. How the emissions in scope 2 has been calculated is reported in Appendix 2.

Emissions reduction in Scope 3

A company's emissions may be associated with emissions that are outside Haga scope, which arises upstream and downstream in the value chain. As a first step in starting to monitor progress in the Haga Initiative's new targets for 2030, each company's most significant emissions in scope 3 is reported. This reporting is based on companies' own analysis of what emissions they consider most significant as well as what strategies they have adopted to mitigate these emissions. The report is therefore a qualitative analysis of emissions and are not quantified in this disclosure. As can be seen in the summary below, primarily emissions from purchased goods and services account for the largest emissions in scope 3, according to the companies themselves. The companies power to influence varies in different categories and the companies can therefore affect their scope 3 emissions in different ways. For instance, some strategies mentioned by the companies to decrease scope 3 emissions are cooperation with suppliers, increase the number of climate friendly alternatives and to increase the efficiency of purchased goods or services.

	The largest category of emissions in scope 3 that quantitatively is reported in this disclosure (category according to GHG Protocol)	The largest category of emissions in scope 3 that is not quantitatively reported in this disclosure (category according to GHG Protocol)	Strategies to manage emissions in scope 3
AkzoNobel	Business travel (6)	Production of purchased raw materials [1]	Renewable raw materials; decrease amount of solvents; climate target in product development process; cooperation with customers and suppli- ers; new technology; energy efficiency
Axfood	Business travel (6)	Production from agriculture (1)	Reduce food waste; vegetarian products; climate-smart alternatives
CCEPS	Refrigeration of beverage on customer premises (10)	Production of ingredients and packaging [1]	Climate target for scope 3; increased share of recycled material; sustainable production of raw materials
Folksam	Electricity from wind power with Guarantee of Origin (3)	Investments (15)	Ethical investment criteria; corporate gover- nance
Green Cargo	Purchased goods transport on behalf of customers (9)		Encourage partners to introduce plans and targets for renewable vehicle fuels and profitable transport optimization with regards to degree of filling
HKScan	Transport (4, 9)	Production of meat (1)	Cooperation with suppliers; change the feed composition
ML	Leased machinery (8)	Production of construction materials (1)	Efficient material use; prevent generation of waste; create circular material flows; identify and test climate efficient materials
Lantmännen	Purchased goods transport (4, 9)	Production of grains and other raw materials (1)	Cooperation with farmers and customers; new concepts of cultivation; new technologies in production
Löfbergs	Cultivation of coffee (1)		Development projects for small scale coffee farmers; increased share coffee from certified farms
McDonald's	Waste disposal (5, 12)	Production from agriculture (1)	Increased share of alternative proteins; global cooperation for improved sustainability within beef production; cooperation with LRF to increase the Swedish self-sufficiency of beef
Preem	Transport (4, 9)	Combustion of vehicle fuels by customer (11)	Increase the share of sold renewable vehicle fuels
Siemens	Production and distribution of energy and vehicle fuels (3)	Production of purchased products (1)	Global effort together with key suppliers to decrease emissions from purchased goods
Stena Recycling	Purchased transport (4, 9)	Transport of waste to the facilities made by customers (4, 9)	Procurement on biofuels, vehicle performance and transport optimization
Stockholm Exergi	Production and distribution of energy and vehicle fuels (3)		Shift of fuel transportation from truck to train
Sveaskog	Purchased timber transport with truck (4, 9)		Encourage the use of renewable vehicle fuels

[↑] This table describes a compilation of the largest emission categories in scope 3 that is being reported or not reported in this disclosure, as well as adopted strategies, which are stated by the companies themselves.

DECOUPLING OF THE HAGA INITIATIVE

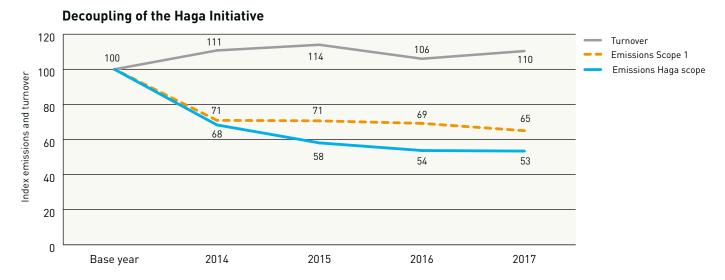
Sweden has managed to decouple GDP growth from greenhouse gas emissions. Since 1990, emissions in Sweden have reduced by 27 percent, while GDP has increased by 79 percent¹. Similarly, the companies in the Haga Initiative have managed to reduce emissions while maintaining or increasing turnover.

The summary in the chart shows that companies increased their turnover by an average of ten percent since their respective base years, while emissions fell by an average of 47 percent (Haga scope) or 35 percent (in scope 1). The figures for average emission reduction should not be confused with the companies' aggregate emission reduction, which is 30 percent in Haga scope, or 23 percent in the in scope 1.

There are obviously major individual differences behind the figures - some companies have made significant reductions in emissions and increased turnover considerably while others experienced subdued turnover or lower emission reductions.

Turnover does not tell the entire story of business economic development. In some cases, the change is due to new acquisitions or spin-offs (which, of course, affect both sales and greenhouse gas emissions). Although turnover is stable, one should be aware that it says relatively little about companies' profits and market development. What we can note is that in relation to base years, emissions have declined and sales increased.

 Source: BNP from users, fixed prices, SCB https://www.scb.se/hitta-statistik/statistik-efter-amne/ nationalrakenskaper/nationalrakenskaper/nationalrakenskaper-kvartals-och-arsberakningar



↑ The Haga initative's reduced emissions and increased turnover. The numbers presented in the figure are the average of each company's indexed emissions and turnover (for Folksam's share, premium income has been used instead of turnover). The indexation has been made so that companies with high emissions and high turnover should not have a higher influence over the numbers than those with lower emissions / turnover.

CARBON LAW

On March 23, 2017, Johan Rockström, at the Stockholm Resilience Centre, together with several international researchers published the article "A Roadmap for Rapid Decarbonization" in the journal Science, which translates the Paris Agreement into a roadmap for decreased emissions needed to keep global warming between 1.5 and 2 degrees. The authors call it Carbon Law. The CEOs of the Haga Initiative supported the Carbon Law in a debate article in DN the same day.

Carbon Law is a roadmap that follows a simple rule of thumb: halving emissions every decade. It is based on Moore's Law: a phenomenon that considered to explain why the IT-industry over 50 years manage to catalyze revolutionizing innovations that doubled computer processors' capacity every other year.

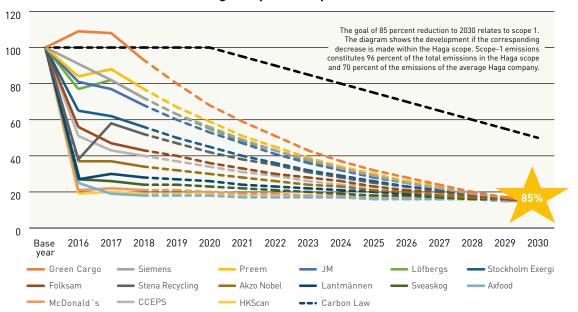
The roadmap requires bending the global curve of CO2 emissions by 2020 and reaching net-zero emissions by 2050. An important advantage of Carbon Law as a tool is that it can be applied in many contexts: for individuals, households, businesses, nations as well as for the world. Therefore, the Haga Initiative has chosen to report its emissions in relation to Carbon Law. With that, we hope to inspire other companies to do the same.

Carbon Law clearly demonstrate what is required of the companies. Halving emissions every decade requires a rate of reduction of approximately seven percent each year from 2020. For the companies in the Haga Initiative to reach the target, an annual average rate of reduction of 10.5 percent was required in 2016. From this year's level, an average reduction rate of twelve percent is required to reach the target by 2030.

CARBON LAW IN THE HAGA-SCOPE

The Haga Initiative's target of 85 percent reduction to 2030 refer to scope 1. The graph below illustrates the trajectory if the corresponding decrease is made in the Haga scope. Scope 1 emissions account for 96 percent of the total emissions in the Haga scope, and for the average company, scope 1 corresponds to more than 70 percent of the emissions in the Haga scope.

Reductions of emissions in Haga scope in comparison with Carbon Law







AkzoNobel was established in Sweden in 1646, originally under the name Bofors. Today, AkzoNobel is a global company, a world leader in the paint and chemicals industry. In Sweden, AkzoNobel generates sales of around SEK 15 billion and employs some 2,700 people across twelve locations. Its brands include Nordsjö Färg, International, Eka, Cuprinol and JOZO salt.

Read more about AkzoNobel's sustainability work work www.akzonobel.com/about-us/what-we-do/sustainability or its annual report at www.akzonobel.com.

AKZONOBEL

Climate targets

AkzoNobel's climate target is to reduce carbon emissions per tonne sold product by 25 percent by 2020 compared to the base year of 2012. The target covers the entire value chain, i.e. scope 1, 2 and 3. The Haga Initiative target of 40 percent only include a small part of scope 3 (business travel) and AkzoNobel's carbon emissions in scope 1 and 2 represent 15 percent of the entire value chain's emissions. This means that AkzoNobel's climate target across the value chain results in a greater decrease overall than if AkzoNobel reduced emissions in the Haga scope by 40 percent.

Actions taken in 2017

2017 has been a year of exciting developments for AkzoNobel as the company was separated into two independent parts. Much work has been put into the division and AkzoNobel Specialty Chemicals, which continues to be a significant part of the Swedish chemical industry, will continue the work in the Haga Initiative.

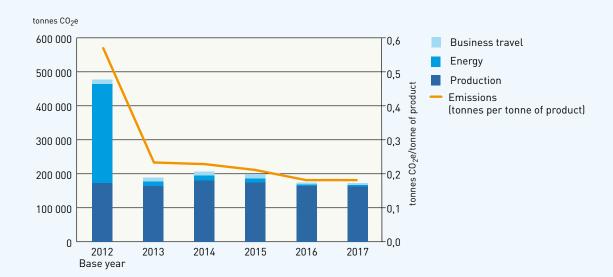
AkzoNobel Specialty Chemicals will continue to be strongly focused on climate work. In 2017 they signed an agreement with Vattenfall, delivering 100% renewable electricity in Sweden by 2020.

Emissions (tonnes CO2e)	Base year 2012	2016	2017	Share of total 2017	Change 2012-2017
Scope 1					
Production	173 000	164 000	162 000	94%	-6%
Scope 2					
Energy	290 000	348 000	371 000	3%	-98%
Scope 3					
Business travel	7200	6100	5800	3%	-19%
TOTAL excl. reduction through energy	471 000	518 000	539 000		
with Guarantee of Origin					
Reduction through purchase of renewable electricity	0	-344 000	-366 000		
or district heating with Guarantee of Origin ⁴					
TOTAL Haga scope	471 000	174 000	173 000	100%	-63%
Produced amount of products in Sweden	832 000	942 000	966 000		16%

Key indicators	Base year 2012	2016	2017	Change 2012-2017	Unit
Emissions per produced product	0,57	0,18	0,18	-68%	tonnes CO ₂ e/tonne product

^{1.} Emissions from production is adjusted from 162 000 tonnes to 164 000 tonnes for 2016 due to updated input data.

^{2.} Emissions from production of purchased electricity, district heating or district cooling, assuming that all is unspecified (residual mix). In "Share of total 2017" and "Change 2012-2017" is Guarantee of Origin included.



In the Haga scope, emissions have decreased by 63 percent since the base year (2012) and 11 percent since last year. Emissions per produced product have also decreased by 68 percent since base year and sustained at a relatively constant level since last year. Of the categories included in the Haga scope, emissions in scope 1 represent the largest impact (94 percent). The scope 1 emissions have decreased by six percent since 2012 and one percent compared to last year.

This reduction is, among other things, due to the optimized furnaces, use of excess hydrogen in the production and switch from oil-fired to electric power boilers.

