

BLICC #6 SWEDEN



AXFOOD
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JM
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SVENSKA STATOIL
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Business Leaders Initiative on Climate Change

Report 6:

Do the right thing, earn money and save our climate

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About BLICC Business Leaders Initiative on Climate Change, was started in 2000 and is a network of companies

BLICC
driver klimatarbetet framåt

from different industries that work actively to reduce their own climate impact and work towards business and society becoming climate neutral. The membership of BLICC includes Axfood, Coca-Cola beverages Sweden, Fortum, JM, Procter & Gamble, Svenska Statoil, Stena Metall, Vasakronan as well as SMHI (knowledge partner). BLICC is coordinated by Respect.

About Respect

respect
SUSTAINABLE BUSINESS

Respect supports businesses in implementing systematic sustainable work that strengthens their brand value and bottom line. Respect sustainability and climate change programme combines strategic advice with effective and easily accessible IT tools. Respect is the initiator of and runs several leading business networks in Sweden and internationally. www.respect.se

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Foreword

Climate change work is rewarding

In December 2009, in Copenhagen, the countries of the world will decide on a new climate agreement to replace the Kyoto protocol. The UN's climate change panel, the IPCC, has shown that the climate situation is more serious than previously thought and the need for a new climate change agreement to be signed is acute. To avoid acceleration in climate change, all parts of society, including business, must contribute to avoid an environmental crisis.

Sweden releases approximately 65 million tons of carbon dioxide equivalents annually, a figure that could be dramatically reduced if businesses took responsibility for their climate impact.

Companies in BLICC have reduced their climate impact on average by 26% over three years with high levels of cost-efficiency. Calculating the climate impact must be as obvious as carrying out an annual report, but too few companies do it at present. By measuring the emissions, the companies can discover the major emission sources, and therefore more easily prioritise the measures to be carried out. BLICC can demonstrate that reduced climate impact leads to profitable business. Examples of action are energy efficiencies and reviews of business travel which lead to better control of

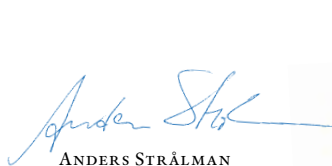
operations, increased competitiveness and reduced costs. The Stern report pointed out that the growth friendly strategy for the long term is to tackle climate change today.

The message is; doing the right thing, earning money and fighting climate change is not a contradiction. Since 1990, Sweden has reduced its climate impact by 9 percent at the same time as growth has increased. During a recession there are reasons to inform people that business benefits and climate benefits can work together. Excuses that it is too expensive, too difficult and unrealistic do not hold water.

The Swedish people also want to see the business community accept its environmental responsibility. In a new Sifo survey, 95% of those asked believed that it is important for companies to get involved in the climate issue. Those companies that underestimate the issue run the risk of being the losers of the future.

Sweden will have a central role as holder of the Presidency of the EU, which will give Swedish business the chance to make Sweden the role model that the world needs. Therefore, BLICC is challenging Sweden's companies to take the chance, to calculate and report their climate impact and help Sweden to be the role model that the world needs!

GOTHENBURG – MALMÖ – NORRKÖPING – STOCKHOLM, JUNE 2009



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President and CEO Axfood



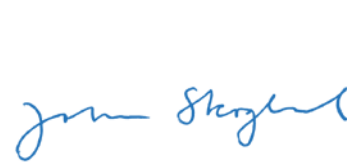
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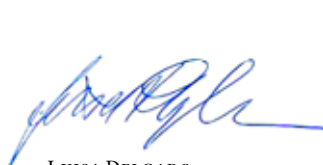
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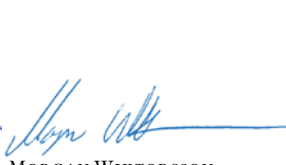
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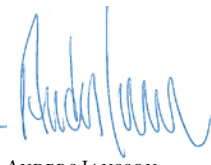
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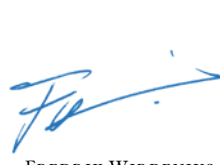
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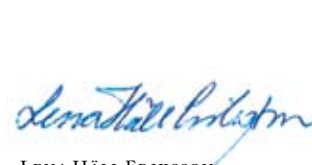
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About BLICC

Since 2000 member companies of BLICC have been identifying and implementing energy measures that are both profitable and, at the same time, help reduce carbon dioxide emissions by their business activities. BLICC was initiated at international level by executives from companies such as IKEA, The Body Shop, Interface and Birka Energi. BLICC has now acquired extensive experience and expertise when it comes to structuring climate initiatives in a way that suits the enterprise sector.

BLICC is a network of companies from different industries that work together, and with their own projects, to actively reduce their impact on the environment through systematic climate work. The long-term vision is of a business sector and a community that has no impact on the climate.

BLICC aims to spread rings on the water. We want to share the best of our experience, and at the same time invite other companies and organisations with a climate agenda to join us in a dialogue.

2009 is an important year for the environment. In December, the countries of the world will decide on a new climate agreement in Copenhagen. BLICC wants to use the time up to the Copenhagen meeting to promote three important messages. First; companies can reduce their own climate impact, secondly; the tools are in place to start doing so and thirdly; it is profitable to do so.

Do the right thing, earn money and save our climate is the theme of the report this year. Several good examples from the BLICC companies demonstrate that climate impact can be reduced in a cost effective manner. Among the subjects covered are the dilemmas the companies have faced in their climate change work, a call to Sweden's business community to start calculating their climate impact and how the GHG protocol, the international standard for calculation, is laid out. Last but not least, there is an important challenge from Professor Johan Rockström that it is now, if ever, that business must act to reduce its climate impact.

ENJOY READING IT!

NINA EKELUND
Program Director BLICC



The drama of climate change

The latest research shows that the situation is more serious than previously thought. The abrupt climate changes caused by mankind are moving faster and are showing greater negative consequences sooner. New insights show that the risks of catastrophic change are increasing. The UN's scientific Intergovernmental Panel on Climate Change, IPCC, stated in 2007 that the world is faced with its greatest challenge ever; to change the global trend of increasing emissions and then rapidly phase out our society's fossil fuel dependency. New research indicates that the IPCC has underestimated the force of climate change in several decisive areas. The situation is even more serious, and today all credible research shows that mankind must reduce emissions of greenhouse gases to zero or very near zero within 40 years. This is without doubt a gigantic transformation that will demand the greatest industrial revolution since the emergence of modern society.

Science is galloping ahead, and all new research only points in one direction, that the situation is getting worse. The source is no longer models and theories, but direct observations of what is happening in reality. The sea level is rising by 3–4 cm per decade and the latest research indicates that the sea level increase this century is likely to be close to 1 metre, compared to previous evaluations of 20–70 cm. Sea level increases of up to 2 metres by 2100, and between 3–5 metres by 2300 cannot be ruled out. This presents a catastrophic image for a large part of the world's population. The effects are already being noticed. The low-lying islands Kiribati and Tuvalu, in the Indian ocean, have already set their evacuation plans into action. The temperature is increasing quickly and in line with the climate models (the sceptics' claim that global warming has stopped is, to put it bluntly, a lie). Global warming is unfortunately following the IPCC's worst case scenario, that is we are following the graph of a 6 °C hotter planet, which is charting a course for the abyss.

Glaciers are melting faster than expected. Greenland's ice is reducing at an increasing pace as a result of melting ice and warmer seas. Illulisat ice fjord, one of Greenland's largest outputs of melting ice is releasing icebergs that are increasing the sea level at a dramatic pace and are undermining the Inuit's standards of living. The water supply is threatened by fast melting inland glaciers, where perhaps the greatest threat is the rapid retreat of the Himalayan glaciers, which provide hundreds of millions of people with fresh water.

Half of our emissions of carbon dioxide are sucked up by the planet's major sinks, oceans, forests and earth. Our planet is our best friend, which, despite the extraordinary stress that we subject it to, still manages to camouflage half our climate guilt. It performs the world's largest ecosystem service, for free. But new research shows that this resilience, the capacity to take (our) dregs and still maintain desirable living conditions for nature and mankind, may be on the wane. If this happens, that our emissions cause nature to release (instead of taking up) greenhouse gases in the ground and oceans, then climate change will accelerate out of our control. Such acceleration can cause threshold effects that can lead to catastrophic consequences (such as the collapse of weather systems, destabilisation of the Greenland ice, loss of the rain forests).

