

The Stora Enso sustainability performance 2009 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 addressed.



SP = Sustainability Performance 2009

SE = Stora Enso 2009

FP = Financial Performance 2009

● Fully reported

○ Partially reported

● Not reported

	Location	Level
<b>PROFILE</b>		
<b>1. STRATEGY AND ANALYSIS</b>		
1.1	Statement from the CEO	SP pages 2–3 ●
1.2	Description of key impacts, risks and opportunities	SP pages 2–7 ●
<b>2. ORGANISATIONAL PROFILE</b>		
2.1	Name of the organisation	SP page 1 ●
2.2	Primary brands, products and/or services	SP page 1, SE pages 2–3 ●
2.3	Operational structure of the organisation	SE pages 2–3 ●
2.4	Location of headquarters	SP back cover ●
2.5	Countries in which the organisation's operations are located	SP page 1, SE pages 2–5 ●
2.6	Nature of ownership and legal form	SP page 1, FP inside front cover ●
2.7	Markets served	SP page 1, SE pages 2–3 ●
2.8	Scale of the reporting organisation	SP page 1, SE pages 2–4, 44 ●
2.9	Significant changes during the reporting period	SE pages 2–13 ●
2.10	Awards received during the reporting period	SP pages 6–7 ●
<b>3. REPORT PARAMETERS</b>		
<b>Report profile</b>		
3.1	Reporting period	SP pages 6–7 ●
3.2	Date of most recent previous report	25 February 2009 ●
3.3	Reporting cycle	SP pages 6–7 ●
3.4	Contact point for questions	SP back cover ●
<b>Report scope and boundary</b>		
3.5	Process for defining report content	SP pages 10–11 ●
3.6	Boundary of the report	The consolidated performance data includes the parent company, Stora Enso Oyj, and all companies in which we hold, directly or indirectly, over 50% of the voting rights. Associated companies are not included in the consolidated performance data. These companies represent undertakings in which the Group has significant influence, but which it does not control (see FP pages 77–78). ●
3.7	Specific limitations on the scope or boundary	Consolidated environmental performance data covers all production units. Sales offices and staff functions are excluded. Consolidated OHS performance data covers 26 570 employees. Some smaller staff functions and sales offices are not included in the OHS data. Average and total numbers of employees are derived from financial accounting, and cover all employees on the payroll during the year. Other Human Resources (HR) data is derived from separately collected HR statistics, and covers permanent employees as of 31 December 2009. ●

