The Volvo Group takes a holistic approach to sustainable development by delivering long-term profitability and value. This is a combination of taking responsibility and the lead on our corporate values quality, safety and environmental care. The aim with Volvo Group’s CSR work is to contribute to sustainable development.
Environmental performance

The Volvo Group is committed to minimising its environmental footprint. Measures are taken to reduce CO2 emissions, improve fuel efficiency, and evaluate alternative fuels such as biomass-derived products. This section presents information on the Group’s environmental performance for the reporting period. Further information on the Group’s environmental efforts can be found in the Sustainability Report.

Emission of CO2 per unit of sales

<table>
<thead>
<tr>
<th>Region</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>0.35</td>
<td>0.30</td>
<td>0.26</td>
</tr>
<tr>
<td>North America</td>
<td>0.35</td>
<td>0.31</td>
<td>0.26</td>
</tr>
<tr>
<td>Asia</td>
<td>0.35</td>
<td>0.30</td>
<td>0.25</td>
</tr>
<tr>
<td>South America</td>
<td>0.35</td>
<td>0.31</td>
<td>0.26</td>
</tr>
<tr>
<td>Africa and Oceania</td>
<td>0.35</td>
<td>0.30</td>
<td>0.25</td>
</tr>
</tbody>
</table>

The Volvo Group’s vision is to be valued as a world-leading supplier of transport solutions. Transports are essential for development and our responsibility is to provide society with transport solutions that reduce the negative environmental impact and contribute to social development.

The Volvo Group is one of the world’s leading manufacturers of trucks, buses and construction equipment. It is also in the forefront of hybrid technology, which offers numerous benefits, including reduced fuel consumption and lower emissions.

Focus on technology

The Volvo Group is a world-leading manufacturer of hybrid technology, which offers numerous benefits, including reduced fuel consumption and lower emissions.

Focus on service

The Volvo Group offers full-service solutions with a full-service package that differentiates it from competitors.

GRI summary

GRI (Global Reporting Initiative) is an independent organization that has drawn up global framework for sustainability reporting and performance. This framework sets out the principles and indicators that organizations can use to measure and report their environmental, economic, and social performance. The framework is voluntary. The table provides an overview of which GRI information is available in this publication, the Annual Report of the Volvo Group.
The Volvo Group's vision is to be valued as complete solutions for financing and service. The Group also provides components and services. The Group aims to be the world's leading supplier of commercial transportation solutions. Transports are essential to society and contribute to social and environmental impact and contribute to social development.

The Volvo Group is one of the world's leading manufacturers of trucks, buses and construction equipment. The Group also provides complete solutions for financing and service.

The Volvo Group, with about 100,000 employees, has production facilities in 19 countries and sells its products in more than 180 markets. Annual sales of the Volvo Group in 2008 amounted to about SEK 304 billion (about EUR 34 billion). The Volvo Group is a publicly traded company listed on the stock exchange in Sweden.

Approximately two thirds of the Volvo Group's net sales are related to sales of new vehicles and machines. The rest is from after-sales products such as service, financing and other services. The Volvo Group is available in the Annual Report and at our website.

GRI summary
GRI (Global Reporting Initiative) is an independent organization that has drawn up global framework for sustainability reporting and performance. This framework sets out the principles and indicators that organizations can use to measure and report their economic, environmental and social performance. The framework is voluntary. The table provides an overview of which the information is available in this publication, the Annual Report or at our website.

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>Demographic profile</td>
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<tr>
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<td>Human rights</td>
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<td>Production sites</td>
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<td>Sustainability impact, risk and opportunities</td>
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<td>Sustainability profile</td>
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<td>4–8, 36–37</td>
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<td>Stakeholders' engagement</td>
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<td>4–8, 11–13, 18, 25, 27, 29, 30</td>
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<td>Summary of data and computations</td>
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<td>Additional information</td>
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<td>38, 39</td>
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</table>

For additional information on other aspects of sustainability, please visit our website.

If you have questions regarding this report or the Volvo Group's CSR work, please contact: Malin Eklund, Supplier Responsibility, Volvo Group, Malin.Eklund@volvogroup.com.
Global presence

Volvo Group Sustainability Report 2008

The Volvo Group takes a holistic approach to sustainable development by delivering long-term profitability and value. This is a combination of taking responsibility and the lead on our corporate values quality, safety and environmental care. The aim with Volvo Group’s CSR work is to contribute to sustainable development.

Economic Responsibility

The Volvo Group focuses on providing products, services and transport solutions that offer maximum value from a sustainability perspective. By recognizing that our operations impact the environment, we continuously work with development in technology, renewable fuels, more efficient transport solutions as well as other aspects of the production and use of our products.

Environmental Responsibility

The Volvo Group is committed to sustainable business development and seeks to set the pace for the future. We believe that our operations are a key component in creating sustainable development.

Social Responsibility

Volvo's success is built on strong relationships between co-workers, customers and suppliers. The Group's approach to sustainable development is built on the basis of the Volvo Group's values, culture and corporate values.
**Profitable growth**

The Volvo Group’s goal is to report a growth rate of at least 10% annually and an operating margin in industrial operations of more than 7% over the business cycle. Profitable growth is needed for developing our business and to create values for our stakeholders. The operating margin in 2008 was 5.2%.

**Fuel efficiency**

Since 1975, fuel consumption for Volvo truck’s has declined by 40% corresponding to a reduction of carbon dioxide emissions of 40%. Through the introduction of a new hybrid driveline in our vehicles the fuel saving potential can be further improved. For example, for a city bus with a hybrid driveline, the fuel savings can be up to 30%.

**Employee Satisfaction Index (ESI)**

Volvo conducts a Group-wide employee survey each year. The purpose of this survey is to improve the working climate and the attractiveness of workplaces, and thereby increase profitability. The objective for 2008 is that not more than 8% of the working groups should score 45 or lower on the ESI. In the 2008 survey, 7.9% of the working groups scored lower than 45 and, therefore, these groups require external help to improve the working climate.
Sustainable development – part of our business

The Volvo Group has a long tradition of corporate responsibility. Over the years, we have faced challenges seemingly impossible to solve. However, as a result of hard work and decisiveness, today we have a history filled with examples of innovative products and services that solved the challenges we faced.

I believe that this is important to remember when we now face such major challenges as climate change and the global recession that has been worsened by the financial crisis.

It is my conviction that successful companies must focus on profitability as well as environmental issues and these do not need to be diametrically opposed. Although the world economy is weak, environmental efforts are as important as ever. Let me provide an example – fuel accounts for about one third of our customers’ costs and each step we can take to reduce fuel costs results in increased profitability for our customers, while simultaneously reducing the environmental impact. According, what can be good for the company in purely commercial terms, can be good for the environment, and what is good for the environment is also good for our own and our customers’ competitiveness. In our striving for more environmentally adapted and energy efficient vehicles, there are only winners.

In our efforts to meet our part of the climate challenge, we cooperate with many interested parties in the community. As an example, in 2007 we presented seven trucks that could all operate on renewable fuels. We have now taken this one step further and are carrying out a project that will demonstrate the entire technology chain, from biomass to trucks powered by BioDME, including fuel distribution and filling stations. All of the different parties needed to introduce a new fuel are collaborating in the project. Achieving sustainable transport solution requires cooperation such as this.

The Volvo Group comprises a broad spectrum of people with different backgrounds, experiences and perspectives. Through working together and benefiting from each other’s different experiences, the best ideas emerge. We are continuing to work actively with capitalizing on the strengths in the Group’s diversity so that we can attract talented people, create long-term relations with our customers and work together in the most effective manner.

The future involves great uncertainty, but I consider that conditions are highly favorable for us to cope with the challenges we face. Against the background of the decline in demand as a result of the recession and the global financial crisis, we have been required to implement savings at all levels and in all areas of our operations. Unfortunately, this has meant that we were forced to lay off employees. Now when we are in a difficult period, it is more important than ever to invest in leading development with regard to sustainable business operations. We will continue to be guided in the future by the principles in the UN’s Global Compact initiative. Active sustainability efforts are an important ingredient in the Volvo Group’s competitiveness and in our ability to create value for current customers and shareholders. This work also contributes to a development that creates value for future generations.

Leif Johansson
President and CEO
Volvo Group a part of the society

The Volvo Group’s vision is to be valued as the world’s leading supplier of commercial transport solutions. Transports are essential for development and our responsibility is to develop transport solutions that reduce negative environmental impact while contributing to social development.

Our Corporate values – quality, safety and environmental care – are the foundation of all our activities.

Corporate Social Responsibility (CSR) for the Volvo Group means to be a good corporate citizen and aim to contribute to sustainable development by taking social, ethical, economic and environmental responsibility for our business within our sphere of influence. Our Code of Conduct guides our business operations as regards appropriate business behavior.

Sustainable development means that our business shall comprise the three dimensions of environmental, social and economic development. It is about striving to meet the needs of present generations without compromising the possibility of future generations to meet their needs. The Volvo Group’s CSR work is carried out at three levels, entailing three different roles:

• Local actor with focus on our impact as employer and on the local society
• A provider of commercial transport solutions with focus on sustainable mobility
• A global corporation that contributes to global development by sharing knowledge, working in partnerships with customers, business partners, authorities, and other stakeholders.

The Volvo Group takes a holistic approach to sustainable development by delivering long-term profitability and value. This is a combination of taking responsibility for what we are doing and the lead in quality, safety and environmental care.

The Volvo Group’s corporate values and commitment to sustainable development are, and will continue to be, reflected, promoted and implemented in Group policies, decisions and actions.

The Volvo Group is dedicated to a long-term engagement for people and society and shall be the most attractive partner for our stakeholders.

The Volvo Group shall make a difference, by combining our efforts and strategies on continuous technical progress, human willpower and creativity.

The Volvo Group shall engage in an open dialogue with our stakeholders, aiming at enhancing sustainable transport solutions.

The Volvo Group shall develop business with integrity, and stand for trust through compliance, governance and transparency.
Issues in focus

We seek to be a good corporate citizen by focusing our work and efforts in areas in which we believe we can provide benefits in contributing to sustainable development. We have titled this publication "Global Presence", in which we identify three primary areas for our work with sustainability:

1. **Economic responsibility** – By creating customer value, we also create long-term value for our shareholders and for the societies in which we operate.

2. **Environmental responsibility** – By recognizing that our operations impact the environment, we continuously work with development in technology, renewable fuels, more efficient transport solutions as well as other aspects of the production and use of our products.

3. **Social responsibility** – Being an attractive partner, we strive to provide the best benefits for the Volvo Group’s employees, suppliers, customers, other stakeholders and the societies in which the Volvo Group is present.