These so called positive feedback effects when the climate is integrated with ecosystems is today one of the our largest fears, and also one of the greatest uncertainties. The planet is a complex self-regulating system that until now has been our best friend. We don't know how long the planet will choose to remain our friend. It is clear, however, that we must mobilise all our powers to move to a sustainable society as soon as possible. It is not enough to have a strong climate agreement, we must have a global agreement for sustainable development that focuses on administering the climate and ecosystems with the purpose of maintaining and strengthening the planet's resilience. Everything indicates that we have the knowledge and capacity to innovate what is required to survive this incomparable change. One advantage is that the climate change that we are seeing is mainly caused by ourselves. If it had been a natural development there would be no way of solving the problem. Now we are the problem and therefore we can solve it. It will require a revolution not just in business life but also in our economic, political, social and institutional systems. Globalisation must take on a new meaning – collaborating for the survival of mankind. This is where business makes up a decisive driving force.

JOHAN ROCKSTRÖM
*Professor in Natural Resources Management
at Stockholm University and Executive Director
of Stockholm Environment Institute and
Stockholm Resilience Centre*



Good examples – this is how to do the right thing

An important objective for BLICC is to spread inspiration and knowledge. By giving good examples, the company shows how much can be done with simple means and existing technology.

One lesson that BLICC wants to share is that the climate work must permeate the whole organisation to achieve a good result and the commitment of the CEO plays an important part. If other companies are inspired to follow the BLICC companies' example it will have significant importance in the work to minimise the climate impact of the business sector.

Low energy housing is housing of the future

Low energy housing is now standard in JM's production in Sweden. With better walls, energy efficient windows and systems for heat recovery, JM counts on reducing its energy usage by 35 % or a total of 19,000 MWh per year. The reduction in carbon dioxide is equivalent to flights for approx. 7000 people between Stockholm and Malmö per year.

– Instead of a few particular projects we have chosen to focus on breadth. Making low energy technology standard in all our housing makes JM an industry leader in climate adapted buildings in Europe, says Åsa Lehto, Director of Technology at JM.

Åsa Lehto sounds enthusiastic as she explains that an important feature of the new low energy housing is that it looks and works just like JM's normal housing.

– For the customers there should be no differences, just "houses to be comfortable in"; attractive, practical and built with high quality materials and with care. In addition, perhaps most importantly, it shouldn't be any more expensive for the customer to live in a low energy house.



One aim of JM's environmental work is to find solutions that are environmentally correct, at the same time as being economically viable for both JM and the customer.

– We have succeeded well with JM's low energy housing, I think. We have a product that is good for the customer, for us, for society and for the climate.

ng, earn money and save our climate

Climate change initiatives lead to:

- ⊙ business development opportunities and growth
- ⊙ efficiency opportunities and reduced costs
- ⊙ customer collaborations and customer benefits
- ⊙ happy employees

We want to use these examples to show the breadth of the companies' climate change initiatives and that they cover the supply chain, their own operations and help their customers reduce their climate impact.

Unique solar cell installation on Telefonplan

Vasakronan has installed almost 700 m² of solar cells on Telefonplan in Stockholm. The installation is located on the roof of one of the buildings.

– The 1940s building has a southerly facing, saw-toothed roof which is perfect for installing solar cells on, says Bengt Jansson, head of environmental issues, cheerfully. He continues to explain why Vasakronan invested in such an installation.

– Vasakronan is very interested in the technology for producing electricity from solar energy. Solar electricity and solar heat are completely clean forms of energy that do not release any emissions into the environment. The project is very much in line with our long term investment in sustainable energy systems, says Bengt Jansson. And, as said, it was a building with great conditions for solar cells. However, it took a long time before the project got underway, partly because of economic considerations.

– With today's calculation methods it is difficult to motivate the financial investment in such a solar cell installation. Other factors, which cannot be included in the purely financial calculations, have to be considered to make the invest-



ment profitable from a company perspective, continues Bengt Jansson.

– It is also worth testing and evaluating new technology. The installation is calculated to produce approx. 66 MWh per year, which corresponds to the domestic electricity consumption of about 20 apartments per year. Producing a similar amount of electrical power from a carbon condensation power plant would produce 66 tons of carbon dioxide per year, says Bengt proudly.

With commitment energy is used more effectively

Fortum has taken several initiatives to help customers reduce their energy use, which is the best possible way to reduce the climate impact.

– The heating competition is one such initiative. It is based on tenant associations competing against each other to reduce their energy consumption, says Johan Tjernström, the initiative taker for the competition. The association that saves the most wins an event for all the members of the association, for a garden party for example, Johan continues. Last year 160 associations took part.

The winner achieved a saving of 27 %. Many reach savings of up to 15 % by taking fairly simple action. Overall the associations have saved a total of about 2000 MWh per year since the beginning. Some of the tenants associations that participate in the competition have also taken part in training at Fortum to learn more.



Sisters Sanna and Jenny Kallur know how to save energy in the athletics arena. Through a sponsorship collaboration with Fortum they have also been trained as Climate ambassadors and participated in the energy mapping of their own sports hall in Falun. In addition to Falun, Fortum has also inspected Växnäshallen in Karlstad and the Friidrottens hus sports centre in Gothenburg.

In Växnäshallen in Karlstad the energy saving potential was estimated to be about 33 %, corresponding to 152 000 kWh/year and a 15.3 ton reduction in carbon dioxide emissions. The athletes can also contribute to the reduction themselves by changing their behaviour. The involvement of the athletics stars can also help youngsters with an interest in athletics to become interested in the environment and energy issues.

Sometimes the solution is simple,

– Cooling is an extremely complex issue, says Stefan Andersson, Purchasing Manager for shop fittings at **Axfood**. He refers to the energy saving project where they are working to make the freezer cabinets in the food stores more efficient.

– It may seem easy, to just put covers on the freezers and save a lot of energy, but bear in mind that we have been using waste heat to heat the rest of the store. When the temperature in the freezers is reduced, less waste heat is produced and so we have to find an alternative way to heat the premises instead, Stefan continues.

Axfood has performed successful long-term testing on their freezer cabinets in the store chains and have saved between 30-40 percent of the energy usage in the boxes.

– It is great that we got such good results, continues Stefan, we were worried that sales would drop, but that turned out to be unwarranted. It also means large financial savings for us. It is fun to be involved in a project that has so many positives; reducing energy consumption, giving financial savings and saving the climate.

Lower temperatures save money a

– Some complained that it was too hot or too cold. But most accepted the comfort project without any problem, says Jerker Åsén, building technician at **Coca-Cola Drycker Sverige**.

With the help of Jerker and his team of technicians, Coca-Cola Drycker Sverige has taken many actions to make its buildings more energy efficient. The solutions have been extremely creative.

– We have an energy optimisation system which enables us to keep track of the energy use. The system makes it easy to measure changes and see the results. We have also questioned the indoor temperature and carried out tests to find the optimum temperature, which should be as low as possible. This mean that some employees complained to begin with, but then changed their minds, continues Jerker. The overall saving for the project was 859 MWh, which corresponds to about 10 % of the total heating cost each year. This corresponds to



sometimes not



and energy

around 560 000 SEK on the basis that one MWh costs about 650 SEK. Coca-Cola Drycker Sverige also recycles heat from processes in the production, which is rerouted to the ventilation. – We will not go back to what we used to do, cool at the same time as we heated and vice versa.

Coca-Cola Drycker Sverige has worked continuously to review the requirement for and to trim lighting, through controls, amongst other things. An example is that the employees can notify the main guard if they are to work outside normal working hours. The guard can then engage the "switch" and switch both ventilation and lighting on and off when somebody arrives and leaves. Requirement reviewing is something we work with a lot and at the moment we have started to see the effects. All these actions combine to give a very large energy saving for the company, explains Jerker. It currently takes 13 % less energy to manufacture one litre of drink compared to 2002.