	Location	Level	
3.8	Basis for reporting on joint ventures, subsidiaries etc	As the joint venture Veracel in Brazil, of which Stora Enso owns 50%, has attracted attention among stakeholders, we report here on the most critical stakeholder issues with relation to Veracel. Data from Veracel is not consolidated into the performance data of Stora Enso as a whole. Efora Oy, of which Stora Enso owns 51% and ABB 49%, and which provides maintenance services to Stora Enso mills in Finland, is not included in the consolidated performance data. The related joint venture agreement defines Efora Oy as an ABB company. Outsourced operations are not included in the consolidated performance data unless specifically indicated.	•
3.9	Data measurement techniques	See below.	•
3.10	Explanation of the effect of any re-statements of information	This is reported in connection with each indicator as relevant. As a general principle for environmental performance data we remove emissions from divested sites from the baseline, and add emissions from acquired sites to the baseline. In cases involving organic growth or mill closures, baselines are not changed.	•
3.11	Significant changes in the scope, boundary, or measurement methods applied	There have been no significant changes since the last report.	•
<b>Assurance</b>			
3.13	Policy and practice with regard to external assurance	SP pages 8–9, 43	•
<b>4. GOVERNANCE, COMMITMENTS AND ENGAGEMENT</b>			
4.1	Governance structure	FP pages 8–15	•
4.2	Position of the chair of the board of directors	FP pages 8–15	•
4.3	Independent, non-executive directors on the board of directors	FP pages 8–15	•
4.4	Mechanisms for shareholders and employees to provide recommendations to the board of directors	FP pages 8–15. All shareholders have the right to make proposals to the shareholder meeting agenda within authority of the Annual General Meeting (AGM). All shareholders also have the right to present questions to the Board of Directors (BOD) and executive management at the AGM. There is no employee representation at board-level. However, the employee representatives meet the chairman and the vice chairman of the BOD and the CEO in connection with board meetings on a regular basis.	•
4.5	Executive compensation	FP pages 8–15, 61–63, 92–93. Remuneration is based on base salary, short term and long term incentives and pension. The short term incentive can include personal or team targets related to social and environmental performance.	•
4.6	Avoiding conflicts of interest	FP pages 8–15	•
4.7	Determining the qualifications and expertise board members need for guiding strategy on sustainability	The company has a nomination committee whose task it is to propose new board members. When preparing proposals the committee evaluates the specific needs of the Board of Directors, including also possible needs for sustainability related competencies, and takes those specific qualifications into account in their proposals.	•
4.8	Mission or values statements, codes of conduct, sustainability principles	SP pages 8–9, 28–29, 44	•
4.9	Board-level procedures overseeing sustainability performance	SP pages 8–9, FP pages 8–15. The board addresses sustainability issues when so is deemed necessary on a case by case basis.	•
4.10	Evaluating board performance with respect to sustainability performance	FP pages 8–15. The evaluation of the board's performance is generic in its nature and focuses mostly on working methods and not on any specific area in particular. However, if concerns relating to sustainability issues arise, the evaluation helps the board to identify those issues and bring them to the agenda.	•
<b>Commitments to external initiatives</b>			
4.11	Addressing the precautionary approach or principle	SP pages 8–9, 34–35	•
4.12	External charters, principles or initiatives endorsed	SP pages 10–11	•
4.13	Memberships in associations	SP pages 10–11	•
<b>Stakeholder engagement</b>			
4.14	List of stakeholder groups engaged	SP pages 10–11	•
4.15	Identification and selection of stakeholders	SP pages 10–11	•
4.16	Approaches to stakeholder engagement	SP pages 10–11	•
4.17	Responding to key topics resulting from stakeholder engagements	SP pages 10–11	•

	Location	Level
<b>5. MANAGEMENT APPROACH AND PERFORMANCE INDICATORS</b>		
<b>MANAGEMENT APPROACH TO ECONOMIC RESPONSIBILITY</b>		
<b>Goals and performance</b>	SE pages 1–13, 41–46	
<b>Policy</b>	SP page 44	
<b>Context</b>	SE pages 1–37	
<b>ECONOMIC INDICATORS</b>		
<b>Economic performance</b>		
EC1 Direct economic value generated and distributed	SP pages 34–35, FP pages 33, 35, 60, 66–67. Revenues from financial investments and sales of assets amounted to EUR 68.1 million. Operating costs excluding purchased materials and services totalled EUR 1 508.9 million.	●
EC2 Risks and opportunities due to climate change	SP pages 2–5, 24–27	○
EC3 Coverage of defined benefit plan obligations	FP pages 87–91	○
EC4 Significant financial assistance from government	FP page 58	○
<b>Market presence</b>		
EC5 Entry level wage compared to minimum wage		●
EC6 Spending on locally-based suppliers		●
EC7 Local hiring		●
<b>Indirect economic impacts</b>		
EC8 Infrastructure investments provided for public benefit		●
EC9 Significant indirect impacts		●
<b>MANAGEMENT APPROACH TO ENVIRONMENTAL RESPONSIBILITY</b>		
<b>Goals and performance</b>	SP pages 6–7, 12–17, 18–23, 24–27	
<b>Policy</b>	SP pages 8–9, 12–17, 18–23, 24–27, 44	
<b>Responsibility</b>	SP pages 8–9. EVP Wood Supply, Human Resources, Sustainability is responsible for environmental issues in the Group Executive Team. SVP Sustainability is responsible for the development, support and follow-up of environmental issues.	
<b>Training</b>	SP pages 18–23. Environmental performance is reported quarterly to the Group Executive Team. Sustainability as a whole is part of Stora Enso's internal management training programmes.	
<b>Monitoring</b>	SP pages 8–9, 18–23. Environmental performance is reported quarterly to the Group Executive Team.	
<b>Context</b>	SP pages 12–17, 18–23, 24–27	
<b>ENVIRONMENTAL INDICATORS</b>		
<b>Materials</b>		
EN1 Materials used by weight or volume	SP pages 18–23	●
EN2 Recycled materials used	SP pages 12–17	●
<b>Energy</b>		
EN3 Direct energy consumption	SP pages 24–27	●
EN4 Indirect energy consumption	SP pages 24–27	●
EN5 Energy saved through conservation and efficiency improvements	SP pages 24–27	●
EN6 Initiatives to provide energy-efficient or renewable energy based products	SP pages 24–27	●
EN7 Initiatives to reduce indirect energy consumption	SP pages 24–27	○
<b>Water</b>		
EN8 Total water withdrawal	SP pages 18–23	●
EN9 Water sources significantly affected		●
EN10 Total recycling and reuse of water	SP pages 18–23	○
<b>Biodiversity</b>		
EN11 Location and size of land holdings in biodiversity-rich habitats	SP pages 12–17	●
EN12 Significant impacts on biodiversity in protected areas and biodiversity-rich areas outside protected areas		●
EN13 Habitats protected or restored	SP pages 12–17	○
EN14 Managing impacts on biodiversity	SP pages 12–17	○