AkzoNobel reports its climate impact from its global operations across the whole value chain, i.e. also for scope 3. The Swedish emissions represent approximately five percent of AkzoNobel's total emissions in scope 1 and 2. Today this is done on a cradle-to-grave product level and is therefore difficult to report by region, such as Sweden. The ambition however, is to report parts of scope 3 specifically for Sweden.

Emission from purchased electricity in scope 2 have decreased by 99 percent since the base year 2012. In 2016 these emissions represent one percent of the total estimated emissions. This is almost entirely due to a shift towards origin-labelled electricity.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Emission in scope 3 account for the majority of AkzoNobel's climate impact (84 percent), of which 40 percent arise in the production of purchased raw materials and 44 percent derive from the use of costumers and the final management of AkzoNobel's products.

To manage the climate impact in scope 3, AkzoNobel aim to increase the share of renewable raw materials, work towards climate goals in the product development process and develop partnerships with customers and suppliers on reducing climate impact through new technology and energy efficiency.



Axfood Axfood work towards developing and driving grocery formats on the Swedish market. The Axfood family is made up of successful and distinctive food concepts that rest upon close collaboration. It includes Willys, Hemköp, Tempo, Handlar'n and Direkten. Axfood also owns mat. se as well as Middagsfrid and is shareowner of Urban Deli, Eurocash and Apohem. In 2017, Axfood reported net sales of SEK 46 billion, 9 903 employees and collaborates with 1 100 stores, of which 274 are owned by Axfood.

www.axfood.se

AXFOOD

Climate targets

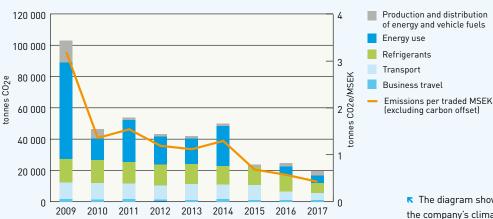
Axfood's target is to be climate-neutral by 2020 and to reduce its greenhouse gas emissions from its own operations by 75 percent (base year 2009). From 2009 through 2016, Axfood decreased its effect on climate change by 79 percent. Axfood has additional climate targets, read more about Axfood's sustainability work at www.axfood.se.

- Even though transitioning into using HVO fuel greatly reduced Axfood's carbon dioxide emissions, the group decided to prevent refuelling with HVO where possible, due to "palm oil" in the HVO. A position to push more sustainable alternatives.
- Axfood has moved to having fruit and vegetable bags made of sugar cane.
 Compared to a fossil bag, carbon dioxide emissions are reduced by about 60 percent with a sugar cane bag. Axfood consumes approximately 170 million bags per year.
- Hemköp introduced deposit-return system on plastic bags, which are recycled with such a high quality that they can become new plastic bags.

Emissions (tonnes CO ₂ e)	Base year 2009	2016	2017	Share of total 2017	Change 2009-2017
Scope 1					
Business travel ¹	851	395	430	2%	-49 %
Own transport	10 531	5 309	4 321	22%	-59 %
Refrigerants ²	15 212	10 730	6 429	33%	-58 %
Scope 2					
Purchased energy ³	61 647	95 466	96 812	25%	-92 %
Scope 3					
Business travel ⁴	770	710	658	3%	-15 %
TOTAL excl. reduction through energy	89 011	112 610	108 649		22 %
with Guarantee of Origin					
Reduction through purchase of rene-	0	-90 141	-91 847		-
wable electricity or district heating with					
Guarantee of Origin ⁵					
TOTAL Haga scope	89 011	22 470	16 802	86 %	-81 %
Production and distribution of energy and	14 008	2 315	2 706	14%	-81 %
vehicle fuels ⁶					
TOTAL (excl. Carbon offset)	103 019	24 785	19 509	100 %	-81 %
Carbon offset ⁷	0	-678	-623		-
TOTAL (incl. Carbon offset)	103 019	24 107	18 886		-82 %

Key indicators	Base year 2009	2016	2017	Change 2009- 2017	Unit
Emissions per revenue (MSEK) exlcluding carbon offset	3,18	0,57	0,42	-87 %	tonnes CO ₂ e/MSEK
Emissions per employee excluding carbon offset	15,1	2,69	1,97	-87 %	tonnes CO ₂ e/employee
Emissions per revenue (MSEK) including carbon offset	3,18	0,56	0,41	-87 %	tonnes CO ₂ e/MSEK
Emissions per employee including carbon offset	15,1	2,62	1,91	-87 %	tonnes CO ₂ e/employee
Emissions per tonne of transported goods	24,3	9,5	7,7	-68 %	kg CO ₂ /tonne goods
Energy use per sqm (total)	624	300	278	-55 %	kWh/m²

- As from 2014, company-owned cars are also included. 2014, the emissions amounted to 527 ton.
- Base year adjusted from 4147 ton, since a new monitoring system have been introduced. Intermediate years are not adjusted.
- 3. Emissions from production of purchased electri-
- city, district heating or district cooling, assuming that all is unspecified (residual mix). Refers to energy use in retail stores and premises owned by Axfood. "Share of total" and "Change 2009-2017" includes contracts for renewable energy with Guarantee of Origin.
- 4. Refers to business air travel, train and taxi jour-
- neys.
- 5. Reduction of emissions for "Purchased energy" in scope 2.
- 6. Refers to fuels consumed in scope 1 and scope 2.
- Refers to carbon offset of business air travel.



The diagram shows which categories are included in the company's climate target. Categories not included in the target are shown in a grey color scale.

Analysis and comments

Axfood's emissions within the Haga scope have reduced by 81 percent since the base year of 2009. 95 percent of the company's electricity is purchased as origin-labelled, which together with energy efficiency actions have reduced emissions from purchased energy by 92 percent since the base year. Own transportation in scope 1 accounts for about one fifth and emissions from refrigerants account for one third of the total emissions. Emissions from own transports have decreased by 19 percent compared with the previous year, largely due to a fuel shift to more renewable fuels (RME and HVO). Climate impact from refrigerant emissions has decreased by 40 percent compared with 2016, mainly due to a change of refrigerants with a high climate impact. Axfood carries out carbon offsetting to compensate for its air travel, equivalent to approximately three percent of its total emissions.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

In the daily consumer goods sector, the biggest climate footprint occurs in the early stage of the supply chain in the agriculture systems with the farmers, from rice fields to dairy farms. A company like Axfood sells thousands of different products produced on more than one farm. The complexity of the supply chain makes it impossible to calculate the climate impact of all the emissions that occur on all farms. However, you can still work actively with the climate impact from food. Focusing on reducing food waste, improving customer offering of vegetarian products, highlighting climate-smart alternative and sustainability-certified goods. Development of e-commerce means both opportunities and risks in terms of climate impact. Here, if you succeed in logistics, emissions from customer transport (scope 3) can decrease more than the company's emissions increase (scope 1). However, there is also a risk that emissions will increase more in scope 1 than they decrease in scope 3.



Coca-Cola European Partners Sverige AB (CCEPS) produces, distributes and sells non-alcoholic beverages on the Swedish market. Its brands include Coca-Cola, Fanta, Sprite, MER, Bonagua Silver, Powerade, Minute Maid and Chagwa. CCEPS employs around 720 people, around 600 of whom are based in Jordbro outside of Stockholm. About one million litres of beverages are produced in Jordbro every day. CCEPS reported a turnover of SEK 3,7 billion. In Sweden, Coca-Cola was launched in 1953. For more information please visit www.ccep.com

COCA-COLA EUROPEAN PARTNERS SVERIGE

Climate targets

By 2025, CCEPS aims to reduce carbon emissions from beverages by one third and absolute carbon emission from the core business by 50 percent. Since 2010, carbon dioxide emissions from beverages have decreased by 25 percent and emissions from the core business have decreased by 43 percent. The targets have been approved as Scienced Based targets.

Actions taken in 2017

- CCEPS continued to use renewable fuels for its own distribution and purchased transportations. Within its own distribution, the total share of renewables has increased from 90 percent to 98 percent.
- Since 2010, energy consumption per litre of manufactured beverages has
 decreased by 15 percent. This has been possible through investments in
 energy-efficient equipment but also through changed behaviour. All energy
 used in the production plant in Jordbro is from renewable sources.
- CCEPS, together with their refrigerator supplier, have developed and purchased new energy-efficient refrigerator models.

	·	· · ·		3	
Emissions (tonnes CO ₂ e)	Base year 2010	2016	2017	Share of total 2017	Change 2010-2017
Scope 1		<u>'</u>			<u> </u>
Business travel ¹	1 852	543	463	13%	-75 %
Refrigerants	41	164	76	2%	87 %
Own transport	1 300	231	63	2%	-95 %
Scope 2					
Purchased energy ²	4 840	6 937	7 175	6%	-58 %
Scope 3					
Business travel ³	262	821	897	24%	242 %
TOTAL excl. reduction through	8 296	8 696	8 674		5 %
energy with Guarantee of Origin					
Reduction through purchase of renewable	-4 298	-6 677	-6 949		62 %
electricity or district heating					
with Guarantee of Origin ⁴					
TOTAL Haga scope	3 998	2 019	1 725	47 %	-57 %
Purchased goods transport ⁵	4 620	3 274	1 171	32%	-75 %
Production and distribution of	1 285	829	775	21%	-40 %
energy and vehicle fuels ⁶					
- whereof vehicle fuels for business travel	459	342	340	9%	-26 %
- whereof vehicle fuels for own transport	470	181	150	4%	-68 %
- whereof vehicle fuels for energy production	356	306	285	8%	-20 %
TOTAL Climate target	9 903	6 122	3 671	100 %	-63 %
Refrigeration of beverages	35 357	37 746	36 777		4 %
on customer premises ⁷					
TOTAL (excl. Carbon offset)	45 259	43 868	40 448		-11 %
Key indicators	Base year 2010	2016	2017	Change 2010-2015	7 Unit
Emissions per revenue (g CO ₂ e/SEK) ⁸	3,374	1,775	0,995	-71 %	
Emissions per litre of beverage (g CO ₂ e/litre) ⁸	29,737	18,153	10,601	-64 %	-
Emissions per revenue (g CO ₂ e/SEK) ⁹	15,421	12,716	10,961	-29 %	tonne CO ₂ e/MSEK
-					-

- 1. Leasing- and rental cars.
- Emissions from production of purchased electricity, district heating or district cooling, assuming that all is unspecified (residual mix). In "Share of total 2017" and "Change 2010-2017" is Guarantee of Origin included.

Emissions per litre of beverage (g CO,e/litre)9

- 3. Refers to business air travel, train and taxi journeys.
- 4. Reduction of emissions for "Purchased energy" in scope 2.

130 073

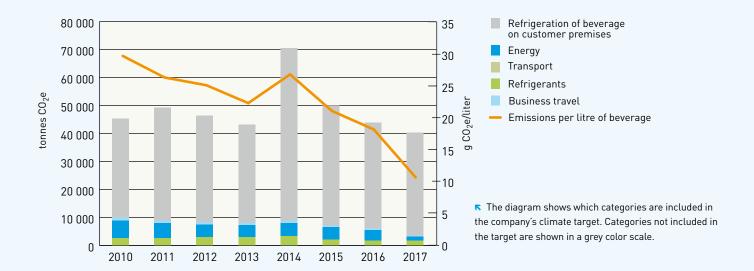
116 806

135 914

- Refers to goods transport purchased from external forwarding agent. Scope 3 category 4 and 9.
- 6. Refers to fuels consumed in scope 1 and scope 2. Scope 3 category 3.
- 7. The electricity consumption by refrigerators is calculated by using conservative estimates (all
- electricity is assumed to be residual mix). Scope 3 category 8.

-14 % g CO₂e/litre

- Operations within the company. Does not include refrigerators at customers. The key indicator refers to emissions within CCEPS climate goal
- Operations within the company as well as leakage of refrigerants at customers



Since the previous year's greenhouse gas disclosure, CCEPS has changed base year from 2007 to 2010. This is the same base year as the group globally. The change makes the target in Sweden tougher as emissions in 2010 were lower than 2007. Despite this, the company decreased its emissions in the Haga scope by 57 percent since 2010.