About this report

This report addresses how the Volvo Group works to contribute to sustainable development. The objective is to present our work in a straightforward, transparent and informative manner intended for a wide audience. We present how the work is organized and what we are doing, together with key data. We view this report as a platform for creating internal and external dialogues with customers, suppliers, investors, employees, general public and other stakeholders. Our financial performance and work with corporate governance is presented in the Annual Report 2008 and therefore not extensively described in this report. When further reading is recommended and more information is available on our website, this is indicated by in this report.

Organizing our work with CSR issues

CSR within the Volvo Group comprises many aspects: financial, legal issues, environmental care, human resources, human rights, purchasing, involvement in society and other social aspects. Responsibility for the CSR performance and legal compliance follows the ordinary business responsibility in which the specific aspects are handled. At Group level there is a corporate function responsible for coordination and follow-up of CSR issues.

Volvo Group takes a position

To participate actively in society and to recognize new business opportunities, knowledge of the surrounding world and future trends in legislation is essential. The Volvo Group’s objective is to comply with legislation related to emissions, noise, vehicle weight and similar items and always enhance new technology in product development. To be able to speak with one voice, we formulate Volvo Group position papers on current important issues for our business.

The Volvo Group participates in different trade organizations and forums such as ACEA (European Automobile Manufacturer’s Association) and CECE (Committee for European Construction Equipment) in Europe as well as EMA (Engine Manufacturers Association) in the US and JAMA (Japan Automobile Manufacturers Association) in Japan.

Through proactive interaction, and by being informed about society's ambitions, such as future legislation and taxation schemes, the Volvo Group wants to create long-term competitive business conditions while together with other actors contributing to sustainable development.
Active stakeholder dialogue

The Volvo Group is open to an active exchange of information with stakeholders on various levels. Conducting a responsible business requires that we take different perspectives into account. This work is best presented by highlighting some of our engagements. The dialogue with employees takes place during daily work but also in formalized forums such as personal development plan discussions and employee surveys. All employees can pose questions directly to the Group’s CEO via the intranet. Furthermore, there are discussions with customers in daily contacts and more formally in customer focus groups in the development phase of new products. We engage in meetings with capital market, owners and suppliers. We also have well-developed relations with such groups as trade unions, universities and research institutions, media, non-governmental organizations (NGO), government agencies and other public actors. Due to the large number of stakeholders, we have not presented a list in this report.

CEO’s external engagements

The Volvo Group’s CEO, Leif Johansson, participates actively in different forums. He is the chairman of the ERT (European Roundtable of Industrialists) and the Swedish Delegation of Technology, in which the focus is to develop close relationships between the industry sector and schools to increase interest in mathematics, science and technology. The future success of the Volvo Group relies on being able to recruit competent people. The CEO is also a member of the Swedish Government’s Advisory Commission for Sustainable Development. The commission focuses on work with issues related to climate change. The CEO has stated that sustainability issues are important for the Volvo Group and that it is vital to contribute with as much knowledge as possible.
**Scorecard 2008**

Sustainable development means that our business shall internalize environmental, social and economic development dimensions. Development requires measurement and follow-up of certain indicators. More data is available in this report and at our website.

### Economic development

<table>
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<tr>
<th></th>
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<th>2007</th>
<th>2008</th>
<th>Result</th>
<th>Page</th>
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<tr>
<td>Growth in net sales, %</td>
<td>7</td>
<td>10</td>
<td>6</td>
<td>↑</td>
<td>31 AR</td>
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<tr>
<td>Operating margin, %</td>
<td>8.9</td>
<td>7.8</td>
<td>5.2</td>
<td>↑</td>
<td>31 AR</td>
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<tr>
<td>Number of vehicles delivered</td>
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<td>246,272</td>
<td>261,088</td>
<td>↑</td>
<td>151 AR</td>
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### Environmental development

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<tr>
<td>CO₂ intensity</td>
<td>1.1</td>
<td>1.0</td>
<td>1.2</td>
<td>↑</td>
<td>11</td>
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<tr>
<td>Greenhouse gas intensity</td>
<td>10.5</td>
<td>9.6</td>
<td>9.3</td>
<td>↑</td>
<td>11</td>
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<tr>
<td>Certified environmental management system, %</td>
<td>99</td>
<td>96</td>
<td>96</td>
<td>↑</td>
<td>10</td>
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### Social development

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<th>2008</th>
<th>Result</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>Satisfied employees, %</td>
<td>83</td>
<td>84</td>
<td>86</td>
<td>↑</td>
<td>26</td>
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<tr>
<td>Women, %</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>↑</td>
<td>26</td>
</tr>
<tr>
<td>Women in senior executive positions, %</td>
<td>15</td>
<td>15</td>
<td>17</td>
<td>↑</td>
<td>26</td>
</tr>
<tr>
<td>Awareness of Code of Conduct, %</td>
<td>na</td>
<td>74</td>
<td>81</td>
<td>↑</td>
<td>26</td>
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</table>

### Performance analysis

The Volvo Group’s orientation is on continued growth with a focus on profitability. The goal is to grow by 10% annually over a business cycle. Over the past five years, annual growth averaged 10.6%, and the average operating margin was 7.4%. The recession, which has been deepened by the financial crisis, has severely affected the automotive industry, and the growth and the operating margin declined during 2008.

CO₂ emissions increased during 2008, while energy consumption declined. After new acquisitions, we have included the own produced electricity in the data therefore the increase in CO₂ intensity. The goal is that the number of employees working in operations certified according to ISO 14001 will be 100%. The proportion of employees working in this type of operations in 2008 was 96%, which was the same level as in 2007. The result depends on new acquisitions where their own environmental management systems were implemented but not certified according to ISO 14001.

In the Group-wide employee survey Volvo Group Attitude Survey (VGAS), all employees are provided an opportunity to express their views on their jobs and what needs to be improved. The results for 2008 were received in March 2008 and showed that the number of satisfied employees increased.

The Volvo Group’s view on diversity is that it should serve as a source of competitiveness and profitability. The Volvo Group focuses on two measures to follow up work in this area: the proportion of female employees and the proportion of female managers. The proportion of women within the Group is stable, while the proportion of female managers increased and now corresponds to the figure for the total number of women in the company.
Transport development

The Volvo Group’s core business is providing transport solutions and services. Consequently, we seek to participate actively in discussing transport development and policy in different forums worldwide.

Transport development and policy relates to issues of sustainable mobility, accessibility, infrastructure, public and freight transport – long-distance and urban transport specifically. The transport system could be described as the blood circulation system of the economy and is a base for social welfare.

Currently, we are facing an expected world population increase to approximately 8 billion by 2020, which leads to an increased need for freight and public transport related services around the world. This population increase is parallel with a growing urbanization, which makes it important for large cities to have efficient urban transportation – reducing accidents and avoiding congestion, which in turn reduces emissions, as well as developing public transportation. Bus Rapid Transit (BRT) is one solution offered by Volvo Buses and is especially developed for Latin America.

Green corridors
Many transport routes in the world have become congested due to excessive traffic. The reason is usually an insufficient infrastructure resulting in decreased efficiency, higher costs, greater risk for accidents and increased pollution. In search for efficient freight transport systems, the Volvo Group in cooperation with the Swedish Government’s logistics forum has started an initiative of “green corridors concept” to realize the EU Commission’s vision of enhancing transports by environmental efficiency.

Through specially adapted transport corridors for heavy duty traffic, the goal is to reduce the impact on the environment while simultaneously increasing efficiency and safety on highways. For example, a “green corridor” can include goods transportation concentrated to efficient highways, sea routes and railways that complement one another. Additionally, applying the “green corridors” concept in urban areas could also provide an excellent possibility to create a public transport system for people and goods.

Modular concept
One way of optimizing long-haul transports is to use Modular Concept vehicles based on standardized modules. This concept aims at combining existing truck-trailer combinations differently, thus creating higher flexibility for adapting vehicles to varying traffic. Shorter vehicles could be replaced with longer vehicles when used on an appointed road network, which would increase transport efficiency and reduce the environmental impact.

In meeting future transport needs, all modes of transport such as rail, road, sea, inland waterways and air are necessary. To achieve effective transport systems, there is a need to embrace a holistic approach by taking the driver, vehicle, infrastructure and transport systems into account.

For more details, see our previous report and website. ☑
For the Volvo Group, sustainable development means that business shall comprise economic, environmental and social responsibility dimensions without compromising possibilities for future generations. Our history and future rest on sustainable business development. We believe that this approach creates long-term value for customers, society and shareholders. This section explains how the Volvo Group translates sustainable business into profitable growth.

This section describes how the financial development of the Volvo Group is connected to sustainable development. We need profitable growth to be able to invest in development, fulfill our responsibility as an employer and supplier and to fully contribute as an actor in society.

Economic downturn – A challenge during 2008

During 2008 the financial crisis affected economies worldwide. Business cycles are a reality for most companies and after years of increasing sales, the Volvo Group faced a weaker market. The uncertainty in the global economy increased and we were forced to adapt all operations and take extraordinary measures such as reducing the number of employees.

During a succession of good years the number of employees in the Group continued to increase. However, due to the decrease in demand during the second half of 2008 the Volvo Group gave notices of redundancy in Sweden, the United States, Australia, Brazil, Canada, France and Belgium among other countries. During 2008 and in the beginning of 2009 a total of 16,255 permanent and temporary employees as well as consultants received notices. Blue collar employees were affected the most. With regard to reductions among white collar employees, the stop of new recruiting introduced in some of the Volvo Group companies has helped. The Volvo Group has also reviewed and prioritized projects and tasks. An interrelated negative impact of such downsizing measures is that the focus on diversity in recruitment in recent years is negated due to the order of priority in redundancy (last in, first out).

Redundancies are difficult and demanding for everyone involved. In this situation it is highly important to respond to questions relating to labor legislation and the demands associated with ethics and communications. The affected employees are entitled to information the moment it is available. Managers receive training and assistance to enable them to handle the situation in the best possible manner.

Before any layoffs are carried out, there is extensive effort to find alternative solutions. In Sweden, for example, so-called flex banks have been implemented in some locations. The difference between real working hours and planned working hours is the flex bank. Agreements are in place concerning the size of the time banks.

The rules applied on notice periods vary from country to country. Therefore actions are taken in accordance with national legislation. In these difficult discussions, the Volvo Group works in close cooperation with representatives from the unions, governments and authorities.

