

Energy and sustainability

Towards a sustainable, reliable and affordable energy system

The Netherlands has embraced a courageous vision: by 2050, we will have a sustainable, reliable and affordable energy system in which CO₂ emissions have been halved and 40% of electricity comes from sustainable sources. The remaining 60% of electricity will come from gas, nuclear fuel and modern coal powered plants using Carbon Capture and Storage technology. By 2020, we aim to have improved energy efficiency by 20%.

The government is investing € 7.5 billion in energy efficiency, sustainable energy and CO₂ reduction. Innovation and public-private partnerships are key to our approach: the government, private sector and academia co-operate on green materials, built environment, sustainable mobility, chain efficiency, sustainable electricity, new gas and greenhouses as a source of energy. The Netherlands aims to achieve 6,000 MW of wind power and is experimenting with energy from waves, algae and biomass. The Dutch are also developing Smart Grids, which enable innovations like electric cars. In addition, the country is establishing itself as a European leader in natural and green gas.



Unique Selling Points

- Using its location at the heart of Europe and the logistical, petrochemical and industrial centre around the Port of Rotterdam, the Netherlands aims to become Europe's bio fuel hub. Rotterdam plans to account for 10% of the European Union's import, production and export of bio ethanol and 25% of its bio diesel.
- The Netherlands is a global pioneer in Carbon Capture and Storage technology, and is realising various pilot projects. The Netherlands has the largest CO₂ storage capacity in Europe after Norway. An estimated 9,000 million tonnes of CO₂ can be pumped in empty gas fields.
- The Netherlands has an international reputation for research in renewable energy, in part due to the work of the Energy Research Centre. The Netherlands ranks 6th worldwide with regard to patent applications involving solar energy.
- There is extensive experience in the field of energy efficiency due to a long tradition of multiannual voluntary agreements on energy efficiency between the Dutch industry and the government. This has made Dutch industry one of the most energy efficient in the world.
- The Dutch have leading expertise in offshore wind energy, co-combustion of biomass in coal-fired power plants, pre-treatment methods of biomass, the use of landfill gas and the use of heat pumps combined with heat and cold storage.
- The Dutch have developed innovative solutions in decentralised energy production in greenhouses, CO₂ 'recycling' and waste heat utilisation for their energy intensive horticulture industry.

Facts & figures

- In 2008, net electricity production from renewable sources represented 7,5% of net electricity consumption. The most important renewable energy sources in the Netherlands were wind energy, which accounted for almost 3% of net electricity consumption, and biomass, accounting for almost 1,5%.
- In 2008, 10,5% of net electricity consumption was covered by imports of "green" electricity.

A few websites

- www.cleantechholland.nl - Dutch export platform for Dutch clean tech companies
- www.dekoepel.org – Dutch Renewable Energy Association
- www.energiened.nl – Association of Energy Producers, Traders and Retailers in the Netherlands
- www.vlm.fme.nl - Association of Suppliers of Environmental Equipment and Technology
- www.ecn.nl - Energy Research Centre of the Netherlands