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# NSON scenario webinar

NSON scenario development in the German NSON-DE project

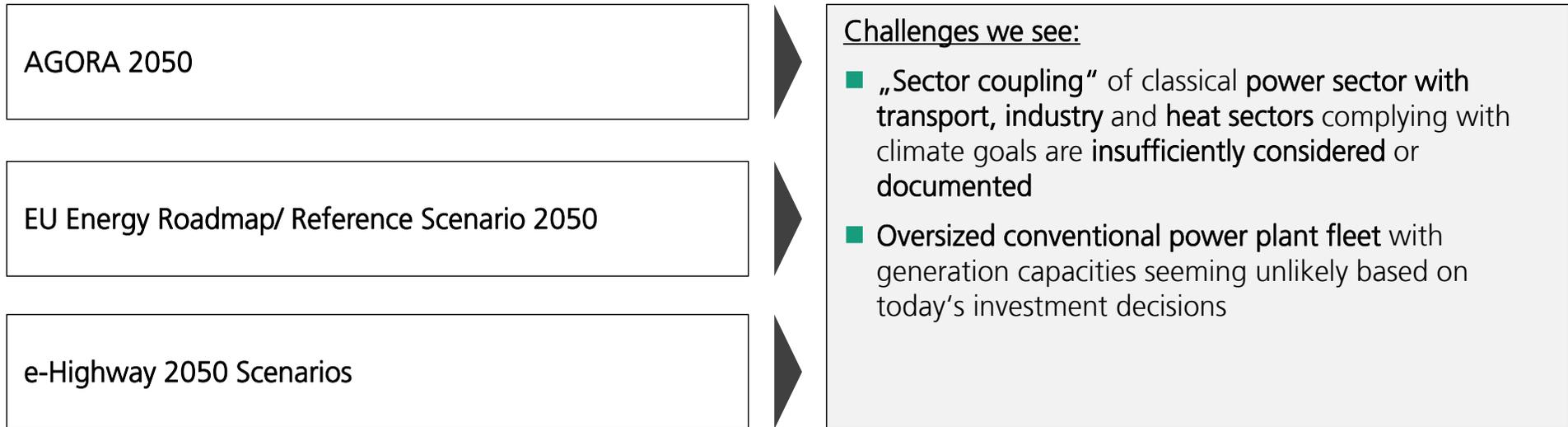
Philipp Härtel, Diana Böttger, Energy Economy and System Analysis, IWES

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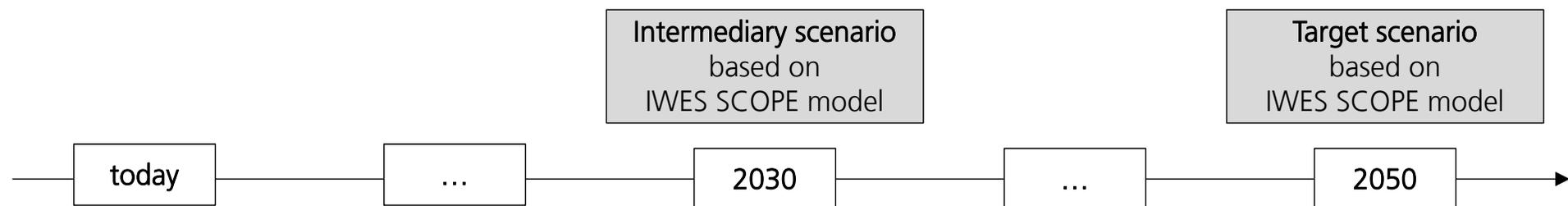
# Previous long-term scenarios lack information about other energy sectors in 2050 and/ or show very high conventional generation capacities



