

# EHS Report 2010



# Contents

Message from the CEO	3
Focus article: Orkla Brands	4
Focus article: Sapa	5
Focus article: Borregaard	7
Orkla	8
Orkla Brands	12
Orkla Foods Nordic	16
Orkla Brands Nordic	19
Orkla Brands International	22
Orkla Food Ingredients	25
Sapa	28
Investments	31
Share Portfolio	31
Orkla Eiendom	32
Hydro Power	33
Borregaard	34
Elkem	37
About the report	40

# A good EHS culture promotes operational efficiency

Good environmental, health and safety (EHS) performance is crucial to operating efficiently and profitably. Orkla's vision of zero harm to individuals, the environment and society is fundamental to all Orkla's activities.

"Orkla is committed to sound, long-term, sustainable operations that reflect the Group's awareness of its responsibility to its employees, society and the environment."



A handwritten signature in black ink that reads "Bjørn Wiggen". The signature is fluid and cursive.

Bjørn M. Wiggen,  
President and CEO  
Orkla ASA

EHS work is primarily carried out at the local level. Management focus is essential, as is the involvement of employees at every level. Orkla seeks to develop a strong EHS culture by promoting correct behaviour and attitudes.

Orkla still faces some challenges in its efforts to prevent injuries. Some of the companies have made a great deal of progress, while others have further to go. Safety measures that focus on behaviour are a key aspect of Orkla's improvement efforts, and are designed to enable each employee to do his or her job correctly and safely right from the start. The most basic prerequisite for sustainable value creation is a good, safe working environment. This means that operations must be well organised, so that we can operate with-

out putting life or health at risk, and can use our workforce in an efficient, productive way.

The working environment is also crucial in terms of sickness absence. Our goal at Orkla is to develop people, and the issue of health-promoting workplaces was high on our agenda in 2010. We will continue to follow up these efforts in 2011. This is not just a question of helping people who have been sick return to their jobs more quickly, but first and foremost of having a good, healthy working environment that promotes the long-term health of employees.

At Orkla, we define EHS in broad terms. This means that climate is also an important part of our environmental work. For Orkla's businesses,

improving energy efficiency is perhaps one of the most important ways of reducing greenhouse gas emissions in the short term. Orkla has sought to reduce its energy consumption and minimise greenhouse gas emissions throughout the value chain for many years. Our businesses engage in continuous efficiency and investment projects aimed at lowering energy consumption and using renewable energy whenever possible.

Orkla is committed to sound, long-term, sustainable operations that reflect the Group's awareness of its responsibility to its employees, society and the environment. Only in that way can we achieve our primary goal: developing people – creating value.

# Climate measures that pay off

Energy efficiency improvements reduce greenhouse gas emissions and generate financial gains, and rank among the most important climate measures at Orkla Brands.



Several of Orkla Brands' companies are engaged in continuous energy efficiency and investment projects aimed at lowering energy consumption and using renewable energy whenever possible. Many of the factories are exploring ways of optimising their use of internally generated and recovering excess heat. There has also been focus on reducing the use of fossil fuels and switching to more environmentally friendly energy sources.

## Stabburet's energy programme

In 2008, Stabburet launched a special energy conservation programme for four of its factories. At the factories in Brumunddal, Fredrikstad, Gimsøy and Rygge, the goal is to cut overall energy consumption by approximately 12% by 2012. Stabburet plans to invest a total of NOK 11 million during this period, including NOK 1.6 million in funding from Enova (a state-owned enterprise established to promote environmentally friendly restructuring of energy use and energy generation in Norway).

"After running the energy programme for two years, we have achieved good results, not least in the form of greater awareness of this issue. For instance, our factory at Brumunddal can point to a reduction of 19% in specific energy consumption. Heat recovery from wastewater is one of the measures that have proved very effective," says Environmental Coordinator Gunvor Irene Dingstad at Stabburet.

One aspect of the improvement programme consists of monitoring all energy data in a web-based environmental surveillance system. Energy consumption is logged automatically or manually at least once a week, providing an even better overview of energy consumption and potential energy savings.

## Targeted efforts at Abba Seafood

For 12 years, Abba Seafood has worked actively and with great determination to reduce its energy consumption. In the raw materials warehouse, energy saving measures have lowered electricity consumption from 4.4 GWh to around 2 GWh per year, based on the same volume of raw materials in the warehouse. Moreover, waste heat from the company's coolers is used to heat nearby premises in the factory as well as the central raw materials facility. In 2010, the company was awarded the "E-Prize" energy efficiency prize for its innovative, effective energy saving efforts.

Jan Persson heads the energy efficiency team, which meets once a month to discuss proposals for new measures. "The management at Abba Seafood prioritises activities that are fundamental to our energy conservation efforts. This is incredibly important and has given us the leeway needed to enable us to pursue a long-term environmental strategy for effective energy saving over time," he points out.

## Enova project at Nidar

Since 2005, Nidar has worked systematically to implement energy conservation measures that have reduced electricity consumption by 18% and water consumption by 70%. Nidar has saved NOK 5.8 million as a result of these efforts, and in 2008 the company was awarded the Municipality of Trondheim's Energy Saving Prize. Measures carried out in the past few years include installation of a new heat pump for the refrigeration plant, conversion of an oil boiler to a gas boiler, and technology for recovering both heat and water.

Nidar maintained its strong focus on energy conservation in 2010, and continued its efforts to reduce water use. "In the course of the year, we reduced our water consumption by a further 5,000 cubic litres," observed Robert Hjelmstad, Maintenance Manager at Nidar.

He relates that there is still potential for energy conservation at Nidar, and that the company has concentrated on implementing the most profitable measures first. Future plans include conversion of the factory's boiler room and installation of a new refrigeration facility, which are the main elements of a new project launched in 2010. With this three-year programme, which receives funding from Enova, Nidar has undertaken to reduce its energy consumption by a further 4.7 GWh by 2013.

# Improving EHS in practice is a team effort

When Inge Buyse started as Managing Director at Sapa Heat Transfer Alutubes, Belgium, in the second half of 2008, EHS and safety in particular were not on the agenda in the company. “We had six accidents in two months,” says Inge. “Considering that there had been a fatal accident in 2006, I thought that this is enough – this needs to end before something really serious happens again.”

Inge called on group EHS Director Brian Jones for help, and they came up with a “turnaround plan”. The first step was to create awareness and a sense of urgency. Inge decided to speak personally to all employees. “I stopped production and had 15-minute meetings with small groups of employees,” Inge explains. The message was quite clear – the negative safety trend had to be stopped. “People were shaken up, but that was what I wanted,” says Inge.

After the first information meetings, a large number of activities were started up. A system of safety reporting was implemented and the results were made available to employees, workshops and training on 5S and Genesis (Sapa’s interpretation of the Toyota Production System to drive continu-

ous improvement) were carried out, emphasis was put on wearing Personal Protection Equipment (PPE), and action plans were put in place at all levels in the organization. “After that, we formed rapid improvement teams to implement the actions,” Inge says.

Inge quickly came to realise that the work on safety brought management and employees much closer together. “Since we involved all the employees, we started to feel more like a team, striving for a common goal,” says Inge. After the first year, the changes were quite visible. Housekeeping was improved, and the facility was clean and neat. “Simply by painting the walls white, we increased light and created a much better work environment,” Inge says. Many investments,

## FACTS:

**Company name:** Sapa Heat Transfer Alutubes (Remi-Claeys Aluminium NV)

**Location:** Lichtervelde, Belgium

**Products:** High-frequency welded tubes for heat exchanger applications, desalination installations, safety, household, sport and leisure, medical and gardening products.

**No. of employees:** 200





both big and small, were made to make machines safe, PPE use was improved, and the number of recorded injuries was substantially reduced.

Encouraged by the positive results, Inge and her team decided to continue the training and safety investments even during the financial crisis in 2009. "It took a long time to get everybody involved, and we saw the need for consistency and to stay committed, even through hard times," Inge points out. To take the safety focus one step further, incident reporting was imple-

mented. "We created a safety sheet, which was made available to all employees, to make the reporting as easy as possible." The reported incidents more than doubled from 2009 to 2010. At the same time, the Total Recordable Rate (TRR) was reduced from 66 (2007) to 13 (2010) and the number of actual accidents from 21 (2007) to 4 (2010).

"When we started this process, people thought it was natural to work in an unsafe environment, and the initial reactions were that it wasn't possible

to change it," says Inge. "You just need to keep working, stay committed and don't give up."

Alutubes is well on its way to creating a "safety culture" in the company. One thing that Inge pays special attention to now, as business picks up and the company needs to recruit, is ensuring that all new employees have the "right" attitude. "I would rather say 'no' to people, even if the labour market where we are located is tough, than risk taking on people who will not contribute to our continuous improvement work," says Inge.

In 2010, Inge and her team won Sapa's "EHS Company of the Year" award. But this does not by any means mean that the goal has been reached. In 2011, Alutubes is starting the preparations for OHSAS 18001 (Health and Safety Management System) certification. "Our goal is to play in the highest league, and get the accreditation in 2012, so we have a lot of work to look forward to," concludes Inge.

### SUCCESS FACTORS FROM THE TRANSFORMATION IN ALUTUBES:

- It's a team effort. The entire organisation needs to be involved and be passionate about making a change!
- Create a sense of urgency in the organisation. Be concrete!
- Walk the talk and be consistent to create trust!

"Since we involved all the employees, we started to feel more like a team, striving for a common goal".

# Staying healthy by working

Many factors affect employee health. That is why several aspects must be taken into consideration in a company's efforts to foster health-promoting workplaces. Borregaard in Sarpsborg has a broad palette of measures which also address factors that contribute to a healthy lifestyle.

Borregaard in Sarpsborg has a long-term goal of reducing its sickness absence rate to less than 3%. Sickness absence was reduced from 6.1% in 2009 to 5.4% in 2010.

"In our efforts to further reduce sickness absence, Borregaard has focused on three areas: follow-up of sick employees, the working environment and lifestyle," explains HR Director Dag Arthur Aasbø.

## Quick and close follow-up of sick employees

Borregaard has appointed a special Inclusive Working Life (IWL) coordinator, who steps in quickly to help management and departmental staff follow up employees on sick leave by organising work functions in a way that enables the employees to return to their jobs as soon as possible.

"When following up employees on sick leave, it is important to ensure that efforts are coordinated and supported by the entire organisation. A meeting is therefore held every two weeks, at which management, employee representatives, safety delegates, health personnel and senior HR staff review sickness absence rates and action plans. In some cases, external health services are also purchased if this helps to bring the person on sick leave back to work more quickly," explains IWL Coordinator Rita Jordskogen.

## Management responsibility

The working environment, both physical and psychosocial, has an impact on employee well-being, motivation and sickness absence. The line management has a particular responsibility in this respect, and these issues are increasingly being integrated into management training and follow-up.



Dag Arthur Aasbø emphasises that managers have a special preventative responsibility for ensuring close, effective follow-up of sick employees. Facilitating their rapid return is important, and calls for the active, constructive contribution of management staff. Special IWL courses are therefore held for line managers to increase their awareness of this issue and provide concrete advice.

Health conditions and the need for differentiated adaptation of working conditions change over the course of an employee's life cycle. A special policy for older employees has therefore been established, featuring milestone interviews and special adaptation measures. Similarly, special arrangements have been established to reduce absence, which target women in particular, both generally and in relation to management recruitment.

## Lifestyle

More and more surveys indicate that lifestyle factors impact health, the

ability to work and sickness absence. Although such factors are primarily a personal responsibility, they are also of great significance for the company. Consequently, Borregaard has established a range of programmes related to physical fitness, diet and smoking cessation and measures to combat use of intoxicants. Several new programmes, focused on exercise and physical training in particular, were launched in the past year. In addition to traditional company sports activities, an activity campaign based on a web-based motivation programme has attracted almost 60% employee participation. Measures were also initiated to mobilise employee engagement in events like bicycle races and fun runs. A brand-new, modern fitness centre is currently being built on the factory site.

All in all, Dag Arthur Aasbø and Rita Jordskogen are convinced that this broad range of measures will promote better health and greater well-being and job satisfaction within the company.

# ORKLA



Orkla’s vision of zero harm to people, the environment and society is fundamental to the Group’s EHS work. The general requirements that must be met by Group companies are set out in Orkla’s EHS policy.

While each company is responsible for its own EHS activities, the guidelines are intended to ensure a system of controls and continuous improvement over time. Operational efficiency based on compliance with EHS requirements is one of Orkla’s value drivers, and is included in Orkla’s “Goals and Values”. This means that a focus on EHS must be an integral part of all Orkla’s business activities.

To ensure that Group companies adopt a coherent approach to their risk picture, all the companies carry out regular risk analyses. These analyses form

the basis for ordering priorities within the EHS activities of the individual companies.

Behaviour-related safety measures are a key aspect of Orkla’s EHS work, and are designed to enable each employee to perform his or her job correctly and safely from day one. Achieving this objective requires the development of best practice standards, the effective adaptation of technological solutions, and comprehensive training for and coaching of employees at the workplace.

## ORKLA

Orkla operates in the branded consumer goods, aluminium solutions, renewable energy, materials and financial investment sectors. Group sales total NOK 57 billion. Orkla has approximately 30,000 employees and operates in approximately 40 countries.

**Safety**

Despite the efforts to prevent occupational accidents, two fatal accidents tragically occurred in connection with Orkla's operations in 2010. At Elkem's plant on Iceland, a male employee died from burn injuries caused by a blow-out of hot gas from a smelting furnace. At Elkem's joint venture at Erdos in China, a contract driver was killed when the tractor he was driving overturned and he was crushed by the trailer. These incidents show that all parts of the organisation must continue to give their full attention to injury prevention efforts.

An important aspect of the improvement process is recording and following up on all types of injuries and undesired events. Including Elkem, Orkla achieved a Lost Work Day Rate (LWDR), i.e. the number of personal injuries leading to absence per million hours worked, of 4.3 in 2010, compared with 4.5 in 2009. The LDWR excluding Elkem is 4.5. The Total Recordable Rate (TRR), i.e. the number of personal injuries leading to absence, a need for medical treatment, or work limitations per million hours worked, was 13.3 in 2010, compared with 12.8 in 2009. The increase is due to that several companies in 2010 have established registration and follow-up of injuries not leading to absence.

While the change in injury rate is not significant for Orkla as a whole, several of the companies, on the other hand achieved improvement in 2010.