Significant events

During 2008 the following events with significant importance for the Volvo Group and the employees occurred:

- Volvo Construction Equipment moved its North American motor grader activities. Operations were previously located in Goderich, Ontario, Canada and were moved to the company’s facility in Shippensburg, Pennsylvania, in the US. The purpose was to consolidate the industrial operations for road machinery in North America. This action affected 500 employees.

- Mack Trucks and Volvo Trucks North America jointly formulated a plan for increasing the efficiency of their North American operations. The plan includes the relocation of Mack’s head office from Allentown, Pennsylvania, to Greensboro in

Taking economic responsibility

We know that our success can only be measured through the success of our customers. By creating value for our customers, we create value for our shareholders.
North Carolina, and a concentration of Mack’s truck production to the plant in Macungie, Pennsylvania.

- Volvo Buses closed the plant in Tampere, Finland due to the need to adjust production capacity in Europe. The same company sold the body plant in Turku, Finland. In total 237 employees were given notice.
- Volvo Group finalized the deal with the Indian vehicle manufacturer Eicher Motors, for the establishment of a new Indian joint-venture company, VE Commercial Vehicles Limited. Fifty percent of the joint-venture company has been consolidated in the Volvo Group.

Growth in developing economies

During the past decade, net sales of the Volvo Group has tripled. In 1998, net sales totaled SEK 100 billion (excluding Volvo Car Corporation) compared with approximately SEK 304 billion in 2008. In 1998 soft products, such as financial solutions, service and spare parts accounted for 14% of net sales. In 2008, soft products accounted for 27%. Due to new market opportunities such as growing markets and mergers and acquisitions, the geographical balance has improved. Ten years ago, 17% of Volvo Group’s net sales was in such developing economies as Eastern Europe, South America and Asia, compared with 45% in 2008.

Investments needed

To remain competitive and offer environmentally enhanced products, the Volvo Group believes it is crucial to have the right skills and invest in research and development. During 2008, the investments in R&D amounted to SEK 14 billion, and in production plants SEK 17 billion. Most of the investments in R&D are related to engine emission reduction.

During 2008, the Volvo Group received SEK 492 M in governmental grants, primarily from the European Commission, the Swedish Government and the Swedish Energy Agency.

Renewable fuels - a business opportunity

The Volvo Group’s customers use our products and services in their businesses. Fuel accounts for approximately one third of their costs and every measure that can reduce their fuel costs will result in improved profitability, while reducing environmental impact. The transportation industry is still very dependent on fossil fuels, which creates risk and enhances the climate change impact. The Volvo Group’s corporate venture capital company, Volvo Technology Transfer, support and lead a number of renewable fuel initiatives, with the ambition to develop a business case for renewable energy sources for its production, supply chain and customers.

Energy challenge - threats and opportunities

There seem to be no panaceas for solving the energy crisis. However, there are many new interesting technologies and system changes that we evaluate and develop. Some of these examples are such energy efficiency technologies as hybrids, sustainable renewable fuels and intermodality. We believe that these technologies, especially working alongside each other, can improve the situation significantly.

More than 98% of the energy use in the transport sector stems from fossil fuels (97% from crude oil). Today, there is more or less consensus that we soon are approaching the peak of world crude oil production since conventional crude oil supplies are declining. The main discussion is about the timing of the peak oil and not about whether or not it will occur. However, the conclusion is that the current use of crude oil is not sustainable and that the pending shortage should not be solved by introduction of transport fuels derived from coal or tar sands.

The challenges we face are significant and will require cooperation between all sectors of society. Increased volatility in the energy markets is expected in the future and therefore it is very important to establish and define rules regarding sustainable use of energy in all sectors. Although the threats are significant, there are also great opportunities to create a new sustainable transport system that could solve current problems.

Profitable growth increases society involvement

Through achieving profitable growth, we also contribute more to the societies in which we are involved by paying taxes and social charges. Studies on a EU level shows that the multiplier effect of one direct employee in the automotive sector ensures at least five more at suppliers and in related sectors and retail. The industry is also the largest private investor in R&D in the EU and thereby a driver of innovation and economic growth. Profitable growth also facilitates social initiative efforts beyond our ordinary business operations.

Key ratios

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<td>Operating income, Industrial operations, SEK M</td>
<td>20,583</td>
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<td>Operating income, Customer Finance, SEK M</td>
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<td>1,397</td>
</tr>
<tr>
<td>Operating margin, Volvo Group, %</td>
<td>7.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Income after financial items, SEK M</td>
<td>21,567</td>
<td>14,010</td>
</tr>
<tr>
<td>Income for the period, SEK M</td>
<td>15,028</td>
<td>10,016</td>
</tr>
<tr>
<td>Diluted earnings per share, SEK</td>
<td>7.37</td>
<td>4.90</td>
</tr>
<tr>
<td>Dividend per share, SEK</td>
<td>5.50</td>
<td>2.00</td>
</tr>
<tr>
<td>Return on shareholders’ equity, %</td>
<td>18.1</td>
<td>12.1</td>
</tr>
</tbody>
</table>

1 According to the Board’s proposal.

Dow Jones Sustainability Index

For the seventh consecutive year, AB Volvo qualified for the Dow Jones Sustainability World Index (DJSI) of globally leading companies in the area of sustainable development. As a result of the Volvo Group’s sustainability efforts in economic, environmental and social issues, AB Volvo ranks among the top 10% of companies worldwide in conducting business in line with sustainable development. High ratings were gained particularly for the manner in which the Volvo Group manages environmental issues, corporate governance and financial issues.
Towards sustainable mobility by ensuring environmental performance

The Volvo Group has one common environmental policy for all companies within the Group. This policy is the vision for our environmental work and also a part of our vision for sustainable development.

The Volvo Group Environmental Policy was last updated in 2004. It lays the foundation for the Group’s environmental management system, strategies, goals, audits and actions.

The Volvo Group’s environmental policy includes the following strategies:
- Holistic approach – the environmental impact from products shall be seen from a lifecycle perspective – from concept to disassembly.
- Continual improvement – environmental programs must be integrated and monitored in all operations.
- Technological development – environmental requirements are to be met via active research and development.
- Efficient resource utilization – the entire life cycle of products and processes must be taken into account to ensure efficient optimum resource utilization.

Strategic environmental issues

The Volvo Group’s focused environmental agenda is about continuously identifying the most important environmental issues and concentrating on the projects that provide the most business value. Since 2003 the areas in focus are climate change, energy efficiency, renewable fuels and communication.

Environmental management system in place

By the end of 2008, 96% of the total workforce at Volvo Group production plants worked in accordance with the certified environmental management system ISO 14001: 2004. The remaining 4% of employees not working in certified systems are mostly employed at newly acquired companies. ISO 14001 is an environmental standard that helps organizations minimize their impact on the environment, work with continuous improvements and complying with applicable laws and regulations.

Environmental organization

Efforts to integrate environmental aspects into daily activities throughout the Volvo Group are coordinated by the Environmental Council. Each business area and business unit within the Group is represented by their environmental manager on the Council. Additionally, there is an environmental coordinator at every production plant. At Group level, the environmental work is followed up and coordinated by the Environmental Affairs department.

The companies within Volvo Group annually receive strategic challenges from the CEO. The challenges on environmental care are based on the environmental policy and the focused environmental agenda.
Volvo Environment Prize awarded prominent ecologist

In 2008, the Volvo Environment Prize foundation awarded the honor to Crawford Holling, Emeritus Eminent Professor in Ecological Sciences at the University of Florida, U.S. for his work on resilience. Professor Holling is the originator of theories concerning resilience. The theory involves the ability of a social or ecological system to withstand a shock, for instance in the form of climate change or financial crisis, and to then renew and redevelop itself.

The Volvo Environment Prize Foundation awards the prize to individuals who explore the way to an equitable and sustainable world. The Volvo Environment Prize is awarded by an independent foundation, assisted by a Prize Jury composed of internationally recognized experts in the environmental field. Since 1990 the Prize has been awarded to 34 individuals. Among the winners are many prominent names, including three Nobel Prize laureates.

For more information on the Volvo Environment Prize visit www.environment-prize.com.

Environmental performance of Volvo production plants, Industrial operations

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007(^{1})</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy consumption (GWh; MWh/SEK M)</td>
<td>2,695; 13.3</td>
<td>2,683; 11.6</td>
<td>2,612; 10.5</td>
<td>2,426; 9.6</td>
<td>2,754; 9.3</td>
</tr>
<tr>
<td>CO(_2) emissions (1,000 tons; tons/SEK M)</td>
<td>293; 1.5</td>
<td>292; 1.3</td>
<td>282; 1.1</td>
<td>242; 1.0</td>
<td>339; 1.2</td>
</tr>
<tr>
<td>Water consumption (1,000 m3; m3/SEK M)</td>
<td>8,495; 42.2</td>
<td>7,419; 32.1</td>
<td>7,596; 30.8</td>
<td>7,087; 27.9</td>
<td>8,205; 27.8</td>
</tr>
<tr>
<td>NO(_x) emissions (tons; kilos/SEK M)</td>
<td>645; 3.2</td>
<td>672; 2.9</td>
<td>606; 2.4</td>
<td>542; 2.1</td>
<td>800; 2.7</td>
</tr>
<tr>
<td>Solvent emissions (tons; kilos/SEK M)</td>
<td>2,085; 10.3</td>
<td>1,960; 8.5</td>
<td>2,048; 8.3</td>
<td>1,979; 7.8</td>
<td>1,945; 6.6</td>
</tr>
<tr>
<td>Sulphur dioxide emissions (tons; kilos/SEK M)</td>
<td>184; 0.9</td>
<td>209; 0.9</td>
<td>69; 0.3</td>
<td>58; 0.2</td>
<td>64; 0.2</td>
</tr>
<tr>
<td>Hazardous waste (tons; kg/SEK M)</td>
<td>24,875; 122</td>
<td>23,590; 102</td>
<td>26,987; 109</td>
<td>27,120; 107</td>
<td>27,675; 94</td>
</tr>
<tr>
<td>Net sales, SEK bn</td>
<td>202.1</td>
<td>231.2</td>
<td>248.1</td>
<td>253.2</td>
<td>294.9</td>
</tr>
</tbody>
</table>

\(^{1}\) Excluding Nissan Diesel and Ingersoll Rand’s division for road construction equipment.

The Group has compiled environmental data since 1990. Environmental data reports are available at www.volvogroup.com/environment
The climate challenge

Transport is a key component in modern society and a precondition for welfare and growth, but it also contributes to the climate change. In providing transport solutions, we realize that we are a part of the problem as well as the solution.