	Location	Level
EN15 Species with extinction risk with habitats in areas affected by operations		●
<b>Emissions, effluents and waste</b>		
EN16 Total direct and indirect greenhouse gas emissions	SP pages 24–27	●
EN17 Other relevant indirect greenhouse gas emissions		●
EN18 Initiatives to reduce greenhouse gas emissions	SP pages 24–27	●
EN19 Emissions of ozone-depleting substances		●
EN20 NO <sub>x</sub> , SO <sub>x</sub> and other significant air emissions	SP pages 18–23	○
EN21 Total water discharge	SP pages 18–23, 38–39	●
EN22 Total amount of waste	SP pages 18–23	○
EN23 Significant spills	SP pages 18–23	●
EN24 Transported, imported, exported or treated hazardous waste	SP pages 18–23	○
EN25 Water bodies and habitats affected by discharges of water		●
<b>Products and services</b>		
EN26 Mitigating environmental impacts of products and services	SP pages 36–37	○
EN27 Reclaimable products and reuse		●
<b>Compliance</b>		
EN28 Fines and sanctions for non-compliance with environmental regulations	SP pages 18–23	●
<b>Transport</b>		
EN29 Environmental impacts of transportation	SP pages 24–27	○
<b>Overall</b>		
EN30 Environmental expenditures	SP pages 18–23	○
<b>SOCIAL RESPONSIBILITY</b>		
<b>MANAGEMENT APPROACH TO LABOUR PRACTICES</b>		
<b>Goals and performance</b>	SP pages 6–9, 28–33	
<b>Policy</b>	SP pages 8–9, 28–33	
<b>Responsibility</b>	SP pages 8–9. EVP Wood Supply, Human Resources and Sustainability is responsible for labour practice issues in the Group Executive Team.	
<b>Training</b>	Health and safety performance is reported quarterly to the Group Executive Team and mill management. Sustainability as a whole is part of Stora Enso's internal management training programmes. Health and safety and other labour practices form part of the Code of Conduct training which all Stora Enso employees have to take.	
<b>Monitoring</b>	SP pages 30–31. Health and safety performance is reported quarterly to the Group Executive Team and mill management.	
<b>Context</b>	SP pages 28–29, 30–31, 32–33	
<b>SOCIAL INDICATORS: LABOUR PRACTICES</b>		
<b>Employment</b>		
LA1 Breakdown of workforce	SP pages 32–33	○
LA2 Breakdown of employee turnover	SP pages 32–33	○
LA3 Employee benefits	SP pages 34–35, FP pages 60, 87–93	○
<b>Labour/management relations</b>		
LA4 Coverage of collective bargaining agreements	SP pages 32–33	○
LA5 Minimum notice period regarding operational changes		●
<b>Occupational health and safety</b>		
LA6 Workforce representation in joint health and safety committees	SP pages 30–31	●
LA7 Injuries, lost days, absentee rates and fatalities	SP pages 30–31. We have not identified any significant absenteeism due to occupational illnesses. Minor injuries that do not lead to lost time are monitored and tracked at site level, but not reported in overall Group figures.	●
LA8 Programmes to assist workforce members regarding serious diseases		●
LA9 Health and safety topics covered in trade union agreements		●
<b>Training and education</b>		
LA10 Average hours of training per year per employee	SP pages 32–33	○

