

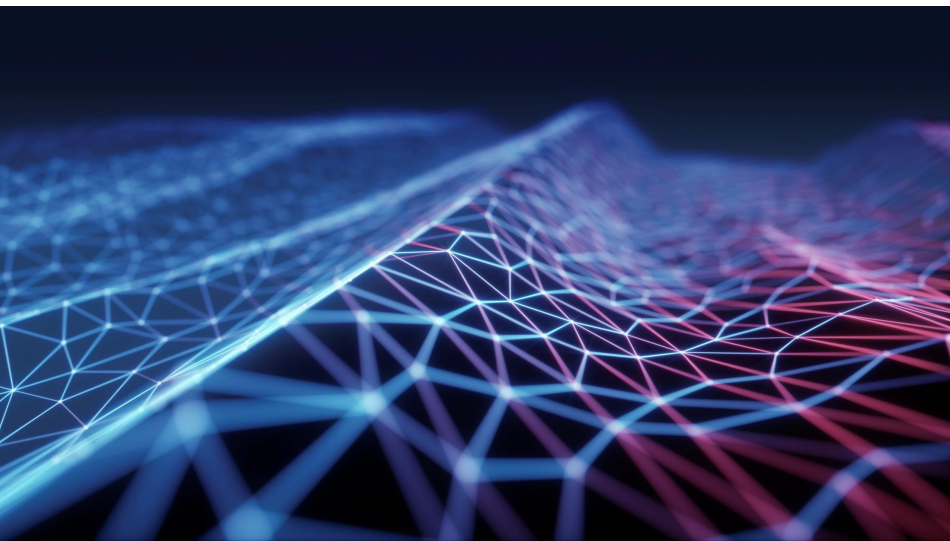


2021 EU POLICY FORUM FOR EDUCATORS

EUROPE GOES GREEN? ENERGY, ENVIRONMENT, POLITICS, AND SECURITY IN THE EU



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A BALANCING ACT

GREEN ENERGY, ENERGY SECURITY AND GEOPOLITICAL SECURITY

DR. SARAH LOHMANN



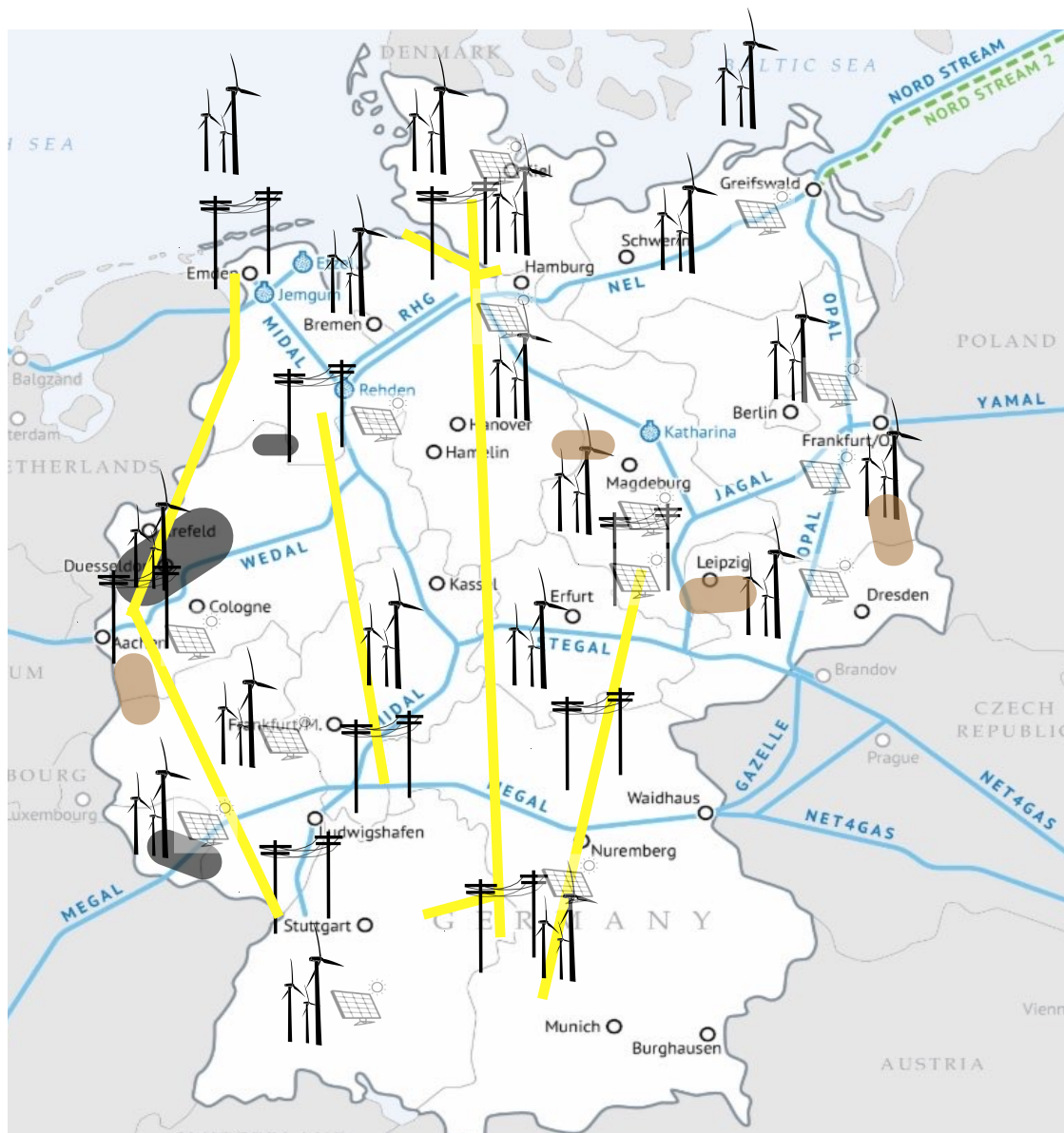
WHAT DOES GREEN ENERGY MEAN TO ME?