Greenhouse gases must decrease

To align with recommendations from the United Nation’s Climate Panel, IPCC, greenhouse gases must decline by 50-80% between 2000 and 2050. This means the carbon dioxide (CO₂) emission per person should be 1 to 1.2 tons per year to reach a sustainable emission level. In accordance with the EIA report (International Energy Annual) the average CO₂ emissions per person per year was 4.5 tons on a global level in 2006.

According to the Stern Report, commissioned by the British Government, it is estimated that the cost of doing nothing about greenhouse gases is equivalent to 5% of the world’s aggregated GDP annually, forever. By starting to reduce the greenhouse gases today, the cost of managing the effects could be cut to 1% of annual global GDP.

Taking on the climate challenge

Transport is responsible for approximately 13%, of which goods transports on roads accounts for about 4% of the total greenhouse gas emissions caused by humans. In addition, statistics from the European Union show that goods transport is rising faster than GDP growth worldwide. There is a great challenge to curb emissions while stimulating economic growth. By focusing on the reduction of energy consumption in production processes and when products are in use, developing alternative drivelines and working with renewable fuels, the Volvo Group is partly contributing to the solution.

Already in 1989, the employees within Volvo Group were trained in environmental issues. Since then, the employees, including the Volvo Group Executive Committee, have continuously been educated in environmental related issues.

Hunt for energy savings

Since 2003, the Volvo Group has reduced its energy consumption per manufactured unit by more than 20%. At the same time, the call for additional reduction in the future is going to increase.

The increases are due to demands imposed on manufacturing and the foreseen increase in energy prices.

Reducing energy consumption per manufactured unit is a prioritized environmental target for the Volvo Group. Here are some examples of ways to save energy in the Group:

Using dry air to dry paint

Volvo Powertrain in Skövde, Sweden, saved around 90% in energy costs by using dry air instead of hot air for drying and dealing with the residue of water-based paint that is used to paint engine blocks.

Changing lights

Volvo Buses in Borås, Sweden, started a lighting project several years ago with the aim of reducing the electricity that was needed for lighting. The company replaced the old lighting with T5 fluorescent tubes in more than 1,500 light fixtures. T5 fluorescent tubes have a longer service life and consume less energy.

Energy efficiency initiatives in production

In 2004 through participation in the Climate Leaders Program, an industry government partnership in the US, Mack Trucks pledged to reduce greenhouse gas emissions from its operations by 20% per produced unit by 2010, using 2003 as a base year for its calculations. Already in 2007 the greenhouse gas emissions were reduced by 32% per unit by focusing on energy efficiency initiatives in production such as fuel conversions, controlled lightning, heat recovery systems and replacing old equipment and tools. The decrease corresponds to a sustainable absolute reduction of more than 25%. In October 2008, Mack Trucks was recognized by the U.S. Environmental Protection Agency for their work.

Sources of greenhouse gas emissions

<table>
<thead>
<tr>
<th>Source of Greenhouse Gas Emissions</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial operations</td>
<td>17%</td>
</tr>
<tr>
<td>Energy, power and heating</td>
<td>22%</td>
</tr>
<tr>
<td>Management and processing of waste</td>
<td>4%</td>
</tr>
<tr>
<td>Land utilization and burn-beating</td>
<td>10%</td>
</tr>
<tr>
<td>Extraction, processing and distrib. of fossil fuel</td>
<td>11%</td>
</tr>
<tr>
<td>By-products from agriculture</td>
<td>12%</td>
</tr>
<tr>
<td>Fuel for transport</td>
<td>14%</td>
</tr>
<tr>
<td>Housing, commercial premises and other sources</td>
<td>10%</td>
</tr>
<tr>
<td>Sources of greenhouse gas emissions</td>
<td>Source: EEA (European Environmental Agency)</td>
</tr>
</tbody>
</table>
Volvo launches the market’s first commercially viable hybrid bus
The Volvo 7700 Hybrid bus is a modern, two-axle city bus with hybrid power – providing fuel savings of up to 30%. The bus is a parallel hybrid featuring diesel and electric power that can operate independently of the other. Hybrid technology is perfect in urban operations.

Trucks’ new goal is to reduce its emissions an additional 12% per produced unit through 2012.

CO₂ neutral dealership facility
In June 2008 the first CO₂ neutral dealership facility was presented by Volvo Trucks. The aim is to have more dealers follow the Verona example. Local conditions should determine what alternative solution is best for the organization. Experiences from Verona are helpful in assessing other facilities to become CO₂ neutral.

CO₂ neutral production plant
In September 2007 the world’s first CO₂ neutral automotive plant was presented by Volvo Trucks in Ghent, Belgium. Investments in wind power and biofuel plant provide electricity and heat that does not result in any additional CO₂ to the atmosphere. Measurements at the Ghent plant show a decrease of 14,000 tons of CO₂ annually. During 2009 other Volvo Group’s facilities will investigate the possibilities to make their production plants CO₂ neutral. The long-term ambition is to make all plants CO₂ neutral.

Recycling water waste
The plant in New River Valley in the US, which produces trucks for Volvo Trucks and Mack Trucks, has its own wind turbine. It was installed last year, it produces 1,000 kWh a month and is part of an energy-savings program. The lighting and heating systems at the plant are also being reviewed. Recently, the plant in New River Valley was presented with a gold medal by the Governor of the State of Virginia for its work with recycling waste water. Some 70% of the waste water from production can be reused.

Solar energy systems installed
At the plant in Ghent, solar cell systems have been installed and there are plans to install similar systems at Volvo Trucks North America in Greensboro, Volvo Powertrain in Hagerstown and Mack in Macungie.
Sustainable product development

The Volvo Group’s product development is inspired by customers’ needs, changes in society and new technology. We have a clear ambition to reduce the environmental impact of our products. By focusing on energy efficiency, enhancing existing products and developing new technologies and renewable fuels, we strive to develop better business solutions for our customers and contribute to a sustainable society.

Research and development

Research and development at the Volvo Group relies on the combined expertise from different companies within our organization. By coordinating R&D initiatives as well as general processes and tools across the company, substantial economies of scale are created.

About 50% of the Volvo Group’s R&D is conducted in Sweden, while the remainder is distributed to various locations in Europe, the US, Asia and South America.

The Volvo Group is involved in a comprehensive series of cooperative ventures with other companies, research bodies and academic institutions to advance the technologies needed for future product development.

Examples of major programs and partners are; FP7 (Seventh Framework Programme for Research and Technological Development), PREDIT (Programme de recherche et d’innovation dans les transports terrestres), VINNOVA (The Swedish Governmental Agency for Innovation Systems), EUCAR (The European Council for Automotive R&D), ERTRAC (The European Road Transport Research Advisory Council) and LUTB (Lyon Urban Truck And Bus).

Environmental impact analyzed and specified

The Volvo Group manufactures a large number of products with various environmental impacts. The Volvo Group’s objective is to comply with legislation and always enhance new technology in product development. Each new product developed should have less environmental impact than the one it replaces. We gain knowledge of a product’s environmental impact over its entire life by conducting Life Cycle Analysis (LCA). The result indicates that 80–90% of the total environmental impact comes from the use of the products. Therefore, the current focus is mainly on reducing the environmental impact when the products are in use.

The results from the LCAs are adapted into Environmental Product Declarations (EPD) intended for customers. EPDs are available for several products. These declarations are divided into three sections: production, use and scrapping. The “Production” section provides information about energy consumption, emissions and waste. The “Use” section presents fuel consumption, emissions and spare parts utilization and the third section deals with scrapping.

Product development

To achieve efficient product development, the work is organized in multifunctional teams, taking advantage of different experiences and competencies from the global organization. The product development cycle contains six stages.

Each stage is followed by different environmental, quality and safety objectives that must be met to proceed to the next development stage. Consideration for the environment is always present, from the first drawings to the end product and scrapping and waste through the life-cycle analysis.

Legal requirements

Different authorities are imposing increasingly more stringent requirements to reduce emissions of nitrogen oxides (NO\textsubscript{x}) and particulate matter (PM) from road transport. NO\textsubscript{x} contributes to acidification of soil and water and PM may cause asthmatic reactions and cardiovascular problems. The latest emission regulation in the EU is Euro IV introduced in 2006 and in the US, the latest regulation, US’07, became effective in 2007. The Volvo Group’s products sold for the European market comply with current prod-
uct regulations and the future Euro V, that will be introduced in October 2009. We support global harmonization of emission regulations and, when competitively neutral any joint international initiative and or regulation is supported.

Meeting future legal requirements
The Volvo Group is working on a solution for meeting the future Euro VI standard to be introduced in 2013 and US'10. The diesel engine is the Volvo Group’s focus, since it is currently the most efficient energy converter for heavy duty transport solutions. Three parallel approaches are applied in product development to meet future regulations.
- Attain high fuel efficiency and low emissions throughout the life cycle.
- Develop alternatives that complement the diesel engine, such as hybrid drivelines that offer potential energy storage.
- Develop and identify renewable fuels. The challenge is producing and distributing sufficiently large volumes of these fuels.

The vehicles that will meet the US’10 and the Euro VI emission regulations are equipped with both EGR (Exhaust Gas Recirculation) and SCR (Selective Catalytic Reduction). Using EGR, the nitrogen oxides in the exhaust gases are cut by returning part of the exhaust gases to the engine for combustion. SCR is an efficient and well-proven method for reducing the amount of nitrogen oxides in diesel exhaust gases by injecting a mixture of urea and water into the exhaust gases. The heat from the exhaust system transforms urea into ammonia, which reacts with the nitrogen gases and water vapor.

A truck is 100 times cleaner today
Since 1975 fuel consumption in a Volvo trucks has declined by some 40%, while emission of nitrogen oxides and particulate matter has declined by some 90%.

The fuel consumption for a Volvo Truck FH, the most sold truck, is 2.85 l/100 km. This fuel consumption corresponds to a CO₂ emission of 750 g per km. Comparing this fully loaded truck with a fully loaded environmental passenger car, the truck has approximately 10 times lower CO₂ emissions per ton km. Our most sold Construction equipment machine is the L120 F wheel loader. The fuel consumption per hour for this machine is 16.2 liters, which corresponds to the emission of 42 kg CO₂ per hour.

The B12 B Volvo Bus model, which is used for inner city and commuter traffic, has a fuel consumption of 3.19 l/100 km. The fuel consumption corresponds to emission of 830 g CO₂ per km.

The number of sold vehicles per region is available in the Annual Report.

Recycling the vehicle
Volvo Group’s products are largely recyclable, since by weight they comprise almost of 85% metal, mostly iron, steel and aluminum. The additional materials are mainly plastic, rubber and material from electronics components. The total weight of a truck, such as a Volvo FH, is approximately 7,000 kg of which approximately 35% are made of recycled material. To support the most optimal way to recover materials, handbooks are available for most products to show how to disassemble the vehicle.

