

Global Responsibility

Sustainability Report 2010



On the cover: For Stora Enso, Global Responsibility means working together with all the people around us, everywhere in the world. This photograph was taken at our trial plantations in Laos in October 2010. These farmers grow rice in between the plantation's eucalyptus trees.

Stora Enso Sustainability Report 2010

Stora Enso is a global paper, packaging and wood products company producing newsprint and book paper, magazine paper, fine paper, consumer board, industrial packaging and wood products.

The Group has some 26 000 employees and 85 production units worldwide, and is a publicly traded company listed in Helsinki and Stockholm. Our customers include publishers, printing houses and paper merchants, as well as the packaging, joinery and construction industries.

Our annual production capacity is 11.8 million tonnes of paper and board, 1.3 billion square metres of corrugated packaging and 6.4 million cubic metres of sawn wood products, including 3.2 million cubic metres of value-added products. Our sales in 2010 were EUR 10.3 billion, with an operating profit excluding non-recurring items and fair valuations of EUR 754.1 million.

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The focuses of our work vary according to local conditions and priorities. This map gives an overview of our main sustainability issues in different geographical locations.

Europe

Most of Stora Enso's production capacity is located in Europe. Minimising the environmental impact of our mills is therefore a top priority in this area. We have especially focused on minimising CO₂ emissions, and on responsible water use. Read more about our mills' environmental work on pages 32–37 and 38–41.

Stora Enso sources most of its main raw material, wood, in Northern Europe. Promoting forest certification and sustainable forestry is therefore a vital part of our sustainability work in this region. Read more about how we source our wood and fibre on pages 24–29.

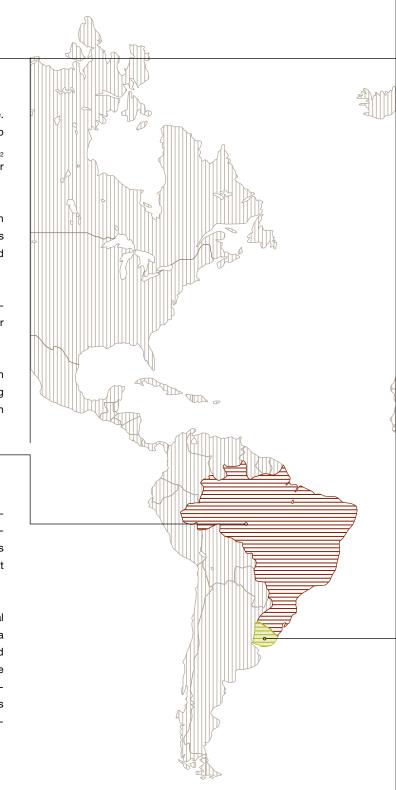
As most of Stora Enso's employees are located in Europe, occupational health and safety (OHS) is another important focus of our work. Read more about our OHS efforts on pages 20–21.

As in recent years, we have reduced production capacity in certain locations in Europe during 2010. We have been actively supporting the people and communities affected by job losses. Read more on pages 16–17 and 23.

Brazil

Stora Enso owns a state-of-the-art pulp mill and large-scale eucalyptus plantations through its join venture Veracel, whose operations are located in Bahía, Northeast Brazil. Stora Enso also runs tree plantations in Rio Grande do Sul and a magazine paper mill at Arapoti, both in the South of Brazil.

In the areas around Veracel's plantations we work to protect local biodiversity by restoring natural Atlantic Rainforest habitats. Stora Enso and Veracel control large areas of land, and to support land reform in Brazil we engage with landless people to find sustainable land use solutions. To help local communities benefit from our presence in the area, we have also initiated tree-farming programmes and other forms of cooperation that promote socio-economic development. Read more on pages 26–28.



Russia

Our operations in Russia consist of wood sourcing and forestry operations, as well as three packaging mills and two sawmills. In Russia we particularily focus on ensuring the legality and acceptability of wood, and on improving occupational health and safety practices. Read more on pages 20-21 and 24-27.

Uruguay

Through our joint venture Montes del Plata, Stora Enso

owns large land areas in Uruguay. We have introduced

plantation forestry in areas previously used for cattle graz-

ing. We engage with local communities and form partner-

ships with local farmers who earn their livelihoods through

wood production, cattle grazing and bee-keeping. Read

more on pages 17 and 27-28.

China

Stora Enso owns two paper mills and two core plants in China. We are also establishing tree plantations in Guangxi, Southern China. Respecting local people's land use rights and working to prevent land use disputes are important parts of our work in connection to these plantations. We are actively striving to improve the working and living conditions of our contract workers, and to train local contractors to meet our sustainability standards. Read more about our operations in Guangxi on pages 19 and 26-28.

Targets and performance

Our sustainability targets ensure effective sustainability management. We report annually on our sustainability performance against these specific targets. We also continuously review our sustainability targets and proactively set new targets where necessary.

All Stora Enso's sustainability targets for 2010 and 2011 are listed in the table below, with notes on the status of each target and references to the sections of this report where progress towards them is described in more detail.

Targets for 2010	Performance	Targets for 2011	Read more
PEOPLE			
All of our employees to complete the Code of Conduct training by mid 2010	81%		pages 18–19
To conduct a compliance survey for the Code of Conduct	done		pages 18-19
Zero lost-time accidents (LTA)	LTA rate 13.2	Zero lost-time accidents	pages 20-21
Attendance rate above 97%	96.2%	Attendance rate above 97%	pages 20-21
WOOD AND FIBRE SOURCES			
To increase the share of certified fibre in our wood supply to 69% by 2010	67%	To increase the share of certified fibre in our wood supply to 70% by 2012	pages 24–25
SUPPLY CHAIN			
To conduct 5 spot check supplier audits	6 audits conducted	To train all Stora Enso purchasing personnel on managing sustainability in the supply chain	pages 30–31
MILLS AND ENVIRONMENT			
Reduce SO ₂ emissions by 30% by 2013 from 2007 levels	-26%	Reduce SO ₂ emissions by 30% by 2013 from 2007 levels	pages 32–35
Reduce waste to landfill by 5% by 2013 from 2007 levels	+51%	Reduce waste to landfill by 5% by 2013 from 2007 levels	pages 32–35
Reduce Chemical Oxygen Demand (COD) by 10% by 2013 from 2007 levels	-2%	Reduce Chemical Oxygen Demand (COD) by 10% by 2013 from 2007 levels	pages 32–35
Reduce process water discharge by 10% by 2013 from 2005 levels	-5%	Reduce process water discharge by 10% by 2013 from 2005 levels	pages 32–35
To conduct an in-depth water balance assessment during 2010	done		pages 32–35
CLIMATE AND ENERGY			
Reduce Group-level CO ₂ intensity from pulp, paper and board mills by 20% by 2020 from 2006 levels	-20%	To establish a new CO ₂ reduction target by the end of 2011	pages 38–41
Increasing trend in power-to-heat ratio of internal energy production	22%		pages 38–41
Reduce energy consumption at pulp, paper and board mills by between 1% and 2% (depending on the Business Area) from 2009 levels	done		pages 38-41



External recognition

Carbon Disclosure and Performance Leadership Index

Stora Enso was ranked the best Nordic company by the Carbon Disclosure Project (CDP) for its reporting on carbon emissions, receiving the highest scores in the CDP's Carbon Disclosure Leadership Index (CDLI). Stora Enso was also one of just five companies included in CDP's Carbon Performance Leadership Index (CPLI), which focuses on actual reductions in carbon emissions and companies' commitment to their climate strategies

The Carbon Disclosure Project (CDP) is an independent non-profit organisation backed by over 534 institutional investors with a combined USD 64 trillion of assets under management. The CDP gathers information on corporations' greenhouse gas emissions, climate change related risks and opportunities, and sets standards for carbon disclosure methodology and processes.

Dow Jones Sustainability Index

In 2010, Stora Enso was listed in the Dow Jones Sustainability Index (DJSI) for the 10th year running. Stora Enso was ranked the best sustainability performer among forestry and paper companies in the Dow Jones Sustainability Europe Index, and was also included in the Dow Jones Sustainability World Index. The DJSI assesses the economic, environmental and social aspects of some of the world's largest companies.

FTSE4Good Index

Stora Enso continued to be included in the FTSE4Good Index Series, where we have been listed since 2001. The FTSE4Good Index Series has been designed to measure the performance of companies that meet globally recognised corporate responsibility standards, and to help investors identify such companies. The index focuses on environmental management, human and labour rights, supply chain labour standards and efforts to counter bribery.

World's Most Ethical Companies

Stora Enso was named as one of the Ethisphere Institute's World's Most Ethical Companies for 2010. The World's Most Ethical Companies are selected by the Ethisphere Institute, which is dedicated to the research, creation and sharing of best practices in ethics, compliance, and corporate governance.

UN Global Compact

Stora Enso supports the ten principles of the UN Global Compact and respects and promotes these principles in its operations. The table below states the ten principles of the UN Global Compact and where information on how Stora Enso addresses these issues is included in our report.

UN Global Compact principles

HUMAN RIGHTS	READ MORE
Principle 1: Businesses should support and	pages 18-19
respect the protection of internationally	
proclaimed human rights.	
Principle 2: Businesses should make sure that	pages 18-19
they are not complicit in human rights abuses.	
LABOUR STANDARDS	
Principle 3: Businesses should uphold the	pages 18-19
freedom of association and the effective	22-23
recognition of the right to collective	
bargaining.	
Principle 4: Businesses should uphold the	pages 18-19
elimination of all forms of forced and	
compulsory labour.	
Principle 5: Businesses should uphold the	pages 18-19
effective abolition of child labour.	
Principle 6: Businesses should uphold the	pages 18-19
elimination of discrimination in respect of	22-23
employment and occupation.	
ENVIRONMENT	
Principle 7: Businesses should support a	pages 16-17
precautionary approach to environmental	
challenges.	
Principle 8: Businesses should undertake	pages 24-29
initiatives to promote greater environmental	32–37
responsibility.	38–41
Principle 9: Businesses should encourage the	pages 32-37
development and diffusion of environmentally	38–41
friendly technologies.	
ANTI-CORRUPTION	
Principle 10: Businesses should work against	pages 18-19
corruption in all its forms, including extortion	
and bribery.	
development and diffusion of environmentally friendly technologies. ANTI-CORRUPTION Principle 10: Businesses should work against corruption in all its forms, including extortion	38–41







Message from the CEO



This report has been given the title Global Responsibility for good reason. At Stora Enso we are building a significant part of our future in new growth markets far from our traditional home. This means we face new challenges. We must overcome these challenges to make our future a long-term success, and to ensure we become a welcomed part of local societies and communities. This is why we need to rethink our roles and responsibilities – and build on the good and globally recognised work we have already been doing to protect the environment, enhance social inclusion and create a business model that makes tomorrow better not only for Stora Enso, but for the people and communities around us.

One of the highlights of the past year was when out of close to 200 candidates Stora Enso was ranked the best Nordic company in the Carbon Disclosure Project (CDP). We received the highest scores in the Carbon Disclosure Leadership Index, which recognises companies with the most complete and professional approach to reporting on carbon management.

The CDP also ranked Stora Enso as the only company in our industry among the five best performing companies in terms of the actual reduction of our CO_2 footprint. This clearly demonstrates that we have embarked on this journey with serious intent, even in the most challenging business environment. I am delighted to note that the target we set in 2006 for a 20% reduction in our CO_2 emissions by 2020 has already been achieved. This spirit of making constant improvements with decisive speed and focus is increasingly becoming part of Stora Enso's DNA. Although we should celebrate every success, we must never accept that things are now good enough – and we must continue to make improvements throughout our journey.

Water resources are going to be the next major challenge for our planet. By 2050, when this Spaceship Earth will be home to more than 9 billion people, 50% more than today, the time for action will have passed. We must act now. At Stora Enso we have a significant role to play, not only in terms of our own use of water, but also working together with other stakeholders. As an active member of the World Business Council's Water Group, we are developing new methodology for measuring water footprints in our industry. We are also building up a firm understanding of our own water balance and how we can improve water management.

In the field of social responsibility, Stora Enso is committed to the United Nations Global Compact and its principles on human rights, labour standards, the environment and anti-corruption. Our efforts are based on these principles, which we are striving to implement in our everyday work. We are proud to be the first company in our industry

to join the UN Global Compact's CEO Water Mandate, an initiative in which Stora Enso has already been active for two years.

One of our most rewarding achievements for 2010 has been that no fatal accidents occurred in our operations. We are also gratified that the attendance rate in 2010 was our highest ever and that the number of occupational health and safety incidents remained stable. Arapoti Mill in Brazil has set a great example for the whole Group by reaching two million working hours with zero accidents. This proves what is possible with focus and commitment, and defines a new benchmark for all of us at Stora Enso.

Mill closures in several countries in Europe have been a difficult reality for us and our employees over the three past years. In 2010 we closed down newsprint production in Varkaus, Finland and in Maxau, Germany. While I am still convinced that these actions to strengthen our competitive position have been taken in the interests not only of the company and our shareholders, but also of the majority of our employees, I also understand that this is of little comfort to the people affected by the lay-offs, many of whom have given years of service to Stora Enso. To support these loyal employees, we have continued to try to find them new employment within Stora Enso, or work with the authorities to provide retraining and outplacement services and financial support to enable them to start new careers or businesses. Although not everybody has found their new beginning yet, I have been encouraged by reports from Varkaus that more than half of the people made redundant have now found solutions for their futures. This indicates how effective collaboration between Stora Enso and the authorities can be - and also demonstrates the resourcefulness of our employees in the most difficult situations. This is the spirit in which we need to continue our efforts to find solutions for people affected by lay-offs.

Have we then been doing a good job in terms of meeting our Global Responsibility? I believe the above examples would give us sufficient reason to say yes. However, I would reiterate that regardless of such positive developments, we must never feel that such achievements are good enough.

One area where we need to continue to improve is highlighted in a report published in October by the Rights and Resources Initiative (RRI) concerning Stora Enso's plantations in Guangxi. This report stated that despite Stora Enso's good intentions and responsibility principles, some local land acquisitions had been made through contracts that endanger local people's livelihoods and land use rights. These problems are due to the unclearness of the contracts and the unfair distribution of the funds that Stora Enso pays as rent

for its plantations. This situation is unacceptable to us. I would like to point out that we had already recognised some of these problems more than a year before the RRI report was published, and had already been using significant additional resources in Guangxi to review thousands of local rental agreements. Our better awareness of these problems has enabled us to start working to rectify contracts and ensure that they are based on the free choices of villagers who receive fair compensation.

The RRI report has nevertheless given us another reminder about the challenges we will face as a pathfinder. This is why we need to be on the ground locally, with our ears, eyes and minds wide open. Rather than setting out to teach others and defend ourselves, we must be humble, courageous, and ready to learn and improve.

To help us deal with such issues in the future, we have now set up a new Global Responsibility function, particularly aiming to take our work on stakeholder dialogues up to the next level.

The way I see it, dialogues are about being open, and not being afraid of tough conversations. Last year we launched a new Global Responsibility website (www.storaenso.com/globalresponsibility) and a Facebook page for discussing difficult issues. These sites have received enthusiastic feedback, and I am pleased to report that in December our Global Responsibility web pages were granted the European Excellence Award 2010 out of more than 1 450 entries. I would like to invite you to take a look at them, and also contribute to our work by telling us what you expect from us. Stora Enso is ready for straight talk. That is what global responsibility is all about.

Let me finish with a positive story before you start looking through our report. This story shows how all of us as consumers can make a difference every day. Whenever we buy milk or juice packed in recyclable liquid carton board made of renewable fibre, we make a good choice for the planet, since the CO₂ emissions related to such packages are 33% lower than for plastic containers. At Stora Enso we are now also devising innovative fibre-based food packaging to replace plastic products. Remember this next time you buy your groceries - and you can contribute to the well-being of our planet. Such stories relevant to our everyday lives encourage us at Stora Enso to continue our journey building up our global responsibility. I wish you welcome to join our journey.

Jouko Karvinen CEO of Stora Enso

Governance and management

Our sustainability governance and management practices ensure that we integrate environmental and social responsibility into our daily operations. We use a wide range of tools to do this in practice:

- sustainability governance
- policies and principles
- · group-level sustainability targets
- management systems
- supply chain management
- sustainability impact and risk assessments for investment decisions
- sustainability reporting and third party assurance

Sustainability governance

In 2010 we expanded our approach to sustainability by forming a new corporate function named Global Responsibility (read more on page 10). The Stora Enso Group Executive Team (GET) is responsible for all policy issues relating to sustainability. Everyday sustainability issues are handled by Stora Enso's Global Responsibility function together with the Business Areas, which are responsible for the operational management of sustainability issues. The role of the Global Responsibility function is to develop, support and follow up on Stora Enso's sustainability strategy, so as to ensure that policies, targets and priorities are duly realised.

Policies and principles

Stora Enso's sustainability policy forms the cornerstone of the Group's social and environmental work, and is the basis for our sustainability management. The policy encompasses the three pillars of sustainability: economic, environmental and social responsibility.

To support our sustainability policy, Stora Enso has also established a set of related principles to guide our employees in their everyday work:

- Principles for Social Responsibility
- Principles for Occupational Health and Safety
- Principles for Sustainable Wood and Fibre Procurement and Land Management

- Principles for the Development of Forest Certification
- Principles for the Implementation of Environmental Management Systems
- Energy Principles
- Transport Environmental Principles
- Principle on Genetically Modified Organisms (GMOs)

We have also established a Code of Conduct which summarises the key elements of our policies, principles and guidelines, and provides guidance on what they mean in practice (see page 18).

Stora Enso has clearly defined its position on vital issues such as climate change, forest certification, illegal logging and water use. Our sustainability policy, all the principles listed above and the position papers are available at: www.storaenso.com/sustainabilitypolicies.

Group-level targets

We set group-level sustainability targets to help us efficiently manage sustainability performance across our operations. These targets are continuously reviewed, and we proactively set new targets where necessary. We also report annually on our performance against these targets. For more information about our sustainability targets and performance, see page 4.

Management systems

Stora Enso's policies and principles are translated into practice through management systems that help our units to recognise any sustainability issues that need to be addressed. These systems are used to set targets and schedules, to assign responsibilities, and to follow up on our performance with regard to environmental impacts, occupational health and safety, product safety and hygiene, as well as forest and plantation operations.