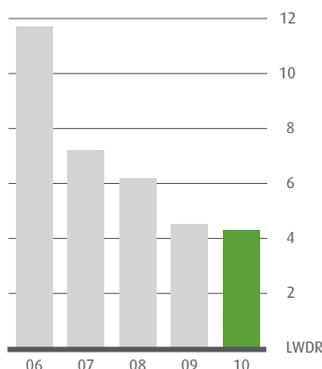
This shows that central EHS-principles, such as good order and cleaning, involvement, skills upgrading and the will to learn from others, are necessary to achieve improvements. These important principles shall have focus and be emphasized throughout the organisation.

**Health and working environment**

In 2010, efforts were focused on the topic of "Health-promoting workplaces and long-term employee health" as a follow-up to a conference held in late 2009. In practice, this means ensuring that individual businesses put in place good processes in which management and employees participate actively to implement measures adapted to their workplace.

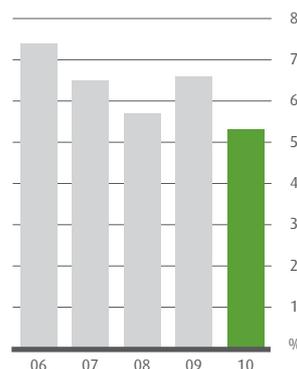
Sickness absence in Orkla was 3.6% in 2010, while the corresponding figure for 2009 was 4.3%. The sickness absence rate, excluding Elkem's operations, was also 3.6%. The rules for registering sickness absence and follow-up of employees on sick leave vary from one country to another. In Norway, Orkla complies with the principles of an inclusive work environment, which entail active follow-up of absentees and cooperation with the company health service. Similar principles also apply to Orkla's operations in other parts of the world. Sickness absence for the Norwegian companies was 5.3% in 2010, clearly down from 6.6% in 2009. Sickness absence for the Norwegian companies, excluding Elkem, was 5.5%.

Trends in LWDR<sup>1</sup> at Orkla\*



\* Figures as reported in 2006-2009.  
<sup>1</sup> Number of injuries leading to absence per million hours worked.

Trends in Sickness Absence for Orkla in Norway\*



\* Figures as reported in 2006-2009.

**External environment**

Orkla is committed to take responsibility for the external environment, and focuses strongly on reducing any negative environmental impacts related to the Group’s processes and products. If unintended discharges occur, they are registered and handled in line with national and local requirements. In 2010, there are registered two unintended discharges which have involved follow-up from local authorities. At AS Saudefaldene’s shut-down power plant in Hellandsbygd, Norway, transformer oil was released into Storlivatn Lake and one minor discharge into the sea was registered at Kolding Salater in Denmark.

Orkla’s products must be manufactured using safe raw materials and accepted methods. Orkla requires its suppliers to meet product safety, environmental and ethical production standards. In 2010, the Group maintained its focus on monitoring suppliers and putting in place systems for supplier approval and auditing.

Environmental impacts are primarily related to greenhouse gas emissions in connection with energy consumption and processing emissions from Elkem’s smelting plant, waste management and noise, and the use of materials and scarce natural resources, including water, in certain geographical areas.

**Energy and climate**

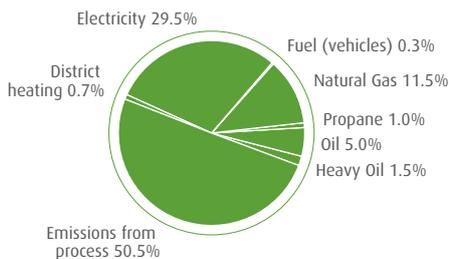
Orkla prepares energy and climate

accounts based on the international Greenhouse Gas Protocol Initiative. These accounts are also submitted to the Carbon Disclosure Project (CDP), an independent organisation that provides investors all over the world with a basis for assessing how the world’s largest companies are dealing with climate challenges.

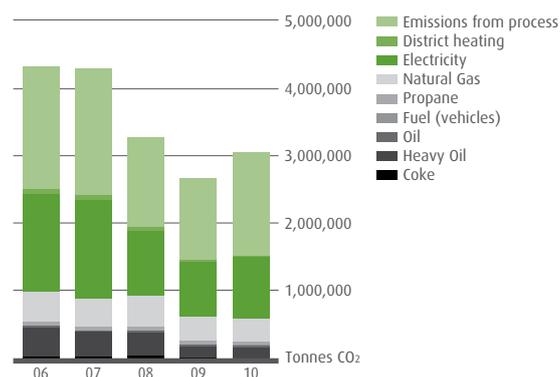
In 2010, global greenhouse gas emissions from Orkla companies amounted to 2.15 million tonnes of CO<sub>2</sub>-equivalents, compared with 1.85 million tonnes of CO<sub>2</sub>-equivalents in 2009. If emissions from purchased energy are included, emissions totalled approximately 3.08 million tonnes of CO<sub>2</sub>-equivalents. The rise in emissions in 2010 is primarily due to high production levels at Elkem’s smelting plant. Excluding Elkem, greenhouse gas emissions totalled respectively 640,000 tonnes CO<sub>2</sub>-equivalents from own operations and 1.15 million tonnes CO<sub>2</sub>-equivalents including emissions from purchased energy. Emissions from Sapa’s and Borregaard Chemicals’ factories and from Orkla’s other operations are mainly linked to the production of thermal energy from fossil fuels.

Orkla’s total energy consumption in 2010 was 9.6 TWh, compared with 8.2 TWh in 2009. Around 6 TWh of total consumption was from electricity. The rise in consumption is mainly due to increased production at Elkem’s facilities, which accounted for 45% of Orkla’s energy consumption.

**Allocation of CO<sub>2</sub>-emissions for Orkla 2010**



**Total CO<sub>2</sub>-emissions for Orkla 2006-10**



Excluding Elkem's facilities, consumption totalled 5.4 TWh. Orkla's own hydropower plants produced around 2 TWh of electricity.

Orkla companies focus continuously on energy efficiency and investment projects to reduce energy consumption and to ensure that the greatest possible use is made of renewable energy. In the short term, this is one of the most important environmental measures carried out at Orkla.

**Water**

Freshwater is becoming a scarce resource in many areas of the world, and water-related costs are expected to rise in the coming years. Reducing water consumption will therefore be an important issue for Orkla companies.

Water consumption at Orkla's factories in 2010 totalled 86.5 million m<sup>3</sup>, compared with 70 million m<sup>3</sup> reported in 2009. This rise is not an actual increase in water consumption at Orkla, but reflects the fact that there is greater focus on water and on the monitoring and reporting of water consumption. Furthermore, reporting in 2010 specified the different types of water resources on which consumption was based. Work on monitoring the consumption of water resources will continue, and the focus on reducing water use at all the factories will be maintained.

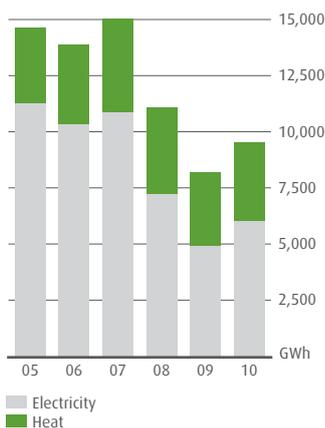
In 2010, several factories also cut their water consumption in relation to production volume.

**Product liability**

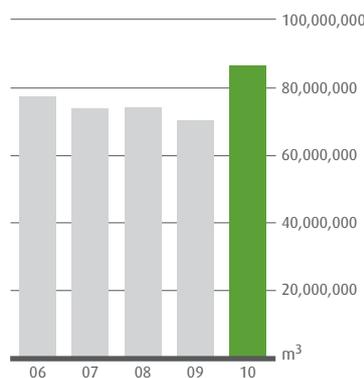
REACH is the EEA's set of regulations governing the registration, evaluation, restriction and authorisation of the sale of chemical substances. All Orkla companies to which these regulations apply have established procedures to ensure compliance with future REACH requirements. In 2010, Lilleborg, Borregaard and Elkem carried out the necessary registration of substances that are manufactured and/or imported in volumes exceeding 1000 tonnes per year. This ensures that the companies will be permitted to continue to import and/or manufacture the substances in question.

In the case of microsilica (Silica Fume), Elkem has been assigned the role of lead registrant in Norway for the chemical safety report (CSR) on which REACH registration of the substance is based. Elkem is also lead registrant for the compound substance Si/FeSi silicates. Borregaard registered 14 substances in 2010, and was lead registrant for two of them. The companies are now beginning work on preparations for the next phase, in which all chemicals manufactured in or imported to the EEA in a quantity exceeding 100 tonnes per year are to be registered by July 2013.

Consumption of Energy



Water Consumption



# ORKLA BRANDS



Efforts to strengthen the business area's EHS work continued in 2010 with the establishment of targets and initiatives, training courses and safety interviews. Further attention was focused on the reporting and follow-up of both injuries and near-miss incidents.

### Health and the working environment

The overall sickness absence rate for Orkla Brands declined slightly from 2009, to 4.5% in 2010. However, the rate varies significantly both between companies and between the different Orkla Brands factories. Orkla Brands International had a sickness absence rate of 2.5% in 2010, making it the business unit with the lowest rate in Orkla Brands. The Orkla Brands Nordic and Orkla Foods Nordic business units saw a positive trend in sickness absence. This improvement is the result of targeted, focused efforts to promote good health, in which activities adapted to local conditions and the regular follow-up of employees on sick leave are important elements. In the Norwegian companies, this work is

carried out within the framework of the Inclusive Working Life agreement.

Reducing sickness absence will continue to be a key objective. Important initiatives will focus on work operations that are physically demanding. Several factories have already invested in equipment that reduces the risk of muscular-skeletal ailments. In 2011, there will also be emphasis on health-promoting measures to foster a good working environment and the long-term health of employees. The continued strong involvement of the management staff, close follow-up and clearly communicated goals and procedures will play a major role in achieving further improvements in 2011.

### ORKLA BRANDS

Orkla Brands is a leading supplier of branded consumer goods and concept solutions, primarily to the grocery and out-of-home sectors. The business area mainly holds no. 1 and no. 2 positions in its categories. Most of the branded consumer goods are proprietary, and have been on the market for many years. The bulk of the portfolio lies in the Nordic region and the Baltics, although Orkla Brands also holds several strong positions in Russia, India and Austria. Through Orkla Food Ingredients, Orkla Brands is also an important supplier to the European bakery market. The business area consists of four units: Orkla Foods Nordic, Orkla Brands Nordic, Orkla Brands International and Orkla Food Ingredients.

**Safety**

The overall Lost Work Day Rate (LWDR) at Orkla Brands was 5.8 in 2010, while the Total Recordable Rate (TRR) was 18.5. This is on a par with the level in 2009.

In the course of the year, the businesses intensified their focus on reporting and following up on injuries, near-miss incidents and hazardous conditions. External sales operations and offices also began to register such matters in 2010, thereby affecting the overall LWDR and TRR for Orkla Brands. Orkla Foods Nordic and Orkla Brands Nordic saw a very positive trend at several companies and factories.

In 2010, work continued on strengthening EHS activities by setting goals and establishing measures, providing training and conducting safety interviews. In order to pursue a proactive, preventive approach to safety work, risk assessments, regular safety inspections and EHS audits are carried out.

The focus on behaviour and attitudes, presentation of EHS results and training will be maintained in 2011.

**Resource consumption**

**Energy**

Orkla Brands' overall consumption of energy totalled 1,070 GWh in 2010, up from 970 GWh in 2009. This increase is mainly due to changes in the product portfolio, which require more energy, and the acquisition of new businesses. For both financial and



environmental reasons, the business area is continuing its efforts to reduce energy consumption, and has established action plans for this purpose.

Consumption of thermal energy accounts for approximately 65% of total energy consumption, which is primarily based on the burning of fossil fuels. Using a larger proportion of renewable energy sources therefore offers a potential for environmental improvements. Several of the factories have begun work on assessing a change.

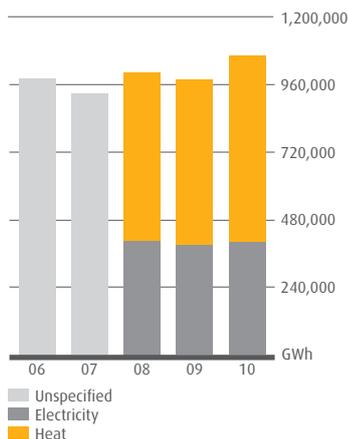
**Water**

Overall water consumption at Orkla Brands' factories in 2010 amounted to 7.3 million m<sup>3</sup>, which is 30% higher

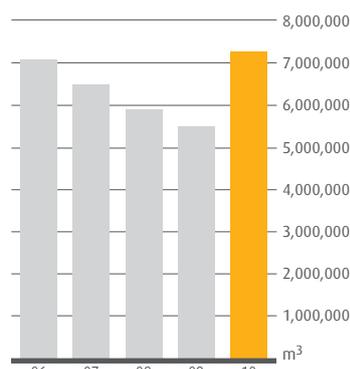
than the figure that was reported in 2009. This is not a real increase in Orkla Brands' consumption of water, but is due to the fact that attention is now focused on monitoring and reporting water consumption and the various water sources in all companies. Further efforts will be made in this connection, and focus on lowering water consumption at all factories will be maintained.

Several factories have reduced their consumption of water in relation to production volume. Several companies are also trying to reuse a greater proportion of water. Lilleborg's detergents factory at Ski (Norway) and Latfood's snacks factory (Latvia) are among the factories that have achieved good

Consumption of Energy



Water Consumption



results. At the factories that manufacture crisps, the quality of the potatoes has an impact on water consumption. Despite the fact that quality has not been optimal in Norway, KiMs Norway nonetheless achieved its objective of cutting water consumption to 8.3 m<sup>3</sup> water per tonne of produced crisps.

The amount of wastewater has increased slightly at KiMs Norway, due to the fact that condensation from the crisps line is now channelled through the internal treatment plant to a municipal facility. This is part of an ongoing project aimed at reducing odour, and has generated positive results.

Lilleborg's detergents factory at Ski continued its efforts to recycle processing washwater, and has further reduced the amount of water discharged to a municipal treatment plant.

**Raw materials**

Looking at the value chain as a whole, it is the raw materials, which totalled around 800,000 tonnes in 2010, that have the greatest impact on the environment, since the cultivation of food crops and animal husbandry generate large amounts of greenhouse gases.