At disassembly stations, trucks and buses are dissembled to be recycled while taking care of reusable product parts. The vehicle is carefully assessed to decide what parts will be recycled, reused or scrapped.

Remaining substances such as oil, diesel and coolant are emptied from the vehicle and part by part the vehicle is disassembled. The Volvo Group has disassembly stations at numerous places around the world.

Environmental impact assessment of a truck in long-haul operation

<table>
<thead>
<tr>
<th>Emission legislation</th>
<th>Reduction in PM</th>
<th>Reduction in NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro IV</td>
<td>80%</td>
<td>30%</td>
</tr>
<tr>
<td>Euro V</td>
<td>80%</td>
<td>60%</td>
</tr>
<tr>
<td>US’07</td>
<td>40%</td>
<td>80%</td>
</tr>
<tr>
<td>US’10</td>
<td>80%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Reference: Euro III and US’02.
Time has come for hybrids

Hybrid technology fits best in urban operations since it is characterized by the continuous stop and go conditions of city buses, distribution trucks and refuse vehicles. Each time the vehicle slows down or the brakes are applied, the retardation energy can be recovered and stored in a battery.

The stored energy can be used at the very instant of starting off, for initial acceleration or for the hydraulic system in construction equipment. The hybrid technology offers fuel savings possibilities and thereby a reduction in CO₂ emissions. The hybrid solution will entail a higher investment, but it will be offset with the reduced long-term operational cost due to the fuel savings.

A unique solution
The Volvo Group is the leading player in hybrid operation for heavy duty vehicles such as trucks, buses and wheel loaders, and has a unique solution that offers considerable potential for commercial success. Volvo has been testing various types of hybrid solutions since the 1980s and Volvo Group unveiled the first demonstration vehicle with a hybrid solution for heavy vehicles in March 2006. The solution is based on a concept known as I-SAM (Integrated Starter Alternator Motor). This solution entails that an electric motor and a diesel engine work in parallel, whereby each of them can be used in the areas where they are most effective.

As a result of our volume and the resources invested in the project, we have a standardized platform solution, which is a prerequisite for the hybrid technology to have a widespread commercial impact in the market for heavy duty vehicles.

During 2008 Volvo Buses launched the first commercially viable hybrid bus. A bus operator in Luxemburg was the first to place an order and the delivery of six buses will begin in 2009. Volvo Buses will start field tests in London with double-deckers. Renault Trucks, Volvo Trucks and Mack Trucks launched field tests during 2008 together with customers. These vehicles will operate in refuse service.

In 2008, Volvo Construction Equipment launched the world’s first hybrid wheel loader prototype. Since the drive cycle is different from a truck or bus, the solution in the wheel loader is a so-called series hybrid. The fuel saving potential for construction equipment is very good. The first generation will have a fuel saving potential of up to 10% and for the next generation the potential fuel saving is up to 50% compared with the current level.

Noise emissions a growing problem
Noise emissions are a growing problem in urban areas. When using the electric mode, vehicles equipped with hybrid technology are practically noiseless. There are different regulations around the world for noise emissions for the transport sector. EU and Korea have the most stringent noise level regulations of 80 decibel for heavy duty vehicles. Other countries are steadily approaching the same level. Volvo Group products are in accordance with these regulations.
Environmentally enhanced products

The presentation below shows a selection of the Volvo Group’s environmentally enhanced products. Some are already commercially viable, and others are under development. The fuel saving is equal to the decrease in CO₂ emissions.

Volvo Trucks
Volvo Trucks delivered an FE Hybrid for field tests to customers during 2008. The hybrid technology combines a 7-liter diesel engine with an electric motor that also functions as a generator. Fuel savings potential for refuse collection is between 15–20%.

Renault Trucks
During 2008, Renault Trucks started to field test a refuse collection truck equipped with a hybrid driveline. Renault Trucks Premium Distribution Hybrys Tech – offers fuel savings potential of between 15–20%.

Volvo Buses
Volvo 7700 Hybrid Bus is a parallel hybrid in which a small diesel engine and an electric motor operate individually or together. The bus stores braking energy in batteries and uses this energy to power the electric motor. The diesel engine is shut down at bus stops and the bus drives away from the stop emission free and nearly noiseless powered by the electric motor. When the bus reaches 15–20 kph, the diesel engine starts up again. When the bus operates on stretches with frequent stops the hybrid technology can be fully optimized and the fuel saving potential is up to 30%.

Mack Trucks
The MACK® TerraPro™ Low Entry refuse truck was presented in December. The Terra-Pro hybrid is US07-compliant and features a hybrid electric powertrain consisting of an integrated starter, alternator and motor that assists the engine in providing torque to the wheels and regenerates energy during braking. The fuel saving potential is between 15–20%.

Nissan Diesel
Nissan Diesel Final Low Emission Diesel System (FLENSDS) combines a fuel-injection system with extremely high pressure and SCR technology. Nissan Diesel was the first manufacturer worldwide to introduce this type of system into its products as the basic solution for attaining lower emissions. FLENSDS reduced nitrogen oxides and particulate matter, as well as contributing to reduced fuel consumption.

Construction Equipment
Volvo Construction Equipment recently launched a hybrid wheel loader prototype. This diesel-electric hybrid drive system mounted on an L220F wheel loader is the first step in Volvo’s continuing developing process. Reduced emissions and the approximately 10% fuel-saving potential point to the benefits that these hybrid systems offer from an environmental and economic perspective.

Volvo Penta
Volvo Penta IPS (Inboard Performance System) is a propulsion system for high-performance boats. Thanks to forward-facing propellers, fuel consumption can be cut by up to 30% compared with conventional technologies. The new technology also makes the boat quieter, along with providing superior performance and maneuvering characteristics.

Volvo Aero
Volvo Aero’s unique technologies – which include lightweight design – are becoming increasingly important in the aerospace industry, since fuel economy and environmental issues have come into focus. Lightweight structures have a major impact on fuel consumption and thus also on aircraft emissions. Lightweight structures, simulation and patented manufacturing methods cut development lead times, while simultaneously making engines quieter and reducing weight.
CO₂ neutral transports not just an utopian dream

CO₂ neutral vehicles are powered by fuel produced from renewable raw materials, such as biomass. Vehicles that operate on renewable fuels do not add any extra CO₂ to the atmosphere. Volvo Group has shown that we have the technology and knowledge to make CO₂ neutral vehicles a future reality.

Change from fossil fuels to renewable fuels
There are convincing reasons to make the changeover from fossil fuels such as oil, coal and natural gas to renewable fuels. Fossil fuels contribute to raising the levels of greenhouse gases in the atmosphere. More than 98% of all energy used in the transport industry is derived from fossil fuels. Therefore, it is important to invest in alternatives to fossil fuels.

Creating discussions
In 2007 the Volvo Group was the first to present seven CO₂ neutral demonstration vehicles with modified diesel and gasoline engines that could be run on renewable fuels. During 2008 the vehicles were presented at several locations, including in the U.S. at the Washington International Renewable Energy Conference. The objective of showcasing the vehicles in various arenas was to create discussions with different actors in society. The Volvo Group has shown that we have the technology and knowledge to develop vehicles for renewable fuels, but we cannot do it alone. Through active cooperation with politicians, government agencies and fuel producers, we can make CO₂ neutral transports a reality in the future.

Research on renewable fuels
The Volvo Group has conducted research on renewable fuels assessed from seven aspects from a well-to-wheel perspective. All seven renewable fuels have potential to reduce CO₂ emissions from transports but they also have their advantages and disadvantages which are presented in the illustration on the next page.

One important factor is that methods used to produce these fuels have to be sustainable and not compete with food production. In the short term, the best solution is to mix currently available renewable fuels with today’s fossil fuels. Renewable fuels are one part of the solution moving towards a sustainable society. The Volvo Group believes that it will not be one renewable fuel that globally replaces oil. We believe that different regional solutions will be used based on the region’s prerequisites. Since we know that biomass will be a limited resource, it is very important to choose the most energy efficient alternative from a well-to-wheel perspective.

BioDME – from biomass to use in vehicles
In cooperation with other actors, we are taking a further step with a project taking into account the full chain of production of fuel from biomass to its use in vehicles. In September 2008 the BioDME project was launched, a joint venture to demonstrate the full technology chain involved in the production and distribution of DME (dimethyl ether) from biomass to its use as fuel in vehicles.

The BioDME project is financed by the EU’s FP7 and the Swedish Energy Agency. The project includes building a pilot facility for the production of DME from biomass, distribution and filling stations, fuel specification and project evaluation. The Volvo Group is the project coordinator and will contribute by developing demonstration vehicles for field tests between 2010 and 2012.

The Volvo Group views DME as one future alternative among others to fossil fuel since it is energy efficient and has proven good environmental performance. This project takes CO₂ neutral transportation to the next step. Parallel with this project we are continuously conducting research on other renewable fuels to meet future demands.
Assessment of various fuels from a sustainability perspective for internal combustion engines* 

BioDME partner awarded
Chemrec, a company specializing in technological development and commercialization of energy and partly owned by AB Volvo, received the Swedish Road Administration’s environmental award in 2008. The company was honored for its work on further refinement of black liquor to permit extraction of non-fossil fuel from pulp industry waste. In the BioDME project, Chemrec will build the world’s first pilot facility for the production of DME from biomass.

98% of the energy used in the transport industry still derived from fossil fuels.

Minimized climate impact
Energy efficiency
Efficiency of land use
Fuel potential
Vehicle adjustment
Fuel costs
Fuel infrastructure

Optimal
Less preferable

*The result may vary for a particular fuel depending on the production process used. Read more at www.volvogroup.com
How to reduce the impact from a product in use

Between 80–90% of the total environmental impact from the Volvo Group’s products arises when they are in use, mainly because of fuel consumption. The Volvo Group works in different ways to reduce fuel consumption through technology solutions as well as driver training.

A number of Volvo Group companies worldwide offer driver training to improve vehicle knowledge while addressing safety issues and fuel consumption reduction.

Reduced costs and environmental impact with Fuelwatch
Volvo Trucks seeks to find solutions enabling customers to use products in the most efficient way. Fuelwatch is a concept for various fuel-saving products and fuel management techniques. The concept includes Fuel Management Service, product maintenance, upgrading of engine and transmission and the Dynafleet system. The information on vehicle and driver performances derived from these products help customers reduce costs and is vital when developing driver training. Research shows that fuel savings between 5–15% are possible and the payback time is calculated to be less than one year, while reducing fuel consumption, the costs and the environmental impact.