– We technicians are curious about the climate issue and are driven by a personal commitment. This means that we challenge each other all the time to come up with new solutions to save energy, says Jerker Åsén.

Wants to spread the railway vision to the rest of Europe

– **Procter & Gamble** have been behind environment-related projects for many years and, looking to the future, we are continuing to set our sights high. In Europe, our aim is to increase the use of rail transport from 10 percent to 30 percent by 2015. At a European level, this will mean an annual reduction of 67,500 tons of carbon dioxide, explains Anneli Grinups, Nordic stock and transport manager at Procter & Gamble.



– We started to use rail transportation for the Nordic region in 2004. Each week, more than 50 railway cars leave our European production units, heading directly for our Nordic storage depot. Thanks to this, we have reduced the emission of carbon dioxide by approximately 2,000 tons per year, which corresponds to 2.5 million truck kilometres.

The environment is important to Procter & Gamble, which has focused on this area for many years. The criteria that were used to transfer to using the railways was not to compromise on costs and service. Lead times and reliability were to meet the requirements of Procter & Gamble, in a dynamic and fast moving industry.



– Our structure makes it possible for us to optimise truck use and improve our transport efficiency, continues Anneli. For example, we have a discount structure that encourages our customers to order full trucks where all possible pallet space is used. The integration of Wella and Gillette has meant that, at present, we can transport many different brands and deliver them to our customers in the same truck. Our aim is to use all the space in the truck and because we usually use all available pallet space we allow for a shift to transport via railway. I am certain that the experience we have gained in the Nordic region over the last four years will help us find new paths to reach our European vision.

Welcome to the scrap show!

Bo Ödman, coordinator and national manager for the "Toxic free environment" project at **Stena Recycling** expresses his enthusiasm for the project that he has been part of and started in 2003.

– It started with the County administration asking Stena in Halmstad to run a campaign to collect scrap cars. In conjunction with this a request came from the Federation of Swedish Farmers that stated that farmers needed help in removing scrap from their farms. They contacted me and we quickly realised that large operations and systems would be needed to do it well. They started with a trial in Halland with a few criteria, mainly the scrap had to be accessible by a passable road so that large cranes trucks could get there to retrieve it.

– We offered to do this free of charge, which was unheard of in this context, and we had a large response from the general public and media, Bo continues. Because it became more popular, we developed the project further in 2005 and 2006 and then discovered that there was also a lot of hazardous waste on the farms. We felt then that we also wanted to take care of that, but realised that it would not be as financially rewarding as scrap



metal, however, we decided to deal with it for the sake of the environment anyway. To make the figures add up, we then ran the campaign with Håll Sverige Rent (Keep Sweden Tidy) and Länsförsäkringar.

During 2008 we collected 16,000 tons of scrap and hazardous waste from 10,000 farms, every kilo of recycled copper saves emissions corresponding to 20 kilos of carbon dioxide. An average collection picked up hazardous waste that would have cost the farmer 3,500 SEK.

– We now cover the majority of the country and when we start in each county we hold a show for the media at selected farms. Previously, we demonstrated how we removed the scrap by crane, but now our hazardous waste expert shows what happens if it is not dealt with correctly. It is pretty impressive.

Economical driving saves money and the climate



– Last summer we started an information campaign about energy efficiency for our station customers, says Helena Fornstedt, PR & Communication Director at **Svenska Statoil**. The aim was to make the customers aware that they could save fuel by changing their behaviour, thereby reducing the impact on the climate. The campaign consisted of us having brochures at our stations containing tips for customers on how to drive more energy efficiently. We also used other information channels such as the internet, press releases and internally within the organisation. The message was; saving energy is good for the climate and your wallet!

Helena believes that it is important to be aware of one's own behaviour and to learn to think about being energy efficient because it is a simple and good way to reduce our own impact on the climate.

– From our point of view the campaign was a continuation of the campaign that Europaia (European Petroleum Industry Association) implemented with the oil companies in Europe and in collaboration with the EU commission. 45,000 stations in 29 countries within Europe took part in the campaign.

Statoil's personnel considered the campaign extremely worthwhile as the majority believe it is important that the company works with climate issues.

– It is also in line with the company's values, Helena continues. The fact that we are an oil company means that it is even more important to us. As a modern fuel company we must create opportunities and make people aware that it is not always just large steps that have to be taken. Every little one helps.

The dilemma

– working with climate issues is not without complications



During 2008 the climate issue has been at the centre of the media and high on the political agenda. Investing in climate change initiatives is becoming obvious to most large companies. At the same time, standards to follow are being established in order for companies to be able to report their climate commitments, and soon the sustainability reporting in a company will be as common as the annual report. However, development has not as yet progressed this far and there are still a few dilemmas and problems that can crop up in the endeavour for improvement for the sake of the climate.

– **The most difficult thing for us has been to change** the customer's behaviour, says Cecilia Udekwu, information manager at **Procter & Gamble**. We can control, make efficiencies and achieve a lot within the company, but to change other people's behaviour in relation to the environment is much harder. They want the same products that they have always bought and use the product in the same way they have always done. This is our next great challenge when it comes to climate change initiatives at P&G.

Even Statoil has been challenged by customer behaviour in the transfer to more climate adapted fuels.

– Up to date we have invested in over 370 Statoil stations to offer our environmentally-friendly car customers the opportunity to fill up with E85. But at the end of the day it is the relative price that determines the customer's choice of fuel. When the environmentally-friendly alternative is more expensive, the environmentally-friendly motorist fills up with petrol and thus carbon dioxide emissions increase, says Helena Fornstedt, PR & Communication Director at **Svenska Statoil**.

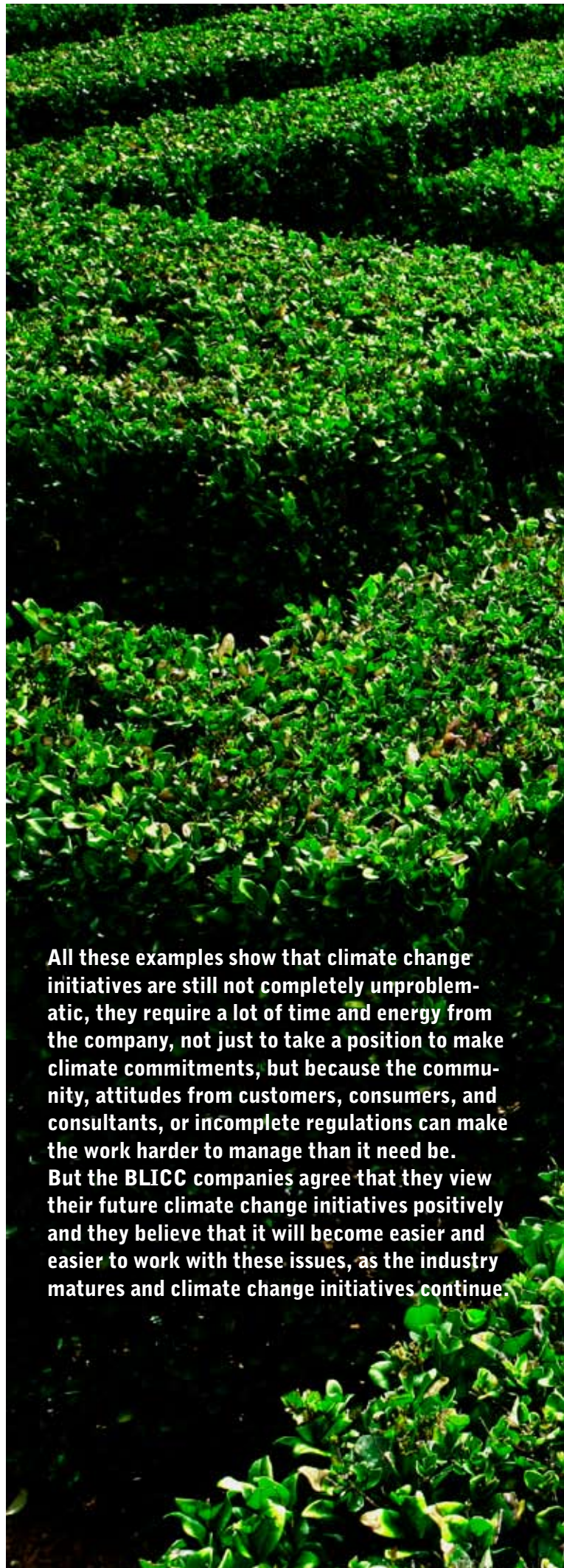
Sometimes the behaviour within companies needs to be altered, but within traditional industries such as the building industry this can be difficult, Olof Sjöberg, Environmental coordinator at **Vasakronan** explains;

– Our consultants are not entirely familiar with all the climate change issues and to teach them about new climate friendly technology and how to calculate savings requires a lot of time and energy. They do not always understand the reasons why we introduce new costly technology when the old proven technology still works. We always have to challenge the arguments that “we have always done it this way” or “we have never done it that way”.