Most of these management systems are third-party-certified. This means that an external party has verified that the management systems are in line with a relevant nationally or internationally recognised standard. More details of these systems are included in the respective

sections of this report and a full list of units' certified management systems can be found on page 42.

Supply chain management

Suppliers are organisations who provide materials, products or services to Stora Enso, including wood, chemicals and other raw materials, as well as contracted services. Our wood suppliers and the whole wood supply chain are covered by regular controls and audits. A detailed description of these processes is given in the wood and fibre sourcing section of this report (see pages 24-29).

For other suppliers and contractors, Stora Enso has set sustainability requirements which are included in purchasing agreements. For a more detailed description of sustainability management along the supply chain, see pages 30-31.

Responsible investment decisions

Stora Enso strives to identify risks related to sustainability in good time, in order to guide decision-making in our investment processes. Tools such as sustainability due diligence and Environmental and Social Impact Assessments (ESIA) help us to ensure that no unsustainable projects are initiated, and that we fully understand all the related risks and opportunities. They also enable us to adapt project plans to suit local circumstances. For more details, see pages 16-17.

Sustainability reporting and assurance

Our sustainability reporting is an important tool for managing environmental and social responsibility issues. We use third party assurance to add transparency to our sustainability reporting. We have been using external verification since 1998. The full assurance statement for this report can be found on page 48.

Verified reporting in line with the Global Reporting Initiative (GRI)

This report follows the sustainability reporting guidelines defined by the Global Reporting Initiative (GRI) network. The GRI has established a common framework for sustainability reporting, in order to help stakeholders to review and compare the sustainability performance and practices of different

We believe that following the GRI's G3 guidelines is the best way to show our stakeholders that we are doing our best to offer transparent and reliable information about our efforts on all the vital aspects of sustainability.

This GRI report has also been verified in detail by an independent third party, the corporate responsibility specialists Tofuture. This kind of external verification involves evaluating the relevance of the report's content with regard to stakeholders' needs, and fully ensuring the reliability of all the information it contains by checking the reporting process step by step.

Tofuture have paid special attention to Stora Enso's work on stakeholder engagement, our responsiveness on issues of importance to stakeholders, and the ways vital data has been collected and consolidated.

This report meets the GRI application level B+ on a scale of A to C. Level B indicates that the report covers all main reporting areas, but has some room for improvement when it comes to the number of performance indicators disclosed. The plus designation signifies that the report has been externally assured.

A table covering GRI content can be found on pages 44-46. An extended version of the GRI table, including detailed descriptions of the scope of the report and data measurement techniques can be found at

www.storaenso.com/sustainabilityreport.

Stakeholder relations

Our operations affect many different stakeholders, ranging from our customers, employees, investors and suppliers to governments and non-governmental organisations as well as communities living close to our operations. In 2010 we recognised the need to find new approaches to corporate responsibility and understanding of our stakeholders. We must put a lot more emphasis on dialogue with all our stakeholders around the world, and we need to increase our understanding of the societies we work within and the ways our operations affect them.

To this end, Stora Enso established in 2010 a new function named Global Responsibility, which gives stakeholder engagement a stronger role in our corporate responsibility work. During 2011 we will develop a more systematic and comprehensive approach to stakeholder engagement. In 2010 as a first step towards improved communications with stakeholders we launched a Global Responsibility website and a Facebook page where anyone may post comments and openly discuss any issues relating to our corporate responsibility with us.

Key stakeholder groups

We have defined our main stakeholder groups from a global perspective as follows:

Customers: All companies and individuals who currently choose or may in future choose Stora Enso to provide goods or services.

Employees: All employees of the Group and operations under its control.

Investors: All current and potential owners of the company's equity and debt.

Partners: All of our suppliers, co-investors and other stakeholders who work with Stora Enso in mutually beneficial activities, including trade and business associations of which Stora Enso is a member.

Civil society: Individual citizens in neighbouring communities and public organisations engaged in civic and charitable work, as well as non-governmental organisations.

Governmental bodies and authorities: Local and national governmental bodies, authorities, politicians and elected officials, as well as transnational bodies such as the UN.

Defining material issues

To improve our understanding of our stakeholders' expectations and to better align our sustainability efforts and reporting with their priori-

ties we conducted a materiality review during 2010, following up on a previous review carried out in 2009.

A total of 93 external stakeholders were invited to participate in the materiality review through an online survey. These selected stakeholders represented customers, suppliers, employees, non-governmental organisations and investors reflecting the entire geographical and business scope of Stora Enso's operations. We received 27 external responses, with most of the respondents representing customers. To assess the impact of different sustainability topics on Stora Enso's business, the same survey was also sent to key internal stakeholders, 26 of whom replied, including representatives from all of our business areas and main group functions. This report strives to focus on the topics which proved to be material to our stakeholders and are also important for our business.

Materiality review results

The materiality review showed that our mills' environmental performance, the origin of wood and forest certification continue to be the most important sustainability topics for our stakeholders. The review also confirmed that the environmental and social impacts of tree plantations are increasingly important. Additionally, it is clear that water use and managing sustainability along the supply chain remain priorities among our stakeholders.

Major stakeholder concerns in 2010

In 2010 the Rights and Resources Initiative (RRI) published a critical report relating to Stora Enso's plantation operations in Guangxi, China. The full RRI report and our response are available on our Global Responsibility website: www.storaenso.com/globalresponsibility/comment. For more details, see page 28.

Some Swedish environmental NGOs continued to criticise Stora Enso's harvesting practices during 2010. For more information, see page 26.

An anonymous organisation filed a complaint to the Forest Stewardship Council (FSC) about the FSC certification of Veracel in 2010. At the same time a group of NGOs who campaign against unsustainable forest management have been criticising current forest certification processes, and especially the FSC scheme, in the Belgian media. For more information, see page 28.

Memberships in associations

World Business Council for Sustainable Development (WBCSD)

WBCSD is a coalition of international companies united by a shared commitment to sustainable development. Stora Enso has representatives in the WBCSD's water working group and sustainable forest products industry working group.

The Confederation of European Paper Industries (CEPI)

CEPI represents the interests of the European pulp and paper industry in dealings with European institutions. Stora Enso employees participate in CEPI's environmental working groups and serve as representatives on CEPI's board.

National industry federations

Stora Enso has representatives on committees and working groups dealing with environmental issues, climate policy and emissions trading within the Finnish Forest Industry Federation, the Swedish Forest Industry Federation, the German Paper Industry Association, the Federation of German Industries (BDI) and the Confederation of Finnish Industries (EK).

Forest certification bodies

Stora Enso participates in the development and revision of forest certification standards through membership in the national and international associations of the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC).

UN Global Compact Nordic Network

This network promotes the implementation of the principles of the UN Global Compact by sharing information among Nordic companies who participate in the UN Global Compact.

The Forest Dialogue (TFD)

• TFD is a group of various stakeholders from different regions who are committed to the conservation and sustainable use of forests. Stora Enso actively participates in TFD and has a representative on its steering committee.

Water Footprint Network (WFN)

· WFN promotes the transition towards the sustainable, fair and efficient use of fresh water resources worldwide. Stora Enso became a member of WFN in 2009.

ISO 26000 Working Group

Stora Enso has chaired the Finnish ISO 26000 working group and actively participated in the development of the new standard's guidance document on social responsibility, which was published in 2010.

ISO Environmental Management Committee

Stora Enso is active in the ISO's standardisation work for product specific carbon footprints through its membership in the Finnish ISO Environmental Management Committee.

Engagement with key stakeholders

Stakeholder group	Examples of engagement methods	Specific projects during 2010
Customers	Customer satisfaction surveys Interviews Feedback	Materiality review for sustainability report (p. 10)
Employees	Employee satisfaction surveys Training and introduction programmes Internal communications channels Support for performance development	Materiality review for sustainability report (p. 10) Code of Conduct compliance survey (p. 18) "Our promise" training programme (p. 22) European Works Council meeting (p. 22)
Investors	Annual General Meeting Road shows and one-to-one meetings Annual Capital Markets Day Quarterly telephone and web conferences Questionnaire responses	Materiality review for sustainability report (p. 10)
Partners	Supplier evaluation and auditing Partnership projects Participation in industry organisations	Materiality review for sustainability report (p. 10) Sustainability audits (p. 30)
Civil society	Public hearings Local information contacts and hotlines Issue-specific dialogues and co-operation with NGOs Public reporting Open House events at production units	Materiality review for sustainability report (p. 10) Issue-specific collaboration with WWF (p. 14 and 26)
Governmental bodies and authorities	Co-operation with intergovernmental organisations Issue-specific dialogues with authorities Public reporting	Materiality review for sustainability report (p. 10) Continuing collaboration with UNDP in China (p. 17) Collaboration with Finland's Ministry of Employment and the Economy on managing restructuring (p. 16)

Products



Stora Enso is constantly looking to develop its product range by finding new applications for materials based on renewable fibre. In 2010 0.7% of our sales, equalling EUR 75 million, was reinvested into R&D activities, especially focusing on developing products with environmental benefits such as reduced material use and minimised carbon and water footprints. Health and safety aspects are also important, especially for packaging materials that will end up in direct contact with foodstuffs.

Product development

During the year many new products were launched, providing markets with fibre-based packaging solutions for new uses. Such products can typically be recycled or composted, and are more material efficient. Examples include fibre-based packaging for cold cuts (replacing

plastics), microwaveable and ovenproof food packages (replacing aluminium trays), biodegradable packing boards for use in cups, plates, trays and folding cartons, as well as lighter liquid packaging board.

In the building and construction sector, Stora Enso has developed a wood element solution known as Cross Laminated Timber (CLT), which can be used in single family houses and multi-storey buildings instead of concrete and steel elements. Stora Enso has also continued to develop its wood pellet supply base. Wood pellets can be used instead of fossil fuels to heat individual homes or in district heating plants. Pellet production is a natural business extension for sawmills, as sawdust and the wood shaving residues from the sawmilling process form the raw material for compressed wood pellets.

Renewable diesel in the pipeline

Beyond our traditional product offering we are also using our expertise in wood to develop completely new products. Together with Neste Oil, Stora Enso is testing the commercial production of renewable transport fuels based on forestry residues. In 2010 the joint venture between the two companies, NSE Biofuels Oy, initiated an environmental impact assessment for a commercial-scale biorefinery to be located in Porvoo or Imatra in Finland. Another important research area concerns microscale materials, which could result in entirely new applications for wood fibre, such as bio-based lubricants.

Products and the environment

To identify and minimise the environmental impacts of our paper and board products, we conduct product life cycle analyses (LCAs). LCAs usually cover the various life cycle stages of a product, extending from the procurement of raw materials through energy use and transportation to the generation of emissions and waste, and impacts on water. LCAs serve as the basis for environmental labels and declarations, carbon footprint information, responses to customers' inquiries, and product marketing. LCAs have been conducted for all of Stora Enso's main paper and board product groups, and for one wood product group.

Paper Profiles

Stora Enso provides product-specific information on the environmental performance of its paper products through Paper Profiles, a voluntary environmental product declaration scheme developed by leading paper producers. Paper Profiles enable paper buyers to make well-informed product choices, by presenting environmental figures in a standardised way. Paper Profiles cover the environmental impacts of pulp and paper production, including product composition and emissions, wood procurement and environmental management. Paper Profiles are available on request for all of Stora Enso's paper and graphical packaging products.

Eco-labels

Several of Stora Enso's paper products are covered by recognised eco-labels such as the EU Flower, the Nordic Swan and the Blue Angel (Blauer Engel). The criteria used by these labelling schemes typically cover the whole life cycle of a product, from its raw materials to energy use and waste. To meet customer demand we have increased the application of the Nordic Swan criteria, which now cover all of our copy and graphical paper products as well as some graphical board products.

Many Stora Enso products are also covered by forest certification labels, showing that they have been produced using wood from certified forests and controlled sources. The two most common forest certification systems are FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification schemes). A forest certification label on the final product means that the journey

Why Nokia have opted for fibre-based packaging

At Nokia we produce nearly half a billion products every year in multiple locations around the world. This means that 15 of our products are packed every second, for delivery to every corner of the world.

These 500 000 000 packages are a very powerful branding tool. Over the last year we have further strengthened the brand impact of this tool by changing to an all blue look, unifying packaging sizes, and updating our material selection by switching to a matt, non-coated, less processed paper grade. Now our packaging feels warmer to the touch and has a unified appearance.

Sustainability is a core element of our approach to packaging, and this further enhances Nokia's reputation as a sustainable company. Nokia's packaging solutions are 100% recyclable, and over 95% of our packaging is paper-based, with an average recycled fibre content of 50%. Basic plastics account for less than 5% of the material used in our packaging. Where plastics are used, we are increasing the amount of recycled plastics, and introducing design details that help to minimize material use.

Over the last few years we have been systematically increasing our use of fibre-based packaging, to ensure that our packaging materials can be reused or recycled anywhere in the world. The fact that our products are used in all parts of the world means that conditions for the end-of-life treatment of our packaging vary greatly. The most challenging conditions are in rural areas with little or no infrastructure for recycling. From this perspective paper is a great material, as a natural material that comes from renewable sources and is highly recyclable. The necessary materials and technologies are available everywhere, so we can avoid long transportation distances.

Awareness of the sustainability of products is becoming an increasingly important part of a delightful product experience, together with product quality. To enhance consumers' experiences of their brand, product manufacturers like Nokia must therefore strive to minimise their environmental impacts.

In packaging we are particularly focusing on minimising the amounts of material used, while enhancing quality and design to give endusers high levels of satisfaction. Over the five years since 2005 we have halved the sizes of all our packaging. This has saved 240 000 tonnes of paper in the category of compact packaging alone. The consequent benefits are both ecological and economical, showing that sustainability is also good business sense.

Ulla UimonenHead of Packaging Design
Nokia

of the wood from a certified forest all the way to the mill and onwards to the store shelf has been documented and verified by an external party. For more details, see pages 24-29.

Carbon footprints

All of Stora Enso's business areas have calculated the carbon footprints for their main products or product groups based on existing guidance, and we willingly make this information available to our customers. Stora Enso is also actively participating in the development of methodologies for calculating and communicating carbon footprints, particularly through the ISO's standardisation work.

Stora Enso has made a decision not to claim that we offer carbonneutral paper. Describing paper as carbon-neutral would mean that either no fossil CO, emissions are emitted during the entire production process, or that the amounts of fossil CO₂ emission emitted are offset. As no internationally accepted method for offsetting CO2 emissions exists, Stora Enso has decided to refrain from marketing its paper as carbon-neutral. Instead we focus on minimising CO, emissions throughout our own value chain. For more details, see pages 38-41.

Water footprints

Stora Enso is also in the process of defining water footprints for its products. To properly reflect the true impact of our operations on the availability and quality of water, we need to analyse local conditions such as water scarcity and the status of water bodies, as well as the volumes of water used. No commonly accepted methodology for calculating and communicating water footprints exists yet, although many current initiatives aim to develop such methodologies. Stora Enso is participating in many of these initiatives, including the ISO's standardisation work on water footprints.

During 2010 Stora Enso tested the water accounting methodology developed by the Water Footprint Network (WFN) at Stora Enso's Skoghall Mill in Sweden together with WFN, WWF and the Alliance for Beverage Cartons (ACE). One key finding indicated that 99% of the overall water consumption is related to the rainwater that feeds growing forests, and only 1% is derived from our production processes and processes along the supply chain. A weakness of this methodology is that it does not take water scarcity issues into account, but treats water use the same way in all geographical areas. Other aspects that should still be further developed concern the role of forests in water accounting, and how to include waste water discharges in the water footprint.

Recyclability of products

All of Stora Enso's paper and board products are safely recyclable and recoverable. Stora Enso is one of Europe's largest users of recovered fibre. For more information, see page 29.

We are also working to enhance and promote the recyclability of our products in various ways. We strive to further increase the European paper recycling rate, which is already 72%, through our own actions and collaboration with the Confederation of European Paper Industries (CEPI).

Stora Enso's Barcelona Mill, for instance, has invested in an advanced beverage carton recycling process that enables the recycling of the cartons' plastics and aluminium content, as well as their constituent fibres. In Spain Stora Enso is also collaborating with other users of recovered fibre and the Spanish Paper Association on a programme that aims to educate consumers and increase recycling rates. Langerbrugge Mill in Belgium, which produces 100% recycled newsprint and magazine paper, asks all mill visitors to bring 2-3 kg of used paper with them, to spotlight the importance of everyday recycling. In Poland, Stora Enso currently runs around 20 collection points for recovered paper, and is looking to increase this number. In Eastern Germany we are helping private collectors to obtain increasing volumes of recovered paper which they can then supply directly to our Sachsen Mill.

Product safety

Ensuring product safety is fundamental for products that are used in food contact or human contact applications. In 2010 Stora Enso's Packaging business area produced 1.8 million tonnes of packaging materials that will come into direct contact with food or pharmaceutical products, or be used for other hygiene-sensitive purposes.

Responsible chemical use

Ensuring the safety of products starts with the purchasing of chemicals. In the production of food contact materials, only chemicals specifically approved for such purposes are used. Stora Enso is also working with suppliers to ensure that we only use chemicals that are registered in accordance with the European Union's REACH legislation. The REACH legislation aims to improve the protection of human health and the environment by comprehensively identifying chemical substances' safety properties. Stora Enso also works to ensure that no chemical substances listed by REACH as substances of very high concern appear in our products.

Safety and hygiene systems

To guarantee that consumer and food safety demands and regulations are met, all Stora Enso units producing food contact materials and other sensitive packaging materials follow Good Manufacturing Practice (GMP). This set of internationally recognised guidelines, which is also incorporated into EU regulations, aims to ensure safety and product quality in foods and pharmaceutical products. GMP covers the whole manufacturing process from the procurement of raw materials, through production processes, to the delivery of the end products.