The company has set its own climate target, which go beyond the Haga scope categories, that includes more categories in scope 3 (purchased transports as well as production and distribution of vehicle fuel), the emissions have decreased by 63 percent since base year (see "TOTAL climate target" in table). Of the categories included in CCEPS emissions target, goods transportation accounts for 38 percent, business travel for 46 percent, energy for 14 percent and refrigerants two percent. The categories include emissions in scope 1, 2 and 3, but not emissions resulting from the refrigeration of beverages in stores. Emissions from business travel and purchased energy have decreased by 34 and 43 percent, respectively, compared to the base year. Freight transport is the category that has reduced emissions the most, 78 percent since the base year. Thus, this year it is no longer the category with highest emissions at CCEPS. The decrease in freight emissions is largely due to the transition to the renewable fuels RME and HVO.

Emissions from business travel represents the highest emissions and business travel in scope 3 (air travel and taxi) is the only category with increased emissions since base year.

CCEPS has chosen to include emissions caused by Coca-Cola fridges in stores. These emissions accounting for around 91 percent of all emissions in 2017 and have increased by eleven percent since the base year of 2010.

The company has increased its production since the base year while reducing its emissions, thus the emissions in relation to production and turnover have decreased. Key performance indicators for emissions in own operations per produced litre of beverage have decreased by 64 percent and emissions relative to turnover have decreased by 71 percent since 2010.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

The most significant emissions in CCEP scope 3 occurs in the production of the beverages ingredients and its packaging, which are not included in CCEP Sweden's disclosure for the Haga Initiative. However, the company has the possibility to influence these emissions and works centrally on an overall sustainability strategy. The sustainability strategy encompasses targets for reducing emissions in scope 3, examples of actions include increased share of recycled materials in packaging and sustainable production of ingredients and raw materials.



Folksam is a mutual company that has four brands, two groups and ten insurance companies. The parent companies are Folksam Sak and Folksam Liv which are majority shareholders in KPA Pension. Folksam offers insurance products and pension schemes. It insures almost one in two people in Sweden and looks after the pensions of more than two million people. Folksam has 3,700 full-time positions and managed over SEK 400 billion in 2017.

www.folksam.se

FOLKSAM

Climate targets

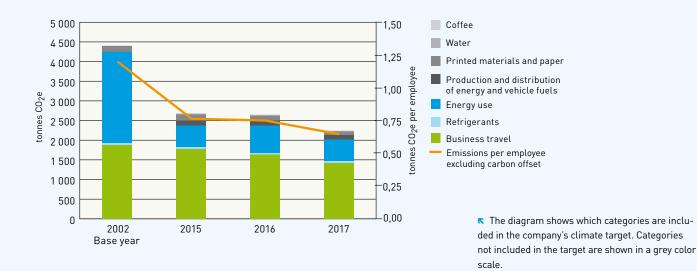
Folksam's goal is to reduce the greenhouse gas emissions produced by travel and its offices by 40 percent in 2020, compared to the base year of 2002. It aims to reduce travel, relative to the number of employees, by 20 percent in 2020.

- Our circular approach to settlement management focusing on recycling and repair has contributed to reduce CO2-emissions by about 1423 tonnes and waste volumes by 2749 tonnes.
- Increased utilization of the digital workplace and reduced travel. Video meetings and moving conferences from abroad to Sweden by train has decreased travel by 23 percent.
- Decision on four new sustainability goals in climate, resource use, gender
 equality and diversity and health for the period 2017-2022 linked to Agenda
 2030. Folksam also joined the TCFD to increase reporting of climate-related
 financial risks.

Emissions (tonnes CO ₂ e)	Base year 2002	2016	2017	Share of total 2017	Change 2002-2017
Scope 1					
Business travel ¹	773	579	484	22%	-37 %
Own transport	-				
Refrigerants ²	43	48	55	2%	29 %
Scope 2					
Energy ³	2 324	3 482	3 209	24%	38 %
Scope 3					
Business travel ⁴	1 105	1 050	929	41%	-16 %
TOTAL excl. reduction through energy with Guarantee of Origin	4 245	5 159	4 677		
Reduction through purchase of renewable electricity or district heating with Guarantee of Origin	0	-2 787	-2 665		
TOTAL Haga scope	4 245	2 372	2 012	89 %	-53 %
Production and distribution of energy and vehicle fuels ^{5, 6}	0	125	115	5%	
Printed materials and paper	141	129	95	4%	-32 %
Water	2	3	3	0%	28 %
Coffee	21	25	24	1%	12 %
TOTAL (excl. Carbon offset)	4 409	2 655	2 248	100 %	-49 %
Carbon offset	0	-2 655	-2 248	-100 %	
TOTAL (incl. Carbon offset)	4 409	0	0	0 %	

Key indicators	Base year 2002	2016	2017	Change 2002-2017	Unit
Emissions per employee excluding carbon offset	1,20	0,750	0,645	-38 %	tonnes CO ₂ e/employee
Emissions per employee including carbon offset	1,20	0,000	0,000	- 100 %	tonnes CO ₂ e/employee

- 1. Leasing- and employee cars.
- 2. Relates only to head quarter. Leakage for 2017 has been calculated as the average between 2014 and 2017.
- 3. Measured value for the head quarter, estimated values for other offices. "Share of total" includes contracts for renewable energy with Guarantee of Origin.
- 4. Flight, taxi and train travels.
- 5. Only upstream emissions from wind power.
- 6. A change of method was made during 2017, which implies an adjusted allocation between the emissions in scope 2 and scope 3 for purchased renewable electricity. Historical emissions have been adjusted to reflect the change of method.



Folksam became a member of the Haga Intiative 2014, thus, this is the fourth year that Folksam participates in the Haga Initiative's greenhouse gas emissions disclosure. Folksam's emissions within the Haga scope have decreased by 53 percent 2017, since the base year of 2002, and the total climate footprint has dropped by 49 percent between 2002 and 2017.

The main source of Folksam's emissions is business travel (63 percent), which include leasing cars, the employee's car journeys as well as air and rail travel. Purchased energy (scope 2) represent 24 percent of the total emissions. All electricity purchased to Tullgården, the sales and field offices as well as Förenade Liv is origin-labelled with a Bra Miljöval-label. Folksam offset its carbon footprint, thus achieving net-zero carbon emissions. Since 2014, electricity consumption has decreased by nearly six percent while heat consumption has increased by about two percent over the same period. Total energy consumption decreased by almost two percent between 2014 and 2017.

MOST SIGNIFICANT

EMISSIONS IN SCOPE 3

Emissions from the businesses that Folksam invests in is the company's most significant emission in scope 3. These emissions are not included in the report to the Haga Initiative. Folksam is a large institutional owner and an active asset manager who influence companies in which they have equity shares through ethical investment criteria and corporate governance. For example, in 2016, Folksam decided to divest from companies with more than 30 percent revenues from coal.

carão ôreeu

Green Cargo runs 400 freight trains each day, which is equivalent to the capacity of approximately 10 000 truck transports. The company serve 270 locations in Sweden and the major cities in Norway. In cooperation with other operators, they reach thousands of locations in Europe. Green Cargo is the only nation-wide freight transport company that meets the standards set by the Swedish Society for Nature Conservation for freight transports (Bra Miljöval). Green Cargo's customers are present in the basic industry where forest, steel and paper dominate but also within industries such as chemistry/energy, engineering, automotive industry and retail. Green Cargo has 1 900 employees and reports annual revenue of SEK 4.3 billion in 2017

www.greencargo.com

GREEN CARGO

Climate targets

Over 94 percent of Green Cargo's transportation services are carried out using electric trains, but diesel consumption is still the biggest environmental aspect. Green Cargo's goal is to reduce diesel consumption in relation to its transport operations. As a member of the Haga Initiative, Green Cargo also has the target of becoming fossil free in its operations by 2030.

Actions taken in 2017

Green Cargo is constantly working to develop and evaluate the existing fleet with technological innovative solutions for more efficient and sustainable transports. Some activities in 2017:

- Upgrading the train fleet with two new electric locomotives that are more efficient than today's locomotives. The trains will be in operation in the autumn 2018
- Customization and optimization of the company's fleet for greater volume capacity and to load more at higher speed.
- Updated and improved workflow with the objective that the recharging of our Re-locomotives will increase to 19 percent, from today's 14 percent.

Emissions (tonnes CO ₂ e)	Base year 2014	2016	2017	Share of total 2017	Change 2014-2017
Scope 1					
Business travel ¹	286	272	240	1%	-16%
Own transport	23 417	25 890	25 511	67%	9%
Scope 2					
Purchased energy ²	200 869	143 022	148 940	2%	-29%
Scope 3					
Business travel ³	534	746	896	2%	68%
TOTAL excl. reduction through energy with Guaran-	225 107	169 930	175 587		
tee of Origin					
Reduction through purchase of renewable electricity or district heating with Guarantee of Origin ⁴	-199 606	-142 155	-148 041		
TOTAL Haga scope	25 500	27 775	27 546	72%	8%
Goods transport⁵	9 369	8 174	6 934	18%	-26%
Production and distribution of energy and vehicle fuels ⁶	2 626	3 539	3 535	9%	35%
TOTAL (excl. Carbon offset)	37 495	39 488	38 016	100 %	1%

2016

4,019

2017

3,469

Change 2014-2017

+18% g CO₂e/tonkm

Base year 2014

2,951

- Emissions per amount transported (tkm)

 1. Refers to private/-leasing and rental cars.
- 2. Refers to electricity and district heating.
- 3. Refers to train, flights, taxi and hotel.

Key indicators

- 4. Reduction of emissions for "Purchased energy" in scope 2.
- 5. Purchased goods transport on behalf of the customers.
- 6. Includes district heating, hydro power and vehicle fuels.



The diagram shows which categories are included in the company's climate target. Categories not included in the target are shown in a grey color scale.

Analysis and comments

Unlike other companies within the Haga Initiative, Green Cargo does not have a target to reduce emissions by 40% by 2020. This is because a switch to rail transportation is required in order for Sweden and individual companies to be able to reduce their impact on the climate. At the same time, Green Cargo needs to continue introducing energy efficiency measures to reduce its emissions per tonne kilometre.

Green Cargo's emissions have increased with approximately one percent since the base year. The largest emissions source is goods transportation within scope 1, accounting for 67 percent of total emissions. The majority of this relates to the diesel consumption in the company's own diesel locomotives, with outsourced road freight transportation accounting for a smaller proportion. Business travel in scope 1, purchased energy, and business travel in scope 3 represent 1-2 percent each of total emissions, while nine percent occur in production and distribution of energy and vehicle fuels in scope 3.

Outsourced transportation was previously reported under scope 1 but is now reported as a separate category in scope 3. This emission accounts for about 18 percent of the total Green Cargo's emissions. The emissions per tonne-kilometres (tkm) have decreased by one per cent since the base year.

The base year, 2016 and 2017 also include shift-journeys and overnight stays in connection with work periods.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Green Cargo has emissions from the business travel in scope 3. This part of the business has not been the focus previously but has been reported for several years in the Haga Initiative's greenhouse gas disclosure. Green Cargo's sustainable freight transportation offering contribute to major emissions reductions in other actors' value chains (scope 3) and freight traffic by train forms an important part of the conversion of the Swedish transport system.

HKSCIN

HKScan Sweden was founded in Halmstad in 1899 and is now part of the HKScan Group, one of northern Europe's biggest food companies. HKScan has net sales of SEK 7.8 billion and approximately 2 100 employees. HKScan produces, markets and sells high-quality, responsibly produced pork, beef, poultry and lamb products, processed meats and convenience foods under brand names such as Scan and Pärsons. Customers include the retail, food service, industrial and export sectors

www.sweden.hkscan.com

HK SCAN

Climate targets

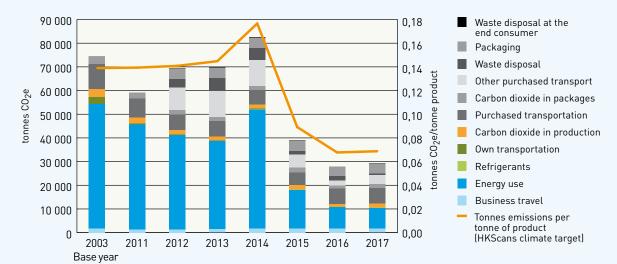
HKScan Sweden climate target is to reduce climate emissions by 95 percent by 2030 compared to 2003. The target has been set in absolute figures to reflect the company's total emissions. The target includes scope 1 and scope 2 as well as business travel, outsourced incoming transportation and the production and distribution of energy and vehicle fuels in scope 3. Primary production is part of the target as HKScan will develop guidelines and formulate strategies for how and what the company can do.