Orkla Brands therefore focuses on maximising the yield from raw materials and minimising wastage.

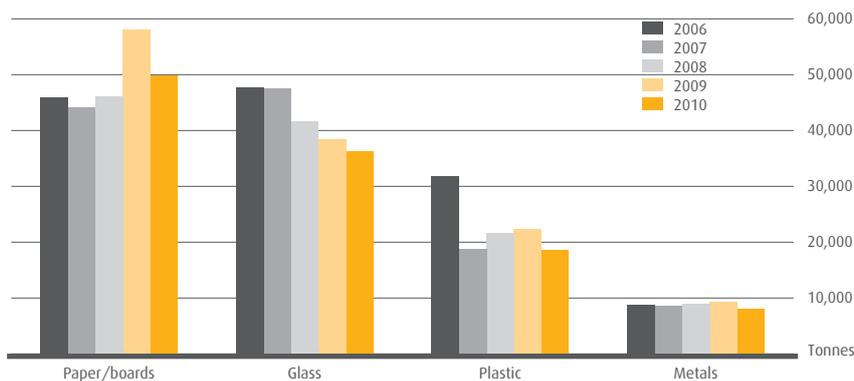
The factories work systematically to improve production line operations so as to optimise the utilisation of raw materials. Lilleborg is engaged in continuous substitution efforts to replace raw materials about which there may be some uncertainty from a health and environmental perspective.

**Packaging**

Developing optimal packaging solutions is a priority for Orkla Brands companies. Reducing the amount of packaging per quantity of product poses a challenge, because it is increasingly common, for marketing reasons, to reduce the amount of product per package. The objective is for packaging to provide adequate protection for the product with the least possible environmental impact.

Several of the Norwegian companies in Orkla Brands are members of Emballasjedugnaden NOK, a cooperative project in which grocery suppliers, packaging producers and retailers have joined forces to motivate the players in the packaging chain to introduce their own control proce-

Consumption of Packaging Materials



dures to ensure optimal use of packaging. The aim is to develop good packaging solutions that have a positive impact on society and conserve resources throughout the value chain.

**Emissions**

The authorities require most of the Orkla Brands factories to have permits for emissions to water and air, waste and noise. A minor discharge of detergent from the Kolding Salater factory in Denmark resulted in a penalty from local authorities with an order to take immediate remedial action. The discharge had no environmental impacts. Orkla Brands' emissions of CO<sub>2</sub> from its own production operations are generated by the burning of fossil materials, such as oil, natural gas and propane. In 2010, emissions totalled 136,000 tonnes. Orkla's climate accounting for 2010 also includes emissions from purchased energy, bringing total CO<sub>2</sub> emissions to 200,000 tonnes. Purchased energy accounted for 32% of total emissions.

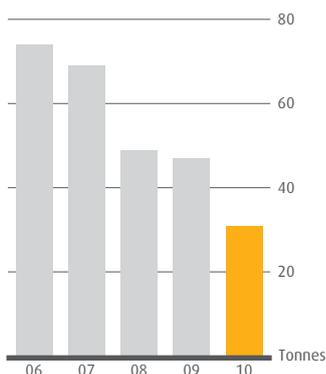
Several of the Orkla Brands businesses have initiated continuous energy-saving and investment projects aimed at reducing energy consumption and using renewable energy wherever possible. This is one of the most important climate protection measures in Orkla Brands.

Many of the factories register the content of their discharges to water (COD, etc.). The amount of organic material in discharges is closely linked to process yield. It is therefore important for both financial and environmental reasons to improve process management to ensure the lowest possible consumption of raw materials.

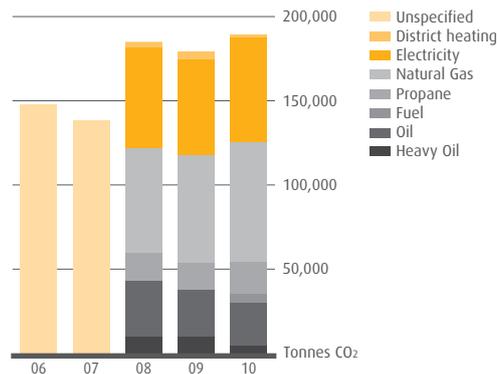
**Waste**

In 2010, the factories continued their efforts to increase production yield and thereby reduce waste. There is also focus on finding the most optimal solutions for the reuse and recycling of waste.

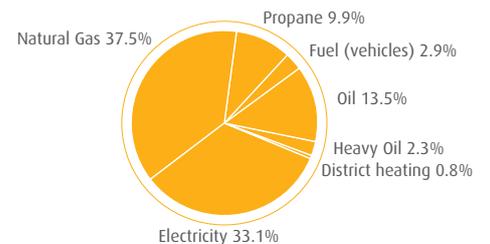
Emissions to Air – SO<sub>2</sub>



Total CO<sub>2</sub>-emissions for Orkla Brands 2006-10



Allocation of CO<sub>2</sub>-emissions for Orkla Brands 2010



# ORKLA FOODS NORDIC



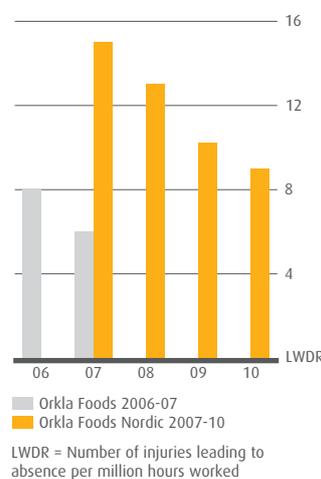
## Health and safety

Orkla Foods Nordics' Lost Work Day Rate (LWDR) was 9.0 in 2010, down from 10.2 in 2009. The number of injuries leading to absence was reduced by 17% in the same period, and the number of factories that had no injuries leading to absence doubled, from 6 to 12. Correspondingly, from 2007 to 2010, Orkla Foods Nordic halved the number of work-related injuries leading to sickness absence.

This improvement is the result of active, systematic efforts to reduce the number of injuries and to create secure, safe workplaces. Closer monitoring of the factories that reported the highest number of injuries is one example of the measures implemented.

In 2011, the objective is to halve the number of injuries in relation to 2010.

Lost Work Day Injuries



## ORKLA FOODS NORDIC

Orkla Foods Nordic primarily consists of food and beverage companies in the Nordic region and the Baltics: Stabburet and Bakers in Norway, Procordia and Abba Seafood in Sweden, Beauvais in Denmark, Felix Abba and Panda in Finland, and Kalev, Põltsamaa Felix, Spilva and Suslavicius in the Baltics. Activities are concentrated on the business unit's own, strong brands within the following product categories: pizza, pie, sauces, seafood, ready meals, jam, juice, cordials, chocolate and bakery goods. Through its well-established brands, Orkla Foods Nordic largely holds no. 1 and no. 2 positions in its home markets.

Companies must also establish local targets and plans for reporting and handling incidents. Focus on identifying and eliminating hazardous conditions and behaviour in the working environment will be further intensified.

The overall sickness absence rate at Orkla Foods Nordic was 4.7% in 2010, which is a decline from 5.0% in 2009.

Orkla Foods Nordic has set clear sickness absence targets, which are continuously monitored and communicated at central and local levels. The positive trend in 2010 is a result of targeted, focused efforts to promote good employee health. The goal is to ensure the long-term health of employees and to bring sick employees back to work as soon as possible. Several of the companies have introduced procedures to ensure the regular follow-up of employees who are absent for several short periods and a close dialogue between the employer and individual employees on sick leave for longer periods. This work will continue in 2011.

**Resource consumption**

**Energy**

Overall energy consumption at Orkla Foods Nordic totalled 481 GWh in 2010, compared with 449 GWh in 2009. This increase is primarily ascrib-

able to changes in the product portfolio. Energy consumption per quantity produced was 1.08 MWh per tonne, and was 10% higher than in 2009, due to somewhat lower production volume.

All the businesses are engaged in systematic efforts to reduce energy consumption and switch to cleaner energy sources. In 2010, the energy company E.ON and the Swedish business journal Veckans Affärer designated Abba Seafood Sweden's most energy smart company, in recognition of the company's sustained energy efficiency efforts in the past 12 years.

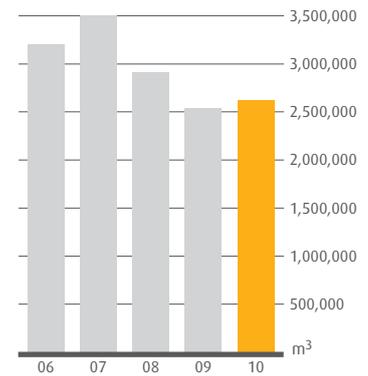
**Water**

Overall water consumption at Orkla Foods Nordic totalled 2,627,000 m<sup>3</sup> in 2010, on a par with consumption in 2009. 75% of the water comes from municipal waterworks, while groundwater meets the remaining water needs. The average consumption of water per tonne of finished product was 5.9 m<sup>3</sup> in 2010, compared with 5.6 m<sup>3</sup> in 2009.

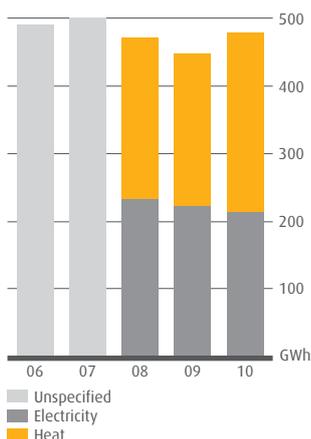
**Packaging**

An average of 137 kg of packaging material per tonne of finished product was used in 2010. This is on a par with consumption in 2010, but packaging use varies significantly depending on

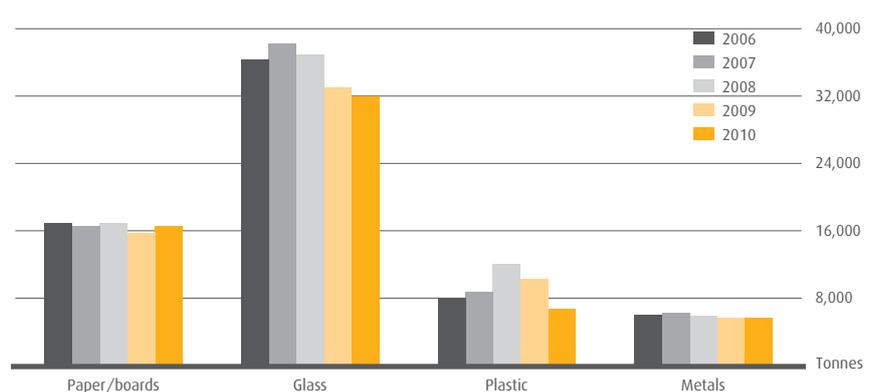
Consumption of Water



Consumption of Energy



Consumption of Packaging Materials



the type of product. Glass accounted for the largest amount in terms of weight (52%), followed by paper (27%), plastic (11%), metal (9%) and wood (1%).

**Emissions**

Emissions of CO<sub>2</sub> at Orkla Foods Nordic totalled 80,700 tonnes in 2010, including purchased energy (electricity) and emissions from the business unit's own production operations were generated by the burning of natural gas, oil and propane, and totalled 50,000 tonnes in 2010. This is an increase of 13% from 2009, which can partly be attributed to changes in the product portfolio. Emissions of SO<sub>2</sub> totalled 22 tonnes in 2010, which is the same level as in 2009.

**Waste**

The factories work systematically to reduce both the amount of organic waste and the amount of organic material in waste.

Orkla Foods Nordic generated a total of 64,500 tonnes of waste in 2010. Most of the waste was further utilised in the production of biogas (31,100 tonnes of waste) and animal feed (16,900 tonnes of waste). A total of 5,300 tonnes consisted of sorted pack-

aging material that was recycled, 5,700 tonnes were incinerated, and 3,100 tonnes of waste were deposited at landfills. Only 51 tonnes consisted of hazardous waste that was delivered to companies specialised in the treatment and disposal of such waste.

The total amount of waste per tonne of finished product was 143 kg. This level has remained fairly constant in the past few years.

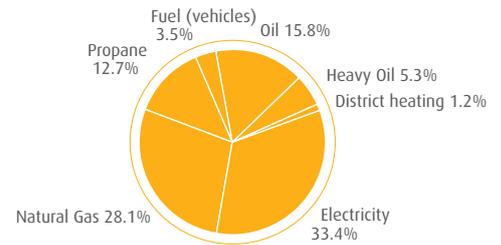
**Other matters**

Most of the Orkla Foods Nordic factories have official permits for emissions, waste and noise.

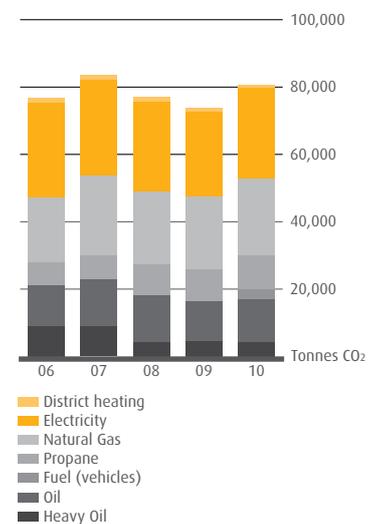
Orkla Foods Nordic companies focus on increasing transport efficiency and reducing the negative environmental impacts of logistics. Some companies require their carriers to be environmentally certified.

Efforts are made to assess and reduce the climate and environmental impact of purchased raw materials. Several businesses support international organisations, such the World Wildlife Fund (WWF) and the Round Table on Sustainable Palm Oil (RSPO).