Stora Enso provides customers with information on products' hygiene and safety aspects through compliance declarations, and has effective processes in place for testing product safety, dealing with complaints, and organising product recalls if necessary. All Stora Enso mills producing direct food contact materials and materials for other hygienesensitive purposes are certified according to the hygiene management standards ISO 22000 or BRC/IoP (British Retail Consortium and The Institute of Packaging). Stora Enso mills that produce indirect food contact materials are also in the process of building up certified hygiene management systems. Such certification shows that mills have analysed and eliminated any possible safety risks, to ensure the maximum safety of their products. For a full list of certified mills, see page 42.

Paper v digital media – which is greenest?

The growth of the digital media has been projected as one way towards a more sustainable society, offering lower resource and energy consumption than paper. This is a topical issue for the paper industry, as digital applications are spreading through a number of areas where paper has traditionally been used, including e-commerce, e-mails, e-books and digital photography.

This raises the question – will information and communications technology (ICT) really *replace* paper? We can distinguish three different types of impact ICT applications may have on paper consumption: *Substitution, Complementary use* and *Generation*.

The idea of the paperless office is often discussed in this context. The prediction that computers would replace all paper in offices has so far proved to be wrong. During the period 1991–2004, when computers became commonplace in offices, paper consumption actually increased by 40%. Over the period 2000–2005, paper consumption in some 600 Swiss companies increased by more than 20%, mainly due to the printing of digital documents. This trend is known as *rematerialization*.

It is clear that substitution is not the only effect in offices: both complementary use and generation are prevailing, and the consequent increase in paper use apparently exceeds the substitution effect. But new trends are emerging.

One example concerns letters. Postal services around the globe are handling decreasing volumes of letters. Britain's Royal Mail has reported that the number of letters sent in the UK increased from 16 billion in 1993 to a peak of 22 billion in 2005/2006, but since then the figures has declined and a further drop in volumes is predicted.

The use of e-mail has correspondingly increased across the UK: in 2000, only 9% of the population used email, but by 2007, the figure was 54%.

If e-mails are starting to replace traditional letters, what does this mean for the environment? The ${\rm CO_2}$ emissions associated with sending a traditional letter amount to about 20–25 grams. Sending a

legitimate e-mail generates about 4–9 grams, and each spam e-mail only results in emissions of about 0.3 grams.

This means that sending a letter via the post office generates 2–6 times more carbon dioxide than sending an e-mail.

But we must also consider the volume factor. Some 430 billion traditional mail items were delivered globally in 2008. This should be compared to an estimated 15–20 trillion non-spam e-mails and more than 60 trillion spam e-mails sent annually.

This means that the $total~\rm CO_2$ emissions from e-mails add up to 7–20 times those of traditional mail. Moreover, about one out of every ten e-mails gets printed, adding to the impact of the e-mail alternative.

The substitution effect of ICT is apparently starting to curb paper consumption. But going digital does not automatically mean that the overall environmental impact will decrease. ICT products and services come with their own environmental costs, which are often smaller than those of the traditional services they can replace. But if we take volumes into account, the accumulated impacts may become even larger than those of the traditional service, as is the case for the substitution of e-mails for letters.

In striving for a more sustainable path, I believe that the question is not just choosing between paper and digital media; it is more of finding a healthy co-existence, and keeping overall consumption levels sustainable. This goes for paper as well as ICT.

Peter Arnfalk

Associate Professor
The International Institute for
Industrial Environmental
Economics at Lund University



People

Community impacts

Our operations have wide-ranging impacts on different groups of stakeholders locally, regionally and globally. In addition to minimising any adverse impacts that our activities may have, we also aim to enrich economic and social conditions in the communities where we operate.

Economic impacts

Our operations contribute to local, regional and national economies on a large scale. Our sales and purchases boost our customers' and suppliers' businesses. Our employees, our shareholders and local and national governments gain income through the salaries, dividends and taxes we pay. Stora Enso also engages in many community projects and events in the localities where we operate. The related direct monetary flows for 2010 indicate the extent of Stora Enso's economic impacts on different stakeholders.

Customers: Stora Enso mainly serves business-to-business customers. Stora Enso's total sales amounted to EUR 10 296.9 million (EUR 8 945.1 million in 2009).

Suppliers: Stora Enso provides a reliable source of income for many companies working as contractors and suppliers. Stora Enso acquired materials and services valued at EUR 6 391.4 million (EUR 5 668.1 million).

Employees: Wages and benefits received by employees totalled EUR 1 375.3 million (EUR 1 349.6 million).

Shareholders: At the end of 2010, Stora Enso had approximately 75 600 shareholders. The total sum distributed to shareholders was EUR 157.7 million (EUR 157.7 million). Interest payments to loan providers amounted to EUR 90.3 million (EUR 100.7 million).

Government bodies: Corporate taxes are a major source of income for governments. Net taxes paid by Stora Enso to governments around the world totalled EUR 62.0 million (EUR 3.0 million).

Communities: Many Stora Enso units have long traditions of co-operation with their surrounding communities, supporting local schools, sports associations and cultural events. Stora Enso's charitable donations amounted to 393 900 EUR (240 118 EUR).

Impacts on local communities

Our operations often play a major role in the communities where we operate. Many of our mills are located in provincial regions where they are major employers, tax-payers and business partners for local entrepreneurs.

To remain competitive in the rapidly globalising economy Stora Enso has undergone profound restructuring. This has meant that communities in some localities where we have traditionally operated have suffered as we have closed down production lines or entire production units. At the same time, we are investing considerably in Latin America and China, where our operations are generating new job opportunities and socio-economic development.

Structural change in Finland

Discontinuing operations and closing mills creates problems not only for our employees, but also for the affected communities as a whole. We proactively help such communities to deal with regional structural changes, and also help to find new alternative employment for the people affected. We have particularly taken such measures in certain localities in Finland which have been most affected by the company's restructuring programme.

In 2009 Stora Enso initiated a joint project with Finland's Ministry of Employment and the Economy to anticipate structural change and find new business opportunities for the communities around Varkaus and Sunila Mills. One important outcome of this project was the development of an operational model that Finnish public authorities and companies will also be able to apply in response to sudden structural changes occurring in other areas and industries. When significant capacity closures were announced at Varkaus Mill in 2010, Stora Enso and the local authorities continued work that had been initiated in 2009, with the aim of attracting new businesses and employment opportunities to the area.

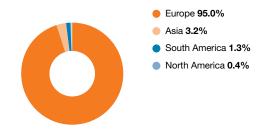
In addition to these measures, Stora Enso assists affected employees by providing support packages and other forms of compensation. For more details, see page 23. Stora Enso also works to minimise the environmental impacts of mill closures (see page 36).

Establishing operations in new settings

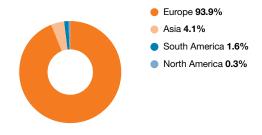
When we plan operations in new areas, it is vital that we understand the environmental and social impacts of the projected operations on local communities. We conduct Environmental and Social Impact Assessments (ESIA) for all new projects that could cause significant changes in local conditions. Such projects include all green-field pulp, paper or board mills, large green-field sawmills, industrial-scale plantation projects, and any large-scale expansions of existing facilities.

Stora Enso has developed common guidelines for conducting ESIAs as part of the Group's Investment Guidelines. One vital element of any ESIA involves establishing dialogues with local residents, members of

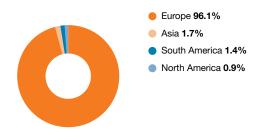
Sales by region



Purchases by region



Personnel expenses by region



local organisations, expert researchers and other stakeholders, through interviews, meetings, workshops and public hearings.

The results of ESIAs for example give Stora Enso valuable information on how local communities will be affected by changes in their socioeconomic structure, impacts on cultural heritage, and developments in community health, safety and security. This information can then be used as a basis for sustainability agendas for planned projects.

Based on the outcomes of the ESIA conducted for our plantations in Uruguay, for instance, Stora Enso has taken action to ensure that our operations truly benefit local communities. Similarly, in our plantations in Guangxi, China, we have hired social engagement officers to improve our relations with local villagers, and worked to improve biodiversity protection in the area. UNDP China is currently conducting a new ESIA for a possible combined mill and plantation site in Guangxi.

Benefits for local farmers in Uruguay



The landholdings of Montes del Plata, the Uruguayan joint venture of Stora Enso and Arauco, include areas designated by the local authorities as suitable for cattle grazing. These pastures are rented out to local farmers, who use them to graze their beef and dairy cattle. So far such rental contracts have been agreed with around 200 producers covering over 100 000 hectares.

Instead of maximising rent revenues, Montes del Plata makes these lands available at reasonable prices, and limits the areas rented out to individual farmers to give as many farmers as possible access to land. The idea behind this scheme is to ensure that the local communities gain from opportunities to use the company's lands. "The company has truly understood that it will also benefit when the surrounding society is doing well," Montevideo. Professor Licandro is currently leading a corporate social responsibility research project examining how small-scale dairy farmers are faring in the Department of Durazno in Central

tion thanks to the availability of new grazing grounds and other forms of assistance from the local authorities and Montes del Plata, such as the provision of sanitation, veterinary and technical services, and training. Grazing cattle often benefit from the presence of trees, which provide shelter on windy winter days and cool shade on hot summer days. The trees also benefit, since the cows help to limit competing undergrowth.

Cattle ranching is the most important livelihood in Uruguay, where Montes del Plata is applying a traditional local practice by planting trees and enabling cattle grazing in the same lands.

People

Social compliance

We want to make sure that we are fair, transparent and responsible in our everyday dealings with our employees, our business partners and the communities around us.

At Stora Enso we are actively committed to the United Nations Universal Declaration of Human Rights and we fully observe the International Labour Organisation's Core Conventions defining labour rights. This gives internationally recognised human and labour rights to all Stora Enso employees. These international agreements especially define minimum standards and guide our operations in areas where local legislation is weak or non-existent.

Code of Conduct

Our Code of Conduct defines common rules for all our employees, and provides the basis for Stora Enso's approach to human and labour rights, ethical business practices and the safeguarding of company assets. The Code of Conduct sets out what Stora Enso expects from its employees, what our employees can expect from Stora Enso, and how we must act in business when it comes to ethical and compliance issues. It aims to ensure that every one of our employees has an equal right to a workplace that is safe, healthy and free of discrimination, and that as a global organisation we always take responsibility for our actions and comply with local laws and regulations everywhere we operate.

Training our employees

To ensure that all Stora Enso employees understand and follow the rules set out in the Code of Conduct, we have set a target that every Stora Enso employee should receive related training, either through our established e-learning tool or face-to-face training. By the end of June 2010, an estimated 81% of our employees had undergone such training, including 77% of our management and 81% of all other employees. We are continuing this training where employees have not been trained yet, and also working to ensure that all new employees are trained.

Grievance mechanism

In 2010, Stora Enso's Senior Vice President, Internal Audit, received several complaints through our Code of Conduct grievance channel, which enables employees to report anonymously and in confidentiality on concerns or breaches against the Code of Conduct. All reported cases were duly handled and reported to Stora Enso's Financial and Audit Committee. The complaints were all related to ethical business practices such as the misuse of company assets or poor management culture.

Half of the complaints were considered to be serious, and thus resulted in further actions. Of the complaints that were investigated, 50% resulted in disciplinary actions.

Measuring compliance

In 2010 we conducted a compliance survey for the Code of Conduct to find out how well the Code of Conduct has been internalised within the Group. In addition to assessing the effectiveness of the Code of Conduct training, this compliance measurement also aims to drive and improve our company culture and further promote a positive ethical atmosphere.

The compliance measurement involved a survey and targeted management interviews. The survey, which was sent to 2 500 randomly selected Stora Enso employees, covered the three main themes of the Code of Conduct: human and labour rights; business practices; and safeguarding of assets. The survey was anonymous, and responses remained confidential.

The survey results show that our Code of Conduct training has effectively introduced the Code of Conduct to our employees and familiarised them with our guidelines on compliance. Respondents clearly recognised the importance of the Code of Conduct to them as individual employees. However, the survey indicated that further actions are still needed to make the Code of Conduct a more integral part of our everyday operations.

Human rights compliance assessment

To gain an improved understanding of how well human rights issues are acknowledged and embedded in our day-to-day operations, we conducted a human rights compliance assessment in 2010. This assessment was aimed to identify possible human rights risks in our business operations, while at the same time raising awareness of these issues and promoting internal learning. The assessment covered our operations in Brazil, Uruguay, China, Laos and Russia. Where necessary, its results will be used to help define action plans to ensure compliance with human rights in these locations.

The assessment applied the Human Rights Compliance Assessment (HRCA) quick check tool developed by the Danish Institute for Human Rights. This comprehensive tool has been designed to help corporations detect human rights risks in their operations. It covers all internationally recognised human rights and their impacts on a wide range of stakeholders, including employees, local communities, suppliers and contractors.



The assessment showed that the most significant human and labour rights risks in our operations are related to contract labour and the supply chain. In Guangxi, China local people's land use rights are also an important issue.

We also learned that we need to further enhance our internal awareness, and have resolved to organise special human rights training for employees in key positions. We also need to improve collaboration with contractors to ensure that human rights are fully observed throughout their operations. For instance, training was provided for contractors in our plantation project in Guangxi in 2008 and 2009 on topics including labour laws and health and safety management through an initiative launched by Stora Enso together with the International Finance Corporation (IFC). We aim to continue to provide such training in 2011.

Stora Enso's sustainability requirements for suppliers and contractors, which cover human and labour rights, help to ensure that our commitment to human rights extends through the operations of our suppliers and contractors. Our target for 2011 is to have all purchasing agreements covered by these requirements, including locally managed agreements. We are also in the process of stepping up monitoring procedures to ensure that the requirements are fulfilled in practice, which will particularly involve sustainability self-assesments and conducting sustainability audits. For more details, see page 30.

In response to disputes related to land use rights in Guangxi, China, we have taken specific measures to improve the land leasing process and to guarantee that land use rights are respected. For more information, see page 28.

People

Occupational health and safety

Improving our overall health and safety performance and building an effective safety culture remained priorities in 2010. In this work the special focus on our Finnish mills has continued, due to their comparatively poor safety performance.

Preventive safety measures in focus

In 2010 we widened our approach to measuring safety performance by assessing preventive actions and safety work in addition to accident rates. To this end, two new targets were introduced for full implementation during 2011. These targets are that the number of near miss reports submitted per person per year should be at least two, and that the processing rate for accidents and near misses should be at least 80%. By spotlighting and more widely reporting on near misses we can raise awareness and prevent future accidents. From a learning perspective it is also vital to investigate and take corrective actions relating to accidents and near misses, so we want to maximise the proper processing of any accidents and near misses that occur.

In 2010 we also continued to put a special focus on attendance rates and promoting work ability especially in Finland where performance in this area is comparatively poor.

Health and safety performance 2010

By the end of 2010, a total of 68 production units, equalling 87% of employees, were covered by Occupational Health and Safety (OHS) management certificates in line with OHSAS 18001 or equivalent national standards. In 2010, 92% of Stora Enso's employees were represented in formal joint management-worker health and safety committees. These safety committees act at unit-level to plan and monitor OHS actions and performance. They also serve as coordination bodies between management and employees.

No fatal accidents

No fatal accidents occurred in Stora Enso's own operations or our contractors' operations in 2010.

Accident rates

Our average lost-time accident rate remained stable at 13.2 accidents per million hours worked compared to 13.1 in 2009. As in previous years, there are still significant differences in safety performance between countries and units within Stora Enso. This reflects variations in safety culture and management commitment to safety issues. In both Sweden and Germany the accident rates increased, to 11.2 and 17.5 respectively. In Finland the accident rate dropped and is now 21.8 (for more details for Finland see page 21).

Attendance rates

In 2010 the Group-wide attendance rate (actual working time as a percentage of total theoretical working time, considering all absenteeism related to sickness and accidents) remained fairly stable at 96.2% (compared to 96.1% in 2009). As with accident rates there are significant differences between countries, with Finland at 93.9%, still clearly below the corporate average rate, and Sweden slightly above the average, at 96.8%. Sweden was able to make a slight improvement in the country's overall attendance rate, while Germany experienced a worsening trend. The best performing countries with the highest attendance rates were China and Brazil, mainly due to national legislation and local practices related to absenteeism.

Top performers

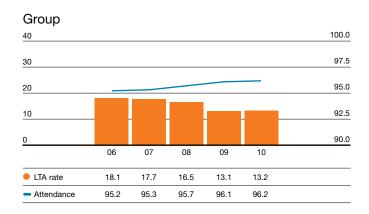
All in all six units reached the Group-level target of zero lost-time accidents in 2010 (Arapoti Mill, Wood Supply Sweden, Arzamas Mill, Balabanovo Mill, Lukhovitsy Mill and Hungary packaging mills). The best performing unit continues to be Arapoti Mill in Brazil, which reached 2 million working hours without lost-time accidents in November 2010, since there have been no accidents since 2007. The second and third best units on safety performance were Wood Supply Sweden with 1 135 280 accident-free working hours and Balabanovo Mill in Russia reaching 739 256 hours without lost-time accidents.

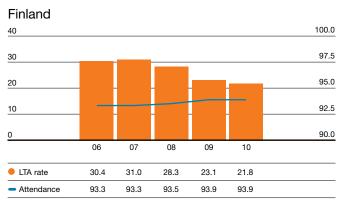
Arapoti Mill has a long tradition of building a safety culture due to local management's strong commitment to safety. Arapoti Mill rethought its approach to safety in 2004 when two new tools were introduced to highlight safety on a daily basis. Firstly, all employees take part in compulsory 5–10 minute discussions on safety before beginning work every day. Secondly, one-on-one safety consulting sessions are organised periodically for all employees, to help them take individual responsibility for creating a safe workplace.

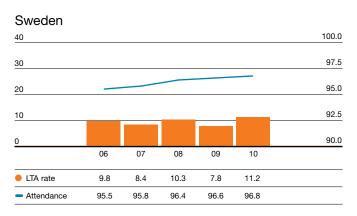
The best units in terms of near miss reporting were Oulu Mill, with a total of 1 439 reported cases, which is 2.0 reported near misses per employee, and Corenso Finnish units with 407 reported cases, which is also 2.0 reported near misses per employee. The other top performers in this area were Enocell Mill and Varkaus Mill, both reaching a level of 1.9 near miss reports per employee.