Drivers training in India - for profitable business and safer traffic environment
The driver is the most important component for a safe and environmentally adapted driving.

Located in Hoskote, India, a Volvo Truck and Bus Driver Training Center provides free training for three drivers to all bus and truck purchasers. The Volvo driver-training center is unique in India. The training aims to provide the driver with vehicle knowledge and driving skills that reduce fuel consumption and thus reduce cost. With simple techniques, drivers can contribute to fuel savings and lower CO2 emissions. As a result, drivers are creators of a more profitable business for transport companies.

The driver training is also an excellent opportunity to address driving behavior from a safety and working environment aspect and social issues important for the local community. This particular training includes HIV/AIDS education. More than 4,000 drivers were trained during 2008.

Safety – in products and in society
Far too many people are killed or injured in traffic accidents. As a large manufacturer of heavy duty vehicles, we are committed to do our part of the work towards a safer traffic environment.

Our products are used in complex transport systems. This means that we have to address a broad range of safety issues, such as the safety of other road users or improving safety by providing good comfort and working conditions for drivers. Our starting point is what happens in real life. We base our product development on knowledge of how our products are used in daily operations and on data from real accidents. For more than 30 years, our traffic accident research team has conducted investigations on accidents and has thus been able to develop a unique knowledge bank. The experiences gathered
over the years have made it possible to develop important safety systems such as deformation zones, efficient safety belts and front under-run protection systems (protects the occupants of a passenger car that collides with a heavy duty truck or bus).

We strive to prevent accidents from happening in the first place. Should an accident occur, however, a number of safety systems will be activated to minimize the consequences. Research results verify that human mistakes play an significant role in the majority of all accidents. Accordingly, one of our focus areas is to build vehicles that support the driver in various ways. Good visibility, easy handling and efficient brakes form the basis. In addition, we have developed a number of advanced support systems based on modern information and communication technology. We also conduct ambitious research programs to further enhance the performance of such supporting and intelligent safety systems.

High-lighting some of our safety projects:
- During 2008 Volvo Trucks launched Driver Alert Support, which detects and warns tired drivers. Volvo is first in Europe to introduce such a system for trucks. If the system senses the driving is uncontrolled, the driver is warned by a sound and later a text message telling the driver to stop the vehicle and rest.
- Volvo do Brazil teaches young people safe traffic behavior through theater plays, videos and booklets. The project is ongoing and called “Transitando.”
- During 2007-2008 Volvo Trucks in cooperation with the Swedish Association of Road Haulage Companies visited some 70 schools in an information tour throughout Sweden. Designated “stop-look-wave,” the initiative is aimed at younger children to make them more visible for truck drivers.
- Mack Trucks sponsors “Share the Road,” an American Trucking Associations’ public information campaign aimed at enhancing road safety in the US.
- Traffic signs to increase safety awareness have been installed on the roads around our plant in Hoskote, India.
Creating sustainable transport solutions requires taking the full spectrum of the transport sector, such as the infrastructure, fuel producers, drivers and the vehicle, into account. This means that joint efforts with different actors in society are needed. Looking at the possibilities of further improve the driveline, design, weight and tiers, the estimated fuel saving possibilities for a standard truck is 15% in 2020 compared with the fuel consumption in 2005. The other possible fuel saving possibilities presented in this illustration can be seen as an additional. Using a hybrid driveline can further improve the fuel saving possibilities.

**Fuel savings possibilities - taking the entire picture into account**

Creating sustainable transport solutions requires taking the full spectrum of the transport sector, such as the infrastructure, fuel producers, drivers and the vehicle, into account. This means that joint efforts with different actors in society are needed. Looking at the possibilities of further improve the driveline, design, weight and tiers, the estimated fuel saving possibilities for a standard truck is 15% in 2020 compared with the fuel consumption in 2005. The other possible fuel saving possibilities presented in this illustration can be seen as an additional. Using a hybrid driveline can further improve the fuel saving possibilities.

25.25 meters
With a vehicle length of 25.25 meters instead of the current 18 meters in the EU three truck-trailer sets can be replaced by two. The legislation on the EU level permits longer vehicles, but the legislation is not yet implemented in all national laws.

1 l diesel = 2.6 kg CO₂

-15%

Low weight
Thanks to a weight-optimized design, each vehicle can carry higher loads.

-5%
**Side spoilers**
Adding side spoilers can contribute to reducing air resistance. This is available today.

**Tires**
New tires introduced during 2008 reduce the noise level and contribute to low rolling resistance, which affects the fuel consumption.

**Design**
By further improving the cab design in the future, reduced air resistance will contribute to a fuel saving of between 5 and 10%.

**Efficient engines**
When the new Volvo Truck Euro V engine is introduced in the beginning of 2009, the fuel saving potential is 3%.

**Fuel-efficient driving**
Thanks to fuel-efficient driving, the driver can influence fuel consumption by between 5 and 10%. Drivers training already exist today.

Fuel consumption for Volvo’s trucks has been reduced by no less than 40% since 1975.
Source: Volvo Trucks
Environmentally adapted production and logistics

To reduce the overall environmental impact of the Volvo Group’s operations, environmental programs are in place at our production facilities and in our logistics system. These encompass such areas as energy savings and restriction of certain chemicals in production.

Three environmental challenges for production
Volvo Group environmental objectives are used to follow-up our environmental performance and are an integral part of the business plans. The environmental objectives for production can be summarized in three challenges, using the year of 2003 as a base:
• Cutting energy consumption by 50% per unit of output by 2008.
• Doubling the use of CO₂ neutral energy by 2008.
• Terminating the use of oil and coal for heating.

Environmental objectives – results 2008
• At year-end 2008, the energy consumption was reduced by 43% per unit produced compared with 2003.
• In 2003, 109 GWh renewable energy was used in the plants. In 2008, 324 GWh of the energy used was from renewable energy.
• In 2003, 11 sites used oil for heating purposes, in 2008, five sites used oil for heating.

Emission trading
Six of the Volvo Group’s production plants are involved in the emission trading system in EU. In 2008, 6,671 allowances were used. One allowance corresponds to one ton of CO₂.

Production requirements and use of chemicals
The Volvo Group has 60 production plants in 19 countries worldwide. All production sites must meet minimum environmental requirements and pursue improvement programs. Requirements include that energy consumption, waste volumes and emissions to air are to be monitored, along with specifications of maximum emissions to air and water. Black and grey lists for chemicals have been set up in the Volvo Group to limit and eventually phase out hazardous substances from products and production processes. The black list indicates what chemicals are never to be used and the grey list indicates what chemicals are to be used with restriction. A taskforce to implement the EU legislation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) within the company’s functions is in place. This involves registering and replacing chemicals used with better alternatives from the perspective of health and environmental risks. If any uncertainty exists concerning a substance’s hazardous environmental impact, it should be deemed as hazardous and replaced by a better alternative.

Since 1980, environmental audits are conducted to ensure that plants observe the environmental policy. As of 1990, environmental data from the production sites is collected annually.

Risk management and biodiversity
Environmental risk is one of the factors in the Volvo Group’s enterprise risk process. Volvo Group has insurance to cover costs related to accidents that negatively affect the environment. During 2008 no major accidents occurred and no disputes are in progress. The production plants have the required environmental permits. In Sweden, 16 facilities require permits that cover waste, noise and emissions to land, air and water. Three permits were renewed in 2008. Each year, an inventory is made of the incidence of polluted land on our properties. During 2008, remedial operations were conducted at 2 plants.

When assessing possible acquisition of companies and real estate, an audit is carried out that, in addition to financial and legal aspects, also takes into account environmental and social factors. This information provides the basis for action plans, if needed to ensure the acquired company can fulfill the Volvo Group’s minimum requirements.

We do not have any activities in areas listed as sensitive or protected with regard to biodiversity. The material used in the Volvo Group’s products might have an indirect impact on biodiversity when extracting the raw material.

Marketing and sales
Regardless of whether a dealer is owned by the Volvo Group or by independent owners, they should meet fundamental requirements related to environmental care, business ethics, operating and facility standards. Training material is provided to dealers covering environmental care. The Volvo Group observes the legislation and established generally accepted business practices with regard to marketing and sales.

Environmental requirements placed on our suppliers
In 1996 Volvo started to place environmental requirements on suppliers. Today the requirements involve use of chemicals, choice of packaging material, precautionary principles when choosing material, maintaining an open dialogue with the Volvo Group, third-party certification in accordance with ISO 14001 or EMAS and other demands. Suppliers are also responsible for their respective sub-suppliers for applying these requirements throughout the supply chain.
More efficient transport solutions

Volvo Logistics provides the entire Volvo Group with logistics solutions. To minimize its environmental impact, Volvo Logistics is focusing on reduced emissions, renewable fuels, energy efficiency and knowledge enhancement.

The CO₂ challenge
In 2008 Volvo Trucks challenged Volvo Logistics to reduce CO₂ emissions by 20% between 2006 and 2010 from transports in Europe, with a long-term vision of halving their climate impact from goods transport by 2020. Volvo Logistics has taken on the challenge and develops jointly with suppliers specific measures to meet the objectives. From 2006 to 2007, Volvo Logistics work resulted in a 4% reduction in CO₂ emissions.

In calculating the environmental impact for new or changed transport routes or for choice of carriers, Volvo Logistic use a tool called EnvCalc. The calculation is based on amount of goods, distance and the transport mode and the result is presented in amounts of CO₂, NOₓ, SOₓ, PM and ELU (Environmental Load unit).

Requirements on transport suppliers
Volvo Logistics also places requirements on transport companies with regard to engine requirements, fuel efficiency driver training and continuous improvements. The requirements are followed up with random sample audits and an annual survey.

Some 68% of Volvo Logistics’ road suppliers in Europe are certified in accordance with ISO 14001:2004 and globally the corresponding figure is 48%. The result from the 2008 year Carrier Survey showed that 89% of the engines used in the truck fleets in Europe are equipped for Euro 3 or later emission requirements. This is an improvement of 12% compared with 2007. In 2008 a project was started to include the social and ethical requirements in the supplier requirements.

Clean Shipping Network
In 2008, Volvo Logistics signed the Clean Shipping Criteria, which is a project placing environmental demands on shipping operators regarding chemicals, water, fuel and waste control, CO₂, NOₓ, SOₓ and PM.

Volvo Packaging System
To reduce transport volumes and the use of packaging material, the Volvo Group has a returnable packaging system used for transport of goods from the suppliers to the Volvo Group plants. All new packaging is being evaluated concerning its environmental impact. The system consists of different types of packaging from wooden pallets to foldable pallets in steel and plastic and also smaller plastic “blue boxes” in various sizes. The plastic boxes are reused for approximately five years, while the wooden pallets and frames are reused for approximately 7–10 years.