	Location	Level
LA11 Programmes for skills management and lifelong learning to support continued employability and manage career endings	SP pages 32–33	○
LA12 Employees receiving performance and career development reviews		●
<b>Diversity and equal opportunity</b>		
LA13 Composition of governance bodies and employee breakdown	SP pages 32–33, SE pages 38–39. We do not collect data on minority membership, since definitions of minorities can be subjective, and in some countries it is illegal to compile such data.	●
LA14 Ratio of basic salary of men to women		●
<b>MANAGEMENT APPROACH TO HUMAN RIGHTS</b>		
<b>Goals and performance</b>	SP pages 6–7. To train all Stora Enso employees in the Code of Conduct; to implement Code of Conduct compliance follow-up in 2010; five supplier audits to be conducted in 2010 to ensure supplier compliance with Stora Enso's sustainability requirements (where respect for human and labour rights are a key element.)	
<b>Policy</b>	SP pages 8–9, 28, 44	
<b>Responsibility</b>	SP pages 8–9. EVP Wood Supply, Human Resources and Sustainability is responsible for human rights issues in the Group Executive Team. SVP Sustainability is responsible for the development, support and follow-up of human rights issues.	
<b>Training</b>	Sustainability as a whole is part of Stora Enso's internal management training programmes. Human and labour rights are part of the Code of Conduct training which all Stora Enso employees have to take.	
<b>Monitoring</b>	SP pages 28–29. 80% of employees have been trained in the Code of Conduct; provision of an anonymous and confidential grievance channel as part of the Code of Conduct.	
<b>Context</b>	SP pages 28–29, 31	
<b>SOCIAL INDICATORS: HUMAN RIGHTS</b>		
<b>Investment and procurement practices</b>		
HR1 Human rights screening or clauses included in significant investment agreements	SP pages 8–9, 34–35	○
HR2 Screening suppliers and contractors on human rights and actions taken		●
HR3 Employee training on human rights	SP pages 28–29. The Code of Conduct course takes approximately 45 minutes to complete.	●
<b>Non-discrimination</b>		
HR4 Actions taken in incidents of discrimination		●
<b>Freedom of association and collective bargaining</b>		
HR5 Supporting right to freedom of association and collective bargaining in risk areas	SP pages 32–33	●
<b>Child labour</b>		
HR6 Measures taken to eliminate child labour in risk areas	SP pages 28–29	●
<b>Forced and compulsory labour</b>		
HR7 Measures taken to eliminate forced and compulsory labour in risk areas	SP pages 28–29	●
<b>Security practices</b>		
HR8 Human rights training for security personnel		●
<b>Indigenous rights</b>		
HR9 Violations of indigenous people's rights and actions taken	No violations have occurred.	●
<b>MANAGEMENT APPROACH TO SOCIETY</b>		
<b>Goals and performance</b>	SP pages 6–7, 28–29, 34–35	
<b>Policy</b>	SP pages 8–9, 28–29, 34–35	
<b>Responsibility</b>	SP pages 8–9. SVP Sustainability, the Group General Council and SVP Internal Audit share responsibility for issues related to society.	
<b>Training</b>	SP pages 28–29. Business practice is part of the Code of Conduct training which all Stora Enso employees have to take. Sustainability as a whole is part of Stora Enso's internal management training programmes.	
<b>Monitoring</b>	SP pages 8–9, 28–29. 80% of employees trained in the Code of Conduct; provision of an anonymous and confidential grievance channel as part of the Code of Conduct.	
<b>Context</b>	SP pages 28–29, 34–45	