BY THE NUMBERS

Germany's Goals

- **Cut gas emissions by 65 % by 2030**
- ✓ Currently, emissions down by 40.8 %
- **Get rid of coal by 2038**
- **Get rid of nuclear by 2022**

- **Renewables: 48%**
- ✓ 27% of electricity from wind (2020)
 - ✓ 29,844 wind turbines (55GW)
 - ✓ 181 offshore wind farms (28 operating-7.7 GW)
- ✓ Photovoltaics: 21% of electricity generation in June 2021



GERMANY GOES GREEN... ALMOST

- Huge energy shortfall
- \$600 billion to maintain stable grid
- Wind energy is down 25%
- Electricity emissions up 25%
- Coal up 36%
- Green energy bill:
Median household pays +43%
\$38 billion

Graphics: Chris Clyde Image Source: GazProm, <https://www.gazprom.com/projects/germany/>



ENERGY SECURITY: THE MATH PROBLEM



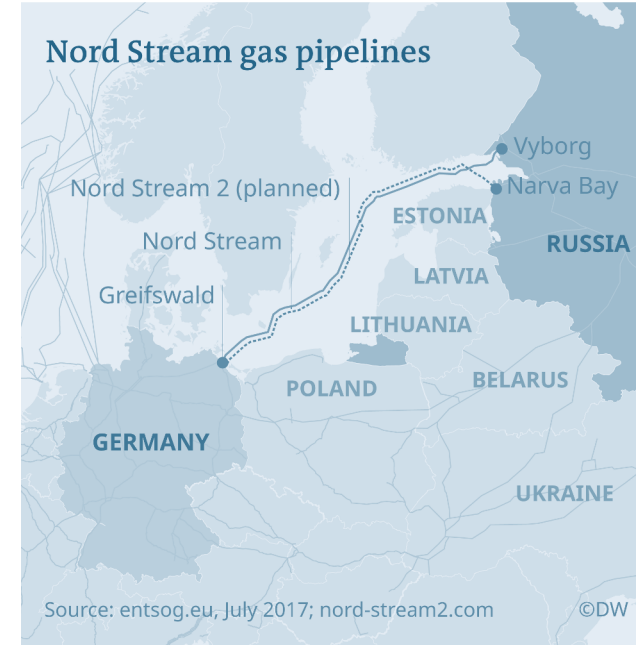
Renewables dilemma

Unstable grid

Too many imports



Grid



Gas

GEOPOLITICAL SECURITY
NETWORKED EUROPE-THE GOOD NEIGHBOR POLICY



SHIFTING POLITICAL LANDSCAPE

NEXT STEPS FOR EUROPE

