NSON scenario webinar NSON scenario development in the German NSON-DE project

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Previous long-term scenarios lack information about other energy sectors in 2050 and/ or show very high conventional generation capacities

 AGORA 2050
 Challenges we see:

 EU Energy Roadmap/ Reference Scenario 2050
 Sector coupling " of classical power sector with transport, industry and heat sectors complying with climate goals are insufficiently considered or documented

 e-Highway 2050 Scenarios
 Oversized conventional power plant fleet with generation capacities seeming unlikely based on today's investment decisions

In order to show the full potential of an offshore grid, a target scenario encompassing all relevant energy sectors complying with a 95% reduction of carbon emissions vs. 1990 (Kyoto accounting applied)

Additionally, this will result in a **"tailored" conventional power plant fleet**, showing more scarcity signals in the power market

NSON-DE scenario development:





SCOPE configuration for developing cost-optimized target scenarios of a future energy system complying with energy and climate objectives





PRELIMINARY

Energy balance in NSON target scenario 2050 complying with a EU-wide 95%emission reduction goal shows significant renewable generation covering all sectors





PRELIMINARY

Aside from CHP, the NSON target scenario for 2050 only exhibits very small investments in thermal generation capacities





Offshore wind capacities correspond to realization of currently planned projects – significant investments in offshore wind are not made due to high costs