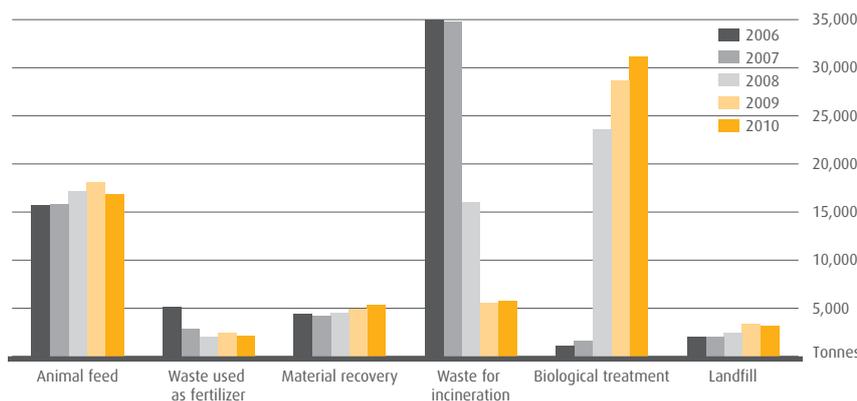
Allocation of CO<sub>2</sub>-emissions for Orkla Foods Nordic 2010



Total CO<sub>2</sub>-emissions for Orkla Foods Nordic 2006-10



Waste per Tonne of Finished Product



# ORKLA BRANDS NORDIC

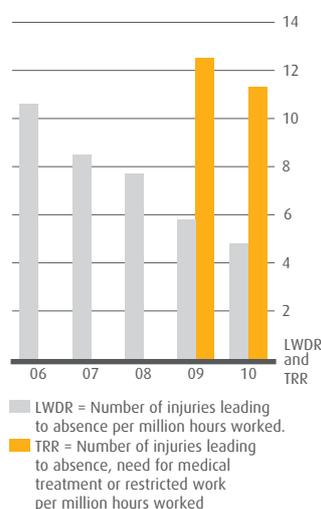


## Health and safety

The sickness absence rate at Orkla Brands Nordic declined from 7% in 2009 to 6% in 2010. There has been a corresponding positive trend in most of the Orkla Brands Nordic companies, but some of them have experienced an increase in long-term absence. In the Norwegian and Swedish companies, all the management staff have undergone training in following up on sickness absence, and efforts to reduce sickness absence will continue to have high priority. In the Norwegian companies, this work takes place within the framework of the Inclusive Working Life (IWL) agreement.

The Lost Work Day Rate (LWDR) at Orkla Brands Nordic was 4.8 in 2010, down from 5.8 in 2009. The Total Recordable Rate (TRR), which was first

Lost Work Day and Total Recordable Injuries



## ORKLA BRANDS NORDIC

Orkla Brands Nordic comprises Lilleborg (detergents and personal care products), Lilleborg Profesjonell (full-range supplier of hygiene and cleaning solutions for the professional market), Axellus (dietary supplements and health products), the Chips Group (snacks), Göteborgs/Sætre (biscuits), Nidar (chocolate and confectionery), and the Pierre Robert Group (basic textiles through the grocery channel). The Nordic countries are Orkla Brands Nordic's primary home market. The business unit holds strong no. 1 positions in all segments in Norway, and several of the companies have also achieved solid market positions in Sweden, Denmark and Finland.

measured in 2009, fell from 12.5 to 11.3 in 2010.

Accidents, injuries and near-miss incidents are recorded in the factories' deviation systems, which are used actively to implement corrective measures. The injuries that occur at factories are mainly pinch injuries, involving body parts that are caught in movable machine parts, slip and fall injuries and accidents related to fork-lift trucks. Preventive safety efforts focus particularly on averting these types of injury. In 2010, the scope of the effort was expanded to include offices, warehouses and external sales.

**Resource consumption**

**Energy**

Energy consumption at Orkla Brands Nordic totalled 183.5 GWh in 2010, which is on a par with consumption in the past few years.

The companies work systematically to economise on energy use. In 2010, most of the companies could report a decline in energy consumption per tonne produced. Improvements made in ventilation and cooling systems, recovery of heat from compressors, reduction of air leakage and the installation of time switches and movement sensors are examples of measures that have had a positive impact. Nidar, for instance, has established a project in collaboration with Enova to recover heat in the factory (see focus article). Axellus Norge focuses on avoiding the

use of diesel, and uses its own production of biodiesel to generate heat.

**Water**

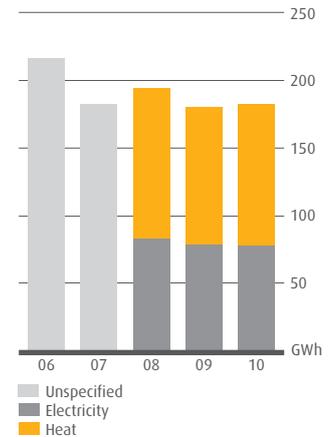
In 2010, overall water consumption increased to 668,000 m<sup>3</sup>. Despite the fact that reducing water consumption is a high priority, four of the companies had an increase in consumption per tonne produced. This was partly due to new production equipment, and steps will be taken to follow up on this issue in 2011. Most of the businesses reduced their water consumption in relation to production volume.

**Packaging**

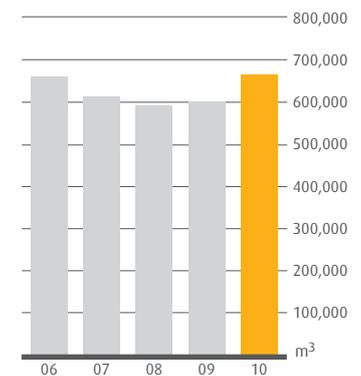
A total of 24,000 tonnes of packaging was used in 2010, equivalent to 180 kg of packaging per tonne produced. The increase from 2009 is due to changes in packaging formats. The relative amounts of the various types of packaging remained relatively stable. Cardboard/paper (68%) and plastic (25%) are clearly the most commonly used packaging materials.

Lilleborg offers refill solutions, among other things, which make it possible to economise substantially on materials, in a growing number of product categories. Better utilisation of pallet space is another way of achieving significant environmental gains. In 2010, Nidar succeeded in increasing the number of boxes per pallet from 208 to 224 for some of their products. All in all, this means that around 3,000 fewer pallets need to be transported.

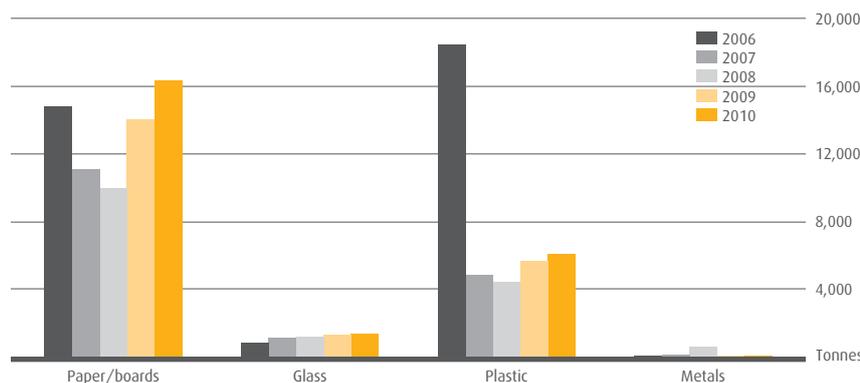
Consumption of Energy



Water Consumption



Consumption of Packaging Materials



**Emissions**

**Air**

Orkla Brands Nordic's emissions of CO<sub>2</sub> totalled 30,500 tonnes in 2010, which is approximately on a par with emissions in 2009. A total of 74% of emissions come from fossil fuel and 26% from consumed electricity.

Emissions of CO<sub>2</sub> from the business unit's own production operations are generated by the burning of light oil, natural gas and propane, and totalled 21,670 tonnes in 2010, compared with 23,700 tonnes in 2009. This reduction is ascribable to somewhat lower production volume and the implementation of energy efficiency measures.

Emissions of SO<sub>2</sub> declined from 4.3 tonnes in 2009 to 3.1 tonnes in 2010. The emissions are generated by the burning of light oil. Emissions of NO<sub>x</sub> totalled 20.6 tonnes in 2010, compared with 20.8 tonnes in the previous year.

**Discharges to water**

The snacks businesses and Lilleborg measure discharges of organic material from their production processes, and registered a slight reduction from 1,614 tonnes in 2009 to 1,531 tonnes in 2010. Chemical oxygen demand (COD) was reduced by almost 7% and biological oxygen demand (BOD) by just under 3%.

At the snacks factories, the treatment plants ran stably and efficiently. Generally speaking, reductions in discharges coincided with increases in the factories' production volumes. KiMs Norge installed two oil separators (for deep fryer oil) in the treat-

ment plant, and in 2010 removed over 60 tonnes of oil that would otherwise have reduced the capacity of the treatment plant and resulted in higher concentrations of COD and BOD in the wastewater.

At Lilleborg's detergents factory, the reduction in discharges was due to the increased reuse of washwater and good production planning. Lilleborg has worked systematically for many years to reduce the COD level in the processing water discharged into the public sewage system. The factory has a permit for 3.5 tonnes COD per week. In 2010, the COD level was 1.62 tonnes per week, which is a decline of more than 7% from the previous year.

**Waste**

Waste produced by Orkla Brands Nordic factories totalled 27,300 tonnes in 2010. This is an increase of 14% from the year before. Most of the waste consists of potato peelings from the snacks businesses, but the factories sort waste into several different fractions, and the recycling rate is high. KiMs Norge achieved a recycling rate of 97% in 2010, which is the same as in 2009. Over 80% of all the waste generated by Orkla Brands Nordic is organic. 57% is used for animal feed and 18% is composted. Some of the organic waste is also used to produce biogas.

**Other matters**

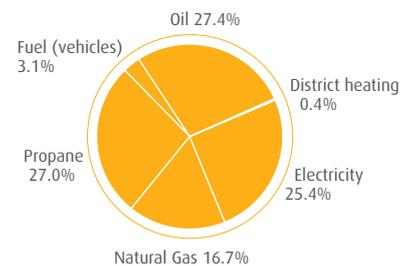
Four of the factories, more specifically Chips Finland, Göteborgs Kex, KiMs Norge and Lilleborg's detergents factory at Ski, are certified under the ISO14001 environmental management

standard. The detergents factory is also certified under the OHSAS 18001 occupational health and safety standard.

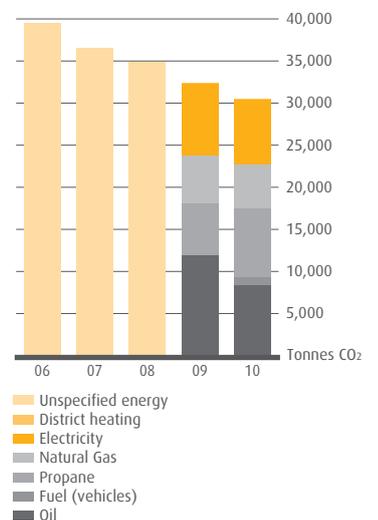
Several of the factories are subject to permits that regulate their relationship with their surroundings. None of the factories have had emissions or discharges that exceed their permit level.

Lilleborg has been an active user of the official Swan environmental label since 1993, and offers Swan-labelled products in every category of detergents. In connection with the Swan label's 20th anniversary in 2010, Lilleborg and OMO were awarded two prizes by the Nordic Ecolabelling Foundation for active use of the Swan label for many years.

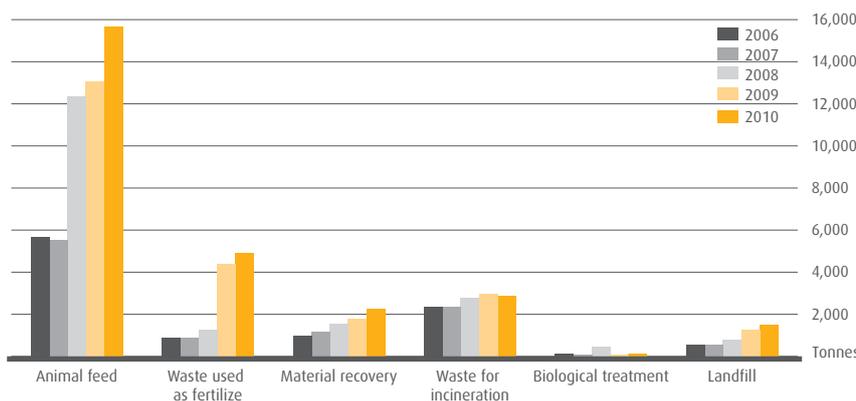
**Allocation of CO<sub>2</sub>-emission for Orkla Brands Nordic 2010**



**Total CO<sub>2</sub>-emissions for Orkla Brands Nordic 2006-10**



**Waste per Tonne of Finished Product**



# ORKLA BRANDS INTERNATIONAL

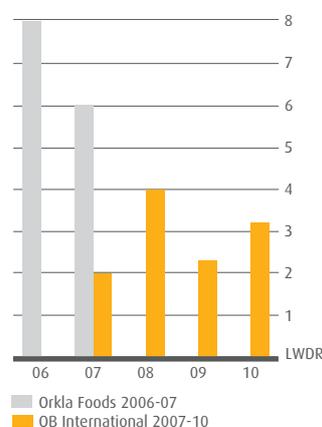


## Health and safety

Orkla Brands International experienced an increase in the Lost Work Day Rate (LWDR), from 2.3 in 2009 to 3.2 in 2010. This rise is due to the fact that MTR Foods in India has integrated a general procedure for reporting injuries into its systems. Felix Austria saw a highly improved trend, with a decline in LWDR from 19.8 in 2009 to 6.7 in 2010. This improvement was driven by increased focus on and a change in attitudes towards the working environment and safety throughout the organisation.

Orkla Brands International is the business unit that has the lowest sickness absence rate in Orkla Brands. In 2010, the sickness absence rate was 2.5%, which is equivalent to the level in 2009.

Lost Work Day Injuries



LWDR = Number of injuries leading to absence per million hours worked.

## ORKLA BRANDS INTERNATIONAL

Orkla Brands International comprises branded companies outside the Nordic region and the Baltics. The business unit consists of the following companies: SladCo and Krupskaya (Russia)\*, Felix Austria (Austria), and MTR Foods (India). SladCo and Krupskaya hold strong regional positions in the chocolate and biscuit markets. In India, MTR Foods holds strong regional positions in the spice and spice-mix segments, as well as solid national positions in the ready-mix and ready-meal segments. Felix is the leading ketchup company in Austria.

\*From the 25 February, Orkla Brands Russia.

**Resource consumption**

**Energy**

Energy consumption at Orkla Brands International totalled 293 GWh, which is an increase of 18% compared with 2009. In 2010, Krupskaya took over new production facilities in St. Petersburg in connection with the acquisition of Peterhof, in addition to which Pekar's production operations (acquired in 2009) are now included in the calculation of overall energy consumption.

A total of 35 GWh of thermal energy from SladCo's factory in Ulyanovsk was sold to external customers. This is an increase compared to the 10 GWh sold in 2009.