In terms of attendance rates, the best units in 2010 were Wood Supply Guangxi, Corenso Hualun and Dawang Mill, all in China. This is partly due to differences in national legislation and health services, which result in differing levels of absenteeism due to sickness or accidents.

Lost-time accident rate and attendance 1, 2)









- 1) Lost-time accident rate (LTA) as number of accidents per one million hour worked.
- ²⁾ Attendance, in % of theoretical working hours.

Building safety culture in Finland

In 2009 our Finnish units were targeted with a special safety programme due to their comparatively poor safety performance. The Finnish units continued to implement the actions defined in this programme throughout 2010.

In Finland, management participation in everyday safety work has been improved by obliging the head of each unit to participate in all accident investigations and a set number of safety rounds. All line managers and supervisors were also required to conduct monthly safety discussions with their staff, and to participate in a certain number of safety rounds.

The lost-time accident rate for Stora Enso's units in Finland dropped from 23.1 accidents per million hours worked in 2009 to 21.8 in 2010 (a decrease of 5.6%). The main reasons for this progress were greater management involvement and the raised awareness of safety issues at all organisational levels.

Extraordinary measures were also taken in Finland to increase attendance rates and promote work ability. A programme named Early Care was devised to highlight and clarify line managers' responsibilities in terms of being aware of and promoting their workers' capabilities to

work. Specific responsibilities include keeping contact with employees during long periods of absenteeism, and taking action together with occupational health services if an employee's work ability is at risk. The implementation of the Early Care programme will continue throughout 2011.

Actions planned for 2011

In 2011 we will continue to focus increasingly on actions that prevent accidents and absenteeism. We will improve and unify our definitions and data collection systems for safety issues, and shift our focus from the current key indicator of lost-time accident rate to all accidents and near misses as the main indicators of safety performance. To this end we will also continue to seek further indicators for measuring safety culture and organisational commitment. Accident severity rates and near miss severity rates will at the same time receive increased attention, to ensure that we prioritise preventive actions that target the highest risks.

The year 2011 will also see a continued and strengthened focus on boosting attendance and work ability. The implementation of the Early Care model will continue in our Finnish units, and partnerships with occupational health services, insurance companies and other key actors will be strengthened.

People

Human resources

By the end of 2010 Stora Enso had 26 379 employees. In 2010 the restructuring of the company continued, with the numbers of employees in various locations reduced. The average number of employees decreased by 4.6% compared to 2009. This was mainly due to production line closures and efficiency improvements in administrative functions.

Our employees are still largely concentrated in Finland, Sweden and Germany, where 59% of all Stora Enso employees work (61% in 2009). In these countries our workforce decreased the most during the year, by 8%. In other regions our workforce levels remained stable. Due to our strong focus on new growth markets, we expect further expansions in the future in Latin America and China.

Our personnel turnover in 2010 was 4%, compared to 3.7% in 2009. There are marked differences in turnover between countries and units, with the highest turnover among employees in Russia (14%), and the lowest in Poland (1.6%).

Employee diversity

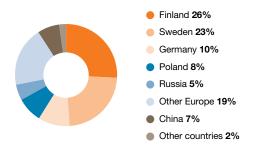
Our workforce is ageing in many of the countries where we operate. In 2010, 27% of our employees were over 51 years old. Employee age structures vary significantly between different countries, with the ageing workforce concentrated in Finland, Sweden and Germany, and operations in new growth markets characterised by lower average ages.

Women account for 20% of our workforce, with no change from 2009. The share of women recruited for permanent positions was 25%. The number of women on the Board of Directors remained the same as in 2010. The Group Executive Team currently has no female members.

Personnel development

To align individual targets with company targets, all Stora Enso employees are covered by our Performance Management process,

Employee distribution by country



which sets priorities for each employee's work and professional development. To identify potential talents, Stora Enso also annually conducts a Management Audit process covering all employees. This helps us to map skills and further develop our people and their competences to match our business needs. In 2010 our employees spent an average of 2.6 days in training, with no change from 2009.

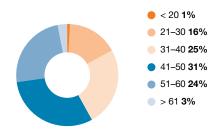
We continued our efforts to train managers and supervisors in all of our Finnish units through the Our Promise programme, which was initiated in 2009. This programme aims to develop leadership skills, to support cultural change, and to create a more people-oriented working environment through a series of workshops and the special coaching of change agents. During 2010 unit-specific workshops were organised for supervisors and managers at all of our Finnish units, and similar workshops will also be held during 2011.

Employee representation and labour organisation

The percentage of employees covered by collective bargaining agreements is the most direct way to demonstrate a company's practices in relation to freedom of association. In the units that report this figure 77% of employees were covered by collective bargaining agreements, mainly through union membership. We do not collect or report figures on union membership due to differences in national legislations.

Stora Enso has employee representation committees at the Group, business area and unit levels. Employee relations, including collective agreements, are mainly managed on a national level. Our annual European Works Council meeting was held in June, with 26 employee representatives present delegated from the 10 European countries where Stora Enso has operations that qualify for representation. Similar meetings were also held for each of our four business areas. The meetings examined the company's current business situation, market outlook, ongoing restructuring measures and capacity reduc-

Age distribution





tions, as well as Stora Enso's approach to corporate responsibility and developments in health and safety issues.

In China, the right to freedom of association and collective bargaining is expressly stipulated by law, and the practical enforcement of such rights is ongoing. In accordance with the relevant laws and regula-

Key human resources indicators

	2010	2009	2008
Average number of employees	27 383	28 696	33 815
Number of employees at year-end	26 379	27 390	31 667
Personnel turnover %	4.0	3.7	6.3
Training days/employee	2.6	2.6	3.1
Share of women among all employees %	20	20	20
Women in the Group Executive Team	0 out of 8	1 out of 8	1 out of 11
Women in the Board of Directors	2 out of 8	2 out of 9	2 out of 9

Personnel turnover %

Region	Europe	South America	Asia
	3.8%	5.4%	6.8%
Gender	Female	Male	
	5.4%	3.7%	

tions, most of our Chinese operations have formed unions that form part of the state-authorised China Labour Union. We have also formed worker councils at most of our units in China to serve as channels for direct feedback and dialogue between employees and management.

Support for employees affected by redundancies

Our total staff was reduced by 1 011 employees in 2010, due to continued company restructuring, efficiency improvements and a weakened market outlook. Stora Enso actively supports those affected by offering solutions such as redeployment, retirement planning, outplacement, supported moves to other locations, retraining, coaching, and additional payment upon termination.

In October Stora Enso closed down two newsprint machines at Varkaus Mill in Finland, making 175 persons redundant. Stora Enso has actively provided support for those affected, for instance by providing financial support to former employees who would like to start their own businesses. These measures have proven successful, and by the end of 2010 as many as 106 of the affected employees had already found a solution.

In November Stora Enso permanently closed down one newsprint machine at Maxau Mill in Germany, affecting some 180 employees. Stora Enso is implementing a social plan to support the employees affected by these restructuring measures.

For more information about measures taken to ease the regional impacts of company restructuring, see pages 16-17.

Wood and fibre sources

Wood is Stora Enso's most important raw material. We procure most of our wood from private forest-owners, state forests and companies in Finland, Sweden, the Baltic countries, Continental Europe and Russia. Some 6% (7% in 2009) of our wood is sourced from tree plantations in the Southern Hemisphere, including pulp produced by our joint venture Veracel in Brazil. Although this is still a small share, plantation sources are becoming increasingly important for Stora Enso. In 2010, we continued developing our plantations in Brazil, Uruguay, China and Laos, and also maintained our trial plantation in Thailand. In 2010, the total amount of wood (including roundwood, chips and sawdust) delivered to our mills was 35.5 million cubic metres of wood (solid under bark) (30.0 million).

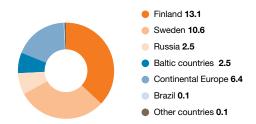
For reasons related to logistics and quality, we bought 6% (8%) of the pulp we used from external suppliers in 2010. The importance of recovered fibre as raw material continues to increase. In 2010 recovered fibre accounted for 26% (25%) of the fibre used in our paper and board production.

Our global wood procurement and land management principles, robust traceability systems and our active promotion of forest certification all help to ensure that no wood or fibre from unacceptable sources enters our supply chain. In addition, when sourcing logging residues and other forest biomass for energy use, which is an expanding business for us, we follow the specific guidelines developed for the harvesting of forest energy, which include strict environmental considerations.

Sustainable forestry

Economically, socially and environmentally sustainable forest and tree plantation management is the foundation for our operations. From an economic perspective our priority is to ensure that our business operations remain viable. Our social priorities include respect for human and labour rights, health and safety issues, the equitable

Wood procurement by region*



Total amount of wood (roundwood, chips and sawdust) delivered to own mills in these areas (million m³, solid under bark).

sharing of economic benefits, the multiple uses of forests, and the protection of sites of historical, social or cultural importance. Key environmental priorities include the conservation and sustainable use of forests, biodiversity issues, soil protection, and the quality and quantity of water resources. The right balance between these priorities varies from region to region.

Promoting forest certification

We promote independent forest certification to demonstrate sustainable forest management. The two major forest certification systems recognised by Stora Enso are the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification schemes (PEFC). To meet our customers' demand for certified products, we aim continuously to increase the amounts of certified fibre.

Despite a steady increase in forest certification, the proportion of the world's forests certified for sustainable management is still below 10%. Most of the certified forests are located in North America and Europe. We have managed to increase the share of certified wood in our wood supply to 67% in 2010, from 49% in 2005. Our target is to further increase this share to 70% by 2012.

The lack of a widely accepted FSC forest management standard in Finland has been a major challenge for Stora Enso. As a member of the Finnish FSC Association, Stora Enso has actively participated in the related negotiations, which finally achieved a breakthrough in 2010 creating consensus on a new FSC forest management standard for Finland. The standard was approved by FSC International in early 2011. Stora Enso has also actively participated in the revision of the Finnish PEFC standard, which was endorsed by the PEFC Council in 2010 and will be implemented in 2011.

We have been working for several years within FSC Sweden to review the national FSC standard. A new standard for Sweden was approved by FSC International in 2010. The new Finnish and Swedish FSC standards both include special criteria for small and low intensity managed forests (SLIMF) that can be applied by private forest-owners who own less than a thousand hectares of forest in Sweden and less than five hundred hectares in Finland. Social responsibility criteria for certification have particularly been strengthened through the SLIMF criteria.

In 2010, we also continued to participate in the development of forest management certification standards in China through the FSC National Initiative and the Chinese National Forest Certification System (NFCS). Stora Enso's plantations earlier served as a pilot site for the NFCS.



Working together with forest-owners

Both FSC and PEFC offer opportunities for group certification, which allows forest-owners to apply for certification collectively with assistance from a certification group manager.

The FSC certification groups established by Stora Enso in Sweden, Estonia and Lithuania continued operating through 2010. In Finland, we set up our first FSC group certification in 2005, and we will restart the group certification process now that the new Finnish FSC forest management standard has been approved.

In Estonia, Stora Enso maintained the SmartLogging certificate (a standard established by the Rainforest Alliance for logging operations) received in 2009 for its forestry services operations. The Smart-Logging certification of forestry contractors helps forest-owners to comply with FSC group certification requirements.

Group certifications can also support larger-scale forest-owners. During 2010, two logging companies in Russia, Ljubinsky and Buisky,

joined our certification group. After extensive preparation and the training of managers and employees the companies achieved certification in early 2011. More wood suppliers will be invited to join our FSC certification group in the future.

In Brazil, Stora Enso's joint venture Veracel continued to work towards the FSC and CERFLOR (Brazilian national certification system endorsed by PEFC) group certifications of some 20 000 hectares of local tree farmers' plantations. The first group certification is expected to be finalised in 2011.

Tracing the origins of wood

Whether the wood we reprocess comes from certified forests or not, we want our stakeholders to be able to trust that it has sustainable origins. We use our own traceability systems to check that all wood has been harvested in compliance with national legislation and according to our own Wood Procurement Principles. Our traceability systems covering all roundwood, chips, sawdust and externally purchased pulp are regularly controlled through internal and external audits.

Moreover, 100% of our purchased wood and pulp is also covered by third party verifications and certifications, such as Chain of Custody, Controlled Wood and ISO 14001. Arapoti Mill in Brazil received FSC chain-of-custody certification in 2010. Arapoti had previously been our only mill with no third party verified traceability system in place.

Conserving biodiversity

Our forest and plantation management planning involves ecological landscape planning and biodiversity assessments conducted to identify valuable habitats and guide forestry operations.

Stora Enso's employees and forestry contractors have continued receiving in-work training on nature management. In Sweden, for example, training has concentrated on the protection of watercourses and sensitive aquatic ecosystems in logging operations. Around 1 000 employees and contractors took part in such training during 2009 and 2010.

In 2010, some Swedish environmental NGO's continued criticising Stora Enso and other forest companies for not respecting key biotopes in logging operations and the Swedish Society for Nature Conservation (SSNC) published a report on the topic. In uncertain cases, we always consult the Swedish Forest Agency for an independent assessment before harvesting. In collaboration with the Swedish Forestry County Board, more advanced nature management training was also provided to 50 employees on key biotopes and 120 employees on nature value assessment during 2010.

In Finland, Stora Enso continued to require employees and forestry contractors to conduct Nature Management Examination. Stora Enso also continued to promote the METSO Forest Biodiversity Programme, a voluntary Finnish forest protection scheme, by helping forest owners to identify areas suitable for protection. In 2010, Stora Enso proposed a total of 15 areas for protection under the METSO programme.

Protecting biodiversity is a major element of responsible tree plantation operations. We only establish plantations on lands with low biodiversity value, such as former pasturelands, and we never convert natural forests or protected areas into plantations. We work to identify and protect any ecologically important areas under our management. Our operations and their impacts on biodiversity are monitored to make sure that we do not harm soil and water resources, and that we safeguard ecosystem functions.

Veracel continued to actively protect and restore Atlantic rainforest habitats in Brazil during 2010. As in previous years, the company planted native trees on 400 hectares of former pastureland. This work is part of a government scheme that aims to connect remaining native coastal forests with ecological forest corridors. By the end of 2010 Veracel had restored a total of more than 3 900 ha of rainforest. Veracel has also been funding and participating in a new study initiated in 2010 to assess changes in native forest cover between 1970 and 2010 in the state of Bahia.

In China, Stora Enso and Fauna and Flora International launched a seven-year programme to monitor bird species in and around eucalyptus plantations. This programme forms part of biodiversity monitoring work in tree plantations in Guangxi province. A baseline survey of residential and migrant birds was conducted in 2010.

New Generation Plantations show the way

By applying innovative approaches tree plantation projects benefit both the local economy and biodiversity. The New Generation Plantation Project, coordinated by WWF, is actively promoting such approaches around the world.

"The project is an initiative that aims to build up a common vision shared by industry, governments and civil society", says Luis Neves Silva, WWF's New Generation Project Manager.

The plantations associated with Veracel pulp mill in Brazil, a joint venture between Stora Enso and Fibria, are recognised as setting a good example of favourable plantation practices. Veracel has unique landscape planning methods that preserve and restore Atlantic rainforest habitats.

"The New Generation Plantations Project defines a framework for favourable plantation practices around the globe," explains Silva. The project's website features cases from three continents alongside a wideranging report. Partners in the project include government agencies such as the State Forest Administration of China and the UK Forestry Commission as well as Stora Enso and several other forest companies.

"The underlying challenges relating to plantation investments vary in different continents", adds Silva. "In Africa the greatest challenge is still poverty, while in Latin America there is the social history of land ownership concentration, and in Asia land use pressures are severe due to large populations."

New generation plantations respect lands and resources that are important for local people, while contributing to the local economy and employment. The best plantation models also support the restoration of natural forest habitats, the conservation of biodiversity and the integrity of wider ecosystems.

"The second phase of work, with a major report due to be published at the end of 2011, will integrate additional issues into the new generation plantation concept, including bioenergy, water management, forest carbon markets, and responsible financing and consumer markets."

For more information, visit www.newgenerationplantations.com.

Forests, plantations and lands owned by Stora Enso*

As of 31 December 2010

Unit**	Hectares	Certification	Broader landscape and protected areas
Montes del Plata plantations and lands, Uruguay (joint venture with Arauco)	238 622 ha, of which 125 642 ha planted	FSC on 120 966 ha, of which 69 822 ha planted	The landscape consists mainly of pasture and agricultural fields. Remnants of native ecosystems, such as grasslands and riparian forests, have been protected within the company's lands.
Veracel plantations and lands, Bahía, Brazil (joint venture with Fibria)	211 676, of which 90 599 planted	CERFLOR (PEFC), FSC	The landscape is dominated by pasture converted from the Atlantic rainforest between the 1950s and 1980s. 105 368 ha of Veracel's areas are protected, including 6 000 ha Private Natural Heritage Reserve. The protected areas mostly consist of native forest remnants at different stages of regeneration (see page 26).
Plantations and lands, Rio Grande do Sul, Brazil	45 161, of which 20 850 planted		The landscape resembles that in Uruguay. 14 000 ha of the total area is protected including native grasslands, riparian forests and other habitats.
Trial plantations, Thailand	1 350, of which 1 280 planted		The plantations are located within an agricultural landscape with no protected areas in or near the plantations.
Wood Supply Baltic, Lithuania	453		70 ha of nature reserves, e.g. buffer zones, and part of a national park.
Wood Supply Baltic, Estonia	92 of which 85 forests		No protected areas within this area.

 ^{*} In addition to the forest and plantation areas listed above Stora Enso owns 43% of Bergvik Skog (www.bergvikskog.com), which owns 2.3 million hectares of land in Sweden, and 41% of Tornator (www.tornator.fi), which owns 600 000 hectares of forestland in Finland.
 ** Including units where Stora Enso's shareholding is at least 50%.