	Location	Level
<b>SOCIAL INDICATORS: SOCIETY</b>		
<b>Community</b>		
SO1 Management of impacts on communities in areas affected by activities	SP pages 34–35	●
<b>Corruption</b>		
SO2 Business unit analyzed for corruption risks		●
SO3 Anti-corruption training	SP pages 28–29	●
SO4 Actions taken in response to incidents of corruption		●
<b>Public policy</b>		
SO5 Public policy development and lobbying		●
SO6 Contributions to political parties, politicians and institutions	SP pages 28–29	●
<b>Anti-competitive behaviour</b>		
SO7 Anti-trust and monopoly court cases	SP pages 28–29	●
<b>Compliance</b>		
SO8 Fines and sanctions for non-compliance with laws and regulations	SP pages 28–29	●
<b>MANAGEMENT APPROACH TO PRODUCT RESPONSIBILITY</b>		
<b>Goals and performance</b>	SP pages 36–37	
<b>Policy</b>	SP pages 8–9, 36–37	
<b>Responsibility</b>	SP pages 8–9. Each business area has responsibility for their own products, marketing and sales.	
<b>Training</b>	Sustainability as a whole is part of Stora Enso's internal management training programmes.	
<b>Monitoring</b>	SP pages 36–37. Mills producing significant amounts of food contact materials or other sensitive materials have product hygiene and safety management systems in place.	
<b>Context</b>	SP pages 36–37	
<b>SOCIAL INDICATORS: PRODUCT RESPONSIBILITY</b>		
<b>Customer health and safety</b>		
PR1 Assessment of health and safety impacts of products	SP pages 36–37	●
PR2 Non-compliance with regulations concerning health and safety impacts of products		●
<b>Product and service labelling</b>		
PR3 Product information required by procedures	SP pages 36–37	●
PR4 Non-compliance with regulations concerning product information and labelling		●
PR5 Customer satisfaction		●
<b>Marketing Communications</b>		
PR6 Adherence to marketing communications laws, standards and voluntary codes		●
PR7 Non-compliance with marketing communications regulations and voluntary codes		●
<b>Customer privacy</b>		
PR8 Complaints regarding breaches of customer privacy		●
<b>Compliance</b>		
PR9 Fines for non-compliance concerning the provision and use of products and services		●

# Data measurement techniques

## Wood volumes

Wood delivered to Stora Enso is measured in different ways, depending on the country, region, assortment and mill. Measurement methods are either defined in national regulations, or in absence of such regulations, mutually agreed in the purchasing contracts made with suppliers. For corporate reporting, Stora Enso converts the different invoicing units (e.g. loose cubic meter, dry ton, green ton) into solid cubic meters under bark by applying site-specific conversion factors (available upon request). Under bark means that the bark is not included in the volumes.

## Environmental indicators

All environmental parameters included in our Sustainability Performance report 2009 have been collected using the Sustainability Data Management System (SDM). Data measurement techniques vary between units, in order to comply with national legislation, but are converted where necessary to ensure consistent corporate reporting. Mill-specific conversion factors are available on request. For data sets where conversions are used to produce the consolidated data, the techniques are described below.

## Water discharges

Stora Enso reports consolidated performance parameters for its effluent discharges in terms of flow, Chemical Oxygen Demand (COD), Nitrogen (N),  $AO_x$  and Phosphorus (P) in tonnes. Reported mill discharge parameters are calculated from continuous sampling and flow rates.

National regulatory requirements specify methods for monitoring effluents. Where mills measure organic releases such as COD, these are reported directly into the SDM system. Where releases are measured as Total Organic Carbon (TOC), a mill-specific conversion factor is used to convert figures to COD for reporting into the SDM system.

Where mills discharge their waste water via an external treatment facility, the values of the parameters disclosed by Stora Enso describe the final treated effluent being discharged. Process water discharge flow is measured continuously using flow meters.

## Emissions to air

Stora Enso reports consolidated performance parameters for emissions to air in terms of  $SO_2$  and  $NO_x$  in tonnes. National regulatory requirements specify methods for monitoring emissions to air. Where necessary, these are converted to allow consistent corporate reporting.