JM believes that it will get harder to find commercially viable solutions as the regulations from the authorities become ever more stringent.

– We all want to help improve the climate, but there ought to be more flexibility for companies to find their own solutions to reduce their impact on the climate, says Lennart Henriz at **JM**. We must be able to see a sustainable economy in everything we build. As the construction of accommodation in Sweden is in practice governed by a state control system, technical development becomes harder for the players in the industry. If instead, housing companies were given the opportunity to develop their own technical solutions, process development and sound environmental solutions would result.

Coca-Cola Drycker Sverige is investing in a new energy saving technology for refrigerators, EMS (Energy Measuring System) that reduces energy consumption by around 40%. The refrigerators learn the customers' purchasing



All these examples show that climate change initiatives are still not completely unproblematic, they require a lot of time and energy from the company, not just to take a position to make climate commitments, but because the community, attitudes from customers, consumers, and consultants, or incomplete regulations can make the work harder to manage than it need be. But the BLICC companies agree that they view their future climate change initiatives positively and they believe that it will become easier and easier to work with these issues, as the industry matures and climate change initiatives continue.



habits and switch off the compressor and lighting when the relevant store is closed.

– This is a dilemma that on one hand promotes the refrigerator to drive sales, but on the other increases our carbon dioxide emissions. Therefore, switching to EMS fridges is necessary. We must however explain to the customer that we cannot scrap all refrigerators without the EMS function at once because it is a major investment, says Johanna Schelin, Environmental coordinator at **Coca-Cola Drycker Sverige**.

There are several influential factors which mean that companies' opportunities to reinforce climate change work is made harder. Åsa Domeij, Head of Environment and Social Responsibility at **Axfood** has several experiences of these; – In our case for example we want to be able to monitor our energy use in our premises. Unfortunately we rent our premises from a landlord who does not prioritise metering equipment for this, and it is a challenge for us to shift from a financial focus to also trying to influence those who we have agreements with when it comes to energy and climate change issues.

When it comes to eco-labelling and environmental adaptation of buildings Ulf Wikström, Environmental manager at **Fortum Värme**, feels frustration over the difficulties that authorities have in seeing the big picture.

– The environmental classification systems for buildings usually only use the kWh (electricity, heating etc) of the energy supplier that is in place as the measurement. They also advocate use of renewable energy ahead of using the community's excess flows such as waste and waste heat. It should be a matter of course to make use of these excess flows, which cannot be used for anything but energy recovery, first before using a new primary energy raw material. Our customers usually think that this is good, but they are not rewarded for it when they are to eco-label their operations. Eco-labelling and classification systems should therefore be developed that also consider excess flows.

Another example is **Stena's** transport dilemma regarding the shipping of space consuming insulation material. HCFCs and fluoridised CFC substitutes are found in garage doors, cool rooms, district heating lines and cooling equipment where good insulation properties are required. The waste is extremely space consuming due to its low density and difficulty to pack tightly. An articulated truck that can usually carry 35 tons is full laden when there is 1 ton of insulation material on the truck. Complete processing at a treatment plant requires a lot of transport for a low weight of waste.

– CFCs are more than 4000 times stronger greenhouse gases than carbon dioxide. From a greenhouse gas viewpoint, however, the emissions are 40 times less if the waste is recycled compared with landfill, which motivates the increased transport work, says Christer Forsgren, Head of Technology and Environmental Science.

SMHI

- BLICC's knowledge partner

The climate change issue affects all the different sectors and aspects of society. Decision-making regarding emissions reduction and climate adaptation places new demands on information for the right actions. SMHI follows the climate in the long and the short term, explains the science behind climate change and describes the effects. Decision-making platforms are developed for business and society.



Erik Kjellström,
climatic researcher SMHI:

"New results within climate change research show that the conclusions of the most recently published report from the UN's climate panel are being borne out. The amounts of greenhouse gases in the atmosphere are increasing ever faster. A global temperature increase is underway that in all likelihood depends on mankind's emissions of these gases. New studies show that the rate of warming in the Arctic and western Antarctic is probably connected to global warming. The sea levels are rising at the same pace as the rise in the global temperature.

The knowledge base within the field of climatic research is continuously changing, but the basic message is the same. If emissions of greenhouse gases, and primarily carbon dioxide from fossil fuels, are not reduced very quickly, global warming will continue and this could give rise to major climate changes in the future."



Hans Björn,
environmental consultant SMHI:

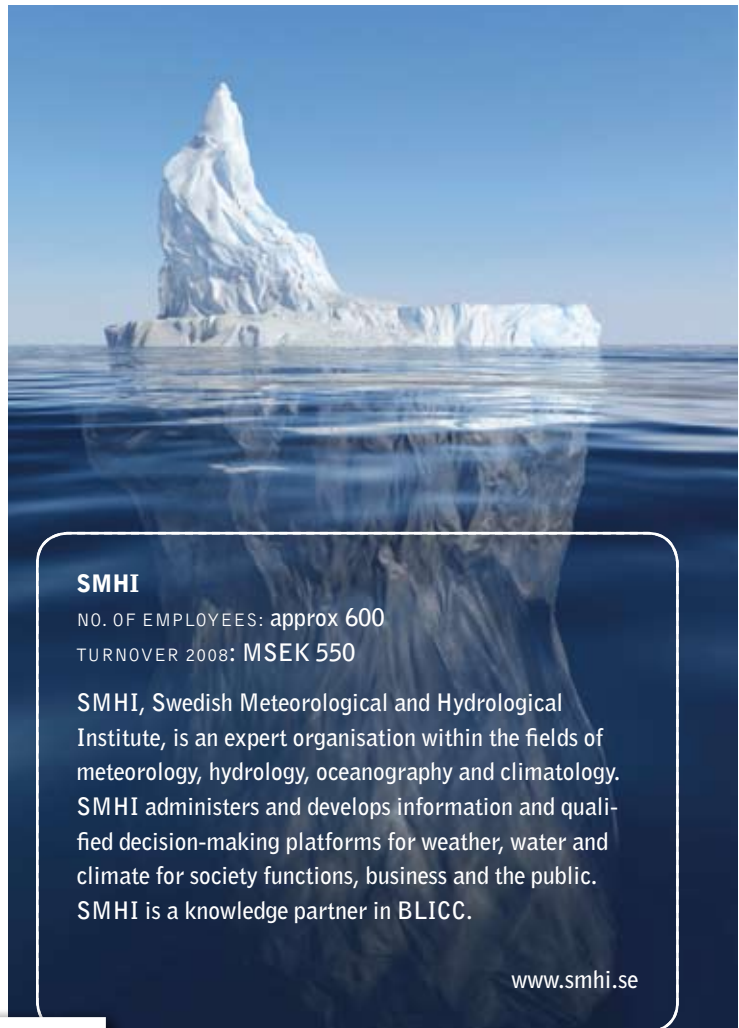
"Climate effects will impact on many aspects of society. Spreading knowledge about climate issues is an important task. Measurement data and scientifically developed scenarios are the basic documentation that is then interpreted and converted to effects, risk analyses and new potentials.

