

MAKING ELECTRICITY CLEAN

Vattenfall's strategic direction is clear, and can be summed up in three words: Making electricity clean. In a nutshell, these three words express Vattenfall's climate vision: to be a climate-neutral company by 2050. The path forward is lined with a number of major challenges. Vattenfall must reduce its emissions of carbon dioxide from existing operations while dramatically increasing its production of electricity with minimal CO₂ emissions – at the same time that the economic conditions are created that will allow the company to finance major investments. Vattenfall is also promoting the use of electricity in new application areas at the expense of other, less climate-friendly and less efficient types of energy, such as oil.

An ambitious – but realistic – climate vision...

Vattenfall's climate vision calls for the company's operations to be climate-neutral by 2050. This vision is entirely in line with Vattenfall's five strategic ambitions – Number One for the Customer, Number One for the Environment, Profitable Growth, Benchmark for the Industry, and Employer of Choice.

[Read more about Vattenfall's investments in renewable energy on pages 12–15...](#)



[...CCS technology on pages 16–19...](#)

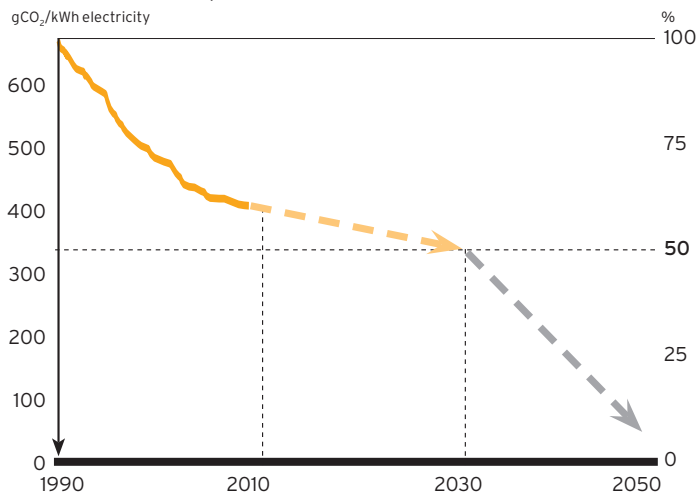


[...and nuclear power on pages 20–23.](#)



Vattenfall's ambitious – yet realistic – climate vision...

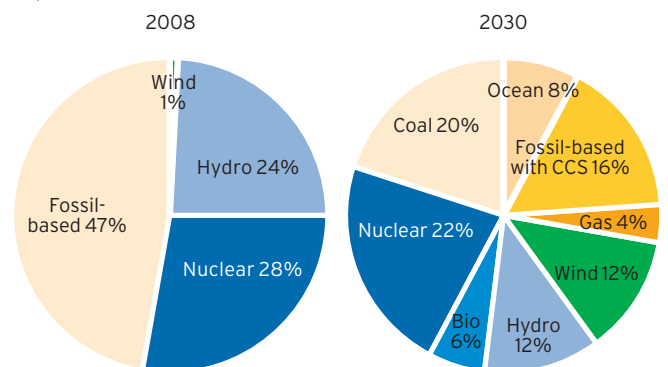
Vattenfall's goal by 2030 is to achieve a halving of specific emissions from existing operations from 1990¹ levels. The Group's climate vision is to be climate-neutral by 2050.



1) 1990 is the base year for the Kyoto Treaty as well as for the EU's emission targets.

...requires substantial production growth

Realising the climate vision will require a dramatic increase in electricity generation with very low CO₂ emissions. Growth of new generation capacity is taking place both organically and through acquisitions.



as wind power, bioenergy, ocean energy, coal power using the new CCS technology, and nuclear power.

Growth requires investment

Growth in new capacity for electricity generation is taking place both organically and through acquisitions. Vattenfall plans to build new power plants as well as improve and increase the capacity of existing generation facilities. A key part in this work will be to gradually introduce CCS technology in the Group's coal-fired power plants in Germany, Denmark and Poland.

Company acquisitions play a key role in achieving the Group's growth targets. Vattenfall is currently concentrating its efforts on acquiring operations in its existing markets, the UK and the Benelux countries. Other priority growth markets are France and Central Europe. In the UK, Vattenfall carried out three acquisitions in 2008 – all in wind power. In early 2009, Vattenfall made an offer for Nuon¹, the second-largest energy company in the Netherlands, with approximately 3 million customers and slightly more than 6,000 employees.

Decisions on acquisitions must be in line with Vattenfall's overall strategy. Acquisitions must be judged to support Vattenfall's environmental objectives and contribute to reliable energy supply and stable prices for society at large. In addition, any acquisitions must meet set requirements for risk profile and profitability, while making a positive contribution to Vattenfall's mix of various types of energy.

Cash flow must be strengthened to handle expansion

To be able to finance the major investments needed to achieve the Group's planned growth target, Vattenfall will need not

only continued high profitability, but even more so, a strong and improved cash flow. Strengthening cash flow will require that all processes are capital-efficient and that the right investments are made at the right time. The Operational Excellence programme plays a vital role in this regard, as it focuses on productivity improvements and better utilisation of synergies across national borders. Success in these areas will be necessary if Vattenfall is to be able to achieve one of its strategic ambitions – to be a Benchmark for the Industry.

Shift to electricity more energy-efficient

Electricity is an efficient conveyor of energy and often the most cost-efficient alternative. In many areas a shift to electricity can lead to an overall decrease in energy consumption. If a growing number of society's processes can be run with electricity, the migration to climate-neutral energy generation can be accelerated. Vattenfall sees major opportunities for electricity to take the place of other forms of energy in the heating and cooling of buildings, in the transport sector and in industry. In the coming decade, new technologies will create a host of new application areas for electricity, such as electric cars, which will lead to further growth in demand for electricity. Read about new application areas for electricity on page 25.

1) The offer pertains to Nuon's unregulated businesses (generation and supply). Nuon's grid company Alliander is not included in the deal.



Cash flow

Cash flow must be strengthened to keep pace with the Group's expansion.