Total sulphur, reported as  $SO_2$ , is normally measured online and consolidated directly. Weak odorous sulphur gases from pulp

production are either measured online, or estimated based on spot-check measurements and reported as elemental sulphur. Unit data is converted to  $SO_2$  by the stoichiometric relationship to sulphur before consolidation.

Total Nitrogen Oxides ( $NO_x$ ) is normally measured online and reported as  $NO_2$ .  $NO_x$  is a generic term for mono-nitrogen oxides (NO and  $NO_2$ ). In the presence of excess oxygen ( $O_2$ ), nitric oxide (NO) will be converted to nitrogen dioxide ( $NO_2$ ) over time. The measured NO is therefore converted to  $NO_2$  by the stoichiometric relationship to NO.

## Waste to landfill

Solid waste includes all solid wastes generated by mills or units (excluding hazardous waste) deposited in landfills owned by Stora Enso or licensed third parties. Waste is reported in tonnes in its dry state (100% solids).

## Hazardous waste

Hazardous waste is waste which has to be sent to special licensed treatment plants (owned by third parties) for safe disposal, and is classified as hazardous waste according to national legislation. Hazardous waste quantities are reported in metric tonnes as measured, and not corrected for moisture content.

## Residuals

Residuals are reported for each beneficial use. The residuals reported are ash, bark and wood handling waste, wood chips, sawdust, sludge, lime mud and green liquor dregs. Residuals are reported in their dry state (100% solids). In the absence of mill-specific dry content and volume-to-weight conversion factors, the following conversion factors are used:

- Chips 1 m<sup>3</sup> loose volume=0.136 dry t
- Sawdust 1 m<sup>3</sup> loose volume=0.130 dry t
- Bark 1 m<sup>3</sup> loose volume=0.128 dry t
- Cutter shavings 1 m<sup>3</sup> loose volume=0.11 t (90-95% dry content)

Methanol, sludge, tall oil and turpentine are defined as external residuals if the company gains income from them, or if they are used to replace some other material. Figures should be reported as 100% free of water.

## Greenhouse gases

Stora Enso reports consolidated performance parameters for emissions to air in terms of greenhouse gases (GHG) in tonnes. GHG are calculated utilising the World Business Council for Sustainable Development's (WBCSD) Greenhouse Gas Protocol.  $CO_2$  data for Scope 1 and 2 are consolidated for all units. Other GHGs such as  $N_2O$  and  $CH_4$  are also calculated and included in Scope 1. Scope 3 includes emissions from

other indirect sources: the harvesting, the 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 CO<sub>2</sub> per unit production in 2008.

## **Social responsibility indicators**

### **Code of Conduct training**

The Code of Conduct training completion rate is calculated as a weighted average of the completion rate in each unit. The % covers permanent and temporary employees. Those employees not covered by the reporting (3 511 out of 27 709) have been calculated as not having completed the course. The Code of Conduct training for management covers the period from October 2008 until the end of the year 2009. Management consists of 939 top management employees. The Code of Conduct training for non-management employees covers training completed during 2009. This group consists of 26 770 employees.

### **Lost-time accident rate**

Lost-time accident (LTA) rate is the number of lost-time accidents (accidents resulting in sick days counting from the next working day) per one million actual working hours (the total number of working hours at the unit as recorded in worktime record keeping).

### **Attendance rate**

Attendance rate =  $100 - \% \text{ of work time absent due to sickness or accidents} (= \frac{\text{the number of hours on sick leave}}{\text{total theoretical working hours}} \times 100)$ .

### **Personnel turnover**

% of permanent employees leaving the company voluntarily, calculated against permanent and temporary employees as full-time equivalents.

### **Training days/employee**

Number of training days per permanent part-time and full-time employees.

### **Share of women**

% of women among permanent and temporary part-time and full-time employees.

### **Age distribution**

% of temporary and full-time employees belonging to a certain age group. 103 temporary employees are however not included in the calculations.

### **Employees by country**

Number of permanent and temporary employees by country, calculated as full-time equivalents.

### **Collective bargaining**

% of permanent and temporary employees covered by collective bargaining agreements. The units that report this figure cover 89% of employees.