Expert support and operationally adapted investigations contribute to better decision-making platforms for companies, local authorities and governmental agencies. This is done, for example, by developing the planning documentation for the local authorities' building planning with reference to both the present and future climates. The risk of flooding is charted, distance to water and rivers is calculated."



Anna Jansson,
climatologist SMHI:

"SMHI continually follows up the Swedish climate. The results are collated and make a contribution to studies of climate change both nationally and internationally. Collaboration is a condition for regular updating of the knowledge base. For example, SMHI has developed a number of climate indicators that are used to illustrate how the climate has varied through the years. The climate indicators are a simple measurement for communicating a complex phenomenon. They display how the temperature, rainfall, wind, distance to the shoreline and the vegetation period have changed over recent years."



SMHI

NO. OF EMPLOYEES: approx 600

TURNOVER 2008: MSEK 550

SMHI, Swedish Meteorological and Hydrological Institute, is an expert organisation within the fields of meteorology, hydrology, oceanography and climatology. SMHI administers and develops information and qualified decision-making platforms for weather, water and climate for society functions, business and the public. SMHI is a knowledge partner in BLICC.

www.smhi.se



BLICC'S CLIMATE DECLARATION

Report the climate impact!

BLICC is challenging companies in Sweden to audit their climate impact so that Swedish companies can be held up as role models at the Copenhagen meeting. Since starting to calculate their climate impact, Member companies of BLICC have systematically reduced their climate impact and increased their turnover. Experience has shown that many companies can reduce their climate impact by up to 20 % after only a few years. There are rewarding measures that can be taken by all companies.

This is what to do

1. Sign the declaration "Report the climate impact!"
2. Calculate the company's climate impact for the year 2008. Assistance and tools are available on the market.
3. Report the 2008 climate impact on the company website.

BLICC's website www.blicc.se displays a list of companies that have signed the declaration. Thereafter, the list of companies that have signed the declaration will be forwarded to the Swedish Government prior to the Copenhagen meeting. Sweden will be the world leader in climate aware business!

International calculation standard

Estimating greenhouse gas emissions is the first step in reducing the company's climate impact. By measuring the emissions, the company can discover the major emission sources, and therefore more easily prioritise the measures to be carried out.

BLICC bases its climate change calculations on the international calculation standard for companies, **The Greenhouse Gas Protocol**. Reporting is carried out through the climate programme Svante*.

The GHG protocol was developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The protocol has been in place since 2001 and BLICC has used it since starting. The protocol gives a guide to companies in how they should measure their climate impact. The company charts what greenhouse gases are involved in its organisation and identifies emissions associated with the company's operations. The GHG protocol contributes to systematising climate inventory taking and simplifying the work and keeping costs to a minimum. It also helps to categorise them as direct or indirect emissions sources and to select scope for calculation and reporting of emissions. Scope is an English word meaning extent or coverage.

The sources from direct and indirect emissions can be further divided into three scopes. Scope 1 is direct emissions of greenhouse gases as own produced electricity or owned vehicles, scope 2 is indirect emissions of greenhouse gases as purchased electricity and district heating that are consumed by the company and scope 3 is other indirect emissions of greenhouse gases that are optional to report such as business travel and purchased goods transport. As a minimum, BLICC reports scope 1 and 2 and business travel under scope 3. The companies calculate all the greenhouse gases in accordance with the Kyoto protocol. For the vast majority of companies, carbon dioxide is the major component of all the greenhouse gases.

The companies estimate all greenhouse gases in accordance with the Kyoto protocol. For the vast majority of companies, carbon dioxide is the major component of all the greenhouse gases.



DEFINITIONS IN ACCORDANCE WITH GHG

RELEVANCE: System parameters for the system must reflect the system in an appropriate way.

COMPLETENESS: The model must include all important activities.

CONSISTENCY: The results must be used for meaningful performance comparisons over time.

TRANSPARENCY: The analysis must be carried out in a specific and coherent way, based on clear use of resources.

RELIABILITY: The precision of the calculations must be sufficient for the intended use and give reliability to the calculations.

The forthcoming ISO standard for estimating greenhouse gases, ISO 14 064, is based on the GHG protocol. For further information on the GHG protocol see: www.ghgprotocol.org

* BLICC uses the Svante climate programme for its climate calculations. Svante is based on the GHG protocol and helps companies to chart and calculate their operations' energy consumption and climate impact.

Annual results 2008

The summary displays the companies' climate impact per earned SEK. The key figure has fallen steadily since 2004. All companies start at 100 percent.

All the companies have included emissions from their own sources, procured electricity and heating and business travel. Companies that have reported emissions over and above this are;

- JM includes newly built property and goods transports.
- Svenska Statoil includes rental vehicles.
- Stena includes goods transports.
- Fortum includes fuel transports.

Other changes since previous years are that;

- Fortum reports figures for the group's operations in Sweden compared to previously just Fortum Värme co-owned with Stockholm City.
- Vasakronan reports figures for both old Vasakronan and AP Fastigheter, which applies to both emissions and turnover.



THE GHG PROTOCOL'S SCOPE

Scope is an English word meaning extent or coverage. The expression scope is used in the GHG protocol and describes in detail where the direct and indirect emissions sources originate from.

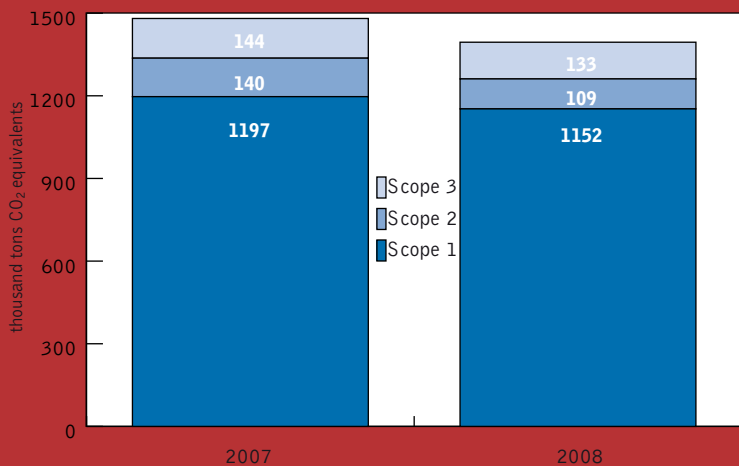
Scope 1 are direct emissions of greenhouse gases such as own produced electricity or own owned vehicles.

Scope 2 are indirect emissions of greenhouse gases such as purchased electricity and district heating consumed by the company.

Scope 3 are other indirect emissions of greenhouse gases that are optional to report, such as business travel or purchased goods transport.

As a minimum, BLICC reports scope 1 and scope 2 and business travel in scope 3.

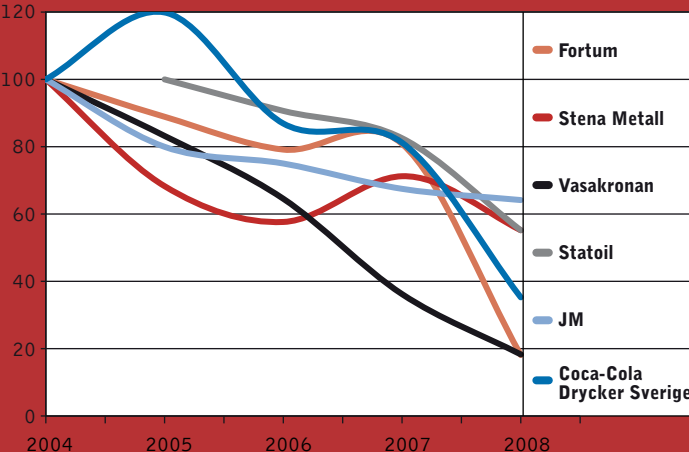
BLICC – CLIMATE IMPACT



The image reports the companies' combined emissions in absolute figures, the reduction is approx 5%.

NOTE: Axfood and Procter & Gamble do not have historical measurements and are therefore not included in the graphs.