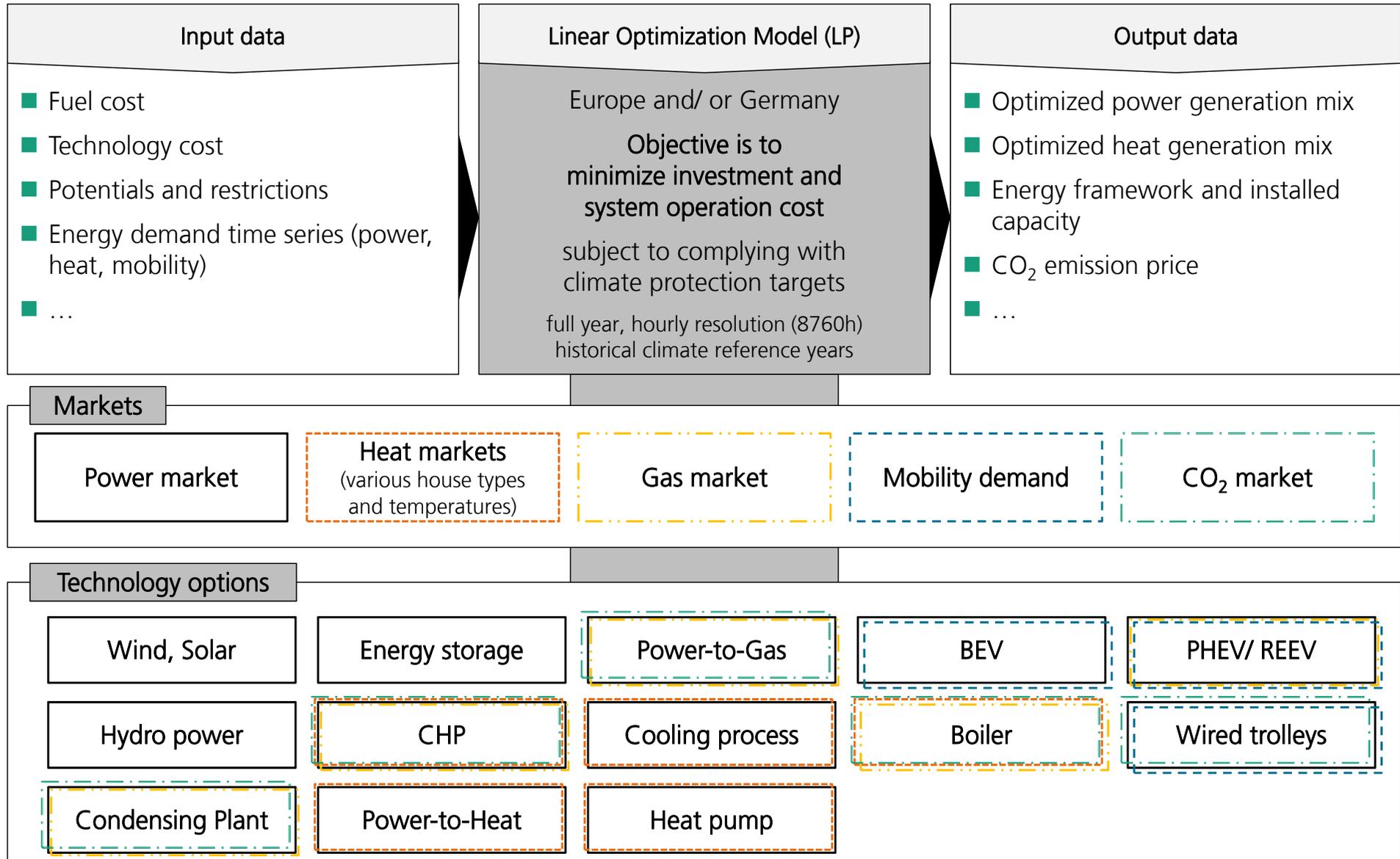
In order to show the full potential of an offshore grid, a target scenario encompassing all relevant energy sectors complying with a 95% reduction of carbon emissions vs. 1990 (Kyoto accounting applied)

