

Implications of the War in Ukraine for the German/EU and Japanese Energy Security and Climate Strategy

German Japanese Energy Transition Council (GJETC)
Outreach Event

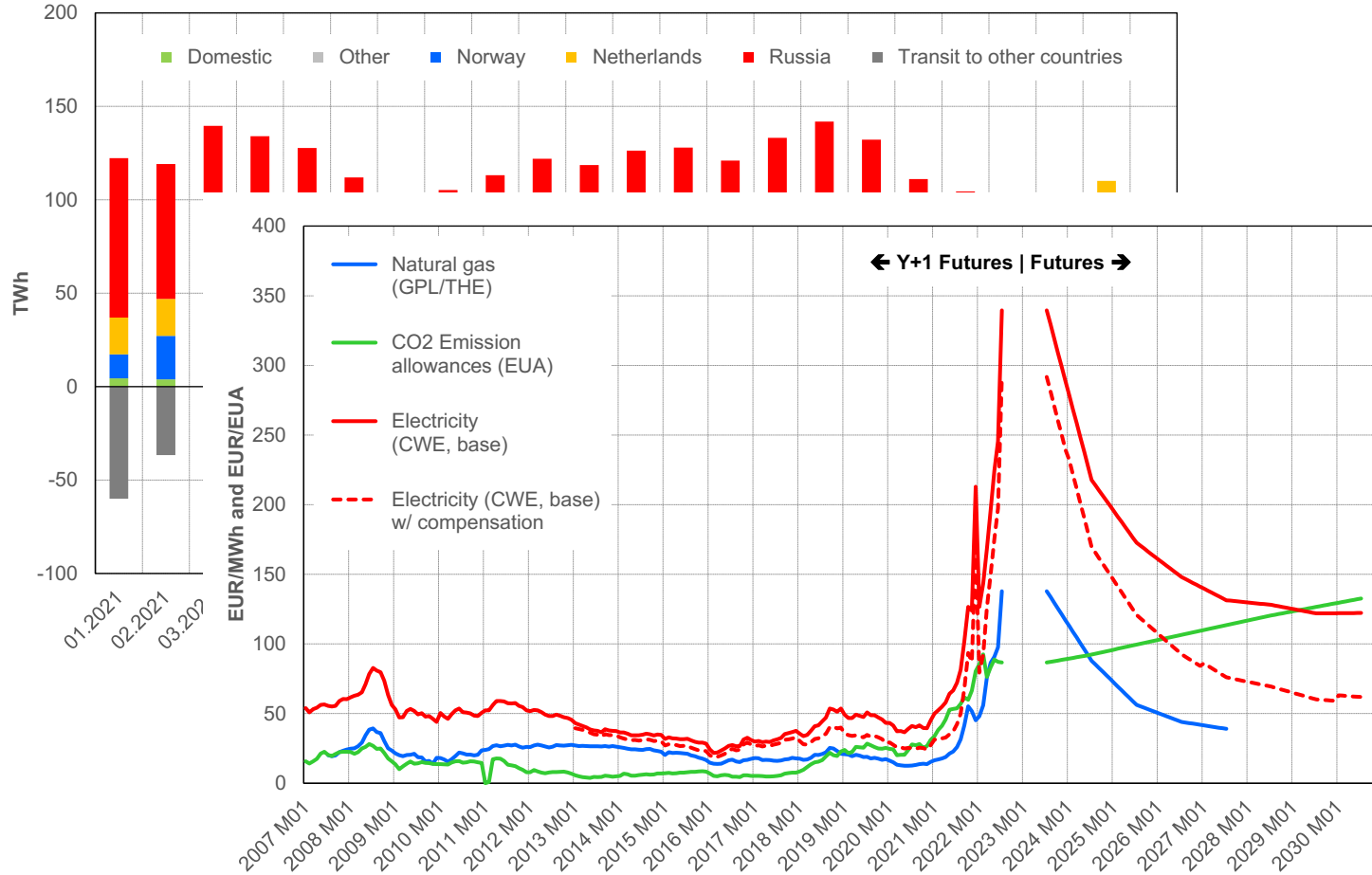
» Approaching Carbon Neutrality in Times of Crisis «

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Natural gas supplies to Germany

Three different but linked challenges



- Russian gas supplies stopped completely in 08/22
 - natural gas savings ~10%
 - increased imports from Norway; Netherlands & Europe (LNG via pipeline)
 - decreasing transit
- Major natural gas wholesale market prices increase
 - peak (intraday) at 350 €/MWh in 03/22
 - ~120 €/MWh for CAL 23
 - ~40 €/MWh for CAL 26
- Wholesale electricity prices mirror natural gas and CO2 prices (~75 €/EUA)

Responses to the gas (price) crisis

Addressing different time horizons (and their interactions) is crucial

- **Next few months**
 - **Physical security of supply not a major issue** due to sufficient natural gas storage feeds
 - Energy prices and costs as key vulnerability: major impacts of gas consumption, minor effects of lifetime extension for few coal (~2 years) and 3 nuclear (3 months) units
 - Many processes need to **take off** (diversification of supplies, energy efficiency, clean energies)
- **Next two to three winters (in Europe)**
 - Preparation for **integrated supply & demand management**: ~20% savings, LNG via 3 state-owned and 3 private FSRUs with capacity of 250-300 TWh (25-30%) commissioned in 2022/23)
 - Probably (slightly) increasing emissions
 - The processes to drive forward medium-term solutions **must make major progress**
- **2025 and beyond**
 - **Sustainable solutions** on all levels (energy and resource efficiency, oil and gas substitution)
 - Fixing solutions for the sectors where natural gas remains a transitional option (transformation of the steel industry, transition towards a 80+% renewable power system, district heating)
 - Diversification based on the „n-1“ principle (also beyond oil, gas and coal)

Guiding citizens and the economy through the “death valley” of the next 2-3 years

A series of integrated packages in Germany and the European Union

- **Three cost relief packages for Germany (including short, medium and long-term measures)**
- **Balancing supply/demand by fast track FSRU commissioning and LNG terminal construction as well as acquisition of additional supply contracts (partly controversial, transition to hydrogen/derivates as an emerging debate)**
- **Recommendations of the Expert Commission on Gas and Heat (Gas Commission, Oct 2022)**
 - gas (and heat) price/cost brake (compensation for private, SME and industrial consumers, designed to maintain incentives for natural gas savings, some adjustments for industrial consumers necessary due to the EU’s Temporary Crisis Framework on state aid)
 - safeguards for industrial production sites as part of the gas price/cost brake
 - package for gas market stabilisation (liquidity, margining etc.)
 - package of additional measures for reduction of natural gas consumption (short and medium term) as well as accelerating transition
- **Electricity prices/cost brake comparable to the Gas Commission proposal for gas and heat (incl. windfall profit skimming mechanism)**
- **European Union package (European single buyer, gas market stabilisation, EU compensation funds – and implementation of the European Green Deal)**

Thank you very much

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