RELATIVE CLIMATE IMPACT PER SEK OF TURNOVER



Raw materials prices are dependent on the markets and companies whose turnover is largely governed by this are affected by swings in the markets. This primarily applies to Statoil and the Stena Metal group. Therefore, it is not a given that this graph reflects the companies' production volumes in relation to the climate impact. Turnover has increased for all companies which indicates that the relative climate impact per SEK of turnover has led to less carbon dioxide intensive operations. All companies start at 100 percent.

Axfood Results 2008

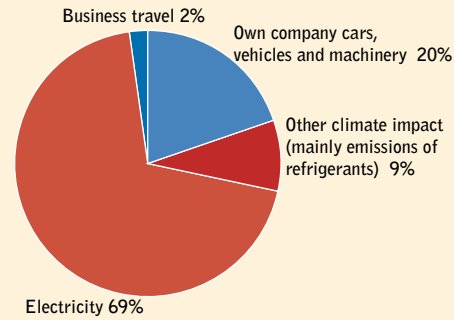
TURNOVER: 31.7 billion SEK
NO. OF EMPLOYEES: 6 847

Axfood's business concept is to drive and develop successful food concepts in the Nordic area based on clear and attractive offers to the customer. Axfood AB operates a trade in consumer goods within the retail and wholesale trade in Sweden. The retail business is run through the wholly owned chains Willys, Hemköp and PrisXtra. In addition, Axfood collaborates with a large number of trader-owned shops, both within the Hemköp chain and Willys but also under brands such as Handlar'n and Tempo. The wholesale business is run through Dagab and Axfood Närlivs. Axfood is quoted on the Nasdaq OMX Stockholm ABs Large Cap list. Main shareholder is Axel Johnson AB with approx 46 percent of the shares. www.axfood.se

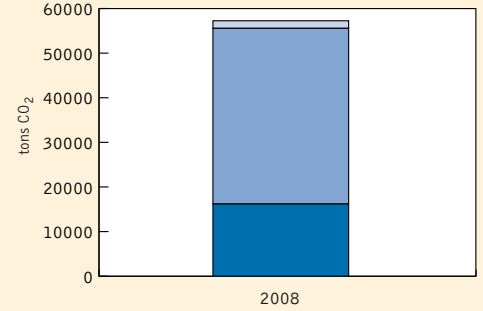
Axfood's shop chains have customer offers for everyone who wants to do something good for the environment. During 2008, Axfood launched its own ecological range under the label Garant, aimed at providing good value everyday goods. During 2009, the Aware brand was introduced for fair trade marked goods. The objective is to increase the number of ecological and fair trade marked goods.

Dagab, which runs Axfood's logistics, works to improve the logistics and load levels so that the emissions from transportation is not higher than necessary. All drivers receive regular training in eco-driving and receive a share of an environmental bonus when the diesel consumption is reduced. When possible, Axfood tries to increase the use of rail transport and to replace diesel with biofuel. All new company cars are clean cars.

Axfood – Climate impact 2008



Axfood – carbon dioxide emissions



Scope 3 Business travel only includes air travel booked via the travel agent. There may be more booked outside the travel agent.
Scope 2
Scope 1

Coca-Cola Drycker Sverige AB Results 2008

TURNOVER: 2.79 billion SEK
NO. OF EMPLOYEES: 850 people

Coca-Cola Drycker Sverige AB produces, distributes and sells non-alcoholic beverages on the Swedish market. The brands include Coca-Cola®, Fanta®, Sprite®, MER®, Nestea®, BonAqua Silver®, Powerade® and Minute Maid®. In Jordbro, outside Stockholm, approx. 1 million litres of beverage are produced every day. Coca-Cola was launched in Sweden in 1953. www.Coca-Cola.se

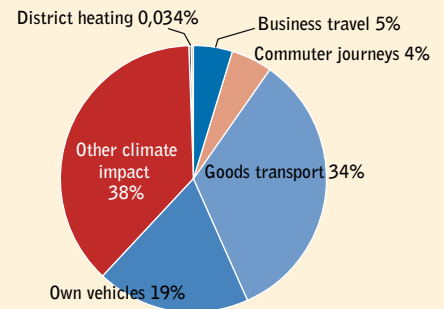
Coca-Cola Drycker Sverige has reduced its total carbon dioxide emissions by 24.3 % and carbon dioxide emissions by a full 60.2 % since 2004. The objective is to reduce the total carbon dioxide emissions by 30 % by 2015 and in the long term to become completely climate neutral.

Distribution has been made more efficient by training the drivers in heavy ecodriving and by the load level of the transports leaving Jordbro being increased to just over 92 %, that is to say that all transports are in principle fully laden. Furthermore, the company's effective route planning means that driving distances, diesel consumption and carbon dioxide emissions have all been reduced. The sales force has also been trained

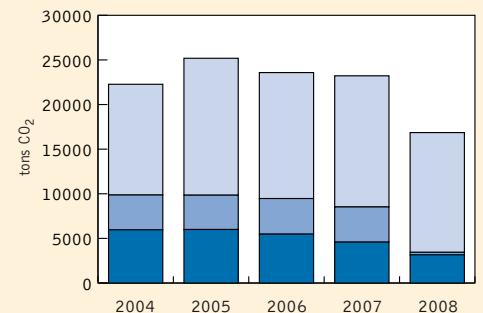
in ecodriving and 50 % of their cars are run on renewable fuels. Because the spring water, BonAqua, is from a local source in Hanveden and is pumped to the factory via pipelines the transport requirement for beverages has been further reduced.

By changing to Good Environmental choice electricity Coca-Cola Drycker Sverige has reduced carbon dioxide emissions by approx. 3,664 tons. The factory is supplied from a local heating plant which is fired with renewable fuels. This means that the carbon dioxide emissions for energy supply amounts to a total of only around 60 tons. To make the energy use more efficient Coca-Cola has reduced the indoor temperature by 2 degrees and adjusted the ventilation.

Coca-Cola Drycker Sverige – Climate impact 2008



Coca-Cola Drycker Sverige – carbon dioxide emissions



Scope 3 In addition to business travel, commuting, goods transports of beverages, suppliers' transports and electrical consumption of refrigeration equipment.
Scope 2
Scope 1 Distribution vehicles
Company cars
Refrigerant losses from installations

Fortum Results 2008

TURNOVER: 5.6 billion EUR, of which 2.6 billion EUR in Sweden

EMPLOYEES: 15,500, of which 3,046 in Sweden

Fortum's business operations include the production, sale and distribution of electricity, heating and cooling and operation and maintenance of power stations with a focus on the Nordic area, Russia and the area around the Baltic. The vision is to be a pioneer within sustainable development and to be a carbon dioxide free power and heating company. www.fortum.se

Fortum contributes to making a carbon dioxide lean society by both reducing the emissions from its own production and by helping customers to be climate neutral.

In the last year a new product "Climate neutral district heating" was launched. Significant investments have also been made in energy efficiencies in their plants, for example, energy savings of 800 MWh in the Håsselby works. The fossil fuel component of Stockholm's district heating system today stands at just 13%. Between 2003 and 2008 Fortum has reduced its own emissions by 20%. During the same period, connection to district heating has reduced the emissions of carbon dioxide by customers by 250,000 tons.

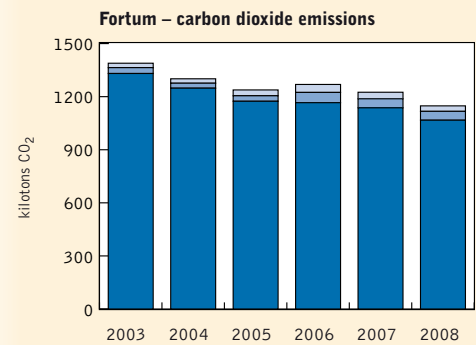
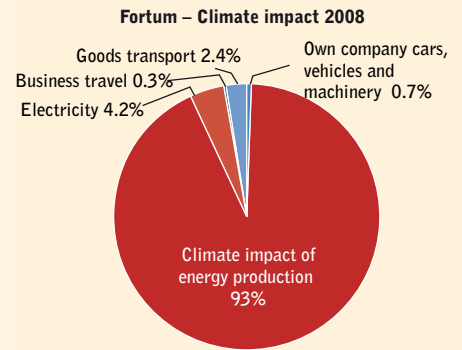
Fortum's electricity production has one of the lowest rates of carbon dioxide emissions in Europe compared to other power companies; 41 g carbon dioxide/kWh

compared to an average of 370 g carbon dioxide/kWh. 92% of electricity production during 2008 was carbon dioxide free. New investments were made, including development of wave power as an energy source.