Most of the energy used was generated from natural gas. Energy consumption per tonne of finished product rose from 1.96 MWh in 2009 to 2.42 MWh in 2010. This increase was largely due to lower production volumes and new production facilities in St. Petersburg, resulting from the acquisitions of Peterhof and Pekar.

In 2011, MTR Foods will replace the use of diesel as an energy source with the use of steam produced from briquettes made from biomaterials. This will reduce the company's consumption of diesel by 70%.

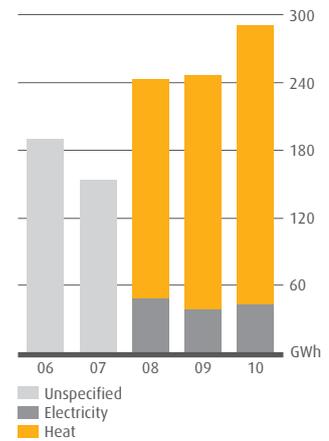
**Water**

Orkla Brands International's consumption of water totalled 1,490,000 m<sup>3</sup> in 2010, which is 9% lower than in 2009. The improvement is ascribable to somewhat lower production volumes and a change in product mix. Water consumption per tonne of finished product averaged 12 m<sup>3</sup>, which is equivalent to a reduction of 5% compared with 2009.

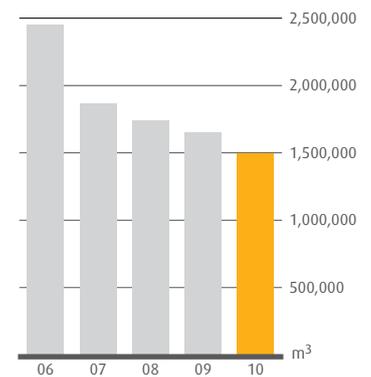
**Packaging**

The companies focus actively on developing optimal packaging solutions. On average, 160 kg of packaging material is used per tonne of finished product, but packaging use varies greatly from one type of product to another. Paper (including cardboard and corrugated paper) account for the largest amount of material in terms of weight (67%), followed by plastic (15%), metal (9%) and glass (9%).

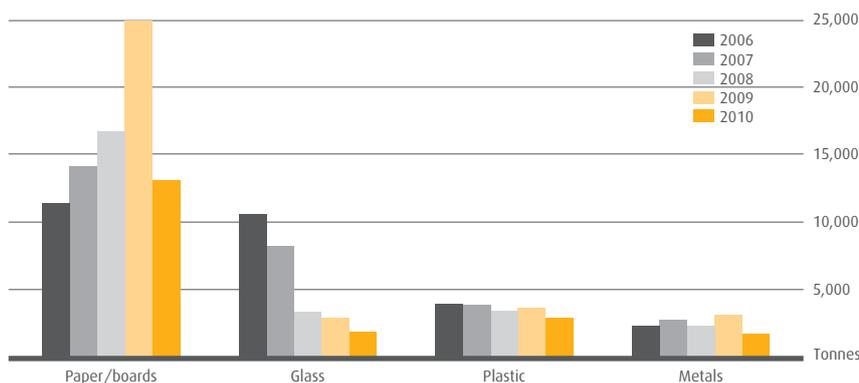
Consumption of Energy



Water Consumption



Consumption of Packaging Materials



**Emissions**

Orkla Brands International's emissions of CO<sub>2</sub>, including purchased energy (electricity), totalled 59,500 tonnes in 2010, up from 9,700 tonnes in 2009. This is primarily due to new production units at Krupskaya. Purchased energy accounts for 29% of emissions. In 2011, MTR Foods will replace diesel as an energy source with steam produced from briquettes. The briquettes are renewable fuel made from coconut shells, and will lower CO<sub>2</sub> emissions from MTR Foods' production operations.

Emissions of SO<sub>2</sub> amounted to only 1 tonne, due to the switch to fuel with a lower sulphur content, in which natural gas is the main energy source.

**Waste**

Orkla Brands International factories generated a total of 5,460 tonnes of waste in 2010. This is equivalent to 45

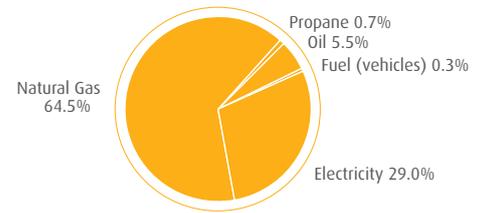
kg per tonne of finished product, and is a rise of 7% compared to 2009. A total of 1,230 tonnes of packaging waste was collected and sent for recycling. Around 450 tonnes of organic waste was used in biogas production, while the bulk of the waste was used as fertiliser on cultivated fields (620 tonnes) and animal feed (270 tonnes). Most of the waste, 2,860 tonnes, was deposited at landfills. There were 3 tonnes of hazardous waste, which was delivered to companies specialised in the management and disposal of such waste.

The authorities in several countries, including Russia, require special permits for waste management, and these permits are regularly renewed.

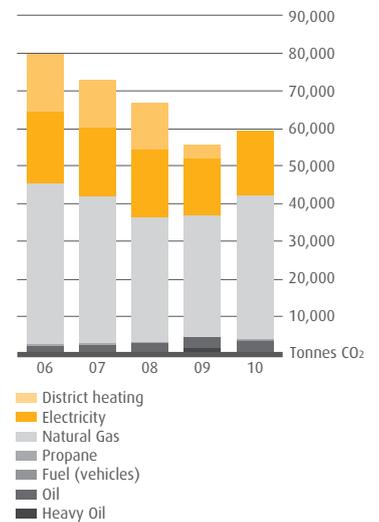
**Other matters**

Krupskaya still uses CFCs (chlorofluorocarbons) as a refrigerant (approximately 1,550 kg).

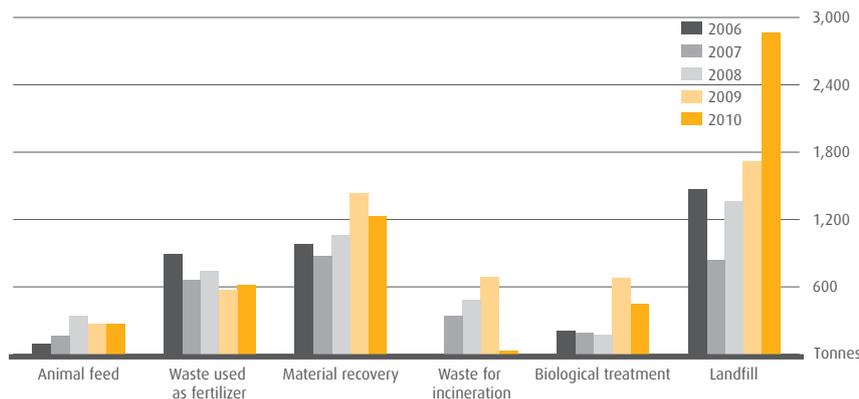
Allocation of CO<sub>2</sub>-emissions for Orkla Brands International 2010



Total CO<sub>2</sub>-emissions for Orkla Brands International 2006-10



**Waste per Tonne of Finished Product**



# ORKLA FOOD INGREDIENTS



## Health and safety

The sickness absence rate at Orkla Food Ingredients was 2.6% in 2010, down from 3.1% in 2009. The Lost Work Day Rate (LWDR) was 7.0 in 2010. This is an increase compared with the LWDR of 4 in 2009.

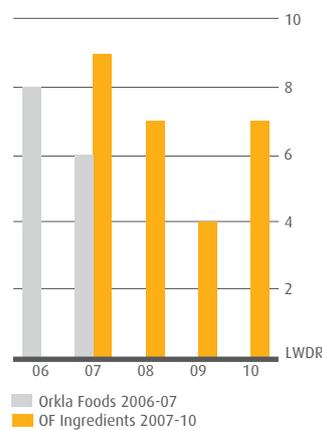
## Resource consumption

### Energy

Energy consumption at Orkla Food Ingredients totalled 109 GWh in 2010. Energy consumption per tonne of finished product amounted to 0.41 MWh, which was on a par with the level in 2009.

A total of 39% of energy production in 2010 was based on fossil fuel, and is a reduction compared with 44% in 2009.

Lost Work Day Injuries



LWDR = Number of injuries leading to absence per million hours worked

## ORKLA FOOD INGREDIENTS

Orkla Food Ingredients (OFI) is currently the market leader in the Nordic bakery ingredients sector. The business unit has a decentralised management structure, consisting of eight main reporting units comprising 40 companies in 21 countries. The industry is fragmented, and OFI is now one of the seven leading suppliers in Europe. OFI's largest product categories are margarine products (Dragsbæk), marzipan (Odense), bread improvers and mixes (Credin and Sonneveld), and yeast (Jästbolaget). The largest sales and distribution companies are KåKå in Sweden, Idun Industri in Norway and Credin bageripartner in Denmark.



Electricity and long-distance heating accounted for 51% and 10%, respectively, of energy supplies.

**Water**

Orkla Food Ingredients' consumption of water totalled 715,000 m<sup>3</sup> in 2010. This is a reduction of 2.8% compared with 2009. Average water consumption per tonne produced was 2.7 m<sup>3</sup> in 2010, down from 3.8 m<sup>3</sup> in 2009.

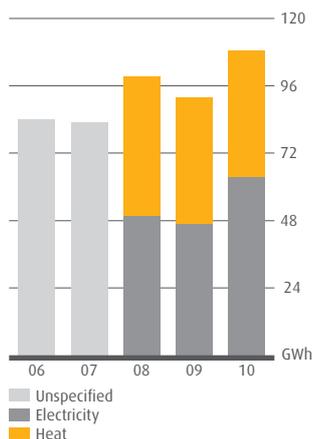
This reduction was achieved through a variety of measures to cut total water consumption. The relatively substantial reduction in consumption per tonne of finished product is ascribable to the acquisition of Sonneveld, which

uses only a limited amount of water in its production of dry goods. A large amount of cooling water is used in Orkla Food Ingredients' production of yeast.

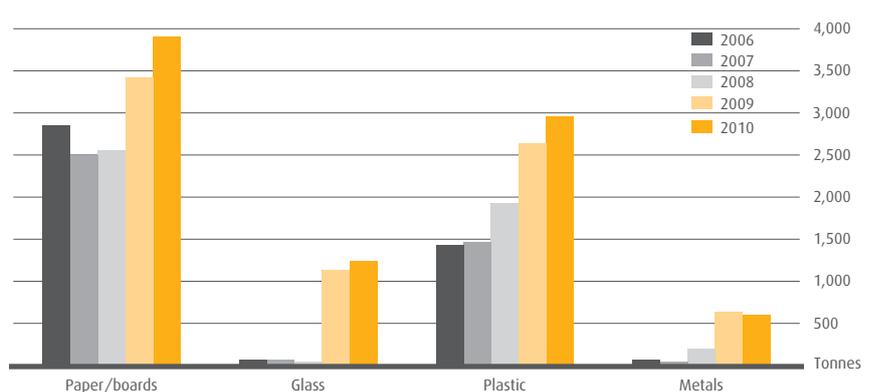
**Packaging**

The total amount of packaging material used in 2010 was 9,400 tonnes, averaging 36 kg of packaging material per tonne of finished product. However, packaging use varies greatly from one type of product to another. Paper and cardboard account for the largest amount in terms of weight (41%), followed by plastic (31%), glass, wood and metal.

Consumption of Energy



Consumption of Packaging Materials



**Emissions**

Only half of the Orkla Food Ingredients factories are required to have licences or more extensive permits for emissions, waste and noise. This is because the factories are not considered to cause significant environmental impacts.

Emissions of CO<sub>2</sub> from energy consumption totalled 18,400 tonnes in 2010 which included 6,250 tonnes of CO<sub>2</sub> from the production of yeast at Jästbolaget in Sweden.

Emissions of SO<sub>2</sub> totalled 16.2 tonnes in 2010, compared with 15 tonnes in 2009.

The higher emissions in 2010 are due to the acquisition of new businesses resulting in higher production volumes.

**Waste**

In 2010, the Orkla Food Ingredients factories generated a total of 14,000 tonnes of waste. This is equivalent to

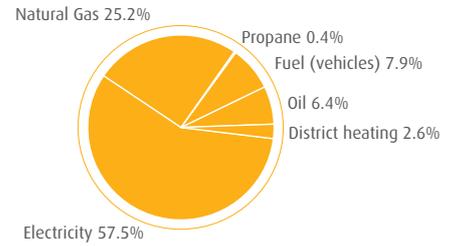
53 kg of waste per tonne of finished product. The factories are continuing their systematic efforts to reduce waste and increase source separation.

50% of the waste is used as fertiliser on cultivated fields and 18% is used in animal feed. A total of 1,250 tonnes of waste, equivalent to 9% of total waste, was deposited at landfills. Most of the factories collect and sort used packaging, which is then sent for recycling. In 2010, a total of 1,375 tonnes of packaging waste was collected.

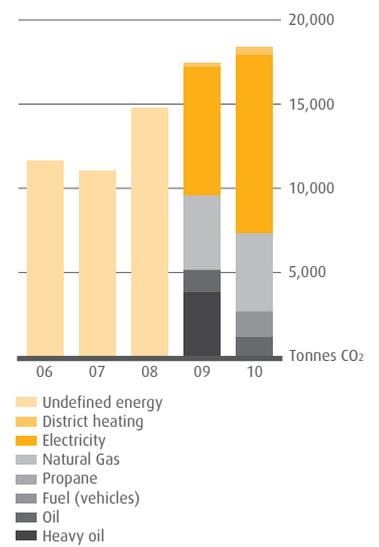
**Other matters**

Several of the Orkla Foods Ingredients factories still use chlorofluorocarbons (CFCs) as a refrigerant (100 kg in total). They are currently in the process of switching to refrigerants that have less impact on climate.