By the end of 2008 Volvo Logistics had a total of 2.8 million blue boxes, 3.5 million wooden pallets and 7.5 million wooden frames. Around the world, Volvo Logistics has terminals for collecting and cleaning the packaging materials that are reused until they no longer meet quality standard. All packaging materials are then scrapped and recycled, becoming new materials or energy.
Life inside the Volvo Group

To be the most attractive employer, the Volvo Group has identified strategies to attract, motivate and develop individuals with skills needed in our operations. We further promote ethical behavior through our company culture and values.

A unique company culture
Volvo Group regards its company culture as a competitive advantage. Unlike products, strategies and business models, culture is unique. By nurturing a healthy company culture and offer work life balance, we can attract and retain employees. We believe that every employee has the capacity to improve our operations. Our values and culture are captured and described in the Group document The Volvo Way. The principles in The Volvo Way guide our daily work to realize business strategies most effectively, assuring long-term business success.

Employee Attitude Survey
Once a year, all employees are invited to voluntarily fill in the Volvo Group Attitude Survey (VGAS). Employees worldwide answer questions about the working climate, working conditions, diversity and leadership. Most importantly, it offers employees a possibility to comment on life inside the Volvo Group. The result of the report leads to feedback sessions in which employees have the opportunity to discuss and create action plans for further improvement. The VGAS report is also a follow-up for, among other items, the rate of satisfied employees. In 2008, 92% of Volvo Group employees participated in VGAS and 86% stated they were satisfied with their workplace. That is a 1% increase from the result previous year. The rate has steadily increased over the years. Improvement potentials are mostly related to conflicts in the internal working groups, work attitude between different working groups and too slow action time between decision and implementation. Based on the results of the survey, an Employee Satisfaction Index is calculated, which is described on page 1 in this report.

Volvo Group Code of Conduct
In 2001, the Volvo Group was one of the first companies to sign the United Nation’s initiative, Global Compact, which aims to align business practices with internationally accepted principles of human rights, labor practice, environment and anti-corruption. The Volvo Group is committed to practice responsible business, which is explicit in the Group policy Code of Conduct policy. It was adopted in 2003 and is based on principles in the Global Compact. It is applicable to all employees and also to the members of the Board of Directors. The Code of Conduct establishes the principles Volvo Group shall

Key figures

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<tr>
<th></th>
<th>2007</th>
<th>2008</th>
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<tr>
<td>Number of employees at year-end</td>
<td>101,698</td>
<td>101,381</td>
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<tr>
<td>Share of women, %</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Share of women, Board members, %</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Share of women, Presidents and other senior executives, %</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Sickness absenteeism in the Group’s Swedish companies</td>
<td></td>
<td></td>
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<tr>
<td>Total sickness absenteeism, regular working hours, %</td>
<td>5.1</td>
<td>4.6</td>
</tr>
<tr>
<td>of which continuous sick leave for 60 days or more, %</td>
<td>48.2</td>
<td>39.1</td>
</tr>
<tr>
<td>Sickness absenteeism (as percentage of regular working hours) by gender</td>
<td></td>
<td></td>
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<tr>
<td>Men, %</td>
<td>4.8</td>
<td>4.4</td>
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<tr>
<td>Women, %</td>
<td>5.3</td>
<td>5.4</td>
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<tr>
<td>Sickness absenteeism (as percentage of regular working hours) by age</td>
<td></td>
<td></td>
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<tr>
<td>29 years or younger, %</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>30-49 years, %</td>
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</tr>
<tr>
<td>50 years or older, %</td>
<td>5.5</td>
<td>4.8</td>
</tr>
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apply in relation to employees, business partners and other stakeholders. It covers business principles, environmental principles, human rights and workplace practices. Basically, the Code of Conduct is the foundation of how to conduct business, the minimum level for actions required in pursuing a responsible business and our contribution to sustainable development. As an example, child labor and forced labor are not tolerated. We encourage our business partners to adopt these principles.

Implementing and safeguarding the Code of Conduct

It is the responsibility of Volvo Group's managers to communicate and demonstrate the content and the spirit of the Code of Conduct within his or her organization. To assist managers in this work, a web-based training module of ethical dilemmas has been developed. The purpose is to reflect on your own attitudes and behavior in different situations while receiving immediate feedback. No personal data is stored but results are registered to see what principles need greater attention to increase compliance. Over 21,500 employees have completed the web-based training. The training module is also available as a workshop with open discussions. VGAS is used to follow up on the implementation of the Code.

Diversity provides Volvo Group with business opportunities

We believe that diversity is a catalyst for innovation and a source of international competitiveness and profitability. By expanding our knowledge base, skills and understanding, we become more responsive to customer needs and strengthen our market position. Diversity is promoted in the Volvo Group’s Code of Conduct, which prescribes behavior that is non-discriminatory with regard to gender, race, religion, age, sexual orientation, nationality, political opinion, union affiliation, disabilities and social or ethnic origin.

There are many reasons for working with increasing the diversity within the Volvo Group and the main reasons are:

- Diversity fosters a working environment in which employees feel included and respected, which enables them to reach their full potential.
- Diversity implies that business challenges can be attacked from various perspectives, and thereby contribute to creative and innovative solutions.
- A diverse workforce gives knowledge of local cultures and marketplaces which is essential to understand our customers’ needs and future possibilities.

These factors allow us to find new business opportunities in keeping the Volvo Group competitive and are also an area for long-term business success. At the same time, this nurtures a healthy company culture, thus attracting the most competent people.

Diversity Initiatives

Several initiatives on the local and global level exist to address diversity in the Volvo Group. One global initiative, Diversity and Inclusive Leadership, has been in focus during 2008 and continues to be so in 2009. The initiative’s objective is to raise managers’ awareness of inclusiveness. An inclusive work climate enables all employees to contribute their fullest potential irrespective of gender, nationality, ethnic origin, sexual orientation or age. Tools are provided to identify and address exclusion behavior and managers learn how to act as role models contributing positively to the company culture.

The Volvo Group believes working with diversity is to work with attitudes. Sometimes it may be challenging, but by focusing on diversity initiatives and supporting employee diversity networks, we believe we can make a difference.
Volvo Group as an employer

By offering possibilities for the individual employee to develop on a professional and personal level, we seek to attract the most skilled people. The same possibilities are offered current employees to ensure that their valuable knowledge is retained in the company.

An international workplace providing competence development
Our operations are global, with the largest workforces in Sweden, France, US and Japan. At the end of 2008 about 100,000 people were employed by Volvo Group. Working within the Volvo Group means working in an international environment with coworkers, customers and other business partners from all over the world. It also opens opportunities for an international career for those desiring to work abroad.

To be competitive, it is essential for us to secure and enhance competence within our operations. Relevant training is continuously carried out. Training modules for raising awareness target all employees, while others are in relation to specific job positions. Individual competence development is handled through an annually reviewed personal business plan. The aim is to establish business and personal development as well as having a long-term approach in line with the overall strategic business objectives.

Workplace practice
The Volvo Group has a global recruitment process to achieve a common framework for recruitment practices. A global applicant tracking system has been developed in accordance to the global process. It currently covers Sweden, United States, France and China. The long-term objective is to implement this process in all countries where Volvo Group has employees. Although the Volvo Group aspires to develop talent globally, it is a prerequisite to have extensive knowledge in the local market.

To ensure that we take a broader and more balanced perspective during the interview and selection process when recruiting for managerial levels, we have implemented a policy designed to improve and profit from the diversity of our global workforce by requiring at least one woman and one man in the interview panel.

The policy for wages, salary, remuneration and reward is based on our basic values and principles as formulated in The Volvo Way document. Through salary mapping, potential wage discrimination is detected. As an example mapping done by Volvo Trucks in Sweden discovered 20 incidents of salary discrimination of women during 2008 and corrective measures were taken. The guiding principle is to secure the employee’s right to equal pay for work of equal value.

Safe workplace, illness prevention and health promotion
A safe workplace is the foundation for productive and efficient work. We try to promote a creative, healthy and energizing workplace free from health hazards. A workplace free from hazards is essential for ensuring the safety of our employees and visitors.

The Volvo Group is in the process of defining a systematic workplace safety system to be deployed throughout the organization. Currently, five production plants within the Group are certified in line with OHSAS 18001 (Occupational Health and Safety Assessment Scheme). Five additional facilities have plans in place to reach certification by the end of 2010.

This international standard specifies a process for controlling and improving a company’s safety and health performance by managing work environment risks, and making necessary improvements which in turn are followed up.

Information is the key to improve safety. Therefore, all employees share the responsibility to report accidents. This makes it easier to investigate the causes of a specific event to make proper improvements. Each company decides how to collect and register data regarding work-related fatalities and workplace injuries based on national legislation, and what measures are to be taken.

Health and welfare
In recent years, greater attention has been devoted to health and sickness absenteeism. A more attractive workplace, higher productivity, maintaining quality in products and reducing costs are additional reasons for making health and employee well-being a priority.

The Volvo Group seeks to provide all employees with access to information and assistance in reducing or eradicating health risks associated with work, lifestyle or emotional well-being. Managers have the responsibility to place these issues on the agenda. The objective is to make the Volvo Group’s employees among the healthiest in the world. Here are some examples from Volvo Group:

Ergonomic in China
Health and Welfare programs are available throughout the organization. In China for instance, health ambassadors, who are voluntary employees, encourage and help coworkers during exercise. In designing new office premises in Beijing, they were ergonomically customized. The new premises were equipped with ergonomic chairs, air cleaners for improved air quality and a recreation room.

Reduced sick leave in France
At the Renault Trucks cab plant in Blainville, France, the PARI (Plan of Accompaniment for Internal Reassignment) project has been in place since 2001. The project was established against the backdrop of average age
and sick leave were rising and it became increasingly more difficult to get an employee once sick or injured to return to work. The factory educated all managers in ergonomics, and all 800 workstations were evaluated from safety and workload perspectives and gradually upgraded. As a result of the PARI project, the employee's sickness absenteeism has declined from 6 to 2%.

**Working actively with HIV – a focal point in South Africa**

In Durban, South Africa, 50% of the inhabitants are affected by HIV. Since the Volvo Group is present in Durban, it is natural to work with HIV/AIDS issues.