Fortum has the largest sales of Bra Miljöval (Good environmental choice) electricity on the Nordic market. From 2009, all electricity sold on the Nordic market will be carbon dioxide free.

Using electrically powered vehicles the transport sector can achieve the breakthrough that is required to be able to reduce carbon dioxide emissions. Fortum is working intensively to develop the infrastructure and evaluate the different solutions to allow the introduction of electrical and chargeable hybrid vehicles.

Note: All of Fortum Sweden's emissions from 2008, previously only Fortum Värme.



- Scope 3** Mainly emissions from fuel transports
- Scope 2** The variation mainly depends on the emission factor for electricity changing. About 60% from fossil fuels. The remainder from waste, which would otherwise be used as landfill, as well as other greenhouse gases.
- Scope 1**

JM Results 2008

TURNOVER: APPROX 11 BILLION SEK

NO. OF EMPLOYEES: 2100

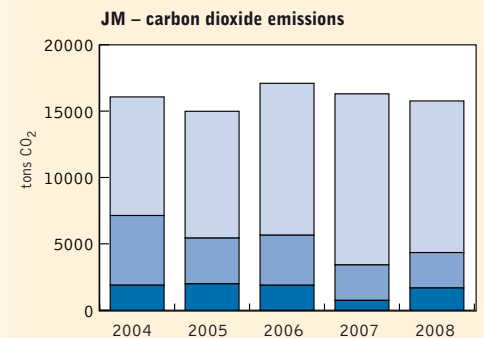
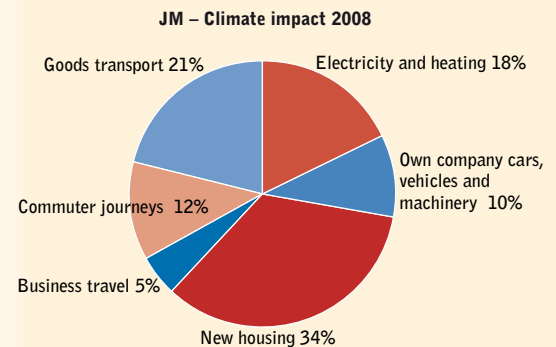
JM is one of the leading property developers in the Nordic region. The operations are focused on expanding big city areas and university towns in Sweden, Norway, Denmark, Finland and Belgium. The company also works with project development of commercial premises and other contract work.

www.jm.se

JM's most important environmental goal for many years has been to reduce energy use through the whole operation. Major focus has been placed on developing more energy efficient buildings, because a significantly larger part of a building's energy consumption occurs during the operating phase. Since 2008, low energy housing is the standard for all of JM housing in Sweden. By using, among other things, well insulated walls, more energy efficient windows and systems for heat reuse, energy use has fallen by an average of 35%. JM leads Europe in low energy housing.

Other important climate initiatives include for example, the decision to use only environmentally approved hydro-electricity in production and administration, that all company cars are clean vehicles and that guidelines have been introduced for business travel. In addition, projects are underway to develop the logistics processes and an ongoing project for logistical development with the aim of coordinating and reducing emissions from the company's construction and material transports.

JM has been a member of BLICC since 2007.



- Scope 3** A large part of scope 3 covers emissions from new housing under JM's administration phase (first 2 years). JM has chosen to report this despite it not being a source owned by JM.
- Scope 2** The emissions in scope 2 are primarily due to purchased district heating.
- Scope 1** Heating of workplaces (LPG), work machinery and leased company cars (main part).

Procter & Gamble Sverige AB Results 2008

GLOBAL TURNOVER 2008: Approx 83.5 billion USD

NO. OF EMPLOYEES: 257

Procter & Gamble (P&G) is a global consumer goods company with several of the world's best known brands. People around the world use three billion Procter & Gamble products in their daily lives everyday. Brands such as Pampers, Always, Alldays, Yes, Ariel, Head & Shoulders, Wella, Vicks, Pringles, Gillette, Oral-B, Duracell and Braun are marketed in Sweden.

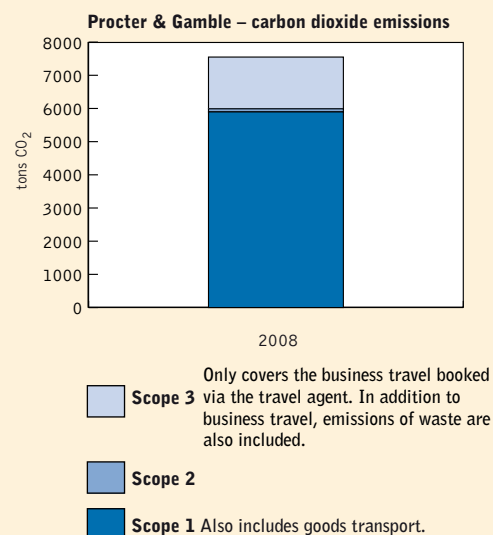
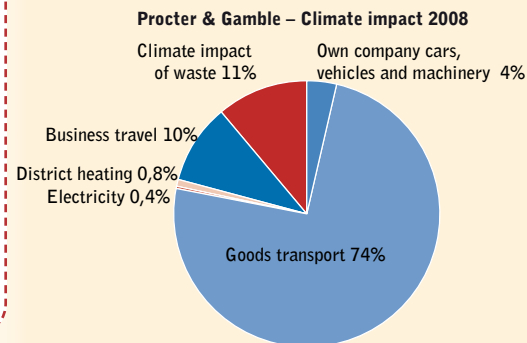
www.se.pg.com

Globally P&G reduced its waste by 22.5 percent, its energy consumption by 25 percent and its carbon dioxide emissions by 30 percent between 2002 and 2007. P&G has refined its global sustainability objectives and committed itself to reducing carbon dioxide emissions by a further 20 percent, which combined will mean a reduction of 50 percent during the 2002-2012 period.

P&G's greatest opportunity to contribute to sustainable development is through its products and therefore it develops so called "sustainable innovation products", products with a minimum of 10 percent smaller ecological footprint. One example is washing detergent which makes it possible

to wash at lower temperatures and so avoid energy consuming water heating.

P&G Sverige AB is a marketing organisation whose primary environmental impact is in distribution. The most important climate change initiatives are therefore to replace a number of trucks with rail transport and to increase the load levels of both rail and truck transports.



Svenska Statoil AB Results 2008

TURNOVER: 35 billion SEK

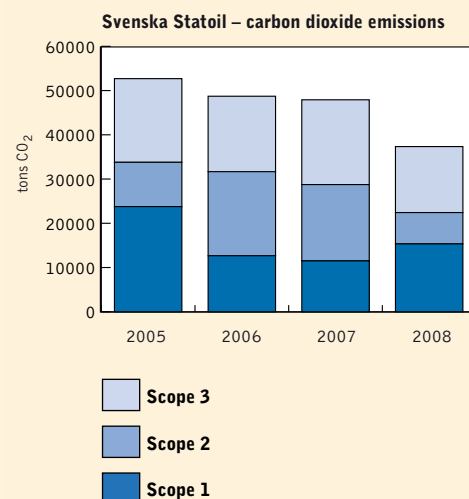
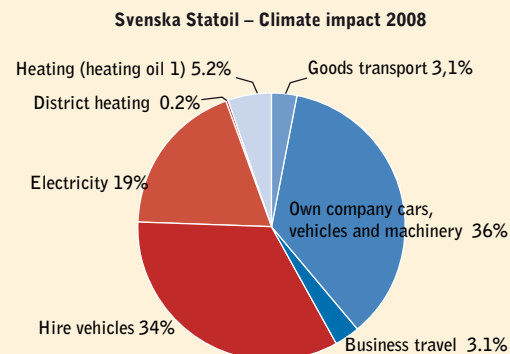
NO. OF EMPLOYEES: 1668

Svenska Statoil sells and distributes petrol, diesel, E85, LPG, aviation fuel and pellets to industries, companies and private individuals. Statoil's approx 380 full service stations offer fuel, fast food, groceries, car and leisure products, car rental and car washing. Fuel is also sold at approx 150 automated sites. The company also produces and sells lubricants.

www.statoil.se

Svenska Statoil's objective is to reduce the climate impact of its own operations and to assist customers in reducing theirs. Today ethanol E85 is available at around 370 Statoil stations, biogas is sold at 5 stations. 5% biofuel is mixed into all 95 octane petrol and into diesel. Statoil wants to increase the mixture of biofuels to 10 % in petrol and 7% in diesel. The EU has given the go ahead so all that is required now is a change in legislation by Sweden to make it possible. This is an effective way to reduce carbon dioxide emissions from all vehicles.