- Scan Rullfärs was launched, which increased durability from nine to 16 days. Emissions were also reduced by 39 percent compared with previous packaging.
- Decision on investment in biogas at the facility in Kristianstad makes it possible to reduce emissions by 3 200 tonnes per year compared with emissions from liquefied natural gas. A reduction of 83 percent.
- All production facilities were certified according to ISO 50001 and action plans for energy efficiency has been further developed.

Emissions (tonnes CO ₂ e)	Base year 2003	2016	2017	Share of total 2017	Change 2003-2017
Scope 1					
Business travel ¹	1 596	1 146	1 057	4%	-34 %
Heating ²	22 334	6 084	6 425	22%	-71 %
Refrigerants	0	39	72	0%	-
Own transport	2 965	0	0	0%	-100 %
CO ₂ in production ³	3 347	1 383	1 765	6%	-47%
Scope 2					
Purchased energy ⁴	24 619	25 748	26 170	4%	-95%
Scope 3					
Business travel ⁵	0	398	384	1%	-
TOTAL excluding reduction through energy with Guarantee of Origin	54 861	34 798	35 873		-35 %
Reduction through purchase of renewable electricity or district heating with Guarantee of Origin ⁶	0	-24 142	-24 943		-
TOTAL Haga scope	54 861	10 655	10 930	37%	-80%
Production and distribution of energy and vehicle fuels ⁷	5 747	1 447	1 367	5%	-76%
- whereof fuels for business travel	110	226	219	1%	100 %
- whereof fuels for own transport	0	0	0	0%	-
- whereof fuels for purchased energy	5 637	1 220	1 148	4%	-80%
Purchased transport 8	10 516	6 373	6 375	22%	-39 %
TOTAL HKScans climate target	71 123	18 475	18 672	64 %	-74 %
CO ₂ in packaging ³	3 347	1 383	1 765	6%	-47%
Other purchased transport ⁸	0	2 196	3 931	13%	-
Waste disposal ⁹	0	1 690	552	2%	-
Packaging ¹⁰	0	4 046	4 074	14%	-
End consumer's disposal of packaging waste ¹¹	0	199	158	1%	-
TOTAL (excl. Carbon offset)	74 470	27 989	29 152	100 %	-61 %

Key indicators	Base year 2003	2016	2017	Change 2003-2017	Unit
Emissions per ton produced product (HKScans climate target)	0,139	0,068	0,069	-51%	tonnes CO ₂ e/tonne product

- 1. Refers only to cars.
- LPG 2015 and district heating 2016 have been adjusted.
- The carbon dioxide is a residual product from the industry. Approximately half is emitted during production (scope 1) and half when the end consumer opens the carbon dioxide filled packaging (scope 3).
- 4. Emissions from production of purchased electricity, district heating or district cooling, assuming
- that all is unspecified (residual mix). In "Share of total 2017" and "Change 2003-2017" is Guarantee of Origin included.
- 5. Refers to business air travel, rail travel and hotels. Category 6 in scope 3.
- Reduction of emissions for "Purchased energy" in scope 2.
- Refers to fuels consumed in scope 1 and scope 2.
 Also includes purchased electricity for processes outside HKScan's operations. Category 3 in scope
- 2.
- 8. Category 4 in scope 3
- Refers to waste disposal (to landfill, materials recycling and production of biogas). Calculated from 2012 onwards. Emissions for 2012 and 2015 have been adjusted from 3374 and 1173 tonnes C02e respectively.
- Emissions from the production of packaging materials. Calculated from 2012 onwards. Category 1 in scope 3.



HKScan's emissions within the Haga scope have reduced by 80 percent since the base year of 2003. In addition to the Haga scope, HKScan's climate target includes emissions from the production and distribution of fuel and outsourced transportation. Emissions within HKScan's 'climate target scope' accounted for 64 percent of the total emissions reported and have reduced by 74 percent since the base year (2003). This is due to lower emissions within all categories. Approximately half of the reduction has been achieved by HKScan buying origin-labelled hydroelectricity for all its electricity needs from 2015. Emissions per unit of weight produced have decreased by 51 percent since the base year of 2003. 30 percent of the emissions fall under scope 1 and consist mainly of heating. Emissions in scope 1 have decreased by 69 percent since 2003, primarily as a result of reduced consumption of fossil fuels for heating (reduced 71 percent since 2003).

Apart from emissions of carbon dioxide when customers open the packaging, the other categories in scope 3 were new in 2012 and are therefore not comparable with the base year. The extended remit of scope 3 has meant disclosure of an additional 6 765 tonnes in 2016 compared with 2003.

The reporting of outsourced transportation has been expanded since 2012 to include a category of "other outsourced transportation" and has not been included in the emissions target for the sake of comparability with the base year. In addition, a further three scope 3 categories were included in the calculations in 2012 that had not previously been included: waste disposal in own operations, production of packaging materials and waste disposal by end consumers. These three categories together account for around 16 percent of HKScan's total emissions.

The diagram shows which categories are included in the company's climate target.

Categories not included in the target are shown in a grey color scale.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Emissions from primary production of meat are not included in HKScan's disclosure and represent the most significant source of emission in scope 3. Rearing cattle, in particular, causes significant emissions of greenhouse gases, especially methane. This is difficult to tackle, however HKScan work together with their suppliers to reduce greenhouse gas emissions.

An example of this is that parts of the soya used in animal feed is replaced with local protein feed, such as field beans, rapeseed and by-products from the food industry, and all soya used in feed is RTRS or Pro Terra certified.



JM is one of the leading developers of housing and residential areas in the Nordic region. Operations focus on the construction of new homes in attractive locations, with an emphasis on the expanding metropolitan areas and university towns of Sweden, Norway, Denmark and Finland. The company is also involved in project development of commercial premises and contract work. JM prioritises quality and environmental issues in every aspect of its work. All homes that JM begins to develop will be eco-labelled with the Nordic Swan Ecolabel from 2018. The company employs 2 500 people and generates sales of approximately SEK 17 billion

www.jm.se

JM

Climate targets

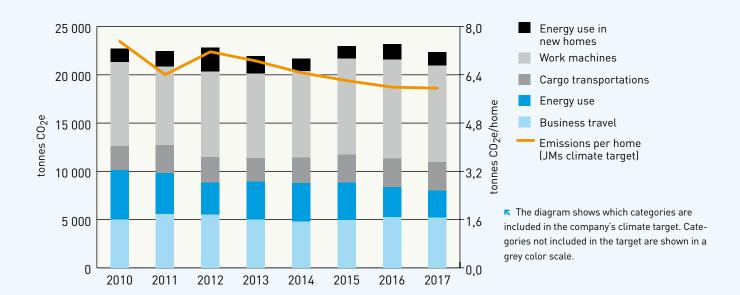
JM has set the target of zero net emission by 2030. The target is broken down into six sub-goals, which include own emissions from passenger transport and energy use (at least 85 percent lower than base year 2010) and indirect emissions from machines, freight transports, construction materials, energy performance of buildings and residents carbon footprint.

Energy use in buildings on exploitation properties is not included in the target, as energy measures are implemented as soon as possible for the exploitation of the properties. Due to the climate impact that arises in the production of building materials and in the operational phase of the buildings, the zero vision is linked to JM's ability to influence emissions.

- The focus during the year was on the application process for the Nordic Swan Ecolabel license, granted in December 2017. The ecolabelling means that JM from 2018 will build housing with even lower environmental and climate impact, including lower energy consumption requirements compared to current guidelines.
- The dialogue continued with suppliers to reduce the concrete's impact on the climate. The process gets extra leverage from the Concrete Initiative that started in 2017 with purpose of achieving climate neutral concrete.
- To increase material efficiency and thus reduce climate impact from material use, a project to radically reduce the construction waste of the business is expected to yield result in 2018.

Emissions (tonnes CO ₂ e)	2010	2016	2017	Share of total 2017	Change 2010-2017
Scope 1					
Business travel ¹	3 970	3 917	3 849	17%	-3 %
Heating	1 785	790	926	4%	-48 %
Scope 2					
Purchased energy ²	9 608	12 014	12 291	6%	-44 %
Scope 3					
Business travel ³	357	525	494	2%	38 %
TOTAL excl. reduction through energy with Gua-	15 720	17 247	17 559	79%	12 %
rantee of Origin					
Reduction through purchase of renewable electri-	-7065	-10260	-10864		54 %
city or district heating with Guarantee of Origin ⁴					
TOTAL Haga scope	8 656	6 987	6 696	30%	-23 %
Purchased transport	2 487	2 971	2 902	13%	17 %
Leased machinery	8 663	10 265	10 026	45%	16 %
Production and distribution of energy	1 485	1 353	1 335	6%	-10 %
and vehicle fuels ⁵					
- whereof fuels for business travel	692	837	848	4%	23 %
- whereof fuels for production of energy	793	516	487	2%	-39 %
Energy use in new homes (first 2 years of use)	1 437	1 587	1 382	6%	-4 %
TOTAL (excl. Carbon offset)	22 728	23 163	22 341	100%	-2 %
Carbon offset ⁶	-359	-422	-409		14 %
TOTAL (incl Carbon offset)	22 369	22 741	21 931	98%	-2 %

Key indicators	2010	2016	2017	Change 2010-2017	Unit
Emissions per home ⁷	7,5	6,0	6,0	-21 %	tonnes CO ₂ e/home



JM's emissions within the Haga scope have reduced by 23 percent since 2010. The Haga scope accounts for 30 percent of all emissions. Both emissions from business travel and heating within the Haga scope have reduced since 2010, however increased one percent since 2016. Emissions from purchased energy have reduced by 44 percent compared to the base year.

In addition to the emissions included in the Haga scope, JM also includes outsourced transportation and machinery as well as the electricity and heat consumed in newly built properties during their first two years in its scope 3 emissions. While total emissions for new homes have decreased by four percent, emissions per home have decreased by around 21 percent since 2010. This shows that the buildings are more energy-efficient, even though volume of production has increased. JM's greatest climate impact is from leased machinery which accounts for 45 percent of total emissions. JM has chosen to carbon-offset emissions from air travel.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Emissions from the manufacture of building materials are not included in JM's disclosure and account for a major part of scope 3 emissions. JM has some possibility to influence this and as a major material user JM identifies the product types in production that have a major climate impact and are continuously working towards climate-efficient solutions. JM operates several initiatives internally to reduce climate impact from materials by streamlining material use, reducing the build-up of building waste and creating more circular material flows. Tests are being conducted to see if the use of carbon dioxide-reduced concrete can be used in the housing production. Houses are continuously evolving towards better energy performance reducing energy demand and climate impact during the building operation and maintenance.

^{1.} Car journeys in vehicles controlled by JM.

Refers to electricity used in production, electricity
used in properties owned by JM, district heating
used in production and district heating in properties owned by JM. Emissions from production of
purchased electricity, district heating or district
cooling assuming that all are unspecified (residu-

al mix). In "Share of total" is Guarantee of Origin included.

Refers to air, taxi, bus and train travel and hotels.
 Reduction of emissions for "Purchased energy" in

Refers to fuels consumed in scope 1 and scope
 These correspond to upstream emissions from

the fuel (production of the fuel) and energy use in newly built properties in their first two years

JM applies carbon offset for air travels.