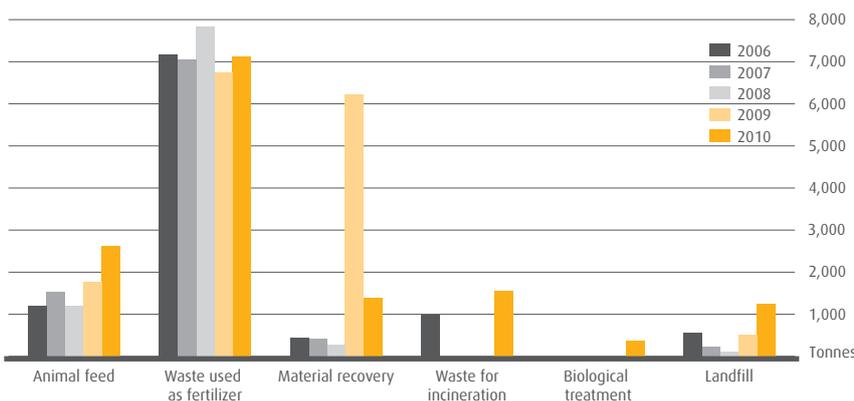
Allocation of CO<sub>2</sub>-emissions for Orkla Food Ingredients 2010



Total CO<sub>2</sub>-emissions for Orkla Food Ingredients 2006-10



Waste per Tonne of Finished Product



# SAPA



The Sapa Group has continued to improve its safety performance year on year. The Total Recordable Rate (TRR) of 9.3 and Lost Work Day Rate (LWDR) of 3.3 reported in 2010 are the lowest ever recorded by the Group.

### Occupational Health and Safety

The Sapa Group has continued to improve its safety performance year on year. The Total Recordable Rate (TRR) of 9.3 and Lost Work Day Rate (LWDR) of 3.3 reported in 2010 are the lowest ever recorded by the Group.

Looking at the business areas, Sapa Profiles improved its TRR to 9.4, which is a reduction of 16% over 2009. The main driver was North America where considerable improvements were made at the plants in Montreal and Mississauga, both former Indalex locations. In Europe, performance also improved over previous years but with a disappointing increase in the Lost Work Day Rate. Good improvements were seen at Albi (France), Brogårds (Sweden) and Drunen (The Netherlands).

Sapa Building System continued to improve, achieving their lowest ever TRR of 7.9 and LWDR of 6.4.

Sapa Heat Transfer unfortunately did not improve over 2009 levels and ended the year at a TRR of 10.0, despite good progress made by Alutubes in Belgium.

Absenteeism rates for the Group fell to an annual rate of 3.1%, which is a considerable improvement over the 3.9% recorded in 2009.

Sapa's continues to pursue an integrated approach to EHS, based on communication, training, auditing and rewards to make all locations as self-sufficient as possible.

## SAPA

Sapa develops, manufactures and markets value-added aluminium profiles, profile-based building systems and heat exchanger solutions in aluminium. Sapa is the leading company in its field and has customers in the building-, transport-, engineering and telecom industry.

Lost Work Day and Total Recordable Injuries



The Group has drawn up a three-year EHS plan that has been integrated into Sapa's business system, Genesis. This overarching plan is being deployed at all factories at a rate appropriate to the locations' current conditions.

All locations have made active efforts to raise standards by implementing measures ranging from major investments in equipment, such as the new extrusion line at Sapa Profiles Tibshelf in Great Britain with high standards of machinery safety, to smaller improvements such as preventing falls at Sapa Profiles Montreal, Sapa Profiles Pudget France, Sapa Building System Belgium and Sapa Heat Transfer Tubes Shanghai.

The greatest cause of injury at Sapa locations remains ergonomic in nature with hand injuries being the most common. Operating locations address their ergonomics risk in a variety of ways, ranging from the installation of automated machinery such as a new packing system at Sapa Profiles Yankton (USA), to innovative die handling equipment at Sapa Profile Harderwijk (The Netherlands) and storage systems at Sapa Profiles Burlington (USA) to providing mechanical assistance such as a spool support system at Sapa Heat Transfer Shanghai. Ergonomic risk assessments and training are commonplace.

Focussed health initiatives to reduce exposure to harmful chemicals were

carried out at several locations. Efforts to eliminate nickel at Sapa Profiles Fossanova (Italy) and chrome at Sapa Profiles Puget (France) are two examples. Noise reduction measures include the purchase of quieter machines and noise enclosures and growing use of noise barriers.

There were numerous initiatives to improve communication with and involvement of employees, contractors and others associated with Sapa businesses worldwide.

A health and safety day was held at all Sapa locations across North America on 26 August. The safety day was launched by former Business Area President Tim Stubbs. The theme of the day was to promote safety and health and to involve all employees in various activities aimed at raising awareness while also creating a sense of ownership and fun.

The Sapa President's Award for EHS was awarded to Sapa Heat Transfer Alutubes in Belgium for improving health and safety standards through a team approach and clear and passionate leadership for the safety and well being of everyone working at the Lichtervelde location.

#### Environment

Sapa locations worldwide carry out many and varied environmental improvements, ranging from the installation of state-of-the-art melting

furnaces, elimination of hazardous substances from surface treatment chemicals, prevention of spills, and energy saving activities, to the implementation of ISO14001.

An online environmental metric reporting system has been introduced to monitor progress in reducing energy consumption, emissions, water, waste, etc.

The number of environmental non-compliances was reduced significantly in 2010 due to improvements made at the former Indalex locations. There were no serious environmental incidents during the year.

#### Resource consumption

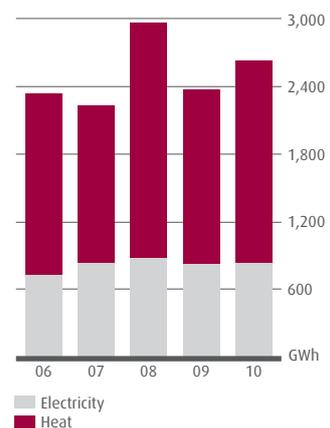
##### Energy

Sapa's energy consumption totalled 2,275 GWh in 2010, 65% of which was heat energy, with 35% used as electricity.

Numerous initiatives were implemented in 2010 to reduce energy consumption, ranging from low frequency control of pump motors, efficiency improvements in the operation of heating and ventilation units, increase in the share of renewable energy sources, to simply replacing old windows with more efficient ones.

Sapa Heat Transfer Shanghai has changed most of its furnaces from diesel to natural gas with considerable savings in energy use and emissions.

Consumption of Energy



The Sapa location in Cressona (USA) has signed the contract to install a 1.4 MW ground mounted solar field on its site that is expected to reduce the plant's carbon footprint by 1,282 tonnes of CO<sub>2</sub> annually.

Sapa Heat Transfer Finspång (Sweden) has recently signed an 'Energy Performance Contract' with an energy consultancy company. Over a period of six years, the consultants will perform a number of energy-reducing measures relating to the location's heating and ventilation systems for a share of the savings achieved. Estimated savings after implementation are in the range of 2,800 MWh/year.

**Water**

Sapa locations worldwide consumed approximately 10 million cubic metres of fresh water during rolling, extrusion, anodising and painting. Water recirculation systems, high efficiency quench units and cooling towers are commonplace.

**Emissions**

**Air**

In 2010, Sapa plants emitted 339 tonnes of nitrous oxide (NO<sub>x</sub>), 56 tonnes of sulphur dioxide (SO<sub>2</sub>) and 183 tonnes of volatile organic compounds (VOC). All locations are required to have plans in place to reduce these and other environmentally harmful emissions.

Sapa plants use the carbon footprint calculator which is built into the online environmental metric reporting system and calculates Sapa's direct CO<sub>2</sub> emission (from burning fossil fuels at the sites), together with indirect emission (from purchased energy at the place of electricity generation). Total CO<sub>2</sub> emission for 2010 was 682,000 tonnes, which is an 8% increase on 2009 due to higher production volumes. Purchased energy accounted for 50% of the emissions.

Sapa locations have already started to replace ozone-depleting refrigerants such as HCFCs, with newer, more environmentally friendly substances such as R422a or R422d.

**Waste**

The total amount of waste generated in 2010 was 86,000 tonnes, of which 73% was recycled.

**Chemicals and hazardous substances**

Sapa uses 9,336 tonnes of caustic soda, which continues to be a focus for reduction activities. Caustic soda consumption has been reduced significantly at Sapa's locations in Sweden and Poland due to process improvements, and, as a result, the resultant waste (spent caustic, sludge) was also decreased.

Sapa Profiles Puget in France installed a state-of-the-art waste water treatment facility, thereby greatly reducing chemical consumption and eliminating the need to use chrome.

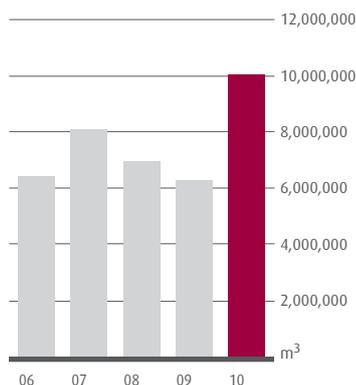
There have been improvements in material storage at all locations due to consistent use of covered storage areas, including containment for spillages where required. Chemical storage has also improved, and secondary containment is now commonplace.

Risk assessment of all hazardous substances used at locations is undertaken to determine risk related to use, storage, transport and waste management.

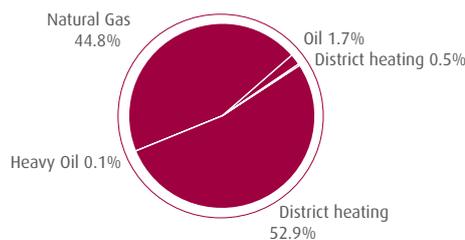
**Other matters**

In 2011, EHS activities will build upon the deployment of the Sapa EHS Management system at all locations with focussed corporate initiatives aimed at raising knowledge and skill levels, particularly in relation to risk assessment, ergonomics, behavioural safety, waste reduction and energy efficiency.

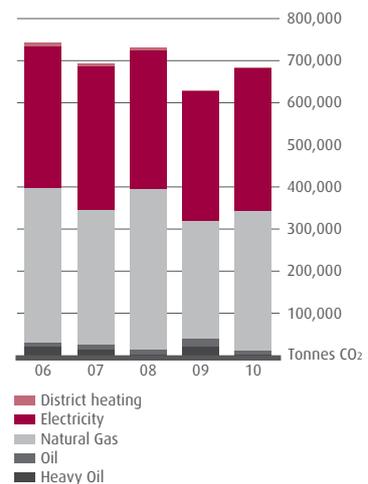
Consumption of Water



Allocation of CO<sub>2</sub>-emissions for Sapa 2010



Total CO<sub>2</sub>-emissions for Sapa 2006-10



# INVESTMENTS



Orkla Eiendom focuses on environmentally friendly and efficient solutions, and implements the same kind of measures in its real estate projects. As a result of Borregaard's environmental strategy, more than 80% of its energy supply is based on renewable sources and energy recovery from waste.

## INVESTMENTS

The Investments area consists of the Share Portfolio (the Share Portfolio and Orkla Eiendom (real estate)), Hydro Power, Borregaard, Jotun (42.5%) and REC (39.7%). Jotun and REC are not required to report EHS data to Orkla, and are therefore not included in this report.

# SHARE PORTFOLIO

The Share Portfolio has analysts who are experts in green investments. Special expertise has also been built up on investments in environment-related projects.



# Orkla Eiendom



Building projects are subject to comprehensive legal environment, health and safety (EHS) requirements. The Working Environment Act imposes a major responsibility on the builder in this respect. Orkla Eiendom requires its project partners to have good systems for ensuring compliance with these requirements.

## Practical EHS work in projects

In all building projects, a plan must be drawn up for safety, health and the working environment which contains:

- A description of the organisation of and division of responsibility relating to the building project
- The project schedule
- A description of critical work tasks
- Procedures for dealing with non-conformances

As builder, Orkla Eiendom requires that the project management is present at the construction site to ensure close cooperation with the contractor with regard to EHS activities. Critical work tasks must be identified at an early stage of the building project. Well before these activities are begun, a safe job analysis (SJA) must be pre-

pared to ensure safe production methods. Safety inspections must be carried out regularly. Undesirable incidents must be reported (Undesirable Incident Report - UIR) and the information must be systematised. In the event of a breach of EHS rules, the project management must take necessary action in respect of the contractor.

## Reporting

The project management must report to Orkla Eiendom each month on the status of the project's EHS work. The key values are the number of UIRs, the number of injuries and the number of injuries leading to absence in the period. The goal is to ensure that no injuries leading to absence occur in connection with Orkla Eiendom's building projects. In 2010, this goal

was achieved. Orkla Eiendom's own projects in 2010 included construction work at Ringnes Park and the former Idun factory in Oslo.

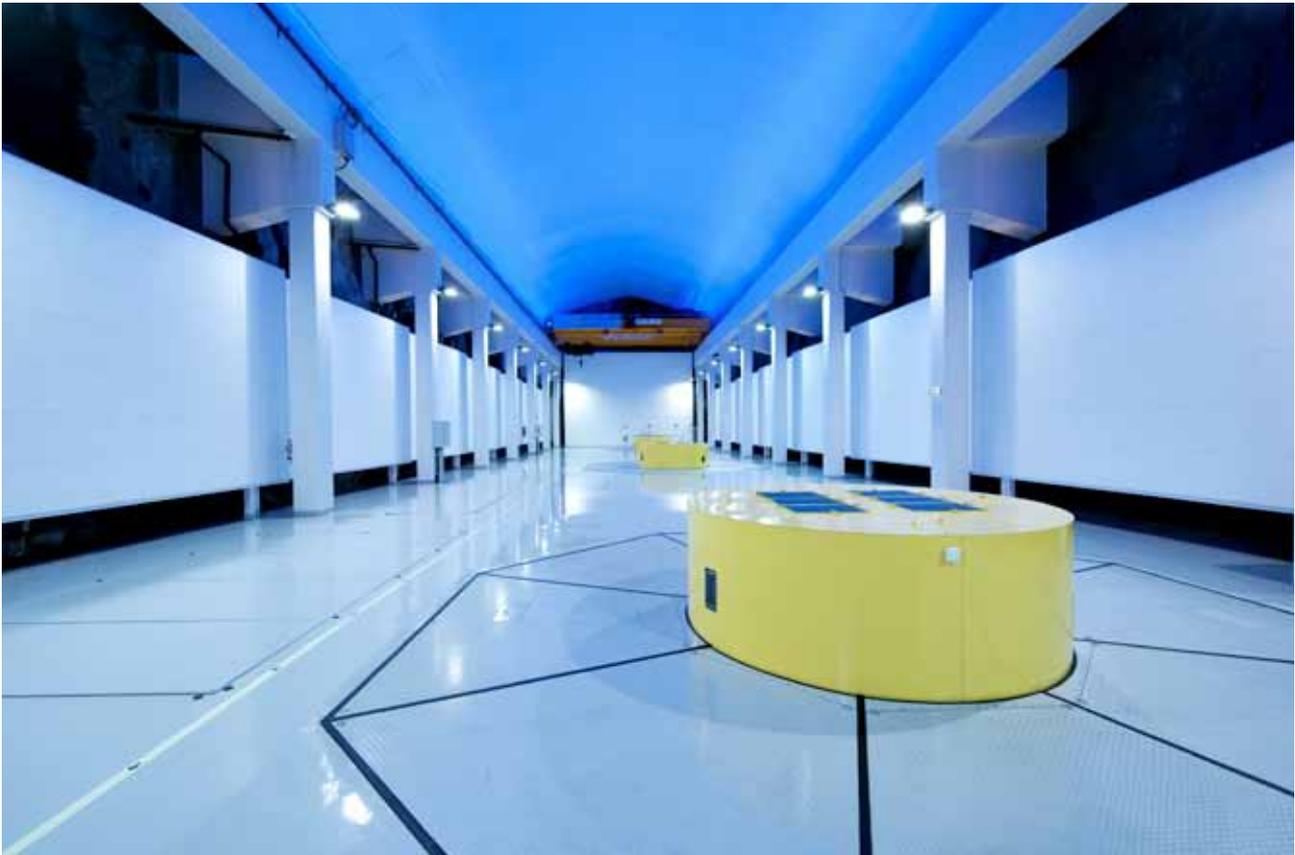
## Environment

Orkla Eiendom focuses on environmentally friendly and efficient solutions, and implements such measures in its real estate projects. New properties that are bought and existing buildings that form part of Orkla Eiendom's portfolio are carefully inspected to ensure that energy use is managed effectively. The introduction of energy efficiency measures can, by simple means, ensure both environmental gains and lower operating costs.