Forests and plantations leased and managed by Stora Enso

As of 31 December 2010

Unit*	Hectares	Certification	Broader landscape and protected areas
Olonetsles, Russia	222 500	FSC group certificate	In Russia protected areas are generally excluded from lease agreements. Areas amounting to 2 362 ha are protected as natural monuments (mainly marshlands).
Ladenso, Russia	153 900	FSC group certificate	409 ha protected as natural monuments, including genetic pine reserves and water courses.
Plantations and lands, Guangxi, China	90 347, of which 74 779 planted with eucalyptus and 8 765 ha with other species		The landscape consists of a mosaic of agricultural crops, forest plantations and settlements. Native ecosystems are not found in the leased lands. Areas totalling around 800 ha are protected, consisting of steep slopes, buffer zones and other important areas for watershed protection.
Terminal, Russia	42 800	FSC group certificate	No protected areas within this area.
Wood Supply Continental Europe, Czech Republic	21 700	PEFC	7 084 ha within a landscape protection area, including 1 895 ha of a bird protection area under the Natura 2000 programme. Other small-scale nature reserves totalling 892 ha.
Montes del Plata plantations and lands, Uruguay (joint venture with Arauco)	15 846 ha, of which 10 099 ha planted	FSC on 5 947 ha, of which 5 870 ha planted	The landscape consists mainly of pasture and agricultural fields. Protected and sensitive areas are excluded from lease agreements.
Trial plantations, Laos	1 200, of which 400 planted		The plantations are located within a mosaic of intensive shifting cultivation areas and traditionally protected remnants of native forests. One plantation area is located close to a National Biodiversity Conservation Area.

^{*} Including units where Stora Enso's shareholding is at least 50%.

Tree plantations and neighbouring communities Veracel in Bahía, Brazil

Veracel pulp mill and plantations is a joint venture involving Stora Enso and Fibria in Southern Bahía in Northeast Brazil. In 2010 Veracel continued working on income generation programmes initiated in previous years. Some of these programmes provide development and marketing support for handicraft manufacturing and beekeeping in local communities. In 2010 Veracel donated 300 hectares of land to neighbourhood associations for crop production also providing the associations with support on farming techniques and crop sales. Veracel has also established a tree farming programme with the aim of sourcing around 20% of its wood from local farmers. The programme involves 104 farmers and some 20 000 hectares of plantation land. Veracel is working with the tree farmers to achieve forest management certification for the farmer's tree plantations (for more details see page 25).

Veracel maintains good relationships with the area's 17 indigenous communities, and supports educational schemes and other initiatives designed to strengthen the cultural identity of the Pataxó and Tupinambás communities.

By the end of 2010, Brazilian social movements including the Landless Workers' Movement (MST), the Fight for Land Movement (MLT) and the Federation of Agricultural Workers of Bahia (FETAG) continued to be involved in 12 land invasions on Veracel's lands. Veracel has actively continued dialogues with these movements and the government of Bahia, with the aim of finding common ground for cooperation. The company takes every possible effort to ensure that such invasions are always handled peaceably. All cases have so far been resolved peacefully.

In 2010, FSC received a complaint about the FSC certification of Veracel and Veracel's certificate provider. The complaint was filed by an anonymous organisation, and FSC decided to investigate the complaint by interviewing local stakeholder groups and auditing Veracel and the certifier. According to the audit Veracel's certification continues to be valid, but the status of the certifier is still pending.

Plantations in Southern Brazil

Stora Enso's tree plantation project in the State of Rio Grande do Sul in Brazil was launched in 2005. In 2010, we continued to integrate tree plantations with other land use forms and strengthen our relations with neighbouring communities and other stakeholders. We initiated a project with a local technical school aiming to take advantage of synergies between tree plantations and traditional cattle grazing. We also established a new system for monitoring the hydrological effects of tree plantations, as part of a water monitoring network run by a local university. To enhance stakeholder dialogue in Rio Grande do Sul we are participating actively in the regional process of The Forest Dialogue.

Montes del Plata in Uruguay

During 2010, Montes del Plata, a joint venture of Stora Enso and Arauco in Uruguay, conducted a comprehensive environmental and social impact assessment to identify the main impacts of a possible future pulp mill and the existing plantation operations. In early 2011 the decision to build a pulp mill in Punta Pereira was taken.

An FSC Forest Management audit and a Chain of Custody certificate follow-up audit were also realised and approved for large part of the plantations managed by Montes del Plata.

The company continued to rent out land for cattle grazing, with over 100 000 hectares of company land now under rent. The company supports the equitable sharing of land and benefits by limiting land rental agreements to 1 500 hectares per tenant. Local partners include individual local landowners as well as sheep and honey production cooperatives and associations of dairy and beef producers. For more information, see page 17.

A Good Neighbour Programme was implemented in areas newly planted in 2010. This programme aims to promote open stakeholder dialogues. Its measures include a grievance mechanism and the provision of information for neighbouring communities about company operations such as planting and harvesting.

In addition to company-owned land, Montes del Plata has rented 15 622 hectares of land from local landowners for tree farming. These wood production partnerships involved 56 landowners by the end of 2010.

Plantations in Guangxi, China

We started establishing plantations in the south of Guangxi province, China, in 2002. The land use plan for the plantation areas has provided an overall framework for planting, harvesting and conservation activities. During 2010 we continued to develop our integrated sustainability and quality, environmental and occupational health and safety management systems.

In October, the international coalition Rights and Resources Initiative (RRI) published a report accusing Stora Enso of irregularities related to acquisitions of collectively owned lands in the Beihai area. We are aware of the issues raised in this report and since last year we have taken concrete measures to improve the land leasing process. In 2009, we started to systematically review all our land leasing contracts. The review showed that a number of contracts did not fulfil our standards. In 2010, we finished the reviewing work (which covered almost 2 300 contracts) and the work to modify the contracts to satisfy all parties is underway.

Two violent incidents occurred in Stora Enso's plantations in Guangxi in 2010. In July, villagers took three Stora Enso employees captive, blaming them for the accidental drowning of a villager. One Stora Enso employee was beaten during this incident. In August, some 100 villagers came to a site where the company was establishing tree plantations, questioning the land use rights over the Qinlian forest farm, which had been leased to Stora Enso. The villagers damaged a forestry contractor's property and seven people were injured during the incident. Stora Enso has withdrawn from the site until a peaceful solution acceptable to all parties is found.

Trial plantations in Laos and Thailand

Stora Enso continued to run pilot tree plantation projects in Laos and Thailand. In Laos, an environmental impact assessment was finalised in 2009 and a social impact assessment conducted by UNDP Laos

Five questions about recycled fibre

How much recycled fibre does Stora Enso use?

We use about 2.8 million tonnes of recycled paper every year. It accounts for about a quarter of all the fibre we use. Stora Enso is one of the largest consumers of recycled paper in Europe. If you put your newspaper or milk carton in a recycling bin in Sweden, Germany, Netherlands, Belgium or Spain, there is a very good chance that it will end up being used at one of our mills to make new paper.

What are the advantages of using so much recycled fibre?

Recycled paper is a highly suitable and valuable raw material for many forms of paper production. But of course it's also a question of using materials responsibly. Recycling is an excellent way to reduce the need for new fibre from the forests - while also saving energy. This is particularly sustainable and worthwhile when our mills can use recycled paper collected from households nearby. Our mills in densely populated areas of Germany, Belgium and Spain are doing just this.

Which of your products contain recycled fibre?

Newsprint for newspapers is perhaps the best example, but we also use recycled fibre to make magazine paper and packaging board. It's quite possible that the breakfast cereal box you held in your hands this morning and the box containing the perfume you were given for Christmas are our products. Both of these products are made of recycled fibres.

How many times can paper be recycled?

We can recycle fibres between four and six times. After that, fibres become weak and start to disintegrate. This means that some fresh fibre is always needed eventually. We hope everyone will take the trouble to recycle all the paper and packages they use, because this is always worthwhile!

What happens after I put an old newspaper or a used milk carton in a recycling bin?

After it is collected, it will be sorted. Different kinds of recovered paper and board are sent to different production lines, where they will be used to make different kinds of new paper and carton products. If you throw your old newspaper into a recycling bin today, you could in theory be holding the same paper in your hands again in 4-6 weeks, printed with up-to-date news.

Rickard Arnqvist Senior Vice President Stora Enso **Publication Paper**



will be completed in 2011. In Laos Stora Enso has developed a plantation concept that combines wood production with food production. This agro-forestry model involves villagers growing agricultural crops in between rows of trees. In 2010 villagers planted rice in 125 newly established hectares of plantation. The local conditions are challenging as the area was bombed during the Vietnam War. Before establishing plantations Stora Enso clears the lands of unexploded bombs.

Market pulp and recovered fibre

Pulp procurement

We produce most of the pulp we use ourselves in connection to our paper and board mills. However, for reasons related to quality and logistics some 6% of the chemical pulp used by the company was purchased from external suppliers (8% in 2009). Only a small amount of mechanical pulp was purchased from external suppliers. Pulp deliveries from Veracel to Stora Enso totalled 0.54 million tonnes in 2010. Pulp from Veracel was mainly shipped to Oulu, Uetersen and Suzhou mills.

Purchased pulp must meet the same sustainability requirements as purchased wood. Pulp is included in Stora Enso's traceability system, so the origins of all the fibre used in purchased pulp must be known and suitably documented. Stora Enso also encourages all pulp sup-

pliers to establish chain-of-custody certification. In 2010 88% of the purchased pulp (including Veracel pulp) was covered by either FSC or PEFC chain-of-custody certification.

Using recovered fibre

The importance of recovered (recycled) fibre as a raw material continued to increase in 2010. Recovered fibre accounted for 26% of our total fibre use in 2010 (25%). This corresponds to nearly 2.8 million tonnes of recovered paper, making Stora Enso one Europe's leading users of recovered fibre.

We use recovered paper as raw material at ten of our paper and board mills. We seek to cooperate with municipalities in the vicinity of our mills to optimise the benefits of paper recycling for both parties. The mills that consume the largest quantities of recovered fibre are located in densely populated areas close to major sources of recovered paper and board. One example is Langerbrugge Mill in Belgium, which produces 100% recycled newsprint and magazine paper at a location where 80 million people live within a radius of 300 kilometres. In 2010 we launched a new sorting plant at Langerbrugge Mill with the capacity to receive 240 000 tonnes of recovered paper per year. The scheme also enables local communities to deliver recovered paper from their household collections directly to the mill.

Supply chain and transport

In 2010 Stora Enso sourced goods and services worth some EUR 6.4 billion. This figure includes wood, other raw materials such as chemicals and fillers for production processes, and various other materials and services, such as spare parts, clothing and maintenance, as well as purchased pulp, energy and logistics services. Some 94% of these purchases by value was sourced in Europe, 4% in Asia and 2% in South America. Through our supply chain we have considerable influence over many communities, societies and environments in different parts of the world.

Supplier requirements

Our wood suppliers and the whole wood supply-chain are covered by regular sustainability controls and audits through chain-of-custody certification schemes. A detailed description of our wood and fibre sourcing is given in the wood and fibre sourcing section of this report on pages 24–29.

For other suppliers and contractors Stora Enso has developed a set of sustainability requirements covering environmental management, health and safety issues, human and labour rights, and business practices. These requirements are included in our purchasing agreements. In 2010 these requirements covered 99% of material purchases and 91% of the transportation services purchased at Group level. Our target is to have all purchasing agreements covered by the requirements, including also purchases made at local level.

Ensuring compliance

During 2010 we developed a monitoring procedure to ensure that our sustainability requirements are followed in practice. The implementation of this monitoring procedure will continue during 2011. The follow up mechanisms include the following elements:

- Sustainability self-assessments
- Sustainability audits

A format for sustainability self-assessments for suppliers was tested in 2010 and will be adopted for wider use in 2011 when self-assessments will become a requirement for all Group-level-coordinated material suppliers and logistics service providers.

Sustainability audits are also conducted at selected suppliers. In 2010 we conducted six sustainability audits to pilot our auditing approach.

Based on the experiences gained through these pilot audits, we are developing our auditing approach and resources further.

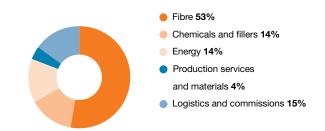
To improve the implementation of our sustainability requirements along the supply chain we also need to increase awareness of sustainability issues, especially among our purchasers. During 2011 we will train all our purchasers on managing sustainability in the supply chain.

Transportation and the environment

Stora Enso transported 49 million tonnes of wood raw material and products in 2010. Nearly three-fourths of this total consisted of wood transportation. Roughly 50% of this wood was transported by truck, and some 40% by rail and 10% by sea. For the transportation of products, transportation by sea accounts for approximately 95%, by truck 3%, and by rail 2%.

One of the most significant environmental impacts of transportation concerns CO_2 emissions. In 2010 transportation accounted for an estimated 13% of Stora Enso's total carbon emissions (see pages 40–41). In Sweden we have taken special measures to reduce CO_2 emissions related to wood transportation by shifting away from road transportation and moving greater volumes of wood by rail. In 2010 a third major roundwood terminal came into operation enabling more wood to be transported from forests to mills by train instead of truck. We estimate that this long-term logistics programme could keep as many as 100 000 trucks off Sweden's roads annually, leading to significant reductions in CO_2 emissions.

Composition of raw material and service costs*



^{* %} of variable costs.

The climate impacts of shipping Brazilian pulp to Europe

Stora Enso produces pulp in Brazil through its joint venture company Veracel. The pulp produced by Veracel is shipped to Stora Enso's paper and board mills in Europe. Most of the pulp from Veracel ends up in coated fine paper sold in Europe.

But what are the climate impacts of shipping pulp long distances? The idea of producing pulp so far away from where it will be used might sound environmentally problematic, but the facts reveal a more carbon footprint of Veracel pulp, and the findings reveal that transportation does indeed play a vital role in the carbon footprint of the pulp – but not in the way one might expect.

Veracel comprises a state-of-the-art pulp mill as well as extensive eucalyptus plantations. The company sources its main raw material - wood - from its own nearby plantations. Wood is transported for an average distance from the plantations to the mill of 44 km. This is a comparatively short distance, since in Finland, for instance, the average transportation distance from harvesting sites to mills is 200 km. Wood transportation thus only adds some 5 kg of CO₂ per tonne of pulp to the total carbon footprint of Veracel pulp. But wood is not

the only factor. Another important raw material for pulp production is chemicals. Most of the chemicals used by Veracel are produced on site, meaning that no transportation is needed.

Once the pulp is ready, it is dried and packed in bales. Shipping pulp in dry form means that it weighs less. The pulp travels from Veracel's harbour through the Brazilian port of Portocel to Brake in Germany or Zeebrugge in Belgium. This is a long journey, but as the ships are small. This stage of the transportation adds 54 kg of CO₂ per tonne of pulp. From the European ports the pulp is transported to its final destination. This results in additional CO₂ emissions ranging between 8 and 40 kg per tonne of pulp, depending on the location of the

Interestingly enough, after adding up all the elements including the transportation of trees to the mill, all the production processes, and the transportation of the pulp to its final destination, the carbon footprint of Veracel's eucalyptus pulp turns out to be on average 248 kg CO, per tonne compared to an average of 253 kg CO, per tonne for hardwood pulp produced in Europe.

Purchasing matters

When I say that I work in purchasing, you will most probably be thinking about goods and their prices. But there is much more to purchasing than comparing prices. For a company like Stora Enso that purchases goods and services worth some six billion Euros every year, responsibility is a key factor in all of our purchasing. It is not only a question of following the company rules; irresponsible purchasing is a real business risk. My job is to make sure that everybody in purchasing understands this.

Stora Enso's business is absolutely dependent on very many suppliers and service providers all around the world - from global chemical suppliers to local trucking companies. This means it is vital for us to make sure that they play by the same rules as we do.

People increasingly judge how responsible we are as a company by what happens along the whole supply chain. This is why we have to make sure that our suppliers, be they big or small, near or far, are environmentally and socially responsible and comply with our policies. If we don't do this, we put our reputation at risk.

Purchasing these days is truly global. Unsustainable practices in a faraway country can easily end up in the headlines close to home. If something goes wrong along our supply chain, the blame can easily be attached to us. Our responsibility and our reputation are at stake, much more than the suppliers'. Responsibility is not something you can outsource.

Sometimes there doesn't even need to be a real case of irresponsible behaviour. Even a suspicion of wrongdoing may be enough to generate headlines, especially if the company cannot show that it has a strong grip on its supply chain.

Since the beginning of 2010 Stora Enso has conducted thorough onsite audits at suppliers in India, China, and Brazil, where we wanted to be sure of their reliability. These audits resulted in lists of actions required from suppliers, which are being closely followed-up. Any nonconformances must be promptly remedied by suppliers. If this does not happen, they will no longer be contracted to provide goods or services for us. We hope that such steps will not be necessary, but this stance shows the extent of our determination!

To finish, I would like to destroy a myth by stressing that responsible purchasing does not cost us more. There is no extra price tag for Stora Enso when it comes to insisting that our suppliers respect social and environmental standards!



Mills and environment

At Stora Enso, our environmental work focuses on two main issues. Firstly, we work to minimise the environmental impacts of our mills. This is a top priority for Stora Enso, and the basis of our everyday work. Secondly, we strive to use raw materials as efficiently as possible. This ensures that we do not waste valuable natural resources or financial resources.

We are committed to continuous improvement in environmental protection. We have set strict targets for emissions to air, process water discharges and waste. Our environmental targets are normalised for production and apply to our pulp, paper and board mills. We monitor our progress towards these targets on quarterly basis, and report our results transparently every year.

Stora Enso has management systems in place to ensure that all our units follow the best environmental practices and improve their work continuously. All Stora Enso's pulp, paper and board production units are certified according to the ISO 14001 management system.

Using water responsibly

Since 2009, our sustainability work has had a special focus on water. Water scarcity is a growing global concern, and this particularly puts pressure on industries that use water intensively.

Water is essential for Stora Enso's production processes. The structure of paper is dependent on water, as hydrogen bonds are needed to keep the wood fibres together. The Group also uses water for cooling, for cleaning, and to make steam for producing energy. Water is also needed as a medium to carry fibres through production processes.

Stora Enso is committed to the responsible use of water, and we actively participate in various international initiatives related to water. These initiatives include the CEO Water Mandate of the UN Global Compact, and the work of the World Business Council for Sustainable Development developing tools for measuring water use. Stora Enso is also involved in the development of an international ISO standard for water accounting, and in the Water Footprint Network, whose water accounting methodology has been tested by Stora Enso at Skoghall Mill in Sweden. See page 14 for more details.