Lantmännen is an agricultural cooperative and northern Europe's leader in agriculture, machinery, bioenergy and food products. It is owned by 25 000 Swedish farmers and has 10 000 employees, operations in around 20 countries and an annual turnover of SEK 40 billion. With grain as its basis, the group creates added value from the fruits of the fields as part of a thriving farming industry. Some of Lantmännen's best known food brands are AXA, Kungsörnen, Go-Green, Schulstad, Gooh, Finn Crisp and Bonjour. The company is founded on knowledge and values built up through generations of owners. Having research, development and operations throughout the value chain means that the company can share responsibility - from field to fork. For more information please visit

www.lantmannen.com

LANTMÄNNEN

Climate targets

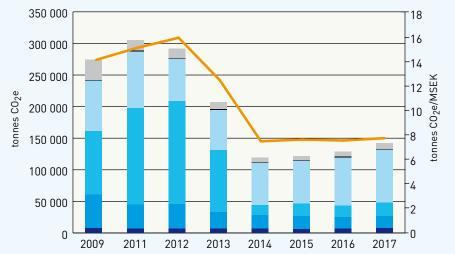
- 40 percent reduction in our own production facilities until 2020, compared to 2015
- Fossil-free production in Sweden and Norway by 2025, in the rest of the Nordics by 2030 and in all of Europe by 2040
- Improved energy efficiency by three percent in relation to production volumes, until 2020
- Reduce emissions from purchased transports with 70 percent to 2030, per own value added, with 2009 as base year.

- Lantmännen take an important step in climate change mitigation with new challenging climate targets, described above.
- Grain dryers in Sala and Helsingborg are no longer heated by fossil fuels such as oil and gas, now direct electric heating is used. Gyllebo Göding in Malmö and the feed factory in Falkenberg run on electricity instead od oil and gas. Korvbrödsbagarn in Örebro replaced the oil-run ovens with RME biodiesel compatible ovens. The use of biogas has increased.
- With the Transport initiative, there is a stronger focus to reduce emissions from transports. The group adopts a new climate target for transports.
- Lantmännen joins the collaboration KNEG "Climate Neutral Freight Transportation".

Emissions (tonnes CO ₂ e)	Base year 2009	2016	2017	Share of total 2017	Change 2009-2017
Scope 1					
Business travel	4 508	3 467	4 020	3 %	-11 %
Heating	53 637	18 281	19 724	14 %	-63 %
Scope 2					
Purchased energy ¹	100 138	148 702	162 062	15 %	-79 %
Scope 3					
Business travel2	2 893	2 955	3 179	2 %	10 %
TOTAL excl. reduction through energy with Guarantee	161 177	173 404	188 986	133 %	17 %
of Origin					
Reduction through purchase of renewable electricity or	0	-130 443	-140 791		
district heating with Guarantee of Origin ³					
TOTAL Haga scope	161 177	42 961	48 195	34 %	-70 %
Purchased goods transport ⁴	79 867	76 747	82 400	58 %	3 %
Production and distribution of energy and vehicle fuels ⁵	32 993	8 948	11 715	8 %	-64 %
- whereof fuels for business travel	953	809	850	1 %	-11 %
- whereof fuels for production of energy	32 040	8 139	10 865	8 %	-66 %
TOTAL (excl Carbon offset)	274 037	128 656	142 310	100 %	-48 %

Key indicators	2009	2016	2017	Change 2009-2017	Unit
Emissions per unit of revenue	14,2	7,5	7,7	-45 %	tonnes CO ₂ e/MSEK

- Emissions from production of purchased electricity, district heating or district cooling assuming that all are unspecified (residual mix). The emission factor for residual mix increased by around 150% between
- 2009 and 2014.
- 2. Refers to business air travel and rail journeys.
- 3. Reduction of emissions for "Purchased energy" in scope 2.
- Refers to goods transportation provided by external contractors.
- 5. Refers to fuels consumed in scope 1 and scope 2.



- Production and distribution of fuels for electricity and heating
- Production and distribution of fuels for business travel
- Business travel
- Purchased electricity, district heating and district cooling
- Direct use of fuels for heating
- Purchased goods transportation
- Emissions per revenue
 - The diagram shows which categories are included in the company's climate target. Categories not included in the target are shown in a grey color scale.

Lantmännen's total climate impact has reduced by 48 percent compared to base year 2009 and increased by eleven percent compared to previous year. The increased emissions are a consequence of that the volume-rich harvest has high water content with the need for drying, the energy use of new plants and increased freight transport. Thanks to acquisition and growth, Lantmännen is a bigger corporation in 2017, compared with previous years - another reason for the increased emissions.

Total emissions per turnover have decreased 45 percent compared to 2009. The reason for the large decrease is that Lantmännen signed contracts for originally labelled renewable energy from water and wind power, made energy efficiency measures and progress in phasing out fossil fuels.

In the Haga Scope, emissions in 2017 have decreased by 70 percent compared to base year 2009. Lantmännen's reported climate impact 2017 is the largest in scope 3, emissions for purchased freight transport account for 58 percent of total emissions. Emissions from own heating in scope 1 and emissions from purchased energy in scope 2 accounts for 14 and 15 percent of total emissions, respectively.

Emissions from business travel have increased by about ten percent compared to 2009, representing about two percent of Lantmännen's total emissions. This year, rental cars are also included. However, the increase is mainly due to increased use of diesel in Lantmännen's service cars.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Lantmännen's reported scope 3 emissions include the purchased freight transports, business travel and production of purchased energy and fuels. In 2017 the purchased freight transports represented a significant part of the reported emissions. Emissions from growing grain and other ingredients are not included in Lantmännen's disclosure, it is however an important focus area in Lantmännen's sustainability work. For example, with development of new cultivation concepts with lower climate impact and R&D work for increased sustainability throughout the value chain from field to fork.



Löfbergs was founded in 1906 and is one of the largest family-owned coffee roasters in the Nordic region. Production corresponds to just over ten million cups of good coffee a day. In Sweden, the company has 174 employees and a turnover of about SEK 1.09 billion. The group has 340 employees and a turnover of SEK 1.879 billion. Headquartered in Karlstad, the company has its own roasting facilities in Sweden, Norway, Denmark and Latvia.

LÖFBERGS

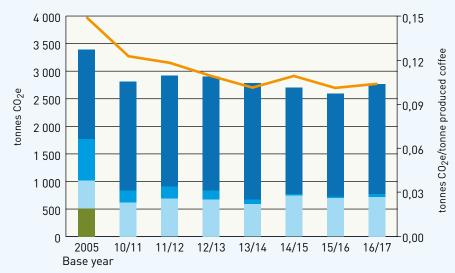
Climate targets

Löfberg's climate target is to reduce greenhouse gas emissions in relation to production volume of coffee by 40 percent by 2020 from the base year of 2005. The target is related to the volume of coffee produced and includes emissions and energy use in own production and business travel. An important part of the climate target is that production should be fossil free 2020.

- First in Sweden to use Scania's new hybrid truck (electricity and HVO) to ship coffee between roasting and warehouse. The technology reduces carbon dioxide emissions by up to 92 percent.
- A new type of plastic packaging that is mostly made on sugar cane. The goal is to replace fossil PE-plastic in all packages by 2020.
- For the first time, more than 10 000 tonnes of organic coffee were purchased, which means that an area corresponding to more than 18 000 football fields have been switched to ecological production.

have been switched to ecological production.									
Emissions (tonnes CO ₂ e) ¹	Base ye	ear 2005	2015/2016	2016/2017	Share of total 2	2016/2017	Change 2005-2016/2017		
Scope 1									
Roasting		1 623	1 865	2 000		1,4%	23 %		
Energy		295	0	0		0,0%	-100 %		
Business travel ²		265	235	260		0,2%	-2 %		
Own transport		511	0	0		0,0%	-100 %		
Scope 2									
Purchased energy		459	1 713	1 906		0,0%	-89 %		
Scope 3									
Business travel ³		236	462	458		0,3%	94 %		
TOTAL excl. reduction through energy		3 390	4 274	4 625		3 %	36 %		
with Guarantee of Origin									
Reduction through purchase of renewable electricity or		0	-1 679	-1 856			-		
district heating with Guarantee of Origin ⁴									
TOTAL Haga scope		3 390	2 595	2 769		2 %	-18 %		
Production and distribution of energy and vehicle fuels ⁵		310	254	274		0,2%	-12 %		
- whereof fuels for roasting		112	116	101		0,1%	-10 %		
- whereof vehicle fuels for energy production		136	105	104		0,1%	-23 %		
- Whereof fuels for business travel		33	52	49		0,0%	48 %		
- whereof vehicle fuels for own transport		29	0	0		0,0%	-100 %		
Purchased transport ⁶		6 825	9 264	9 881		7,0%	45 %		
Packaging ⁷		2 836	2 625	2 946		2,1%	4 %		
Coffee cultivation ⁸		122 873	123 397	125 454		88,8%	2 %		
TOTAL (excl. Carbon offset)		136 234	138 135	141 324		100 %	4 %		
Air travel ⁹		0	-242	0					
"Sustainable business" - carbon offset coffee ¹⁰		0	-862	-895					
TOTAL (incl Carbon offset)		136 234	137 031	140 429			3 %		
Key indicators	2005	2015/2016	2016/2017	Change 20	005-2016/2017	Unit			
Emissions per tonne coffe produced (Haga scope)	0,149	0,101	0,104		-30 %	tonnes C	O ₂ e/tonne coffe produced		
Emissions per tonne coffe produced (total)	5,994	5,348	5,277	-12 % tonnes CO ₂ e/tonne coffe prod		O ₂ e/tonne coffe produced			
Emissions per tonne purchased raw coffe (Haga scope)	0,130	0,085	0,087		-33 %	tonnes Coffee	02e/tonne purchased raw		
Emissions per tonne purchased raw coffe (total)	5,211	4,464	4,432		-15 %	tonnes C	02e/tonne purchased raw		

- Löfbergs' disclosure covers its Swedish operations as well as its production site in Viborg, Denmark.
 The disclosure of Viborg all parts except for business travel are included in the reporting.
- 2. Refers to leased vehicles.
- $3. \quad \text{Refers to air, rail and taxi travel and hotels}.$
- 4. Reduction of emissions for "Purchased energy" in Scope 2
- $5. \ \ Refers to fuels consumed in scope \ 1 \ and \ scope \ 2.$
- Refers to transportation of green coffee beans from grower to factory, transportation of packaging materials and distribution. The calculation method for transportation of packaging has changed
- Extraction of raw material and production of packaging. The increased emissions in 2013 and 2014 are mainly due to the change in calculation method
- with effect from 2012 and the inclusion of the plant in Viborg.
- 8. Coffee growing, including associated processes.
- All carbon offset takes place through CDM Gold standard projects 2012/2013-2015/2016.
- All carbon offset takes place through CDM Gold standard projects 2012/2013-2016/2017.





(Hagascope)

The diagram shows which categories are included in the company's climate target. Categories not included in the target are shown in a grey color scale.

Analysis and comments

Löfbergs' include the climate impact of the coffee cultivation that it purchases, not adjusted for the carbon sinks provided by the coffee plantations and their shade plants, hence they are reporting on the most significant emissions in the value chain. Within the Haga scope, the roasting of coffee represents the largest source of emissions; accounting for 1.4 percent. From 2017, Löfbergs purchase a BioMix which will reduce emissions for the fiscal year 2017/2018. In 2014, the company switched from natural gas to biogas for the roasting of coffee in Viborg, leading to a decrease of 115 tonnes for 2016/2017.

The impact on the climate of coffee cultivation is largely unchanged compared to the base year of 2005, even though production has risen by 17 percent. The reason is that a large proportion of the coffee is certified with lower emissions during cultivation. Emissions from the roasting process have risen by 23 percent due to the increased production. In relative terms, emissions per tonne produced coffee have dropped by twelve percent since 2005, and per tonne purchased raw coffee by 15 percent. Emissions from electricity and heating have reduced substantially, partly thanks to the use of district heating rather than oil-fired systems, and partly to the fact that electricity consumption is purchased as origin-labelled wind power.

Löfbergs is continuously working to reduce climate impact on packaging materials, for example, new type of plastic packaging that is mostly made on sugar cane is now being tested.

