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Defensores do Clima
クライメート・セイバーズ
Climate Savers



Leading the way towards a low-carbon transport sector

Volvo Group is one of the leading suppliers of commercial transport solutions, providing trucks, buses, construction equipment, marine and industrial power systems, and aerospace systems. Active in 180 countries, they employ more than 90,000 people and own production facilities in 19 countries.



How Volvo Group has promised to fight climate change

Volvo Group's WWF Climate Savers commitment is to:

- Scope 1 and 2 emissions: By 2014, reduce CO₂ emissions from production plants by 12% from 2008 levels, which amounts to 0.5 megatonnes (Mt) of CO₂. This will primarily be achieved through energy efficiency improvements. In line with Climate Savers rules, no carbon offsets will be used to achieve this objective.
- Scope 3 emissions: Reduce total lifetime CO₂ emissions from trucks sold between 2009 and 2014 by 13 Mt compared to 2008 models, via improved fuel efficiency.
- Demonstrate, by 2014, a truck prototype with 20% lower fuel consumption compared to a 2008 year model truck.
- During the commitment period Volvo Group will commercially offer at least one truck model running on renewable fuels.

How Volvo Group aims to do this

As a leading provider of transport solutions, the company acknowledges that it needs to be part of the solution.

In order to fulfil their Climate Savers commitment, the company will take three parallel approaches for product development:

1. Attain high fuel efficiency and low emissions throughout product life cycle
2. Develop alternatives that complement the diesel engine, such as hybrid drivelines that offer improved fuel efficiency
3. Identify and develop engine and vehicle technology for renewable fuels

“Rising fuel prices have a large impact on our customers’ economy, and the necessity of combatting climate change has become increasingly urgent. So developing fuel-efficient vehicles is of the highest priority for us. Our more energy-efficient engines and alternative drivelines have a positive impact on our customers’ financial situation - and less impact on the environment.”

Leif Johansson
President and CEO



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Fuel efficiency and renewable energy

For Volvo Group, fuel efficiency is the most tangible, immediate and effective way they can reduce CO₂ emissions. For this reason, they are working to improve fuel efficiency of their vehicles. Some of the ways the company will achieve this are through drive train improvements, reduced air resistance, and by lowering the weight and rolling resistance from tires.

Volvo Trucks will also be the first manufacturer to have an efficient diesel engine fuelled by a mixture of methane gas and diesel, with field testing beginning in 2010. About 50-80% of the diesel can be substituted by methane and – calculated over the whole fuel chain – this new technology could reduce carbon dioxide emissions by up to 80%.

Hybrid technology, with its large potential for saving fuel, means lower costs and increased profitability for customers while providing substantial environmental benefits. Volvo Group fieldtests have shown fuel savings of 15-20% for distribution trucks, up to 30% for city buses, and 10% for wheel loaders. If the hydraulic system is also hybridised, fuel savings for construction machinery would be significantly higher.

The company is also exploring renewable fuels, such as DME (dimethylether), as possible long term solutions for the future. Produced from biomass (Bio-DME), DME is energy-efficient and has proven to have a good environmental performance. The raw material used can be black liquor, an energy-rich, highly viscous by-product of the pulp industry. With Bio-DME instead of diesel, carbon dioxide emissions are cut by 95%.

Aiming at CO₂ neutral production

Volvo Group’s long-term ambition is to make all production facilities CO₂ neutral, with no additional contribution of carbon dioxide to the atmosphere. In 2007, Volvo Trucks unveiled the world’s first CO₂ neutral automotive plant in Ghent, Belgium, followed in 2008 by a CO₂ neutral dealership facility in Verona, Italy. Measurements at the Ghent plant show a decrease of 14,000 tons of CO₂ annually, and in Sweden the two plants in Tuve, Gothenburg, and in Umeå are close to becoming carbon neutral.

No offsets have been used to achieve this. To make these plants CO₂ neutral, Volvo Group has switched to renewable energy for production and heating. In Ghent, for instance, on-site wind turbines and a wood pellet heating system have been installed.

Together, Volvo Group and WWF will explore how to catalyze more sustainable movement of freight throughout the transport sector. WWF recognises Volvo Group’s potential to take a leadership role in this work, which would ultimately generate significant social and environmental benefits for society. Volvo Group is currently considering how other product segments might gradually be incorporated into the partnership.