The reported emissions from the Swedish operation in 2008 were mainly reduced because of improved reporting of the stations' actual oil consumption, which turned out to be less in reality than had previously been calculated. The carbon dioxide emissions from heavy goods vehicles have increased slightly as a result of increased transport work but the emissions from business travel have been reduced by 30 %. The remaining emissions from the tanker trucks and company cars have been carbon offset by Svenska Statoil.



The Stena Metall group Results 2008

TURNOVER OPERATING YEAR 2007/2008: 31.8 billion SEK

AVERAGE NO. OF EMPLOYEES: 3600

The Stena Metall group develops innovative recycling solutions for customers, environment and society. A constant challenge is to create new ways of taking care of more of society's waste using sustainable methods.

www.stenamettal.com

Recycling creates significant environmental benefits and contributes to resource management when waste is refined to new raw materials that can be used in the community again. During 2007/2008 the Stena Metall group's total waste volumes contributed to carbon dioxide emissions of approx 10 million tons of carbon dioxide being avoided. That is what the emissions would have been if the same amounts of raw materials had instead been produced through virgin material from mines, forestry and oil by-products. The saving is the equivalent to the total emissions of 1.7 million Swedes each year*.

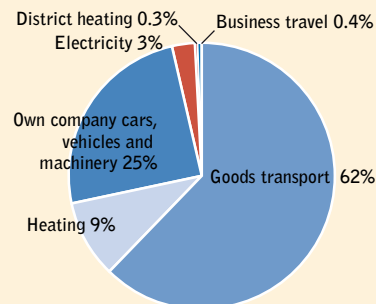
One goal is to increase the recycling of metals and plastics that still go to landfill. It is important from a global perspective

because inefficient recycling can cause shortages of raw materials and increased energy consumption at production of raw materials from virgin materials. The Stena Metall group's experience of recycling electronics is an example of how knowledge is transferred to new markets and means significant environmental benefits.

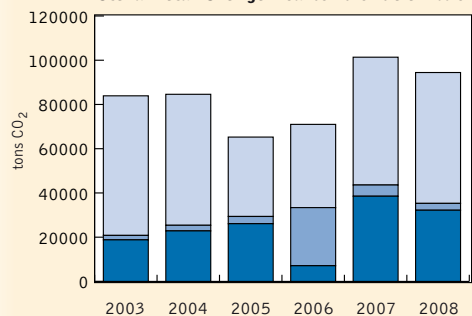
Goods transport dominates Stena's environmental impact. New logistics solutions are under constant development and the Swedish commitment to more rail transport is an example where significant environmental benefits are created.

* Swedish Environmental Protection Agency 2006
** The increase for Stena 2006 to 2007 is due to improved calculations.

Stena Metall Sverige – Climate impact 2008



Stena Metall Sverige – carbon dioxide emissions



Scope 3
Scope 2
Scope 1

Vasakronan Results 2008

TURNOVER: 5600 billion SEK

NO. OF EMPLOYEES: 662

Vasakronan is Sweden's largest property company with a clear concentration on long-term sustainable property business. The company is therefore a climate neutral property company and is certified in accordance with ISO 14001. In total, 303 properties with an area of 3.2 million m² are owned and administered in Stockholm, Göteborg, Malmö, Lund and Uppsala. AP-fastigheter acquired Vasakronan on 1st September 2008 and assumed the name Vasakronan for the combined company.

www.vasakronan.se

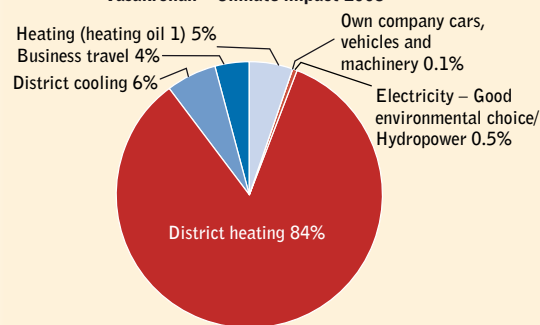
Climate neutral Vasakronan has been a climate neutral property company since 1st January 2008. Carbon dioxide emissions have been successively reduced over the last few years. The main reason is the reduced heat use and that fossil fuels have been replaced by other fuels. Today, Vasakronan purchases climate neutral district heating from all its major suppliers. A large part of the district cooling is also climate neutral. Electricity use is green, according to Good Environmental Choice.

Carbon dioxide emissions amounted to 36,500 and 27,200 tons during 2006 and 2007 respectively and reduced to just over 8,700 tons in 2008 and the prognosis

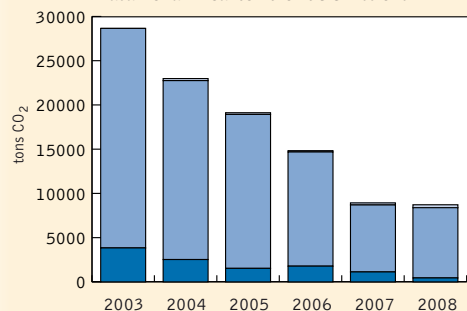
for 2009 is 2,600 tons. These tons consist of smaller amounts from district heating, district cooling and travel, which are compensated in CDM projects in India. Measures are planned to reduce these emissions.

Energy use Vasakronan's heating energy consumption lies 26 percent below the average in Sweden, according to SCB statistics, and fell by 3 percent during 2008. Fossil fuel has been replaced by other fuels. Extensive work is underway to significantly reduce all energy use in the properties, primarily through the introduction of more efficient and climate friendly energy technology and collaboration with tenants.

Vasakronan – Climate impact 2008



Vasakronan – carbon dioxide emissions



Scope 3
Scope 2
Scope 1

Note: Emissions before 2008 refer to the "old" Vasakronan.



“The situation is even more serious, and today all credible research shows that mankind must reduce emissions of greenhouse gases to zero or very near zero within 40 years.”

Johan Rockström,
Stockholm Environment Institute and
Stockholm Resilience Centre



INTERNET

This report is also available as a pdf at
www.blicc.se

OTHER LINKS

Rosby Centre, SMHI: www.smhi.se
GHG Protocol: www.ghgprotocol.org
World Resources Institute: www.wri.org
World Business Council for Sustainable Development:
www.wbcsd.org



Business Leaders Initiative on Climate Change

BLICC is a network of companies from different industries that work on actively reducing their emissions of greenhouse gases. BLICC shows that profitability and climate change work go hand in hand. Do the right thing, earn money and save our climate is the theme of the report this year. Several good examples from the BLICC companies demonstrate that climate impact can be reduced in a cost effective manner. Among the subjects covered are the dilemmas the companies have faced in their climate change work, a call to Sweden's business community to start calculating their climate impact and how the GHG protocol, the international standard for calculation, is laid out. Not least, there is an important challenge from Professor Johan Rockström that it is now, if ever, that business must act to reduce its climate impact.

axfood
— kvalitets till varje pris

Coca-Cola Drycker Sverige AB

 Fortum



P&G
Sweden

 **STATOIL**

 **STENA**
Innovative recycling

VASAKRONAN

and **SMHI**