For own and purchased transports, the emissions have increased since base year by about 35 percent. This is mainly due to the increase in production but also due to increased emissions from shipments of packaging and manufactured products. During the base year 2005, Löfbergs still had its own distribution, all transports are now purchased. Emissions from business travel have risen 46 percent since 2005 due to increased air travel. In 2015/2016, they began to support Fly Green Fund (instead of carbon offsetting), where 75 percent of the effort goes to the purchase of biofuel and 25 percent for development.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Löfbergs reports its most significant emissions in scope 3; coffee cultivation, packaging and transports.

Löfberg's does not have its own plantations, but nonetheless is working in various ways to reduce the climate impact of the plantations. For example, through various development project for small-scale coffee cultivators, as well by increasing demand and access to coffee from certified farms.



McDonald's is Sweden's largest restaurant chain, with 210 restaurants and 400 000 daily customers. The company had a turnover of more than five billion SEK in 2017. McDonald's is one Sweden's largest private employer of young people. The restaurants are run locally by owner-operators. For more information, please visit www.mcdonalds.se

MC DONALD'S

Climate targets

McDonald's in Sweden has a target of a 40 percent reduction in carbon emissions by 2020 – relative to the number of customers – from its base year of 2010. The emissions included in this target are scope 1, scope 2 and business travel in scope 3. A further goal is to achieve 95 percent renewable fuel for deliveries of ingredients to restaurants by 2020. McDonald's has already achieved the 2020-target. In line with other member companies in the Haga Initiative, McDonald's has adopted a target of fossil free operations by 2030, and that McDonald's operations have emissions close to zero by 2030.

- McDonald's has increased the number of rapid chargers for electric cars at their restaurants. In 2017, electricity was charged to drive over 860 000 kilometres.
- During the year, McDonald's has launched its vegan burger McVegan. To increase the customers choice with different protein options.
- McDonald's has continued to develop its efforts to utilize the returning transportations from the restaurants, taking waste to the distribution centres where material can be recycled.

Emissions (tonnes CO ₂ e)	Base year 2010	2016	2017	Share of total 2017	Change 2010-2017
Scope 1					
Business travel ¹	251	159	132	2 %	-47 %
Refrigerants	861	800	785	10 %	-9 %
Scope 2					
Purchased energy ²	33 834	34 331	35 120	8 %	-91 %
Scope 3					
Business travel ³	427	236	292	4 %	-32 %
TOTAL excl. reduction through energy	35 373	35 525	36 330		
with Guarantee of Origin					
Reduction through purchase of renewable electri-	-26 695	-33 684	-34 444		
city or district heating with Guarantee of Origin ⁴					
TOTAL Haga scope	8 678	1 842	1 885	23 %	-78 %
Waste disposal	6 078	5 189	5 304	65 %	-13 %
Production and distribution of energy	3 061	960	952	12 %	-69 %
and vehicle fuels ⁵					
- of which fuels for business travel	23	15	12		-47 %
- of which fuels for energy prodcution	3 038	945	940		-69 %
TOTAL McDonald's Sveriges climate target	17 817	7 991	8 141	100%	-54 %
Logistics ⁶	3 144	1 204	1 226		-61 %

Key indicators	Base year 2010	2016	2017	Change 2010-2017	Unit
Emissions per customer visit (climate target)	215,4	107,8	117,1	-46 %	g CO ₂ e/customer
Emissions per month of operation (climate target)	6,5	3,1	3,3	-50 %	tonnes CO ₂ e/month
Energy use per customer visit	1,6	1,5	1,6	-4 %	kWh/customer

^{1.} Refers only to company cars.

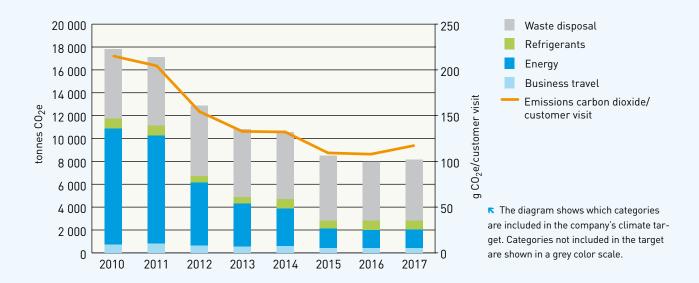
^{2.} Emissions from production of purchased electricity, district heating or district cooling assuming that all are unspecified (residual mix). "Share of total" includes contracts for renewable energy with Guarantee of Origin.

^{3.} Refers to business air travel, train and taxi journeys.

^{4.} Reduction of emissions for "Purchased energy" in scope 2.

^{5.} Refers to fuels consumed in scope 1 and scope 2.

^{6.} From 2015, the consumption of diesel from the sub-suppliers of the distribution supplier HAVI is included.



McDonald's Sweden has reduced its emissions in the Haga scope by 78 percent since the base year 2010. The Haga scope includes about 23 percent of the total calculated emissions. The largest sources of emissions come from waste management, accounting for about 65 percent this year.

The company has also set its own climate target where waste management and production and distribution of energy and vehicle fuels are included. Within its emission target, the company has more than halved (53%) its emissions compared to the base year (2010), however increased by two percent since last year. The increased emissions from the previous year also led to that emissions per customer visit increased by nine percent compared to 2016. Emissions per customer visit, however, has decreased by 46 percent since the base year. Emissions from business travel increased by seven percent in 2017 compared with last year. New to this year is that emissions from train journeys is included in the reporting, this however only contributed marginally to the result. Emissions from waste management and energy increased by two percent and one percent respectively compared to 2016. However, compared with base years, they have decreased by 13 and 84 percent, respectively. New for this year is also that the company no longer purchases any unspecified electricity, but all purchased electricity is labelled with Good Environmental Choice (Bra Miljöval) or origin-labelled renewable electricity, which has contributed to the reduction of purchased electricity and district heating (scope 2) by 91 percent since the base year. The emissions from refrigerants have decreased two percent compared to 2016 and by nine percent compared to base year, thanks to the ongoing work to replace refrigeration and freezer systems with less harmful refrigerants.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

McDonald's most significant emission in scope 3 is purchased agricultural products. McDonald's was one of the initiators of the Global Round Table of Sustainable Beef, an organization that promotes sustainability in beef production around the world. In Sweden, McDonald's restaurant industry is the largest purchaser of Swedish beef and has cooperated with LRF for many years to increase the Swedish self-sufficiency of beef, currently about 45 percent. McDonald's Sweden is also working to constantly develop its menu with different protein options. Today more than 40 percent are chicken, vegetarian and fish protein. As the first restaurant company in the world McDonald's global has set climate targets by 2030 that has been approved by the Science Based Targets initiative (SBTi), which includes reductions of emissions in the supply chain.



Preem is the largest fuel company in Sweden with the vision to lead the transformation towards a sustainable society. Preem refine and sell gasoline, diesel, heating oil and renewable fuels to companies and consumers in Sweden and abroad. The two refineries in Gothenburg and Lysekil are among the most modern and environmentally adapted in Europe with a refining capacity of more than 18 million cubic meter of crude oil per year. Preem has over 1 400 employees, of which 950 works at the two refineries in Gothenburg and Lysekil, Sweden. Preem had a turnover of SEK 69 billion in 2017.

www.preem.se

PRFFM

Climate targets

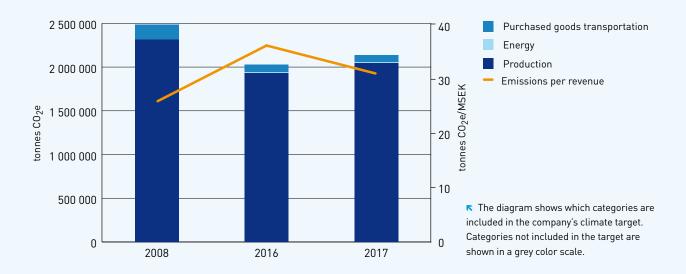
Preem's goal is to gradually replace fossil raw materials with renewable raw materials in their own production, thereby increasing sales of renewable fuels. By 2030, Preem will manufacture at least 3 000 000 m3 of renewable fuels, which is the same as Preem's sales volume in the Swedish market.

- Building of a new hydrogen production plant at the refinery in Gothenburg enabling increased production of renewable fuels. With the plant, the production of renewable fuels can increase to 200 000 m3 annually and create opportunity to reach 500 000 m³ on an annual basis at the start of 2020.
- Preem is now certified according to the International Sustainability and Carbon Certification (ISCC) for sustainable biofuels. The certification further confirms that Preem's products meet the requirements of the EU's directive on promoting the use of energy from renewable energy sources.

Emissions (tonnes CO ₂ e)	Base year 2008	2016	2017	Share of total 2017	Change 2008-2017
Scope 1					
Production ¹	2 310 306	1 931 626	2 045 087	96%	-11 %
Scope 2					
Purchased energy 2,3	79 670	218 990	234 847	0%	-97 %
Scope 3					
Business travel					
TOTAL excluding reduction through energy with Guarantee of Origin	2 389 976	2 150 616	2 279 934		
Reduction through purchase of renewable electricity or district heating with Guarantee of Origin ⁴	-78 649	-218 972	-234 815		
TOTAL Haga scope	2 311 327	1 931 644	2 045 119	96 %	-12 %
Purchased transport ⁵	172 118	87 305	79 700	3,7%	-54 %
Production and distribution of energy and vehicle fuels ⁶	2 724	11 026	11 992	0,6%	
TOTAL (excl. Carbon offset)	2 486 169	2 029 975	2 136 811	100 %	-14 %

Key indicators	Base year 2008	2016	2017	Change 2008-2017	Unit
Emissions per revenue	25,95	36,25	31,08	20 %	tonnes CO ₂ e/MSEK

- 1. Combustion in Preem's refineries.
- 2. Emissions from production of purchased electricity, district heating or district cooling, assuming that all is unspecified (residual mix).
- 3. Emission factors for 2008, 2016 and 2017 have been adjusted. This in order to reflect the consumption of electricity from with Guarantee of Origin.
- 4. Reduction of emissions for "Purchased energy" in scope 2.
- $5. \ \ Refers to purchased goods transportation by truck and freighter.$
- 6. Refers to fuels consumed in scope 1 and scope 2.



Preem is included in the Haga Initiative's greenhouse gas disclosure for the second time this year, as the company became a member in 2016.

Preem has reduced its emission in the Haga scope by 12 percent and by 16.

Preem has reduced its emission in the Haga scope by 12 percent and by 14 percent for total calculated emissions.

Emissions from purchased energy, in scope 2, have increased decreased significantly since the base year 2008. Mainly due to the energy mix purchased in 2008 had fossil fuel in the mix, and in 2016 and 2017 the mix only contained hydropower, wind and nuclear energy.

The direct emissions in scope 1 have also decreased, by eleven percent since 2008. Emissions from purchased transports outside the Haga scope have decreased by 54 percent since the base year. Especially due to reduced emissions from ship transport.

Emissions in 2017 have increased by five percent compared to 2016. This is mainly due to the increased use of energy in production, as a result of increased production. Preem's production of renewable fuel increased from 156 800 m³ 2016 to 169 000 m³ in 2017 - the highest volume so far.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Preem's most significant source of emissions in scope 3 is when customers use the company's fuels. With Preem's commitment to renewable fuels, emissions will decrease, which is of great importance in reducing Swedish emissions from transport.

SIEMENS

Siemens is a global powerhouse focusing on the areas of electrification, automation and digitalization. Siemens has innovative solutions for intelligent infrastructure, sustainable energy technology, efficient production and medical diagnosis. During the fiscal year 2017, the company had a worldwide turnover of around EUR 83 billion and had 372 000 employees in more than 200 countries.

In Sweden, Siemens AB is a member of the Haga Initative and has been established since 1893 with around 1099 employees. In 2017, turnover for Siemens AB amounted to approximately SEK 5 billion. In Sweden, Siemens employs about 4200 people Read more at www.siemens.se

SIEMENS

Climate targets

Siemens has set targets to reduce greenhouse gas emissions by 50 percent until 2020 compared with base year 2014 and to reach carbon neutral operations by 2030 in scope 1 and 2.