To better understand our water use, we initiated an in-depth water study in 2009, covering all of our pulp, paper and board mills, and this study was completed in 2010. The study examined both direct water use at mills, and our indirect water use related to the water present in fibre and chemicals. The results showed that the greatest water inputs consist of process and cooling water, and as expected only a minor contribution comes from different raw materials, including 2% from wood and bark, and 0.3% from recovered fibre, purchased pulp and chemicals. The study also examined water outputs, and concluded that around 4% of our total water intake ends up being released as steam from processes, 0.3% ends up in our products, residuals and wastes, and the rest is treated and discharged back into the water bodies from which it was extracted. These results will help us focus our continued efforts to improve water measurement and reporting and to reduce water use in the right areas at each mill.

Water sources

In 2010, we used a total of 318 million cubic metres of process water and 365 million cubic metres of cooling water in our production processes. Most of this water (99%) was taken from lakes and rivers, and less than 1% was withdrawn from municipal water supplies or extracted from groundwater.

All of our water intakes are regulated by the authorities, and we follow local laws and regulations everywhere. In five localities local water sources are significantly affected by our water use. This means that we either use more than 5% of the average total volume of the water body, or that the water body has been recognised by authorities as a sensitive area. For more details, see the extended GRI table at www.storaenso.com/sustainabilityreport. In these localities our water use is particularly strictly regulated and supervised by the relevant authorities.

Water discharges

After water is used in production, it is carefully treated and then released back into the natural environment. Treating water is important, as impurities in water discharges can harm ecosystems in lakes, rivers and other natural water bodies. Stora Enso uses top class waste water treatment systems to ensure that the water we release is purified, ecologically safe, and meets all regulatory requirements. About 99% of our releases of purified water are discharged into surface water bodies. Some of Stora Enso's mills discharge waste water into municipal or private treatment plants.

Stora Enso's target is to reduce process water discharges by 10% of their 2005 levels by 2013. During 2010 the Group made slight progress towards this target. We have reduced our normalised discharges of process water by 5% since 2005.



Another target that we have set for water discharges is to reduce average Chemical Oxygen Demand (COD) in our water releases by 10% from 2007 levels by the end of 2013. During 2010 normalised COD discharges declined slightly and are currently 2% lower than in 2007.

In 2010 our normalised discharges of Adsorbable Organic Halogen Compounds (AOX) increased, but their present level is still 3% below their level in 2006. AOX is a collective term for the amounts of chlorine or other halogens bound to organic matter in waste water. Over the last five years our discharges of AOX have fluctuated within a range that represents good performance. This is due to the fact that Stora Enso has not used elemental chlorine in its bleaching processes for over 20 years.

During 2010 our normalised discharges of nitrogen decreased, while phosphorus discharges increased. Compounds of both nitrogen and phosphorus are used to provide nutrient sources for the micro-organisms that are vital to our biological waste water treatment processes. In natural water bodies excessive amounts of nitrogen and phosphorus can lead to increased biological activity through eutrophication. Over the past five years our normalised discharges of both nitrogen

and phosphorus have declined considerably, by 13% for nitrogen and 17% for phosphorus.

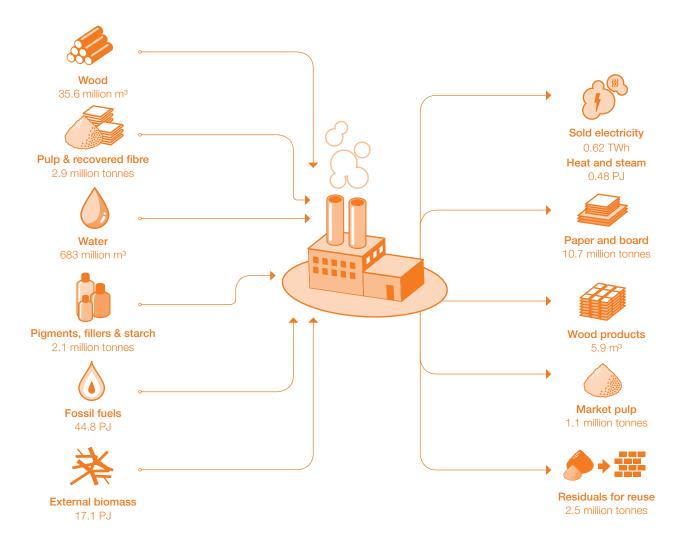
Emissions to air

Minimising emissions to air continues to be a priority for Stora Enso. Our atmospheric emissions result mainly from the combustion of fuels used in production processes. These emissions include carbon dioxide (CO2), sulphur dioxide (SO2) and nitrogen oxides (NO2). Stora Enso has taken action to reduce its CO₂ emissions and total carbon footprint (see pages 40-41). SO₂ and NO₂ affect air quality and cause acid rain and soil acidification.

We are working to reduce our emissions to air by using more renewable energy and by increasing our energy efficiency (see pages 38-40). SO, and NO, emissions are also controlled through advanced technologies such as scrubbers and boiler process control systems.

In 2010 our SO₂ emissions increased slightly. Our target has been to reduce our SO₂ emissions by 30% from 2007 levels by 2013. In 2010 our normalised SO₂ emissions were 26% below the 2007 level. Over the five year period 2006-2010 we have reduced our normalised emissions for both SO₂ and nitrogen oxides (NO_x), by 33% and 2%, respectively.

Material use in 2010



Residuals and waste

Stora Enso's production processes generate various residuals and wastes, the vast majority of which are beneficially reused. Such materials include ash from energy production, lime solids from pulping processes, and waste water treatment sludge. Many of these materials can be used for bioenergy production, for agricultural purposes, or for brick manufacturing and road construction. We are constantly looking for new and innovative ways to reuse materials that would otherwise end up as wastes. Across the Group we have achieved a waste use rate of 96% (96% in 2009).

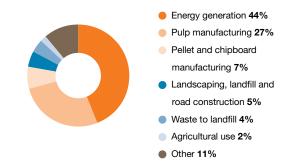
Waste to landfill

Residual materials that cannot be reused end up in landfills. In 2010 our total waste to landfill rate increased to 17 kg/tonne of board and paper produced (16 kg/tonne in 2009). This means that no progress was made towards our target to reduce normalised waste to landfill by 5% from 2007 levels by the end of 2013. In 2010, 51% more waste to landfill was generated (in terms of kg/product tonne) than in our target base line year 2007. One major reason for this is our increased use of biomass fuels, which generate more ash than other fuels, coupled with the reduced demand for residual ash for beneficial uses.

Hazardous wastes

Hazardous wastes from our production include used oils, solvents, paints, laboratory chemicals and batteries. In 2010 Stora Enso's pulp, paper and board production units created 2 895 tonnes of hazardous waste, down from 2 955 tonnes in 2009. We dispose of hazardous wastes by either burning them to generate energy, or ensuring that they are safely processed at hazardous waste facilities or incinerators. We report on our disposal of hazardous wastes in line with definitions set out in respective national regulations. No significant spills, releases or leakages of hazardous wastes occurred in 2010.

Beneficial use of residuals and waste to landfill



Total sulphur as SO₂ 1) 0.85 0.75 6.5 0.65 5.5 0.55 0.45 3.5 0.35 06 07 08 09 10 1 000 tonnes 6.7 4.6 3.6 4.3 -43%

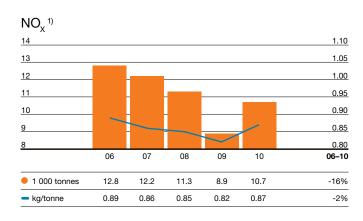
0.35

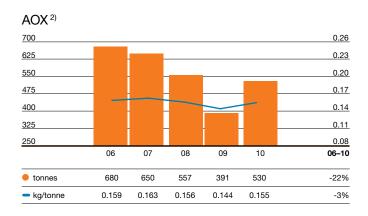
0.33

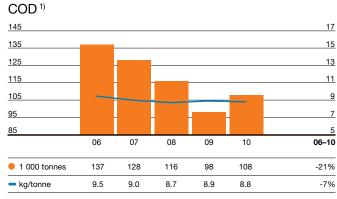
-33%

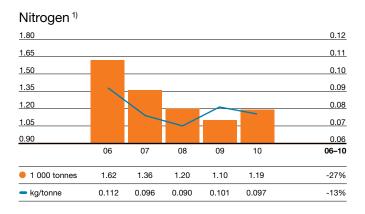
0.47

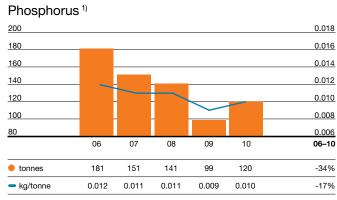
kg/tonne

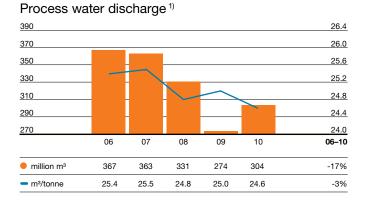


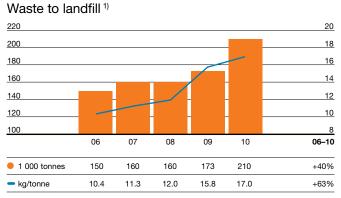












¹⁾ From pulp, paper and board production facilities. Normalised figures are reported per unit sales production.

²⁾ From bleached chemical pulp facilities only. Normalised figures are reported per unit bleached chemical pulp production.

Environmental incidents

Unit	Incidents	Corrective actions
Fors Mill, Sweden	The mill exceeded limits for phosphorus and suspended solids due to problems with its waste water treatment plant.	Resolved. The cases have been reported to the authorities. Stora Enso decided to rebuild the waste water treatment plant. The new plant is expected to be running during the first quarter of 2011.
Skoghall Mill, Sweden	A leaking pipe resulted in chlorine dioxide discharges. The discharges were channelled to the mill's waste water treatment plant and the incident had no environmental impacts.	Resolved. The incident was reported to authorities and preventive actions, including the repair of the pipe, have been taken.
Skoghall Mill, Sweden	A leak in the mill's white liquor pipe was detected. All resulting discharged were channelled to the mill's waste water treatment pant and no environmental impacts ensued.	Resolved. The incident was reported to the authorities and corrective actions, including the repair of the pipe, have been taken.
Kvarnsveden Mill, Sweden	Phosphorus guideline value exceeded due to faulty dosage of ferrous sulphate in the waste water treatment plant and high summer temperatures.	Resolved. The incident was reported to authorities and dosage of ferrous sulphate has been adjusted.
Hylte Mill, Sweden	The mill exceeded the air limit value for dioxins and furans due to emissions from one of the boilers.	Pending. The incident was reported to the authorities. The cause of the incident is being investigated internally so that preventive actions can be taken.
Varkaus Mill, Finland	Plastic waste from the mill's recycling plant entered the lake and was borne downstream by water currents.	Resolved. The mill cleaned the areas of the lake where plastic waste was noticed. The incident was investigated by the environmental authorities who concluded that no further actions are needed.
Enocell Mill, Finland	The permit limit for phosphorus was temporarily exceeded due to technical problems.	Resolved. The incident was reported to the authorities, and preventive actions have been taken.
Corbehem Mill, France	The legal limit for suspended solids in waste water discharges was exceeded.	Pending. The cause of the incident is being internally investigated so that preventive actions can be taken. In accordance with the French authorities' requirements a study to evaluate the efficiency of the waste water treatment plant will also be conducted.
Maxau Mill, Germany	Small amounts of oil leaked into the cooling water circuit, resulting in discharges into the Rhine river, due to a defect in the heat exchanger.	Resolved. As soon as the spill was discovered the discharged water was channelled to the waste water treatment plant. The defected heat exchanger has been replaced.
Ostrołęka Mill, Poland	Water containing small amounts of light oil entered River Narew during the start-up operations of a new power plant on the site.	Resolved. The spilled oil was successfully retained through several measures. Preventive actions including changes to construction, automation and the organisational processes as well as internal training have been taken.

Environmental investments

In 2010, Stora Enso's environmental investments amounted to EUR 37 million (EUR 21 million in 2009). These investments were mainly directed to improve the quality of air and water, to enhance resource efficiency and energy self-sufficiency, and to minimise the risk of accidental spills. Several significant environmental investments were completed in 2010. New multifuel boilers started operating at Maxau Mill and Langerbrugge Mill (see page 40). A new recycling facility at Barcelona Mill now enables beverage cartons' plastics and aluminium content to be recycled, as well as their constituent fibres. A new gas turbine at Sachsen Mill is considerably reducing the mill's NO, and CO, emissions.

Stora Enso's environmental costs in 2010 excluding interest and including depreciation totalled EUR 152 million (EUR 147 million). These costs include taxes, fees, refunds, permit-related costs, and repair and maintenance costs, as well as the prices paid for chemicals and certain materials. Estimates indicate that a total of EUR 122 million (EUR 145 million) will be needed to cover future environmental liabilities, such as removing mercury and other contaminants from Stora Enso mill sites. There are currently no active or pending legal claims concerning environmental issues which could have material adverse effect on Stora Enso's financial position.

Complying with environmental permits

Each of our mills is regulated by environmental permits based on the national, regional and local legislation applicable to each location. Our mills continuously monitor their own compliance with these permits, as do the appropriate environmental authorities. All of the environmental incidents at Stora Enso mills in 2010 that resulted in major permit violations, claims, compensations or significant media coverage are detailed in the table above.

Environmental impacts of mill closures

When closing down a mill, Stora Enso always ensures that the mill site and surrounding area is properly cleaned and restored. This is done in accordance with local laws, regulations, and environmental permits granted by the relevant authorities.

In April 2010, Kemijärvi Mill in Finland received an environmental permit related to its closure in 2008. Stora Enso subsequently submitted an appeal concerning the permit to the Vaasa Administrative Court. Between June and November 2010 Stora Enso carried out remediation work on the mill site in line with an environmental permit granted in 2009 for the necessary soil cleaning work.

Companies embrace "water stewardship"

In July 2007, UN Secretary-General Ban Ki-moon presented a challenge to the global business community: to embrace the concept of "water stewardship" as a key corporate priority.

Issues related to water availability, quality and sanitation had previously not figured very high on the general business agenda. Companies typically viewed water management as an ancillary environmental concern, devoting some resources to water recycling and waste water treatment, perhaps, but not seeing water as a material risk or a possible opportunity - and certainly not taking a holistic view. The same could be said of many other global actors and stakeholders - including governments, civil society organizations, and investors. International attention remained largely focused on climate change as the headline issue of the day, even though global warming is known to have major implications for water resources.

Much of this changed in 2006 following the publication of the UN Development Programme's "Human Development Report 2006: Power, Poverty and the Global Water Crisis". This landmark report presented a comprehensive overview of the escalating global crisis in water and sanitation - and highlighted the crucial correlation between water availability and economic development.

The UN Secretary-General subsequently issued his challenge and launched the UN Global Compact's CEO Water Mandate.

In just over three years, the CEO Water Mandate has established itself as a pre-eminent business platform for water stewardship and sustainability. The Mandate today involves more than 70 companies from industries ranging from footwear to forest products.

The CEO Water Mandate entails commitments by Chief Executive Officers on six areas: direct operations, supply chain and watershed management, collective action, public policy, community engagement and transparency.

Endorsing CEOs and their companies pledge to implement these six aspects, and submit annual "Communication on Progress - Water" reports, which are posted on the public CEO Water Mandate website. These reports form a growing repository of best and emerging practices for learning and benchmarking.

The CEO Water Mandate seeks to bring about a transformational change in the minds of business leaders with respect to sustainability and water, and encourage them to see industry as a critical user and therefore steward of water resources. The Mandate has also brought companies together with public-sector entities, NGOs, UN agencies, investors, and other stakeholders to help find solutions to water challenges - particularly at the level of the catchment area or watershed.

This approach helps companies participating in the Mandate to go "beyond the fence line" of their operations and recognise that their direct operations and their suppliers have broader responsibilities to the surrounding communities and ecosystems.

Mandate endorsers are pursuing a range of inspiration actions, including working with suppliers to improve water efficiencies, collaborating with NGOs on watershed restoration, and working with the public water authorities to improve water governance.

To address understandable concerns about the role of businesses in shaping water policies, the Mandate has recently released a Guide to Responsible Business Engagement with Water Policy, developed with the Pacific Institute and WWF.

The CEO Water Mandate recognises that by mobilizing a critical mass of committed companies dedicated to working in partnership with other stakeholders, progress can be made towards the achievement of the vital Millennium Development Goals. Important connections are also being made between water sustainability and other key issues such as food and energy.

Indeed, growing numbers of corporate leaders see their critical and important role in the broader development and sustainability agenda of the 21st century, recognising the fundamental truth that healthy societies and healthy markets go hand-in-hand.

Gavin Power

Deputy Director of the UN Global Compact and Head of the **CEO** Water Mandate



Climate and energy

We work to eliminate and reduce carbon dioxide (CO₂) emissions all along our value chain. This includes promoting sustainable forest management, creating innovative products based on renewable materials, and developing cleaner and more energy efficient production processes.

Forests and the climate

As trees grow they absorb carbon dioxide from the atmosphere and store it as carbon. Trees are a renewable resource. If forests and plantations are managed in a sustainable way, after trees are logged a new generation of trees will grow back absorbing CO, from the atmosphere once again. Sustainable forest and plantation management therefore plays a vital role in mitigating global warming.

We promote third party forest certification and chain-of-custody certification to guarantee that all our wood originates from sustainably managed forests and tree plantations. We also actively combat illegal logging, which is a major cause of global deforestation. Our tree plantations sequester more carbon than the previous land uses, since they have been almost entirely planted on formerly unused grasslands or areas used for grazing cattle. We restore and conserve Atlantic rainforest in and around the tree plantations we own through our joint venture Veracel in Brazil, and these forests and tree plantations are a significant carbon sink. For more details see pages 24-28.

