

## Appendix A.2



# Niedersachsen

Since the reunification of Germany Niedersachsen has been the Federal State at the heart of Europe, the hub where east and west, north and south meet. As the ancestral home of the Saxons, this region between the Rivers Ems and Elbe, the North Sea and the Harz Mountains has one of the richest traditions in Europe. Niedersachsen is the second-largest Federal State, and its economy has traditionally been founded in agriculture; today food production and processing is the second most important sector after the automobile industry. Further significant areas are, along with tourism, the traditional sectors shipbuilding, steel, chemicals, electronics and computers. The State Capital, Hannover, is the world's most important trade fair location, host to such flagship events as Hannover Messe industrial fair, Agritechnica and the computer fair CeBIT.

Niedersachsen is assuming a central role in the German energy turnaround, with more installed generating capacity from wind and biomass than any other State. As early as 2015, more than 40% of the electricity generated in Niedersachsen came from renewable sources; the State thus makes an important contribution to achieving federal climate protection targets.

On 16 August 2016 the State Government approved its 'Vision for a sustainable energy and climate protection policy', with the following objectives for Niedersachsen:

- Reduce greenhouse gas emissions by 80-95% compared to 1990 levels by the year 2050.
- Almost complete transition to energy provision from renewable sources by 2050 at the latest.
- Maximum possible exploitation of the potential for energy efficiency and energy saving.

Security and reliability of supply, affordability and environmental compatibility comprise the framework criteria for Niedersachsen's energy and climate protection policies, with two equal emphases: environmentally and socially responsible configuration of the energy turnaround, and maintaining the international competitiveness of the Niedersachsen economy.

## **Base figures:**

Population: 7.93 million (2015)

GDP: 256,705 million € (2015)

GDP per head of the population: 32,591 € (2015)

Annual greenhouse gas emissions: 83.5 million tonnes in CO<sub>2</sub> equivalent (2013)

## **Practical measures and commitments**

### I. Greenhouse gas emissions

Over 70% of greenhouse gas emissions in Niedersachsen are from energy use in the four sectors transport, industry, domestic and commerce/trade/services. Another significant source of emissions (around 17%) is agriculture. Greenhouse gas emissions should be reduced by 80-95% compared to 1990 levels by the year 2050, without transferring manufacturing to locations abroad.

### II. Renewable energy sources

By the year 2050 at the latest, energy provision in Niedersachsen should be almost completely sourced from renewables, with a high proportion coming from within the State and using surplus potential for supplying neighbouring regions. In this, the economically and ecologically responsible use of agricultural land for renewable energy generation, especially from photovoltaic fields but also from fuel plants, is crucially necessary.

### III. Energy efficiency

The potential for energy efficiency and energy savings should be determined in close consultation with the principal stakeholders in Niedersachsen, and as far as possible fully exploited by the year 2050.

### IV. Moorland

The 'Niedersächsische Moorlandschaften' programme responds to new knowledge of moorland ecology and integrates it in climate protection objectives. The programme sets up the basis, especially for State agencies, for moor management and climate protection in moorland. Components have been presented that will contribute to specifying the programme, and important steps taken towards its implementation.

## V. Lead role of the State

Long term, the State Government administration aims to make its working practices to a large extent climate neutral.

## VI. Emissions trading

Businesses in Niedersachsen are subject to the EU's Emissions Trading Scheme, ETS. Together with Federal Government and other Federal States, Niedersachsen is campaigning for ETS to be developed and strengthened as the central European climate protection instrument to reduce greenhouse gas emissions.

## VII. Adapting to the consequences of climate change

In the coming decades, anthropogenic climate change will have serious ecological, social and economic consequences worldwide that will threaten the livelihoods of many people. As a littoral and agricultural State, Niedersachsen is also affected by these changes. The negative consequences in Niedersachsen of inevitable climate change are to be contained and ameliorated through appropriate adaptive measures.