- Siemens' headquarter in Stockholm moved to an environment-certified building (Gold rated) in Arenastaden. The office is estimated to reduce energy consumption by about 66 percent and has a green lease agreement.
- Reduced carbon emissions from company cars and investments in lowemission vehicles. In 2017, 29 percent of newly purchased vehicles were plug-in hybrids.
- Digital meetings are increasing, and analysis are carried out annually for air travel with revised action plan.
- Internal goals to demonstrate how the different divisions affect customers' environmental impact.

Emissions (tonnes CO ₂ e)	Base year 2014	2016	2017	Share of total 2017	Change 2014-2017
Scope 1					
Business travel ¹	1 084	1 132	909	26 %	-16 %
Scope 2					
Purchased energy	1 690	1 529	1 516	43 %	-10 %
Scope 3					
Business travel	1 458	1 199	1 061	30 %	-27 %
TOTAL Haga scope	4 232	3 860	3 486	99 %	-18 %
Production and distribution of energy and vehicle fuels ²	36	35	30	1 %	-18 %
TOTAL	4 232	3 860	3 486	99 %	-18 %

Key indicators	2014	2016	2017	Change 2014-2017	Unit
Emissions per revenue	0,49	0,79	0,71	44 %	tonnes CO ₂ e/MSEK

^{1.} Private-/leasing and company owned vehicles

^{2.} Refers to fuels consumed in scope 1 and scope 2.



Siemens is included in the Haga Initiative's greenhouse gas disclosure for the second time this year, as the company became a member in 2016. Since the base year 2014, emissions have dropped by 18 percent in both the Haga scope and for total calculated emissions. Most of the total emissions within the Haga scope are emissions from business travel, which include leasing cars, the staff's own cars, as well as air and rail travel.

In 2016 and 2017, focus has been on measures for investments in low-emission vehicles and increased charging infrastructure for the company's fleet. Emissions from business travel have decreased by 27 percent compared with base year 2014 and with 12 percent since last year.

Purchased energy is a significant part of total emissions and is relatively stable between 2014 and 2017. The relocation of headquarters in 2017, contributed to emission reduction of 20 percent from heat consumption. The electricity use has also decreased, although not to an equal degree and compensated by the increase in emissions per kWh in the energy mix.

As part of a global restructuring of the Healthcare division, Siemens AB divested the Swedish Healthcare business to Siemens Healthcare AB. This results in an increase in emissions relative to sales in 2016 for Siemens AB. Several of Siemens products help reduce emissions at the time of use, namely scope 3. These products are collected in Siemens environmental portfolio and compiled by Siemens at a global level. At present, no breakdown is made by region or product level, consequently a specific figure for Siemens Sweden cannot be obtained.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Siemens significant release in scope 3 comes from purchased products as well as the costumer use of Siemens products and services. Siemens monitors energy consumption and carbon dioxide emissions from a large part of the product portfolio. Siemens globally will be carbon neutral by 2030 and has also begun an in-depth work on evaluating key suppliers' climate impact and carbon dioxide emissions. The result of the evaluation will be used in the next step, in joint effort with key suppliers to work towards reduced carbon dioxide emissions from purchased goods. Siemens globally is a large company with complex value chains and many suppliers. This poses a challenge in switching to carbon dioxide neutral production, while Siemens has a great potential to influence its suppliers. Siemens AB is a sales and marketing company for Siemens global operations Siemens AG in Germany.



Stena Recycling, makes recycling a sustainable business. The company recycle and refine products into new raw materials. With 1 500 employees, long term solutions are created every day for customers and the society. Stena Recycling is a part of Stena metal Group and is represented by 95 facilities located in different parts of Sweden and has annual sales of SEK 7.7 billion.

www.stenarecycling.se

STENA RECYCLING

Climate targets

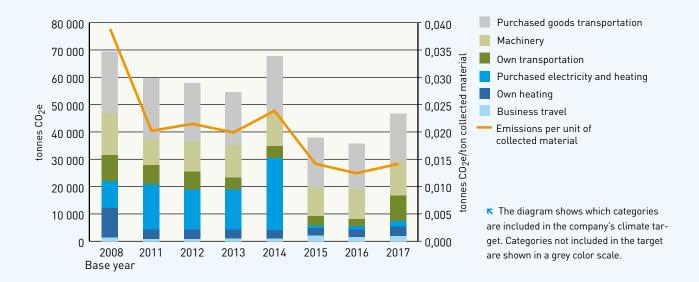
Stena Recycling has an overall target of a 40 percent reduction in climate impact by 2020 compared to 2008. This is a relative goal and is based on the quantity of materials collected.

- New cross-functional teams have been created to work on energy and transport issues within the group.
- Focus on fossil-free procuring remains in all new agreements and currently the company has over 20 sites with about 70 vehicles that roll on fossil-free fuels. Since 2012, more than 85 percent of all rail transports, previously powered by diesel, are electrified through a collaboration with Green Cargo.
- Continued focus on more efficient use of work machines has led to a decrease in average fuel consumption compared with the previous year from 1.73 to 1.63 L/ per processed tonne of material.

Emissions (tonnes CO ₂ e)	Base year 2008	2016	2017	Share of total 2017	Change 2008-2017
Scope 1					
Business travel	814	1 122	1 385	3%	70 %
Heating ¹	10 704	2 706	3 421	7%	-68 %
Own transport ²	8 564	1 905	7 325	16%	-14 %
Machinery	13 237	9 077	10 360	22%	-22 %
Scope 2					
Purchased energy ³	7 472	18 302	20 428	3%	-84 %
Scope 3					
Business travel ⁴	359	176	236	1%	-34 %
TOTAL excl. reduction through energy	41 150	33 284	43 155		
with Guarantee of Origin					
Reduction through purchase of renewable electricity		-17 847	-19 256		
or district heating with Guarantee of Origin ⁵					
TOTAL Haga scope	41 150	15 437	23 899	51%	-42%
Purchased transport ⁶	22 479	16 735	17 525	38%	-22 %
Production and distribution of energy	5 759	3 592	5 294	11%	-8 %
and vehicle fuels ⁷					
- whereof fuels for business travel	213	336	331	1%	55 %
- whereof fuels for own transport	998	729	2 060	4%	106 %
- whereof fuels for own machinery	2 157	1 835	2 126	5%	-1 %
- whereof fuels for energy production	2 405	691	777	2%	-68 %
TOTAL (excl Carbon offset)	69 388	35 764	46 718	100%	-33%

Key indicators	Base year 2008	2016	2017	Change 2008-2017	Unit
Emissions per unit of collected material	0,039	0,012	0,014	-64 %	tonnes CO ₂ e/
					tonne collected material

- 1. Including LPG consumption for flame cutting.
- 2. Own trucks and own train.
- 3. Emissions from production of purchased electricity, district heating or district cooling assuming that all are unspecified (residual mix). "Share of total" includes contracts for renewable energy with Guarantee of Origin.
- 4. Air and rail travel.
- 5. Reduction of emissions for "Purchased energy" in scope 2.
- 6. Transportation purchased centrally accounts for around 92% of outsourced outward and intermediate transportation. Measurable transportation on which the table is based is in the range 37–54% of total outward and intermediate transportation.
- 7. Refers to fuels consumed in scope 1 and scope 2.



In 2017, Stena Recycling acquired the company IL Recycling, which is now incorporated into Stena Recycling's operations. In the Haga Initiative greenhouse gas disclosure, the IL Recycling emissions during the 2008 base year were added to Stena Recyclings' to provide an overall picture of the new and existing climate impact of the new organization. The intermediate years, including 2016 in the table above, has not been recalculated.

Stena Recycling's emissions in the Haga scope have decreased by 42 percent since the base year 2008. Of the emissions, almost 50 percent are in scope 1 where emissions have fallen by 32 percent between 2008 and 2017. This is due to reduced oil consumption, reduced diesel consumption for machines and a shift from own transport to purchased transport.

Emissions in scope 2 have fallen sharply since the base year, by 84 percent. This is mainly due to Stena Recycling's decision to purchase origin-labelled electricity from hydropower. In 2014, the emission in scope 2 was at 38 percent, which was reduced to only one percent in 2015. In 2017 this figure was three percent, as all energy purchased, for what was previously IL Recycling, had not yet been renewed to renewable energy.

Stena Recycling has centralized procurement of all logistics, as well as expanded the system support available to measure a larger proportion of the company's transports. The reported emissions for purchased transports are 38 percent of the emissions in 2017. Transport emissions in general, even with own cars included, account for 58 percent of emissions and have fallen by just over 16 percent since 2008.

MOST SIGNIFICANT EMISSIONS IN SCOPE 3

Emissions from Stena Recycling's customers' transports of waste to the facilities are not included in the emission disclosure and represent significant emissions in scope 3. Stena Recycling is aware of these emissions and is working to reduce them by setting environmental requirements when outsourcing, such as requirements of vehicle performance and transport optimization.



Stockholm Exergi Stockholm Exergi provides a pleasant indoor climate to people and properties in the metropolitan Stockholm.

The local energy company is equally owned by the City of Stockholm and Fortum and produces district heating, district cooling, and electricity. Stockholm Exergi has over 10 000 customers and about 700 employees. During the year, the company reported annual sales of approximately SEK 6.6 billion. Together with customers and the inhabitants of Stockholm, Stockholm Exergi has contributed to that the city is being counted as one of the world's most sustainable capitals. www.stockholmexergi.se

STOCKHOLM EXERGI

Climate targets

Stockholm Exergi's target is to reduce emissions by 40 percent by 2020 (compared to 2010) through switching to renewable energy, energy recovering/recycling, efficiency measures, and, as a last resort, carbon offsetting. By 2030 at the latest, 100% of production should be based on renewable or recovered energy and by 2020 at the latest, the use of coal should be terminated.

- The biogas plant in Högdalen was opened together with Stockholm Water Company and the City of Stockholm. The inhabitants of Stockholm leave their garden waste, which becomes district heating and soil fertilizing biochar that binds renewable coal into the ground.
- A new district heating network for colder temperatures was put in operation in Hjorthagen.
- A service for heating control in mobile phones was soft-launched: Intelligy.
 The product has been developed together with several housing associations.
 The goal is more effective use of district heating.

Emissions (tonnes CO ₂ e) ¹	Base year 2010	2016	2017	Share of total 2017	Change 2010-2017
Scope 1	1 418 507	888 469	842 203	82,0%	-41%
Production ¹	1 418 156	888 075	841 876	82,0%	-41%
- CO ₂ from burning of coal	624 340	341 656	431 595	42,0%	-31%
- CO ₂ from burning of oil	420 232	109 321	36 232	3,5%	-91%
- CO ₂ from burning of fossil fuel fraction of municipal waste	210 756	366 787	321 236	31,3%	52%
- Other GHG related emissions ²	162 828	70 310	52 813	5,1%	-68%
Business travel ³	351	394	327	0,03%	-7%
Scope 2	77 982	82 719	85 206	8,3%	9%
Purchased electricity ⁴	442 002	383 614	362 839		-18%
Reduction through purchase of renewable electricity or district	-364 020	-300 895	-277 634		-24%
heating with Guarantee of Origin⁵					
Scope 3	176	121	181	0,02%	3%
Business travel ⁶	176	121	181		3%
TOTAL Haga scope	1 496 665	971 308	927 589	90,3%	-38%
Production by another district heating producer but supplied by	124 850	37 135	27 334	2,7%	-78%
Stockholm Exergi ⁷					
Production and distribution of energy and vehicle fuels ⁸	323 963	95 056	72 115	7%	-78%
- whereof vehicle fuels for business travel	75	88	73	0,01%	-3%
- whereof vehicle fuels for energy production	323 888	94 967	72 042	7%	-78%
TOTAL (excl. Carbon offset)	1 945 479	1 103 499	1 027 038	100%	-47%
Carbon offset	-7 797	-297 888	-293 912		
TOTAL (incl. Carbon offset)	1 937 682	805 611	733 126		-62%

Key indicators	Base year 2010	2015	2016	Change 2010-2016	Unit
Emissions from production9	158	112	102	-36 %	g CO ₂ e/kWh
Emissions per energy delivery ¹⁰	162	113	100	-38 %	g CO ₂ e/kWh
Emissions per energy delivery ¹¹	162	82	72	-56 %	g CO ₂ e/kWh

- 1. Emissions of CO_2 , methane, refrigerants and N_2O from Stockholm Exergi's own production
- Tonnes CO2e adjusted according to IPCC AR5 as from 2017.
- Refers to business car travel. Emissions in 2010 are assumed to be same as in 2014
- Emissions from production of purchased electricity, district heating or district cooling assuming that all are unspecified (residual mix). "Share of total" includes contracts for renewable energy with Guarantee of Origin.
- 5. Reduction of emissions for "Purchased energy" in
- scope 2. Stockholm Exergi purchase electricity with Guarantee of Origin for its district heating and district cooling production.
- Refers to business air travel. Emissions in 2010 are assumed to be same as in 2014. Category 6 in Scope 3.
- Emissions by players other than Stockholm Exergi
 in the case of production partnerships for district
 heating. The emissions include both emissions from
 plants and from the extraction and distribution of the
 fuels for these plants.
- 8. Production refers to extraction and processing of

- the fuels. In addition to distribution of the fuels, also transportation of additives and ash.
- Total emissions from production of electricity, heating and cooling.
- Total emissions from scope 1, 2 and 3 for the total supply of district heating, electricity and district cooling before carbon offsetting.
- Total emissions from scope 1, 2 and 3 as above for the total supply of district heating, electricity and district cooling after carbon offsetting.