Products from renewable materials

As our main raw material - wood - is a renewable resource, our products have a much smaller carbon footprint than competing products made of non-renewable materials. Stora Enso is constantly developing its product range by finding new applications for wood and wood-based materials. During 2010 Stora Enso has launched many new packaging applications which are more material efficient and can be recycled or composted. Examples include fibre-based packaging for cold cuts replacing plastic trays, and microwaveable and ovenproof packaging replacing aluminium trays. Stora Enso has invested in developing and testing biomass-based transport fuels together with Neste Oil in Finland. We are also actively building up our expertise in biofuels through our expanding wood pellet business

and our subsidiary Stora Enso Bioenergi, which is already the biggest supplier of logging residues and certain other biomass fuels in Sweden. Read more about our products and product development on pages 12-14.

Our production processes

Most of our greenhouse gas emissions come from the energy we purchase and produce to operate our mills and manufacturing processes.

To reduce costs and reach our environmental goals, we are continuously working to improve the energy efficiency of our production. We also focus on enhancing energy self-sufficiency and promote the use of low carbon energy alternatives, both in our own power generation and in external procurement. In addition, we want to continue the long-term supply of district heating for local communities wherever this is technically and economically feasible.

Energy use

We purchase fuel, electricity and heat from external suppliers and generate steam and electricity internally for use at our production facilities. Our energy procurement and generation strategy focuses on our long-term needs. Existing contracts and our internal electricity generation are estimated to cover around 87% of our electricity needs for the next 5 years.

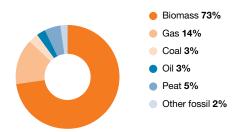
In 2010 we consumed 16.2 TWh of electricity and 127.7 PJ of heat at our mills. Our total energy self-sufficiency figure in 2010 was 56%, compared to 54% in 2009. The share of renewable energy in our total energy use was approximately 63% in 2010.

Energy procurement and partnerships

Stora Enso is increasingly focusing on securing and enhancing access to cleaner energy through strategic partnerships with external energy suppliers. In 2010, 81% of our purchased electricity was generated from low carbon sources including nuclear energy and renewable energy sources. At Skutskär Mill in Sweden, the wind park built by Vindln AB of which Stora Enso owns about 15%, generated 29.5 GWh during 2010. Stora Enso has also decided to participate in Vindln's

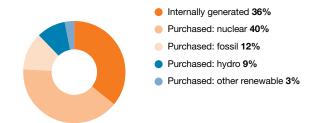
Energy consumption

Fuels



Our total annual fuel consumption was 159 295 (130 389) terajoules (TJ) in 2010. 1 TJ = 1012 ioules

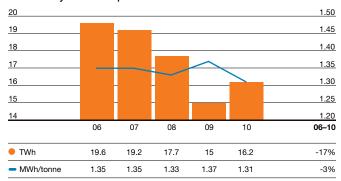
Electricity



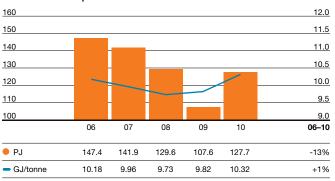
We generated and purchased 16.8 terawatt hours (TWh) of electricity in 2010 and consumed 16.2 TWh. 0.6 TWh was sold. TWh (terawatt hour) = 109 kilowatt hours

Energy efficiency

Electricity consumption 1)



Heat consumption 1, 2)



- ¹⁾ From pulp, paper and board production facilites. Normalised figures are reported per unit sales production.
- ²⁾ Excluding heat for electricity generation.

Investors looking for transparent sustainability reporting

Due to the intensifying global focus on climate change, investors today are increasingly attracted to companies who are clearly working to improve their environmental performance, and developing and applying technologies towards this end.

Nordea is one of the leading financial providers in the Nordic region, and we see responsible investments as an integral part of our product offering. One key factor behind such investment decisions is how companies are addressing climate change. When we see that a company is reporting its CO₂ emissions transparently, this has a real impact on an investment decision.

We use the emissions data we receive from our investee companies to steer our investments so that they contribute towards the goal of a low-carbon economy. Information about companies' other efforts to tackle climate change, such as improvements in energy efficiency, are also useful in this context.

In response to growing climate awareness we are improving the products that we offer investors by encouraging our portfolio companies to measure and report their emissions transparently. We also aim to use such data to create new responsible investment products.

At Nordea, we encourage our portfolio companies to develop new business ideas and generate sustainable profits through operations that are also socially and environmentally responsible.

Sustainability cannot just be a buzzword companies have to use in their reports to attract responsible investments; it must be a genuine and active choice, reflected in responsible and transparent reporting. We aim to invest in companies that make such active choices to help build a sustainable future.

Sasja Beslik

Head of Responsible Investments & Governance Nordea Investment Funds



second wind farm project in Sweden which is expected to generate 213 GWh annually from the end of 2012.

Internal energy generation

In 2010 our electricity self-sufficiency was 37%, compared to 33% in 2009. This increase was mainly due to the new multifuel power plants that started up at Langerbrugge Mill in Belgium and Maxau Mill in Germany. We expect that this figure will increase further in 2011 when these two plants, and another power plant completed at the end of 2010 at Ostrołęka Mill in Poland, will be operational for the whole year. With their combined capacity of 127 MW, these three power plants should alone increase our electricity self-sufficiency by approximately 5%.

Pulp and paper production results in by-products such as black liquor, bark and de-inking and bio-sludge that we use to produce bioenergy. Harvesting residues and recovered wood are also important biomass sources in our internal energy generation. In 2010 our use of biomass for internal energy production remained stable at 73% (73%).

In addition to improving our energy self-sufficiency, the new multifuel power plants at Langerbrugge, Maxau and Ostrołeka mills will enable us to increase our use of biofuels. Multifuel boilers can use various types of biomass fuels including forest residues and recovered wood, as well as various sorted wastes, coal and gas. These plants will also help us to improve our overall energy efficiency, and they should reduce our annual CO, emissions by an estimated 205 000 tonnes per year.

Improving energy efficiency

The best way to cut costs and work towards our environmental goals is to reduce our energy use. In 2010 our overall electricity efficiency improved by 3% from 2009. In 2009 we had set individual targets for each of our business areas to further improve energy efficiency. Fine Paper and Packaging Business Areas reached their targets of reducing specific energy consumption by at least 2%. Publication Paper reached its target of reducing electricity consumption by 1%. The baseline year for these targets was 2009. These business areas have kept the same percentage improvement targets for 2011, with their energy consumption levels for 2010 as the new baseline.

Better use of the combined heat and power (CHP) potential of our mills can increase the power-to-heat ratio of our internal energy production. This means that for each MWh of heat that we produce we also aim to maximise the amounts of electricity generated. The Group's overall power-to-heat ratio improved from 21% in 2009 to 22% in 2010.

Our centralised energy efficiency fund, which was set up in 2008 to support our mills energy efficiency projects, supported 22 projects in 2010. We will continue to support such energy efficiency projects and have already selected 34 projects that will receive support during 2011. To further promote smart and efficient energy use we started a new training programme focusing on energy saving in 2010. Six of our European mills were selected for this scheme, with one member of personnel at each mill trained to act as an internal energy saving agent. Our goal is to establish a network of energy saving experts covering all Stora Enso mills by the end of 2011, to share experiences and spread best practices.

Our special energy saving efforts initiated in 2009 continued in 2010. Potential energy savings were identified through audits at Hylte, Skoghall, Langerbrugge, Veitsiluoto, Imatra and Anjalankoski mills. This information will be used in the planning and implementation of energy efficiency investments and improvements at these mills. During 2011 similar audits are planned to be conducted at Nymölla, Sunila, Corbehem, Uetersen, Imatra, Kabel and Maxau mills.

Following our carbon footprint

Since 2007 we have estimated our Group-wide carbon footprint on an annual basis, with the aim of identifying the main sources of CO, emissions across our operations.

We base our carbon footprint accounting and calculations on guidelines established and provided by the Greenhouse Gas Protocol of the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). In our accounting we concentrate on CO2 which is the dominant greenhouse gas in our carbon footprint, but emissions of other greenhouse gases, such as methane (CH_{a}) and nitrogen dioxide (N₂O) are also included where data exists.

We report on emissions in three areas:

- Scope 1: Emissions from sources we directly own or control, including on-site energy generation and processes, power boilers, lime kilns, paper-drying processes, vehicles, engines and harvesting equipment.
- Scope 2: Emissions related to the purchased electricity and heat consumed in our operations.
- Scope 3: Emissions from other indirect sources including the harvesting and transportation of wood raw materials and finished products, and emissions generated by raw material and fuel suppliers. Figures have been calculated based on estimates of CO₂ per unit production in 2010.

In 2009 we improved the methodology and the accuracy for calculating our Scope 3 emissions. Based on this improvement we also recalculated our Scope 3 estimates for 2006, 2007 and 2008 and we have used the same methodology in 2010.

Our total estimated carbon footprint (including Scopes 1, 2 and 3) has increased by 12% from 8.54 million tonnes of CO₂ equivalent in 2009 to 9.58 million tonnes in 2010. This was largely due to production increases and consequent increases in energy use in 2010, following a year with extensive production curtailments in 2009. In 2010, direct

emissions from production (Scope 1) made up 34% of our total carbon footprint, indirect emissions related to production (Scope 2) made up 24%, and emissions from outsourced activities (Scope 3) accounted for 42%.

CO₂ reduction target

We are actively working to reduce greenhouse gas emissions from our production, and we have set a target to reduce fossil CO2 emissions per saleable tonne of pulp, paper and board by 20% from 2006 levels by the end of 2020. This target covers both emissions generated directly by our own facilities (Scope 1), and indirect emissions produced during the generation of the electricity and heat we purchase (Scope 2).

By the end of 2010 we had reduced our CO₂ emissions per tonne of product from our pulp, paper and board mills by 20% compared to our baseline year 2006. Since this means we have already reached our target, we have made a commitment to set a new, tougher target during 2011.

This significant reduction has been achieved mainly through improved productivity, the use of more efficient equipment and streamlined processes, the reduced use of fossil fuels, and improved efficiency in our power and heat generation. Another significant reason for the CO, reductions achieved has been increased purchases of electricity generated from low carbon energy sources.

Direct and indirect CO₂ emissions

In 2010 we increased our direct fossil CO₂ emissions both in absolute terms and per unit of sales production compared with 2009. Since 2006 we have reduced our direct CO, emissions from stationary combustion sources at our pulp, paper and board mills by 6% per unit of sales production.

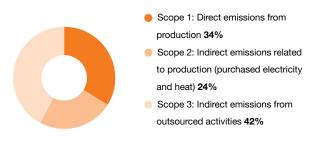
Our indirect CO₂ emissions are significantly influenced by the energy mix used in the national grids of the countries where we operate. By the end of 2010 our fossil CO, emissions from energy purchased for electricity and heat had decreased to a level 35% lower per unit of sales production than in 2006.

Recognised by the Carbon Disclosure Project

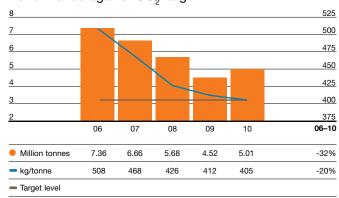
In 2010 Stora Enso was ranked the best company in the Nordic region by the Carbon Disclosure Project (CDP) when it comes to reporting on carbon emissions. The CDP also recognised our achievements in reducing carbon emissions. For more information, see page 5.

Our carbon footprint 2010

9.58 million tonnes of CO₂ equivalents



Performance against CO₂ target 1)



¹⁾ Covering direct and indirect fossil CO2 emissions (Scope 1 and 2) from pulp, paper and board production facilities. Normalised figures are reported per unit sales production.

Group level carbon footprint 2006–2010¹⁾

			Fossi	I CO ₂ equivalent	**	
Emission source	Scope	2010	2009	2008	2007	2006
Stationary and mobile combustion sources (direct)	Scope 1	3.25	2.61 *	3.26 *	3.60 *	4.01 *
Purchased electricity and heat (indirect)	Scope 2	2.27	2.33 *	2.91 *	3.50 *	3.91 *
Other sources (indirect)*	Scope 3	4.06	3.60 *	4.37 *	4.67 *	4.75 *
Total		9.58	8.54	10.54	11.77	12.67

¹⁾ Covers all Stora Enso's production units.

^{*} Figures have been recalculated due to changes in baseline and reporting errors.

^{**} million tonnes

Sustainability data

by unit					4001	001	OHSAS 18001	SO 22000	BRC/loP/FDA	Coc	O-0-0		
Unit	Number of emplyees a)	Products	Production b)	Recovered fibre c)	ISO 14001	ISO 9001	OHS/	1802	BRC/	FSC (PEFC	Landfill *	Hazardous waste d) *
Belgium Langerbrugge Mill	383	1	528 117	x	х	х	х			х	х	24 710	42
Brazil Arapoti Mill	350	1	155 000		х	х	х			х	х	2 764	5
China Dawang Mill	216	1	137 495	х	х	х	х			х	х	200	0
Suzhou Mill Estonia	545	2	219 972		х	х	Х			х	Х	0	7
Tallinn Mill Finland	34	⑤	9 403			х						13	
Anjalankoski Mill	355	0 3	555 431		x	х	х	х		x	х	14 305	385
Enocell Mill Heinola Fluting Mill	167 193	4 3	457 172 258 100	х	X X	X X	X X	х		Х	X X	422 11 407	36 79
Heinola Mill	147	⑤	39 933		Х	Х	Х	X			Х	21	104
Imatra Mills Lahti Mill	1 242 ¹⁾ 259	234 5	1 049 854 30 668		X X	X X	X X	X X	Х	Х	X X	6 793 23	184
Oulu Mill	681	2 4	1 168 193		X	X	Х	^		х	x	32 296	133
Ruovesi Mill	90	5	5 561		Х	х	Х	х			Х	15	
Sunila Mill Tiukka Mill	246 56	4 5	336 144 6 680		X X	X X	X X	х		Х	X X	11 994 13	85
Varkaus Mill	308 ¹⁾	000	425 634		X	x	X	^		х	x	12 393	304
Veitsiluoto Mill	7921	1 2 4	850 855		Х	х	Х			х	х	2 936	42
France Corbehem Mill	351	1	270 567		х	х				х	х	1 937	182
Germany	004		004.050										0.4
Kabel Mill Maxau Mill	631 634	① ①	384 958 531 320	х	X X	X X	X X			X X	X X	5 769	81 322
Sachsen Mill	338	① ④	318 275	x	X	х	X			X	x	0	73
Uetersen Mill	442	23	267 898		Х	х	Х			х	х		42
Hungary Páty and Komárom Mills	187	⑤	15 524		х	х					х	56	75
Latvia Riga Mill	116	⑤	39 534			х						45	
Lithuania													
Kaunas Mill Poland	46	(5)	6 044			Х						11	
Łodz Mill	238	⑤	47 309		Х	х	Х				х	107	4
Mosina Mill Ostrołęka Mill	90 1 187	⑤ ③ ⑤	7 220 323 068	х	X X	X X	X X				X X	40 5 366	17 83
Tychy Mill	188	5	43 260	^	х	х	X				x	25	5
Russia													
Arzamas Mill Balabanovo Mill	210 386	⑤ ⑤	52 647 55 068			X X						263 336	
Lukhovitsy Mill	126	6	30 810			X						282	
Spain Barcelona Mill	265	3	162 925	x	х	x	х	х		х	х	16 972	47
Sweden													
Falu Rödfärg	h)	0	721		Х	Х					Х	500	9
Fors Mill Hylte Mill	675 803	③ ①	349 849 835 139	х	X X	X X	X X	Х		X X	X X	522 50 021	92 147
Jönköping Mill	220	⑤	25 577		Х	х					х	24	5
Kvarnsveden Mill	828	0	883 287		Х	х	Х			Х	Х	51	194
Nymölla Mill Skene Mill	780 171	② ④ ⑤	458 870 40 448		X X	X X	Х			Х	X X	110 28	65 0
Skoghall Mill	879	3	717 499		X	x	Х		х	х	X	2 038	237
Skoghall Mill Forshaga	111	⑤	97 212		Х	х	Х		х		х	3	2
Skutskär Mill Vikingstad Mill	391 63	4 5	512 859 19 719		X X	X X	Х			Х	X X	172 9	15 6
Corenso	03	9	19 7 19			^						9	0
Corenso Pori Coreboard Mill	108	3	112 660	х	х	х	х				Х	45	10
Corenso Soustre Coreboard Mill Wisconsin Rapids Coreboard Mill	88 66	③ ③	89 270 66 307	X	X	X	X				X	3 194 3 717	3
Corenso, core factories	780	⑤ ⑤	198 664	Х)))	X D	X j)	j)	D		X D	358	14
Stora Enso Wood Products Sawmills	3 762	6	5 866 343		j)	D	Ď			j)	D	7 254	482
Total pulp, paper, board and	3 102	<u> </u>				-							
Converted products, tonnes			13 198 720									211 806	3 032
Total wood products, m ³ Grand Total			5 866 343									7 254 219 060	482 3 514
Midnid Ioldi		1										£13 000	0.014

Certificates

Footnotes a)=Year average. Source: financial accounting database. b)=Sales production. Sawn timber is reported in m³, other products in metric tonnes. c)=Mills using recovered fibre as raw material (fully or partly). d)=Reported on the basis of country-specific definitions applied in national regulations. e)=Total sulphur is reported as SO₂ (sulphur dioxide) and includes all sulphurous compounds. f)=All CO₂ figures are calculated using the WRI/WBCSD greenhouse gas protocol. Direct emissions from internal transport are excluded. g)=Indirect emissions from purchased heat and electricity. h)=Does not have personnel but buys this as a service from Stora Enso Ab. i)=The figure does not include service company personnel. j)=See www.storaenso.com/certificates.