From 1 July 2010, a requirement was also introduced to the effect that all dwellings and commercial and industrial buildings that are sold or leased must have an energy certificate. This certificate consists of an energy label that shows the building's energy standard. The aim is to increase awareness of energy use and solutions that can make the dwelling or building more energy-efficient.

Property development is also a form of active social development, and several of Orkla Eiendom's projects involve the renovation of older industrial neighbourhoods and converting them into modern residential and commercial areas. One example of this type of project, besides Ringnes Park and the Idun factory, is Orkla Eiendom's conversion of one of Denofa's former factory buildings at Øra in Fredrikstad, Norway, into a centre for the arts in 2011.

# HYDRO POWER



## Borregaard Energi

Borregaard Energi's production of hydro power totalled 525 GWh in 2010, compared with 490 GWh in 2009. The higher output is a result of increased production capacity from the new turbines, which were installed in the power plant in 2009.

## AS Saudefaldene

AS Saudefaldene is 85% owned by Elkem Energi Sauda AS and 15% owned by Sunnhordland Kraftlag AS. The plants have an installed effect of 356 MWh, and annual output averages 1.85 TWh. Work began on the first hydro power installations in Saudafjellene in 1915, and the latest power plant was officially opened in the winter of 2010. The Sauda project is the largest hydro power development project in Norway in many years, and generates 650 GWh of new,

renewable energy. The entire facility now comprises seven power plants: Dalvatn, Storlivatn, Svartkulp, Sønnå høy and Sønnå lav, along with the small power stations Kleiva and Storli mini-power plant. Sauda I and Sauda III are no longer in operation.

Production in 2010 totalled 1.13 TWh. The low output is due to the very small amount of precipitation in 2010 (approximately 62% of precipitation in a normal year).

Good EHS performance is crucial to efficient operations, and Saudefaldene has established plans to protect its employees and the environment in connection with its hydro power operations. The business's sickness absence rate is very low, and no injuries were registered in 2010.

At AS Saudefaldene's shut-down power plant in Hellandsbygd, Norway, transformer oil was discharged into Storlivatn Lake in 2010 as a result of frost damage to a transformer cooler that had not been drained after the power station was closed down. Because the lake was frozen and the oil was quickly cleaned up, the negative environmental impacts of the discharge were negligible.

## HYDRO POWER

Hydro Power consists primarily of Borregaard's energy operations and Orkla's 85% interest in AS Saudefaldene (Norway). Production capacity totals 2.5 TWh of electrical energy.

# BORREGAARD

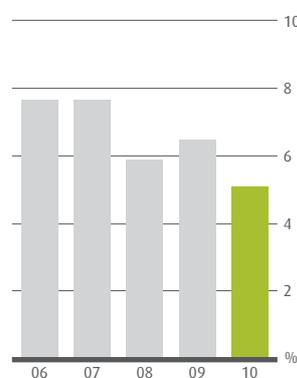


## Health and safety

The sickness absence rate for Borregaard as a whole, and for the company's operations in Norway in particular, improved in 2010. Compared with 2009, when the sickness absence rate was 5.5%, the total rate for Borregaard was 5.1% in 2010. The systematic efforts that have been initiated to reduce sickness absence will continue in 2011.

Borregaard in Sarpsborg, Norway, which constitutes two-thirds of Borregaard's operations, had a sickness absence rate of 5.4% in 2010. This is an improvement of over one percentage point from the previous year. The decline in sickness absence can be ascribed to comprehensive efforts to promote an inclusive workplace, including extensive follow-up of

Sickness Absence in Borregaard's Norwegian Operations



## BORREGAARD

Borregaard has one of the world's most advanced, sustainable biorefineries. Using natural, sustainable raw materials, Borregaard produces advanced, environmentally friendly biochemicals, biomaterials and bioethanol that can replace oil-based products. Borregaard also holds strong positions in the additives, fine chemicals and energy segments. The company has factories and sales offices in 20 countries in Europe, Asia and Africa.

employees on sick leave at an early stage of their absence, as well as to the introduction of a number of preventive, health-promoting measures. The company seeks to ensure close collaboration between the employees, line management, personnel managers, employee representatives, the company health service and the public authorities in this work.

The company's safety work suffered a small setback in 2010. The Lost Work Day Rate (number of injuries leading to absence per million hours worked) at Borregaard was 4.5 in 2010, compared with 3.6 in 2009. The Total Recordable Rate (number of injuries leading to absence, need for medical treatment or restricted work per million hours worked) was 17.0, which is on a par with the rate in 2009.

Borregaard has a vision of zero injuries, and the company has implemented a range of measures to achieve this objective. To intensify its safety efforts, Borregaard in Sarpsborg introduced a new tool in its safety work, the Personal Safe Job Analysis (PSJA), in the autumn of 2010. The PSJA is a safety tool designed for use by all operational and maintenance staff when performing tasks for which no safety instructions or work permit have been issued. The PSJA is a pocket-sized checklist which must be completed by the technician before commencing the work operation. The purpose of the PSJA is to ensure that each technician makes safe choices before starting a job. This is one of the strategic measures aimed at creating greater awareness of each individual's

responsibility for his/her own safety. Borregaard LignoTech's "Zero Harm project" was launched in 2007, with the aim of increasing the level of safety and the safety culture by promoting greater engagement and motivation. A common standard for procedures has been introduced at all levels. A key factor is the introduction of a job observation system, which is an interview about safety that is conducted at all levels and in all departments. Health and safety issues are communicated by means of bulletins and information about incidents is shared with all the employees. The programme, which covers the production plants outside Norway, has proved to be an effective means of reducing the injury rate. In 2010, five plants registered no injuries leading to absence.

#### Resource consumption

In 1998/99, Borregaard in Sarpsborg established an energy strategy aimed at lowering energy consumption and replacing the use of heavy oil with renewable, environmentally friendly energy sources. Since then, Borregaard and the company's partners have invested in sustainable energy plants which collectively have substantially reduced the need to use heavy oil. In 2007, Hafslund Miljøenergi was commissioned to establish a plant based on the use of energy generated from waste-based fuel. The plant, which was opened in early 2010, will almost halve the company's consumption of heavy oil used to produce steam at Borregaard Sarpsborg, as well as help to reduce emissions of CO<sub>2</sub> and NO<sub>x</sub>.

#### Energy

Energy consumption at all the Borregaard units totalled 1.7 TWh in 2010 (1.1 TWh heat and 0.6 TWh electricity), which is on a par with consumption in 2009. Most of the energy was used by Borregaard in Sarpsborg, where energy consumption totalled 1.44 TWh in 2010.

In 2010, approximately 70% of Borregaard's thermal energy was based on renewable sources, such as biofuel, recovery of energy from industrial processes, waste incineration and long-distance heating.

The LignoTech units' consumption of energy varies according to production volumes. The factory in South Africa had lower production, while the factory in the USA had higher production than normal. A system was installed to recover heat from spray dryers at the factory in South Africa, thereby reducing oil consumption by 25%. The system was introduced in one dryer in 2010, and is to be installed in another dryer in 2011.

#### Water

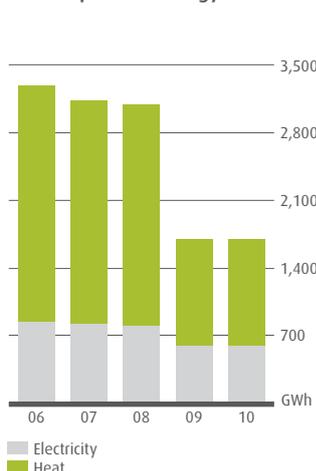
Water consumption at Borregaard totalled 22.6 million m<sup>3</sup> in 2010, which is a decline from 25.7 million m<sup>3</sup> in 2009. The decrease in water consumption is partly ascribable to optimisation of energy use in the fibre line.

Water consumption at Borregaard has declined, an improvement that is primarily due to the reduction in water consumption at the plants in Sarpsborg. In 2008, new sieves were

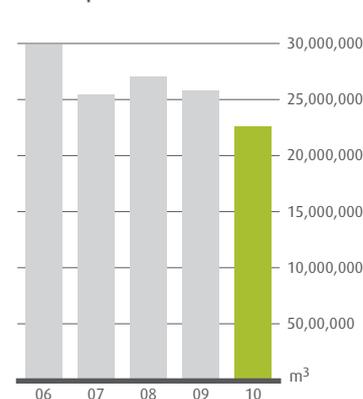
Lost Work Day and Total Recordable Injuries



Consumption of Energy



Consumption of water



installed in the bleachery, making it possible to implement measures to further reduce water consumption. Water is used in cooling, steam and hot water production, transport of products, cleaning, washing and other processes. Borregaard's waterworks is one of the largest water treatment plants in Norway, and cleans 2,000-3,000 litres of water per second.

**Emissions**

Borregaard further reduced its consumption of heavy oil in 2010, compared with 2009, thereby also reducing its emissions of CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>2</sub> to air.

Borregaard's emissions of CO<sub>2</sub> are generated by the use of fossil fuel to produce heat. Emissions totalled 212,000 tonnes in 2010. This is a significant improvement from 2009, when emissions totalled 350,000 tonnes. Orkla's climate accounts for 2010 also include emissions from purchased energy, which brings total emissions of CO<sub>2</sub> to 336,000 tonnes. Purchased energy accounts for approximately 35% of emissions.

In the past few years, Borregaard has substantially reduced its emissions of greenhouse gases. As a result of the company's environmental strategy, more than 80% of energy supplies are now based on renewable sources and the recovery of energy from waste. In 2010, a new waste incineration plant was opened on Borregaard's site, which has halved consumption of heavy oil.

Emissions of SO<sub>2</sub> are generated in part by the burning of fossil fuel and

in part from cellulose processes and the production of ethanol and biogas. Borregaard Sarpsborg's emissions totalled 942 tonnes in 2010, which was 20% lower than in 2009.

Odour and discharges of organic material (chemical oxygen demand (COD) to water are the two most important environmental factors for Borregaard in Sarpsborg. Both these challenges are related to the closure of stage 2 of the biological treatment plant in 2008, as a result of the risk of legionella bacteria. In 2010, discharges of fibre, chloroorganic compounds, copper and phosphorus were reduced in relation to 2009. On the other hand, discharges of organic material have increased. Work is in progress on several projects, comprising both processing measures and projects aimed at exploring long-term treatment solutions, with a view to exploring long-term treatment solutions.

**Waste**

A large percentage of materials are recycled at Borregaard. For instance, bark is either sent to the company's own incineration plant or is sold. Gypsum and ash waste are sent for deposit at external landfills. At Borregaard LignoTech, waste mainly consists of gypsum or other insoluble substances in the raw material, and the quantity of waste was as expected in 2010. All Borregaard factories sort waste at source.

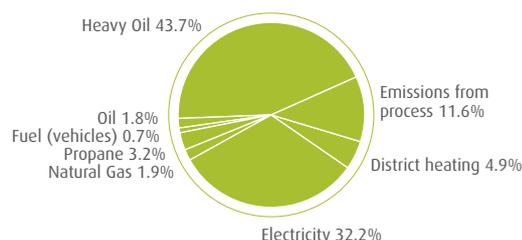
**Research and development of environmental technology**

Borregaard uses the entire log of timber to make products and energy in its production of biochemicals, biomateri-

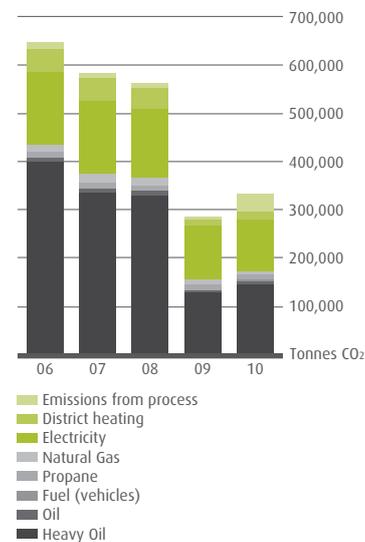
als and bioethanol, which are environmentally friendly, sustainable alternatives to oil-based products.

Borregaard is investing substantial resources in the further development of its biorefinery concept. The company has received research funding from the EU and the Norwegian authorities for this work. This support is an important financial contribution, but also a recognition of Borregaard's specialised expertise. Towards the end of 2010, Borregaard was granted NOK 58 million by Innovation Norway for the construction of a pilot plant to develop a new process for manufacturing biochemicals and second-generation biofuel based on various biomasses as raw materials. Work on construction of the pilot plant will begin in the first half of 2011.