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

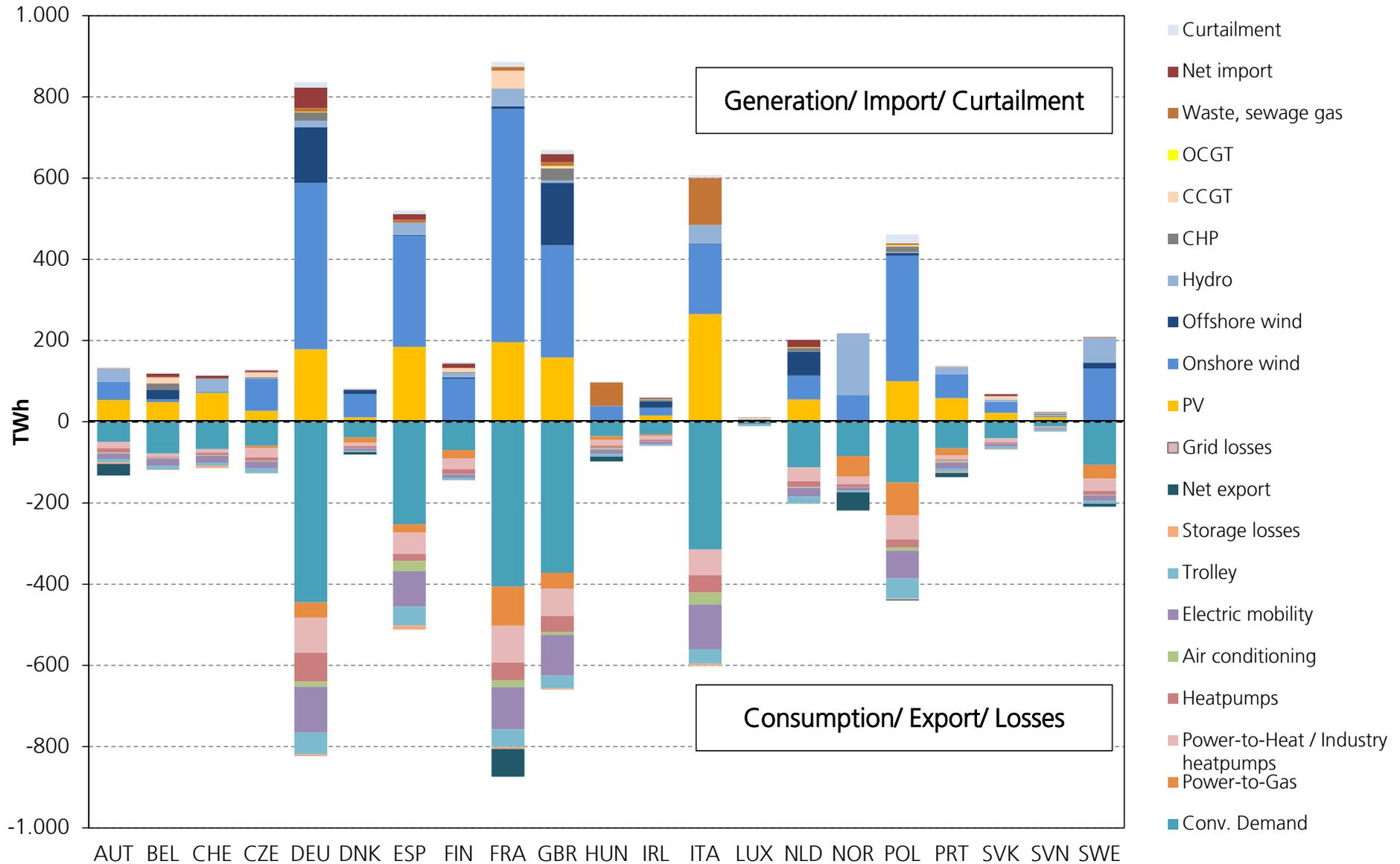
## NSON-DE scenario development:



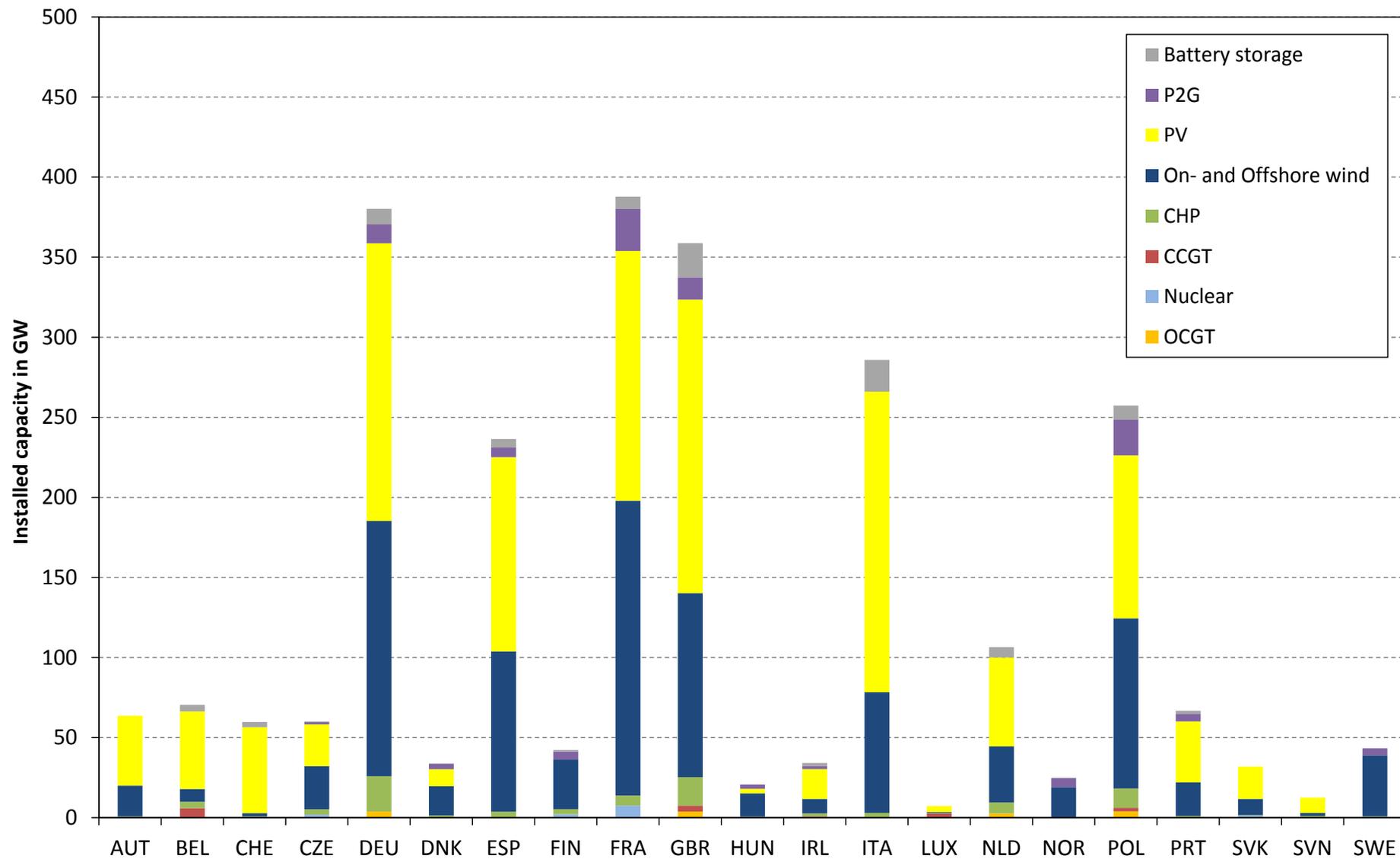
# SCOPE configuration for developing cost-optimized target scenarios of a future energy system complying with energy and climate objectives



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



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