The HIV/AIDS program in South Africa revolves around the significance of knowing one's status, preventive work and employee assistance. All employees receive education about HIV and are regularly offered HIV-tests. Raising knowledge means people can protect themselves and others, while addressing stigmatization connected to the disease. All employees infected or affected by HIV are offered support through the Employee Assistance Program (EAP). Generally, antiretroviral medication is covered by medical insurance but for those employees that are infected but not covered by insurance, the Volvo Group assumes the costs and provides medication. In the near future, the offer of education and HIV-tests will be extended to family members and customers such as truck drivers.

**Needing assistance when dealing with life’s challenges**

Depending on the social context and the social security system in different countries, the Volvo Group offers various Employee Assistance Programs (EAP) around the world. Through the EAP program in the US, employees are offered support through available help-line, which is free to call. If needed, six free visits for counseling are provided. If extra help is necessary, the employee is further assisted. The EAP is provided under confidentiality and no personal data is recorded. Experiences show that this kind of program yields return on investment through lower healthcare costs, reduced sick absenteeism, fewer accidents and lower employee turnover.

**Cooperation with unions**

The Volvo Group recognizes everyone’s right to freedom of association, and maintains a close relationship with a number of unions. In Europe, the Volvo European Works Council was formed in 1996 to create a forum for dialogue between the
employer and employees. The forum meets once a year and the Chairman is the Volvo Group’s CEO. In addition to this forum, the employee representatives have two meetings each year. Representatives from outside Europe are invited to attend these meetings every two years. During 2008, the Works Council meeting was held in China, with the aim to enhance understanding and sharing experiences about labor practices. In many places, collective bargaining agreements are in place, including the ten countries in which we have our largest activities.

Volvo Adventure Award
Today’s children will become leaders of tomorrow. Hence, it is important to engage children, making them apply their creativity to improve their local environment and learning about environmental care. Therefore, in partnership with the United Nations Environment Program (UNEP), Volvo coordinates an international competition for children in the 13-15 age group. For more information, please visit www.volvoadventure.org.

Sweden’s most attractive employer
For the second consecutive year, the Volvo Group has been chosen as Sweden’s most attractive employer by the country’s young engineers, according to the ranking institute Universum’s annual Career Barometer survey. A corporate culture with strong ethics and high morals combined with international career possibilities are factors differentiating the Volvo Group from other companies.

Volvo Group’s Foundations
The Volvo Group has a number of foundations that award scholarships to prominent researchers and organizations to promote research in various spheres. In 2008, the Volvo Research and Education foundations, Assar Gabrielsson’s Foundation and the Volvo Environment Prize Foundation allocated a total of SEK 40.2 M.
**Sustainable development together with our suppliers**

The Volvo Group encourages all suppliers to operate in compliance with our Code of Conduct. The purpose of working with corporate social responsibility in the supply chain is risk management. It is also a way of developing together with the suppliers to contribute to a sustainable development.

**In partnership with our suppliers**

The Volvo Group’s suppliers are vital for maintaining the Volvo Group’s business. We have production in 19 of the countries in which we are active. Strategic suppliers are to a large extent located close to the Volvo Group’s production plants. The Volvo Group has two types of suppliers – those that supply material and components to our products and those needed to maintain our operations.

**General requirements on suppliers**

Our suppliers have to fulfill a number of requirements. These encompass such parameters as financial position, management, organization, logistics, social and environmental performance.

**Continues improvement with our suppliers**

During 2008, a project addressing social responsibility in the supply chain was established. The objective is to clarify our requirements, implement procedures and increase awareness. The requirements are based on our Code of Conduct and include; human rights, working environment, workforce rights and business ethics. Environmental requirements were adopted already in 1996. As of 2008, all new general purchasing agreements include a paragraph on compliance with the Volvo Group’s Code of Conduct that further presents our work with supply chain management.

**Identifying risks within our supply chain**

In our continuous development with our suppliers, we have chosen to focus efforts on high-risk suppliers. An assessment tool, for social responsibility performance, will identify high-risk suppliers. This tool will also be a part of the evaluation base of suppliers and will be implemented during 2009. Risks can be related to forced labor, child labor, poor working environment, freedom of association, corruption and similar issues. The assessment tool will be based on CSR country risks and the segment in which the supplier operates.

**Enhancing Volvo Group’s social responsibility work through education**

Training about social responsibility targeting strategic actors within our purchasing organizations started in 2008. A social responsibility training module for suppliers is currently under development.

**Benefits of working with social responsibility in the supply chain**

We believe that working with responsible supply chain management can make a difference for many people. By placing demands on our first-tier suppliers and asking them to put the same requirements on their suppliers, risks may be avoided. Benefits include risk management, closer relationship with supplier, higher quality, delivery readiness, and efficient processes.
In developing and sustaining relations with business partners, all employees must know what behavior is expected of them as representatives of our company. The Volvo Group Code of Conduct provides guidelines.

Being a global company, the Volvo Group’s employees have the opportunity to engage with business partners all over the world. The expectations on our employees derive from different stakeholders but also from the company culture, values and the Code of Conduct. Legal compliance is a cornerstone of the Code of Conduct.

The Volvo Group takes a neutral position in relation to political parties and candidates.

Managing anti-corruption and anti-fraud
To raise awareness on how to behave in business relations, Code of Conduct training is available. Complementary education on anti-corruption and anti-fraud are provided for all employees and mandatory for targeted groups such as managers. In total 22,182 employees have completed the anti-corruption training including 1,501 in 2008. With training and other management tools, we want to enable our employees to act in an ethical manner.

Joint ventures
Investment decisions, such as entering a joint venture, are guided by internal financial policies that include our Code of Conduct. The issues of environmental care, freedom of association, non-discrimination and respect for human rights are therefore taken in account before investment agreements are made. The entire process of investment decisions is also controlled by an internal audit structure.

Defense materiel products
The Volvo Group sells defense materiel as defined in Swedish legislation governing military products and related regulations. The Volvo Group complies with governing legislation and with regard to the sale of defense materiel we apply for permits to the particular public authority in each country in which business is conducted. We do not sell military equipment to countries on the United Nation’s embargo list.

In March 2008 we acknowledged that human rights have been violated during mining expropriation in South Africa. The company that was accused of the violations was Angilo Platinum, a four-tier supplier to Volvo Group. The Volvo Group immediately started to investigate the circumstances by contacting the supplier, reading reports and talking to stakeholders. A representative for Volvo Group traveled to South Africa for further investigations through meetings with all parties in the supply chain. The case is still in progress, and the Volvo Group is maintaining communications with the involved NGO, Action Aid, and the supplier.

In 2008, the Volvo Group sold military equipment, as defined in the Swedish Military Equipment Ordinance (1992: 1303) section A, for 0,3% of net sales.
The Volvo Group’s vision is to be valued as an
organizational profile
elementary, intermediate, and college
students. The Group also provides complete solutions for financing and service, and
related technology. The Volvo Group has a full-scale presence in the areas of material
handling, powertrains, and engine technology, which offers numerous benefits, including
savings on fuel consumption and engine emissions. Read more on page 14 and 15.

Environmental management production
The Volvo Group is the market leader in hybrid technology, which offers numerous benefits, including
savings on fuel consumption and engine emissions. Read more on page 14 and 15.

CO2 neutral transport
The Volvo Group is the market leader in hybrid technology, which offers numerous benefits, including
savings on fuel consumption and engine emissions. Read more on page 14 and 15.

Focus on innovations
In 2008, R&D investments indicated that the future of the Volvo Group in a
sustainability, social, and customer satisfaction.

Emission testing reaches land
The Volvo Group has the ambition to reduce the impact of climate change. Read more on page 18.

The Volvo Group, with about 100,000
employees, provides products to customers in
180 markets. Annual sales of the Volvo Group for
2008 amounted to about SEK 159 billion
(about EUR 16.9 billion). The Volvo Group is a
publicly traded company headquartered in
Gothenburg, Sweden. The
Volvo Group's share is listed on the OMX Nordic
Exchange, Stockholm, and is included in the
SIX Swiss Exchange, Switzerland.

Approximately two thirds of the Volvo
Group's net sales are related to sales of new
vehicles and machines, the rest is from soft
products such as services. Earnings and expenses
for trucks and buses are presented for
operations in North America, Europe, Asia,
and South America. The
Volvo Group's principal areas of
operation are diesel engines,
transmission systems, and all other areas of
vehicle and machinery manufacturing.

Information on the Internet
For more information on the Volvo Group's CSR
work, please contact: Malin Ripa, AB Volvo, Public Affairs, Dept. 960 VHQ, Box 180,
SE-405 08 Gothenburg, Sweden. Mail address: malin.ripa@volvo.com

GRI summary
GRI (Global Reporting Initiative) is an independent organization that has
drawn up a global framework for sustainability reporting and
sustainability performance. This framework aims to set the principles and indicators
that organizations can use to measure and report their economic, environmental, and social performance. The
framework is voluntary. The table provides an overview of where the information
available in this publication, the Annual Report or at our website.

The Volvo Group has published Environmental
Reports since 2007. These reports initially covered
Finnish and Swedish operations. The
report covers operations for 2008 financial year.

The Volvo Group published the Sustainability Report
in June 2008. In addition, sustainability informa-
tion is available in the Annual Report 2008 and at www.
volvogroup.com.

Unless otherwise stated, this report encompasses
Volvo Group's CSR work, please contact: Malin Ripa, AB Volvo, Public Affairs, Dept. 960 VHQ, Box 180, SE-405 08 Gothenburg, Sweden.

Information on www.volvogroup.com including
Detailed and comprehensive sustainability
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Detailed and comprehensive sustainability
information on www.volvogroup.com including

Volvo Group's CSR work, please contact: Malin
Ripa, AB Volvo, Public Affairs, Dept. 960 VHQ, Box 180, SE-405 08 Gothenburg, Sweden.

Additional information
• Financial performance
• Corporate governance
• Detailed environmental data
• Additional information
• Sustainability, environment, and social performance

Reports since 2007. These reports initially covered
Finnish and Swedish operations. The
report covers operations for 2008 financial year.

The Volvo Group published the Sustainability Report
in June 2008. In addition, sustainability informa-
tion is available in the Annual Report 2008 and at www.
volvogroup.com.

Unless otherwise stated, this report encompasses
Volvo Group's CSR work, please contact: Malin Ripa, AB Volvo, Public Affairs, Dept. 960 VHQ, Box 180, SE-405 08 Gothenburg, Sweden. Mail address: malin.ripa@volvo.com
The Volvo Group takes a holistic approach to sustainable development by delivering long-term profitability and value. This is a combination of taking responsibility and the lead on our corporate values quality, safety and environmental care. The aim with Volvo Group’s CSR work is to contribute to sustainable development.