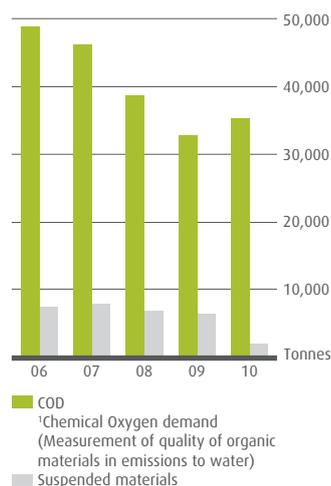
Allocation of CO<sub>2</sub>-emissions for Orkla 2010



Total CO<sub>2</sub>-emissions for Orkla 2006-10



Emissions to water – COD<sup>1</sup> and Suspended Materials



Emissions to Air – SO<sub>2</sub> and NO<sub>x</sub>



<sup>1</sup>COD  
Chemical Oxygen demand  
(Measurement of quality of organic materials in emissions to water)  
Suspended materials

# ELKEM



Energy management, energy efficiency measures and energy recovery were key issues in 2010, and a number of possibilities for recovering energy or increasing energy efficiency were identified in the course of the year.

### Health and safety

After a decline in capacity utilisation in 2009 due to the financial crisis, the activity level rose sharply, and most of Elkem's plants were operating at full capacity in 2010. Despite the high priority given to safety work, the results unfortunately show a return to approximately the same level as in 2007. The Lost Work Day Rate (LWDR) was 2.0 in 2010, compared with 1.5 in 2009, while the Total Recordable Rate (TRR) was 7.9, compared with 4.5 in the previous year.

Despite the efforts to prevent occupational accidents, two fatal accidents

tragically occurred in 2010. At Elkem's plant on Iceland, a male employee died from burn injuries caused by a blow-out of hot gas from a smelting furnace. At Elkem's Erdos JV plant in China, a contract driver was killed when the tractor he was driving overturned and he was crushed by the trailer.

In the aftermath of both these tragic accidents, extensive investigations were carried out and action was taken to prevent the reoccurrence of such incidents.

## ELKEM

Elkem is one of the world's leading companies for environment-friendly production of materials. Its main products are silicon, solar grade silicon, special alloys for the foundry industry, microsilica, carbon and energy.

On 11 January 2011, Orkla ASA announced that it had concluded a binding agreement with China National Bluestar regarding the sale of Elkem. EHS data relating to Elkem in 2010 was reported to Orkla and is included in this report.

There were also cut and pinch injuries, the most serious of which necessitated the amputation of parts of fingers and broken bones, respectively.

The sickness absence rate was reduced from 5.6% in 2005 til 3.4% in 2010, as a result of continuous focus on preventive efforts, management involvement and personal follow-up.

At the Norwegian companies, efforts relating to sickness absence are based on the Inclusive Working Life agreement. As soon as an employee goes on sick leave, there is focus on providing assistance, ascertaining whether he or she is able to work to any extent and helping the sick person to return to work as quickly as possible.

Elkem and the company health service jointly monitor employee health on a regular basis. Risk analyses of the working environment are carried out, as well as specific measurements of employee exposure to dust, noise and heat.

### Resource consumption

#### Energy

Energy consumption in 2010 totalled 4.2 TWh, while consumption in 2009 amounted to 3.3 TWh. This increase is due to significantly higher capacity utilisation than in 2009, the year of the financial crisis.

Elkem's own hydro power plants generated 1.13 TWh of electricity in Norway and 0.23 TWh in Canada. At

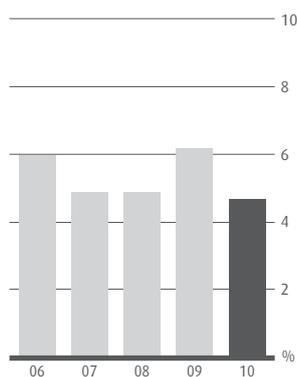
the Elkem Thamshavn and Elkem Bjøvefossen smelting plants in Norway, electrical energy equivalent to 155 GWh was recovered from hot waste gases. Several of Elkem's plants utilised 183 GWh of waste heat from hot water or steam to heat buildings or in neighbouring facilities. In the course of 2010, a number of possibilities for recovering energy or improving energy efficiency were identified, and several projects were initiated or implemented.

At Elkem Carbon China, energy from coal-generated power equivalent to 2.3 MWh was replaced with energy from heat recovered from the plant's calcination furnaces, thereby reducing emissions.

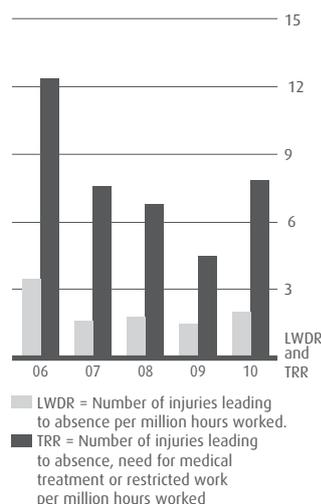
A different type of energy recovery facility has been in trial operation at Elkem Carbon in Kristiansand.

Energy management, energy efficiency and energy recovery were key areas of focus in 2010. Many plants are now examining the possibilities of utilising long-distance heating in their own operations and in their local community, and several projects were launched. In the autumn of 2010, the Board of Elkem AS decided to upgrade and expand the current energy recovery operations at Elkem Thamshavn. The total amount of recovered energy will reach 180 GWh per year when the project is completed in the course of 2011.

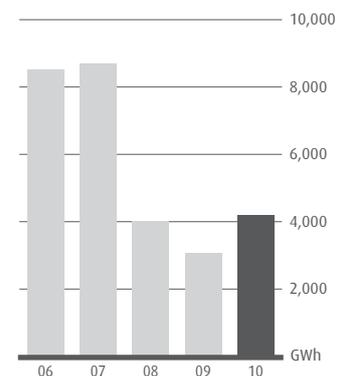
Sickness Absence in Elkem's Norwegian Operations



Lost Work Day and Total Recordable Injuries



Consumption of Energy



**Raw materials**

Elkem controls raw materials for important environmental elements, such as their content of sulphur and certain selected trace elements. This data is included in reporting to the Norwegian Climate and Pollution Agency on the Norwegian plants' emissions. Conditions for the safe storage of raw materials and chemicals in tanks and silos are continuously monitored through internal and general audits.

**Emissions**

Elkem generated emissions of 1.5 million tonnes of CO<sub>2</sub>-equivalents in 2010, which account for approximately 70% of the greenhouse gas emissions from Orkla's own production operations that year. This is a rise from 1.05 million tonnes in 2009, which is largely ascribable to increased capacity utilisation.

Orkla's climate accounts for 2010 also include emissions from purchased energy, which bring total emissions of CO<sub>2</sub> to 1.9 million tonnes. Purchased energy accounts for 21% of emissions. Elkem has continuously reduced its total emissions of SO<sub>2</sub> over many years. This reduction has been achieved through a combination of a switch to the manufacture of products with lower emissions per weight unit and focus on using low-sulphur coal. The rise in emissions from 2009 to 2010 reflects the increase in production.

Reported emissions of NO<sub>x</sub> totalled 7,600 tonnes in 2010, compared with 3,600 tonnes in 2009, and are predominantly generated by the smelting furnace process for the production of ferrosilicon (FeSi) and silicon metal (Si). Since Elkem began to use new measurement technology in 2010 for the continuous recording of NO<sub>x</sub> emissions, the emissions from certain furnaces were adjusted upwards in relation to earlier calculations based on the industry factor for NO<sub>x</sub>. Based on new knowledge, work has begun on research and the development of models to gain an understanding of the fundamental factors that give rise to different relative NO<sub>x</sub> emissions from the different furnaces.

New measurement campaigns were also initiated to record NO<sub>x</sub> values in the immediate vicinity of the businesses concerned. The results of these campaigns will be available in the autumn of 2011.

Discharges to seawater from Elkem Bremanger, Elkem Carbon and Elkem Solar are regulated and are monitored through a variety of control programmes. The state of the environment in the respective fjords is monitored through special surveillance programmes, and the 2010 results show environmental improvements in the water quality in the fjords.

**Waste**

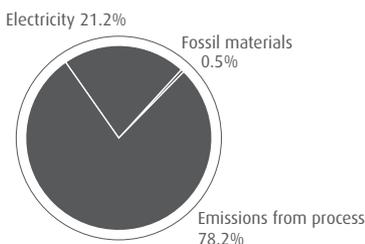
The quantity of waste has diminished considerably in the past few years, and the majority of the waste is now recycled. In 2011, priority will be given to carrying out environmental audits of waste recipients to ensure the sound management of waste streams en route to final disposal.

**Other matters**

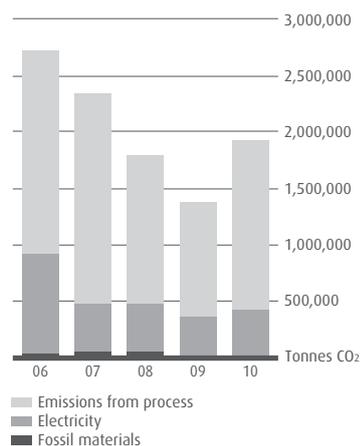
There were no serious non-conformances with environmental licences or permits in 2010. However, a few minor discharges occurred at several of the plants, which were reported to the authorities and dealt with in accordance with normal procedures. Very few complaints were received from neighbours in 2010. The complaints were primarily related to emissions of dust and noise, besides which there were complaints concerning odour from Elkem Carbon in the autumn of 2010. Each complaint is registered and followed up with contact and information, and action is taken where possible.

In 2010, Elkem continued the process of adapting to the requirements of the EU's chemicals regulations, Registration, Evaluation and Authorisation of Chemicals (REACH), by ensuring that necessary chemicals are pre-registered with the European Chemicals Agency (ECHA).

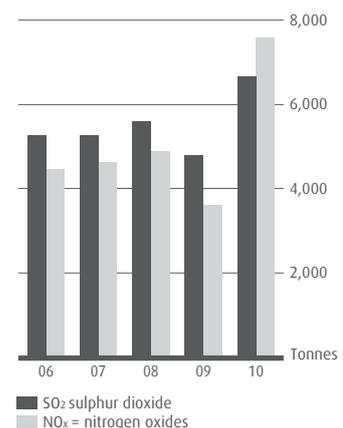
Allocation of CO<sub>2</sub>-emissions for Elkem 2010



Total CO<sub>2</sub>-emissions for Elkem 2006-2010



Emissions to Air – SO<sub>2</sub> and NO<sub>x</sub>



# About the report

The purpose of this report is to give readers the best possible insight into Orkla's approach to the environment, health and safety (EHS), and the status of the Group's efforts in this field.

The information in Orkla's EHS report is based on contributions from many different units and data sources. Great importance is attached to ensuring that the information is correct. However, the report does not aim to cover all the detailed matters that may be significant for individual local companies, activities or products.

To be able to further develop and improve our EHS efforts and reporting procedures, we would appreciate your comments and suggestions. Please send your feedback to [post@orklabrands.no](mailto:post@orklabrands.no)

## Contact persons for the EHS Report:

Inger Johanne Eikeland, Senior Vice President EHS, Orkla ASA. Kari Westersund, Consultant Corporate Communications, Orkla Brands

## The following persons have contributed texts to the EHS Report:

Anja Åkerlund, Orkla Brands  
Anne Gjemdal, Orkla Brands Nordic  
Brian Jones, Sapa  
Dag Arthur Aasbø, Borregaard  
Erika Ahlqvist, Sapa  
Eva Berglie, Abba Seafood  
Gunilla Landelius, Orkla Foods Nordic  
Inger Marie Ingdahl, Stabburet  
Jens Christian Fjellidal, Elkem  
Kjersti Garseg, Borregaard  
Mark Breidenthal, Elkem  
Marthe Schomacker, Nidar

Niklas Stoltz, Orkla Brands International  
Svante Svensson, consultant, Orkla Brands  
Sven Kruse Jensen, Orkla Eiendom  
Tone Horvei Bredal, Borregaard

## Translators:

Maidie Kloster, Linda Sivesin and Nina Reier.

## Photos:

Kyrre Lien, Enova/Bjørn Frostad, Jan Lillehamre, Guri Dahl/tinagent.no, Kristofer Ryde, Scanpix og Orkla Brands.

## Design:

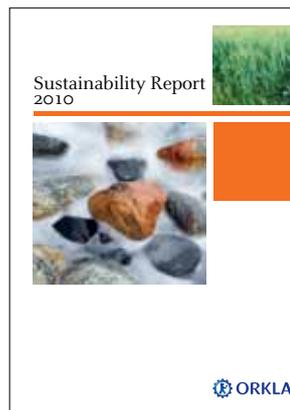
Cox Oslo

## Web production:

Odin media as



Read more about Orkla in 2010 in the Annual Report 2010



Read about Orkla's corporate responsibility in the Sustainability Report.

These are available at [www.orkla.com](http://www.orkla.com)

## Contact us

### Orkla ASA

Inger Johanne Eikeland

P.O. Box 423 Skøyen  
NO-0213 Oslo  
Tel: + 47 22 54 40 00  
E-mail:  
[inger-johanne.eikeland@orkla.no](mailto:inger-johanne.eikeland@orkla.no)

### Orkla Brands

Kari Westersund

P.O. Box 711  
NO-1411 Kolbotn  
Tel: + 47 66 81 61 00  
E-mail: [kari.westersund@orklabrands.no](mailto:kari.westersund@orklabrands.no)

### Sapa

Brian Jones

Humlegårdsgatan 17  
P.O. Box 5505  
SE-114 85 Stockholm  
Tel: +46 84 59 59 00  
Mobile: + 44 77 65 24 05 87  
E-mail: [brian.jones@sapagroup.com](mailto:brian.jones@sapagroup.com)

### Elkem

Mark Breidenthal

P.O. Box 5211 Majorstuen  
NO-0303 Oslo  
Tel +47 22 45 01 00  
E-mail: [mark.breidenthal@elkem.no](mailto:mark.breidenthal@elkem.no)

### Investments

Borregaard  
Dag Arthur Aasbø

P.O. Box 162  
NO-1701 Sarpsborg  
Tel: + 47 69 11 80 00  
E-mail: [dag.arthur.aasbo@borregaard.com](mailto:dag.arthur.aasbo@borregaard.com)

### Investments

Orkla Eiendom  
Sven Kruse Jensen

P.O. Box 423 Skøyen  
NO-0213 Oslo  
Tel: + 47 22 54 40 00  
E-mail: [sven.kruse-jensen@orkla.no](mailto:sven.kruse-jensen@orkla.no)