SO ₂ e) *	NO _x as NO ₂ *	Direct CO ₂ fossil ¹⁾ *	Direct CO ₂ biomass ^{f) *}	Indirect CO ₂ g) *	COD*	AOX *	Phosphorus *	Nitrogen *	Process water discharge **
10	259	94 666	330 854	234 930	1 068	1.2	6.3	33.6	6 715
0	75	28 776	85 305	98 312	507				2 826
0 290	0 293	0 154 526		153 770 97 200	131 77	17.4	0.6 0.4	1.3 4.0	1 919 1 698
				3 747					5
1 250 530 31 193 601 56 291 916	320 783 477 13 1 662 1 200 846 844 1 227	336 240 64 595 209 585 5 132 178 336 355 314 448 50 105 81 92 080 369 534	64 341 1 527 504 194 595 2 441 732 1 269 649 860 814 704 133 1 111 818	52 564 7 646 733 67 719 2 718 31 652 204 76 56 713 53 815	4 502 9 439 1 260 17 228 8 781 6 733 4 720 12 663	103.3 174.0 54.0 79.7 15.2 38.7	4.3 2.4 2.4 13.6 12.7 10.2 6.8 11.1	136.4 39.1 17.8 203.6 70.1 20.8 94.5 127.8	10 640 22 688 4 063 105 63 306 18 18 903 3 16 464 1 14 125 13 100
1	30	57 102		24 418	853	0.6	3.9		6 127
2 0 0	15 111 150 31	17 281 238 753 169 480 78 273	124 010 63 651	356 816 280 629 2 016 62 552	846 1 830 738 40	0.2 0.8 0.5 0.1	3.1 1.7 0.8 0.0	19.3 14.6 4.5 0.2	6 440 6 551 3 586 1 016
		1 639		2 814					5
		2		3 644					10
				1 360					2
0 97	3 38	76 219 393 74 343 2 392	175 676	5 115 1 599 304 266 3 315	809		2.0	22.0	15 2 5 727 8
1 1 0	3 3 3	4 017 4 939 2 254		14 430 21 208 11 945					33 38 44
	127	181 914		0	184				786
0 8 3 1 86 499	112 197 146 586	757 3 047 25 366 331 31 849 -3 658	281 983 447 910 312 296 770 285	160 5 885 17 500 526 33 803 5 162	2 462 1 485 3 078 11 138	1 0 2 0	2.0 2.7 3.3 7.7	29 31 75 63	4 038 7 578 12 531 27 544
0 201	489	6 96 109	906 791	19 10 572	7 621	12	5.9	81	23 326
299 3	711	26 162 1 492	1 553 587	339 226 11	8 850	53	15.8	100	20 398
1 0	1	709 19 349 0 4 543		28 203 1 363 43 142 12 344	571 93 587		0.2	5.9	667 503 982 23
25	698	20 079	308 733	157 775	145		2.9		310
4 372	10 755	3 054 481	13 226 934	2 117 181	108 294	554	120	1 195	304 559
25	698	20 079	308 733	157 775	145		2.9		310
 4 397	11 453	3 074 561	13 535 667	2 274 956	108 439	554.2	122.9	1 195.5	304 869

Products: ① newsprint and magazine paper ② fine paper ③ board and packaging paper ④ market pulp ⑤ converted products (e.g. cores, inpregnated laminating paper, corrugated board) ⑥ wood products ⑦ red paint pigment

GRI table

This report follows the Global Reporting Initiative's (GRI) G3 guidelines and meets the GRI B+ level standard. The table below shows how and where the GRI indicators are adressed. An extended version of the GRI table can be found at www.storaenso.com/sustainabilityreport.

SP = Stora Enso Sustainability Report 2010
FP = Stora Enso Financial Performance Report 2010
CG = Stora Enso Corporate Governance Report 2010

- Fully reported
- Partially reported

	Location	Level
PROFILE		
1. STRATEGY AND ANALYSIS		
1.1 Statement from the CEO	SP pages 6-7	•
1.2 Description of key impacts, risks and opportunities	SP pages 2–3, 6–7	•
2. ORGANISATIONAL PROFILE		
2.1 Name of the organisation	SP page 1	•
2.2 Primary brands, products and/or services	SP page 1	•
2.3 Operational structure of the organisation	SP page 1, FP page 50	•
2.4 Location of headquarters	SP back cover	•
2.5 Countries in which the organisation's operations are located	SP pages 1, 2–3	•
2.6 Nature of ownership and legal form	SP page 1	•
2.7 Markets served	SP pages 1, 16–17	•
2.8 Scale of the reporting organisation	SP page 1, FP page 35	•
2.9 Significant changes during the reporting period	SP page 23. Kotka Mill was sold in 2009.	•
2.10 Awards received during the reporting period	SP pages 5, 6–7	•
3. REPORT PARAMETERS		
Report profile		
3.1 Reporting period	1 January 2010-31 December 2010	•
3.2 Date of most recent previous report	25 February 2010	•
3.3 Reporting cycle	SP page 9 (annual)	•
3.4 Contact point for questions	SP back cover	•
Report scope and boundary		
3.5 Process for defining report content	SP page 10	•
3.6 Boundary of the report	Extended GRI table	•
3.7 Specific limitations on the scope or boundary	Extended GRI table	•
3.8 Basis for reporting on joint ventures, subsidiaries etc	Extended GRI table	•
3.9 Data measurement techniques	Extended GRI table	•
3.10 Explanation of the effect of any re-statements of information	Extended GRI table	•
3.11 Significant changes in the scope, boundary, or measurement methods applied	Extended GRI table	•
Assurance		
3.13 Policy and practice with regard to external assurance	SP pages 9, 48	•
4. GOVERNANCE, COMMITMENTS AND ENGAGEMENT		
Governance		
4.1 Governance structure	CG page 2	•
4.2 Position of the chair of the board of directors	CG page 2, Extended GRI table	•
4.3 Independent, non-executive directors on the board of directors	CG page 4	•
4.4 Mechanisms for shareholders and employees to provide recommendations to the board of directors	CG page 3, Extended GRI table	•
4.5 Executive compensation	CG pages 4, 6, 7, 9-13, Extended GRI table	•
4.6 Avoiding conflicts of interest	CG pages 4, 14	•

	Location	Level
4.7 Determining the qualifications and expertise board members need for guiding	Extended GRI table	•
strategy on sustainability		
4.8 Mission or values statements, codes of conduct, sustainability principles	SP page 8	•
4.9 Board-level procedures overseeing sustainability performance	SP page 8, Extended GRI table	•
4.10 Evaluating board performance with respect to sustainability performance	CG pages 4, 5, Extended GRI table	•
Commitments to external initiatives		
4.11 Addressing the precautionary approach or principle	SP pages 9, 17	•
4.12 External charters, principles or initiatives endorsed	SP pages 5, 6–7, 9	•
4.13 Memberships in associations	SP page 11	•
Stakeholder engagement		
4.14 List of stakeholder groups engaged	SP pages 10–11	•
4.15 Identification and selection of stakeholders	SP pages 10–11, Extended GRI table	•
4.16 Approaches to stakeholder engagement	SP pages 10–11, Extended GRI table	•
4.17 Responding to key topics resulting from stakeholder engagements	SP pages 10–11	•
5. PERFORMANCE INDICATORS		
ECONOMIC INDICATORS		
Economic performance		
EC1 Direct economic value generated and distributed	SP pages 16–17, Extended GRI table	•
EC2 Risks and opportunities due to climate change	SP pages 38–41, FP page 30	0
EC3 Coverage of defined benefit plan obligations	FP pages 89-93	•
EC4 Significant financial assistance from government	FP pages 3, 60	0
ENVIRONMENTAL INDICATORS		
Materials		
EN1 Materials used by weight or volume	SP page 34	•
EN2 Recycled materials used	SP pages 24, 29	•
Energy		
EN3 Direct energy consumption	SP pages 38-40	•
EN4 Indirect energy consumption	SP pages 38–40	•
EN5 Energy saved through conservation and efficiency improvements	SP pages 38-40	•
EN6 Initiatives to provide energy-efficient or renewable energy based products	SP pages 38–40	•
EN7 Initiatives to reduce indirect energy consumption	SP pages 38-40	0
Water		
EN8 Total water withdrawal	SP page 32	•
EN9 Water sources significantly affected	SP page 32, Extended GRI table	•
EN10 Total recycling and reuse of water	SP page 32	0
Biodiversity		
EN11 Location and size of land holdings in biodiversity-rich habitats	SP page 27	•
EN13 Habitats protected or restored	SP pages 26–28	0
EN14 Managing impacts on biodiversity	SP pages 26–28	0
Emissions, effluents and waste		
EN16 Total direct and indirect greenhouse gas emissions	SP pages 40–41	•
EN18 Initiatives to reduce greenhouse gas emissions	SP pages 40–41	•
$\mathrm{EN20~NO_{x^{\prime}}}$ $\mathrm{SO_{x}}$ and other significant air emissions	SP pages 33, 35	0
EN21 Total water discharge	SP pages 33, 42–43	•
EN22 Total amount of waste	SP page 34	0
EN23 Significant spills	SP page 34	•
EN24 Transported, imported, exported or treated hazardous waste	SP page 34	0
Products and services		
EN26 Mitigating environmental impacts of products and services	SP pages 12–15	0
Compliance		
EN28 Fines and sanctions for non-compliance with environmental regulations		•
Transport	SP page 36	
	SP page 36	
EN29 Environmental impacts of transportation	SP page 36 SP pages 30–31	0
EN29 Environmental impacts of transportation Overall		0

	Location	Level
SOCIAL INDICATORS		
LABOUR PRACTICES AND DECENT WORK		
Employment		
LA1 Breakdown of workforce	SP pages 22–23	0
LA2 Breakdown of employee turnover	SP pages 22–23	0
_A3 Employee benefits	SP pages 16–17	0
_abour/management relations		
LA4 Coverage of collective bargaining agreements	SP page 22	•
Occupational health and safety		
_A6 Workforce representation in joint health and safety committees	SP page 20	•
_A7 Injuries, lost days, absentee rates and fatalities	SP pages 20–21. We have not identified significant absenteeism due to occupational disease.	•
Training and education		
_A10 Average hours of training per year per employee	SP pages 22–23	0
A11 Programmes for skills management and lifelong learning to support continued employability and manage career endings	SP pages 22–23	0
A12 Employees receiving performance and career development reviews	SP page 22	•
Diversity and equal opportunity		
LA13 Composition of governance bodies and employee breakdown	SP pages 22-23, CG pages 16-19	•
HUMAN RIGHTS		
nvestment and procurement practices		
HR1 Human rights screening or clauses included in significant investment agreements	SP pages 9, 16–17	0
HR2 Screening suppliers and contractors on human rights and actions taken	SP page 30	0
HR3 Employee training on human rights	SP page 18 (Code of Conduct training, which takes aproximately 45 minutes to complete)	•
Non-discrimination		
HR4 Actions taken in incidents of discrimination	SP page 18 (Code of Conduct grievance mechanism)	•
Freedom of association and collective bargaining		
HR5 Supporting right to freedom of association and collective bargaining in risk areas	SP pages 22–23	•
Child labour		
HR6 Measures taken to eliminate child labour in risk areas	SP page 19	0
Forced and compulsory labour		
HR7 Measures taken to eliminate forced and compulsory labour in risk areas	SP page 19	0
ndigenous rights		
HR9 Violations of indigenous people's rights and actions taken	SP page 28. No violations have ocurred.	•
SOCIETY	. · ·	
Community		
SO1 Management of impacts on communities in areas affected by activities	SP pages 16–17	•
Corruption	. 100	
SO3 Anti-corruption training	SP page 18 (Code of Conduct training)	•
Public policy	. 5 ,	
SO6 Contributions to political parties, politicians and institutions	Extended GRI table	•
Anti-competitive behaviour		
SO7 Anti-trust and monopoly court cases	Extended GRI table	•
Compliance		
SO8 Fines and sanctions for non-compliance with laws and regulations	Extended GRI table	•
PRODUCT RESPONSIBILITY		-
Customer health and safety PR1 Assessment of health and safety impacts of products	SP page 14	_
PR1 Assessment of health and safety impacts of products	SP page 14	•
Product and service labelling	CD nore 15 (Denov nin-file-)	_
PR3 Product information required by procedures	SP page 15 (Paper profiles)	•



Statement GRI Application Level Check

GRI hereby states that **Stora Enso Oyj** has presented its report "Global Responsibility, Sustainability Report 2010" to GRI's Report Services which have concluded that the report fulfills the requirements of Application Level B+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

15 February 2011, Amsterdam

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because Stora Enso Oyj has submitted (part of) this report for external assurance. GRI accepts the reporter's own judgment for choosing its assurance Provider and for deciding the scope of the assurance.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 4 February 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

Independent Assurance Statement to the Management and Stakeholders of Stora Enso

Scope and Objectives

The Management of Stora Enso has commissioned us to perform a limited assurance engagement on the Sustainability Performance Report 2010 ("Report"). The assurance engagement was conducted in accordance with the AA1000 Assurance Standard (2008). We have performed a limited assurance engagement, the objective of which was to evaluate:

- Stora Enso's adherence to the AA1000 Accountability Principles of inclusivity, materiality and responsiveness,
- Reliability of performance information presented in the Report according to the Quality of Information Principles defined in the Global Reporting Initiative Guidelines, and
- · GRI application level of the Report.

Responsibilities of the Management of Stora Enso and Assurance Providers

Stora Enso's Management is responsible for the preparation of the Report, the presented performance data including statements expressed within the Report; and has approved them. The reporting criteria used for our assessment are the Global Reporting Initiative Guidelines and Stora Enso's internal responsibility reporting guidelines. Our responsibility is to express a conclusion on the information disclosed in the Report based on our work performed.

Assurance Provider's Independence and Competence

An assurance provider is required to be independent and impartial from the reporting organization. We were not involved in the preparation of the Report, and have no other engagement with Stora Enso during the reporting year. In 2007-2008 we have assisted Stora Enso to implement a Group level data consolidation system (SDM) for environmental performance data. As a part of this assurance engagement the SDM system was reviewed by an independent Certified Information System Auditor. Our assurance team consists of competent and experienced responsibility reporting and assurance experts, who have necessary skills to perform an assurance process. Further information, including a statement of competencies related to the team can be found at: www.tofuture.eu.

Basis of Our Opinion and Limitations

An assurance process is required to be planned and performed in a way in which the assurance provider collects adequate evidence for the conclusion. The procedures selected depend on the assurance provider's judgement; including the assessment of the risk of material misstatement adhere to the reporting criteria. We have performed the following procedures:

- Assessment of Stora Enso's procedures in place to adhere to principles
 of stakeholder inclusivity, materiality and responsiveness.
- Evaluation of performance information presented in the Report against stakeholder expectations. For this purpose we have conducted a materiality test and collected 27 external and 26 internal experts' views on material stakeholder expectations for Stora Enso.
- Interviews with managers responsible for performance data collection at Group level and in selected sites.
- Review of Group level systems and procedures to generate, collect and report performance data for the Report.
- Evaluation of Group level calculations and data consolidation procedures and internal controls to ensure data accuracy.
- Review of data sources, data generation and reporting processes at Veitsiluoto Mills in Finland and Wood Supply in Sweden.

Conclusions

Adherence to AA1000 Accountability Principles

- Inclusivity: Stora Enso was found to have systems in place for stakeholder involvement, and the company has made a commitment to stakeholder dialogue
- Materiality: Stora Enso has defined material sustainability reporting issues as a part of the Stora Enso sustainability governance and management
- Responsiveness: Stora Enso has adequate policies, guidelines and procedures in place to respond to stakeholder's expectations

Reliability of Performance Information

We have reviewed the basis of the sustainability information in the report. Based on the review, nothing has come to our attention that would suggest, that the report does not give, in all material issues, a fair and balanced view of Stora Enso's sustainability performance, and that the information presented is not, in all material issues, reliable based on the reporting criteria.

GRI Application Level

The Report corresponds to the GRI application level B+

Observations and Recommendations

Based on our limited level assurance engagement, we present the following observations and recommendations, which do not affect our conclusion presented above.

- Stora Enso has systems and controls in place to collect and consolidate Group level sustainability data. Data collection is based on distinct processes, which could be better integrated for sustainability management purposes. We recommend integrating all the sustainability data gathering processes into a common, streamlined process, which is completely documented in order to confront reporting risk management and change management issues. Furthermore systematic data gathering and analysing procedures, improved documentation on Group level occupational health and safety (OHS) and human resources (HR) data can be developed.
- Based on materiality analysis there are several business critical sustainability issues in which Stora Enso has responded. Primary concerns to Stora Enso's stakeholders are the environmental performance of mills, origin of wood, forest certification, environmental and social impacts of plantations. We encourage Stora Enso to progress intensively with the new Global Responsibility approach to global stakeholder engagement including forest certification, plantation and land ownership issues.
- Sustainability governance and management in Stora Enso is firmly established. Stora Enso's sustainability reporting has been developed incrementally. We encourage Stora Enso to establish even more challenging targets for environmental performance and further increasing efforts to meet the targets regarding OHS performance.

Espoo, 4th February 2011 Tofuture Oy | Sustainability Assurance

Mikael Niskala Director of Assurance Practice Jani Alenius Senior Assurance Practitioner





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It should be noted that certain statements herein which are not historical facts, including, without limitation those regarding expectations for market growth and developments; expectations for growth and profitability; and statements preceded by "believes", "expects", "anticipates", "foresees", or similar expressions, are forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Since these statements are based on current plans, estimates and projections, they involve risks and uncertainties, which may cause actual results to materially differ from those expressed in such forward-looking statements. Such factors include, but are not limited to: (1) operating factors such as continued success of manufacturing activities and the achievement of efficiencies therein, continued success of product development, acceptance of new products or services by the Group's targeted customers, success of the existing and future collaboration arrangements, changes in business strategy or development plans or targets, changes in the degree of protection created by the Group's patents and other intellectual property rights, the availability of capital on acceptable terms; (2) industry conditions, such as strength of product demand, intensity of competition, prevailing and future global market prices for the Group's products and the pricing pressures thereto, price fluctuations in raw materials, financial condition of the customers and the competitors of the Group, the potential introduction of competing products and technologies by competitors; and (3) general economic conditions, such as rates of economic growth in the Group's principal geographic markets or fluctuations in exchange and interest rates.



Facts & Figures – Stora Enso 2010

Offers basic information for the shareholder about Stora Enso's financial performance and proposed dividend, as well as gives Annual General Meeting, publication and other important dates.

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Read more at:

www.storaenso.com/globalresponsibility

Send your feedback to: sustainability@storaenso.com



Financial Performance – Stora Enso Financial report 2010

Contains in-depth information about Stora Enso's financial performance, corporate governance as well as the capital markets. Includes consolidated financial statements and notes, and the report of the Board of Directors.