



North Rhine-Westphalia: Germany's Leader in Energy Technology

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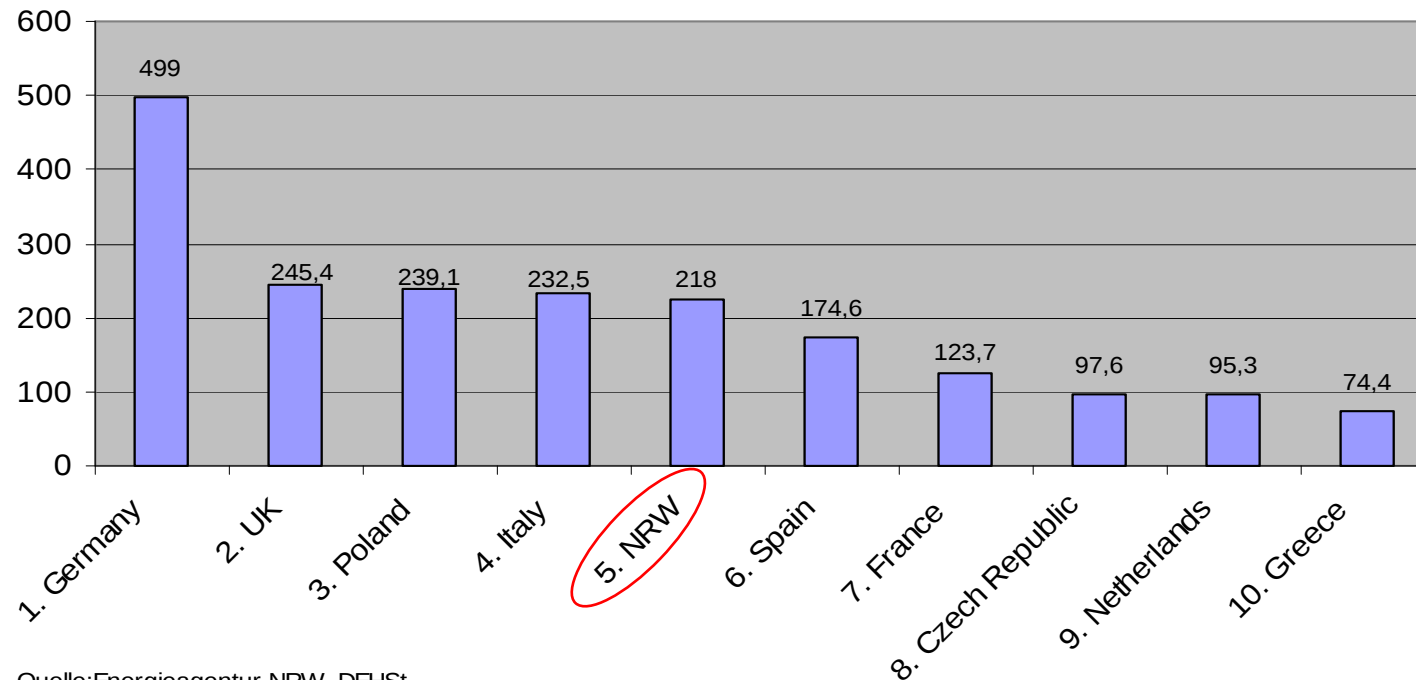
NRW – Number one energy state in Germany

- NRW has 18 million inhabitants
- GDP and population both 22% of Germany
- Location of energy-intensive industries
- 40 % of the national industrial energy consumption
- CO₂ emissions of NRW at rank 5 among major European Countries



Amount of allocation in Europe: NRW in the fifth place

(annual emission allowances 2005 – 2007 in million tons)



Quelle: Energieagentur NRW, DEHSt



Key technologies from NRW

- Energy efficiency
- Power plant technology
- Biomass plants, mainly for wood
- Wind energy, components and testing
- Solar thermal power generation and photovoltaics
- Small hydropower plants
- Cogeneration plants and gas fueled cogeneration units



Carbon Capture and Storage (CCS)

- International Energy Agency: “CCS is a key carbon abatement option”
- Pilot project for the washing of CO₂ in Niederaußem under construction (BoA 1)
- Planned CCS power plant using lignite with 450 MW in Hürth in 2014 (IGCC)
- R & D in NRW for CCS power plants, CO₂ transportation and storage, Enterprises: *Hitachi, Evonik, Uhde-Krupp, Envi Con, BP, RWE, RWE-DEA, E.ON, E.ON Ruhrgas, Vattenfall*