- energy and vehicle fuels Purchased electricity Production partnerships
- - Emissions per energy delivery

The diagram shows which categories are included in the company's climate target. Categories not included in the target are shown in a grey color

Analysis and comments

2017 was the first full year with the new combined heat and power plant (CHP) on biofuels in operation, which lead to an increased production by 68 percent compared with 2016. 1713 GWh renewable district heating and 683 GWh renewable electricity were produced in the facility, which corresponds to the annual needs of 165 000 apartments as well as 279 000 electric cars. Emissions from both coal and fossil oil are lower in 2017 than in the years be-

fore 2016. Compared to 2016, emissions have increased slightly from coal while emissions from fossil oil has reduced. Overall, this has led to a reduction in emissions from production by five percent. Compared to nearest comparable year before the new biofuel CHP plant came into operation (2015), emissions in production have reduced by 23 percent.

1072 GWh of district heating was generated by recycling waste heat in purified wastewater, heated water from the district cooling network other activities with cooling needs, corresponding to the annual need of 100 000 apartments. To optimize production, there is a cooperation with nearby district heating producers, whose emissions are reported in this disclosure. These emissions, that also include the concept of open district heating, continues to decline, mainly because 2017 was the first year Söderenergi abandoned peat as a fuel. In total, emissions have dropped by seven percent compared with 2016 and by 47 percent compared with the base year 2010. Gas operations were sold at the end of 2016 and thus, according to the Greenhouse Gas Protocol, historical emissions are recalculated so that the gas operation is not included. Key figures "emissions from own production" and "total emissions per energy delivery" have decreased by eight and ten percent respectively compared with 2016, and 32 and 34 percent respectively compared to the base year 2010. In the Haga scope, Stockholm Exergi reduced its emissions by 38 percent since the base year 2010, which means that the company is close to reach the target for 2020.

MOST SIGNIFICANT

EMISSIONS IN SCOPE 3

Stockholm Exergi has for many years reported all significant greenhouse gas emissions. Emissions from extraction, processing and transportation of the fuels to the plants account for around eight percent of emissions. These are included in the disclosure in scope 3. Emissions from the extraction of fuels are relatively low, as a large proportion of the fuels are residues from the forest, industry and society.

W SVEASKOG

Sveaskogs core business is forestry and sales of timber, pulpwood and biofuel for use in the production of wood products, paper, packaging and energy. Sveaskog is Sweden's largest forest owner with customers all over the country. In 2017, Sveaskog had sales of SEK 6 billion and in average 846 employees. Sveaskog takes long-term responsibility for the forests as a complex ecosystem supporting people, animals and plants

www.sveaskog.se

SVEASKOG

Climate targets

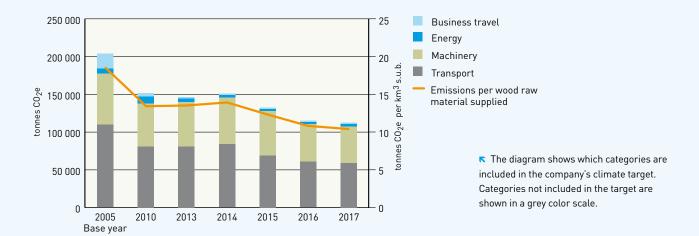
Sveaskog's target is at least a 30 percent reduction in carbon dioxide emissions between 2010 and 2020 relative to the volume of wood raw material supplied. With 2005 as a base year, the target is to achieve a 40 percent reduction in total carbon dioxide emissions by 2020.

- A first step has been taken to develop a multidimensional sustainability reporting of the whole business, where the climate benefits of forests can be determined by quantifying growing forests that bind carbon and thereby further develop Sveaskog's climate work.
- Increased elements of renewable fuel at own operations and contractors through active engagement in procurement and continuous internal education
- Increase in transport by train instead of truck. New forms of cooperation over larger geographies than usual where interchanges with other players can shorten transport distances.

Emissions (tonnes CO ₂ e)	Base year 2005	2016	2017	Share of total 2017	Change 2005-2017
Scope 1					
Business travel ¹	13 380	1 822	1 585	1,4%	-88 %
Energy ²	5 084	2 133	2 992	2,7%	-41 %
Machinery	12 303	4 229	3 350	3,0%	-73 %
Scope 2					
Purchased energy ³	776	5 002	5 867	0,0%	-99 %
Scope 3					
Business travel ⁴	643	257	274	0,2%	-57 %
TOTAL excl. reduction through energy with Guarantee of Origin	32 185	13 443	14 068		-56 %
Reduction through purchase of renewable electricity or district heating with Guarantee of Origin ⁵	0	-4 900	-5 857		
TOTAL Haga scope	32 185	8 543	8 211	7,3%	-74 %
Purchased transport ⁶	109 631	62 672	59 127	52,6%	-46 %
Leased machinery	53 576	44 256	42 564	37,9%	-21 %
Production and distribution of energy and vehicle fuels 7	8 542	1 970	2 527	2,2%	-70 %
- whereof fuels for business travel	5 575	358	323	0,3%	-94 %
- whereof fuels for energy production	751	328	422	0,4%	-44 %
- whereof fuels for own transport and machinery	2 216	1 284	1 782	1,6%	-20 %
TOTAL (excl. Carbon offset)	203 934	117 441	112 430	100 %	-45 %

Key indicators	Base year 2005	2016	2017	Change 2005-2017	Unit
Emissions per unit of wood raw material supplied (total)	18,532	10,817	10,394	-44 %	ton CO ₂ e/km ³ s.u.b.

- $1.\,$ Company cars, cars used for company business and leased cars.
- 2. Heating using own boilers.
- 3 Emissions from production of purchased electricity, district heating or district cooling assuming that all are unspecified (residual mix). "Share of total" and "Change 2005-2017" includes contracts for renewable energy with Guarantee of Origin..
- 4. Air and rail travel.
- 5. Reduction of emissions for "Purchased energy" in scope 2.
- 6. Emissions for "Purchased transport" for 2016 has been adjusted from 60 804 tonnes due to change in methodology.
- 7. Refers to fuels consumed in scope 1 and scope 2.



A large part of Sveaskog's calculated emissions is found in scope 3, as 53 percent of total emissions come from purchased transports and 38 percent from leased machinery. Since the base year 2005, these emissions have dropped by 46 and 21 percent, respectively. In total, emissions have decreased by 45 percent since the base year.

Emissions from transport have decreased, partly due to a higher concentration of renewable raw materials in diesel and increased use of pure biofuels, mainly HV0100. Since 2016, emissions from transport have decreased by five percent. The equivalent figure for work machines is four percent, due to the use of high and low-blended biofuels in vehicle and machine fuels.

Emissions per delivered forest raw material (tonnes CO2e / km3 s.u.b.) have decreased by four percent since 2016 and by 44 percent since base year 2005. The Haga scope only covers seven percent of total calculated emissions, with own machines being the largest source with three percent of total emissions. Emissions in the Haga scope have decreased by 74 percent since the base year.

MOST SIGNIFICANT

EMISSIONS IN SCOPE 3

Sveaskog's most significant emission in scope 3 derives from timber transportation by road and from forestry machinery. These fall within scope 3 and are reported in the disclosure under purchased transports and under own or leased machinery and are included in the climate target. Sveaskog encourages the use of renewable fuels for leased machinery and purchased transports.

APPENDIX 1: BIOGENIC EMISSIONS

Biogenic carbon dioxide emissions arise when biofuel is used for heating, production and transportation. Combustion in air of fuel containing carbon results in the formation of carbon dioxide, regardless of whether the fuel is fossil or renewable. In the medium to long term, however, only carbon dioxide emissions from fossil fuels contribute to the greenhouse effect, because biofuels absorb just as much carbon dioxide during their growth as is released on combustion. Carbon dioxide emissions from combustion of biofuels are known as biogenic carbon dioxide emissions. In the GHG Protocol and in national climate reporting, biogenic carbon dioxide emissions must be reported separately from emissions from fossil fuels.

In the table below, the companies' biogenic carbon dioxide emissions are shown parallel to their fossil fuel emissions in scope 1. Note that only carbon dioxide emissions are reported, which is why the fossil CO2 emissions in the table are not the same as the greenhouse gas emissions expressed in CO2e (carbon dioxide equivalents) in each company's disclosure.

Share of total of biogenic and fossil CO ₂ -emissions scope 1	Biogenic CO ₂ emissions in scope 1 (ton)	Fossil CO ₂ emissions in scope 1 (ton)
Akzo Nobel	0	162 000
Axfood	13 710	11 180
Coca-Cola European Partners Sverige AB	748	602
Folksam	N/A	539
Green Cargo	18	34 304
HKScan	899	9 319
JM	321	4 775
Lantmännen	70 469	23 744
Löfbergs	155	2 260
McDonald's Sverige	0	1675
Preem	0	2 160 421
Siemens	0	909
Stena Recycling	3 572	22 491
Stockholm Exergi	1 973 613	842 203
Sveaskog	12 131	7 927

APPENDIX 2: : SCOPE 2 EMISSIONS ACCORDING TO DIFFERENT CALCULATION METHODS

Under the GHG Protocol, scope 2 emissions can be calculated using one of the following methods:

- Market-based method, which distinguishes between with Guarantee of Origin purchased electricity, heating or cooling and unspecified supplies. A specific emission factor is used for with Guarantee of Origin products, while an emission factor for a residual mix is used for unspecified supplies.
- Location-based method, which uses one emission factor for everything supplied through the power, heating or cooling grid.

Under new guidelines in the GHG Protocol, the method chosen is to be declared and the emissions according to the method not chosen are to be reported separately. The Haga Initiative's greenhouse gas emissions disclosure uses the market-based method, which is also the method prescribed by Energimarknadsinspektionen (the Swedish Energy Markets Inspectorate). Scope 2 emissions according to each method are reported below.

Emissions scope 2 using different calculation methods	"Location-based method" ton CO ₂ e	"Market-based method" ton CO ₂ e	
Akzo Nobel	46 088	4 576	
Axfood	12 268	4 660	
Coca-Cola European Partners Sverige AB	1 093	226	
Folksam	875	543	
Green Cargo	18 798	899	
HKScan	4 340	1 227	
JM	2 783	1 428	
Lantmännen	33 670	21 271	
Löfbergs	282	34	
McDonald's Sverige	4 976	676	
Preem	29 306	234 847	
Siemens	396	1 516	
Stena Recycling	3 053	1 172	
Stockholm Exergi	45 277	85 206	
Sveaskog	359	82	

THE HAGA INITIATIVE'S vision is a profitable business sector without climate impact.







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SIEMENS





W SVEASKOG

