



# New Nuclear in Germany ?

Consequences of the Nuclear Phase Out  
and Status of the German „Energiewende“

11.02.2026 | Estonia, Tallinn - Ulrich Gräber

The great German Poet Goethe might be helpful to understand the  
German “**Energiewende**”

"So that was the crux of the matter!" exclaims Goethe's Faust in  
amazement as the Poodle transforms into Mephisto.

The "crux of the matter" of the energy transition "Energiewende" is  
revealed in Germany's supposed pioneering role, which turns out to  
be less a technological advance than a culture war – a struggle in  
which climate protection is defined primarily by moral superiority.

The result is **Germany's Fundamental Delusion.**



# GERMANY'S FUNDAMENTAL DELUSION

- Prosperity without electricity growth
- Germany a pioneer in climate protection
- Demolition of its own nuclear power plants, but nuclear power from the neighbours
- 20 new gas-fired power plants, but no gas exploration in Germany



# A PROMISING START OF NUCLEAR ENERGY IN GERMANY

- In 1955 joint efforts by politics, science and industry enabled the peaceful use of nuclear energy in a period of only five years.
- By the end of the 1970s, 10 nuclear power plants with a total capacity of 9,000 megawatts were connected to the grid, 6 nuclear power plants with a total capacity of 8,000 megawatts were under construction
- At the beginning of the 1980s, the construction of the three Konvoi nuclear power plants with a total capacity of over 4,000 megawatts began.





## Höchstspannungsnetz (2012)

— Leitung 220 kV  
 — Leitung ≥380 kV

Kraftwerke mit einer Leistung über 1000 MW:

Kernkraftwerk  
 Steinkohlekraftwerk  
 Braunkohlekraftwerk

≥ 3000 MW  
 ≥ 2000 MW  
 ≥ 1000 MW







2011 X

6.000 MW of installed Nuclear Power  
had been taken from the grid since 2000

2023 X

15.000 MW of installed Nuclear Power had  
been taken from the grid since 2011

**21.000 MW since 2000**



# 2010

Nuclear Power (21 GW) and Fossil fuels (79 GW) together produced 85.3% of total electricity generation.

Renewable energy (48.4 GW) produced 14.7% of total electricity generation

**A total of 615 TWh (100%) was produced by 148.4 GW of installed capacity.**

**net export 17 TWh = 598 TWh**



# 2025

Fossil power (77.5 GW) produced **39.2%** of electricity generation.

Renewable energy (184 GW) produced **55.8%** of electricity generation.

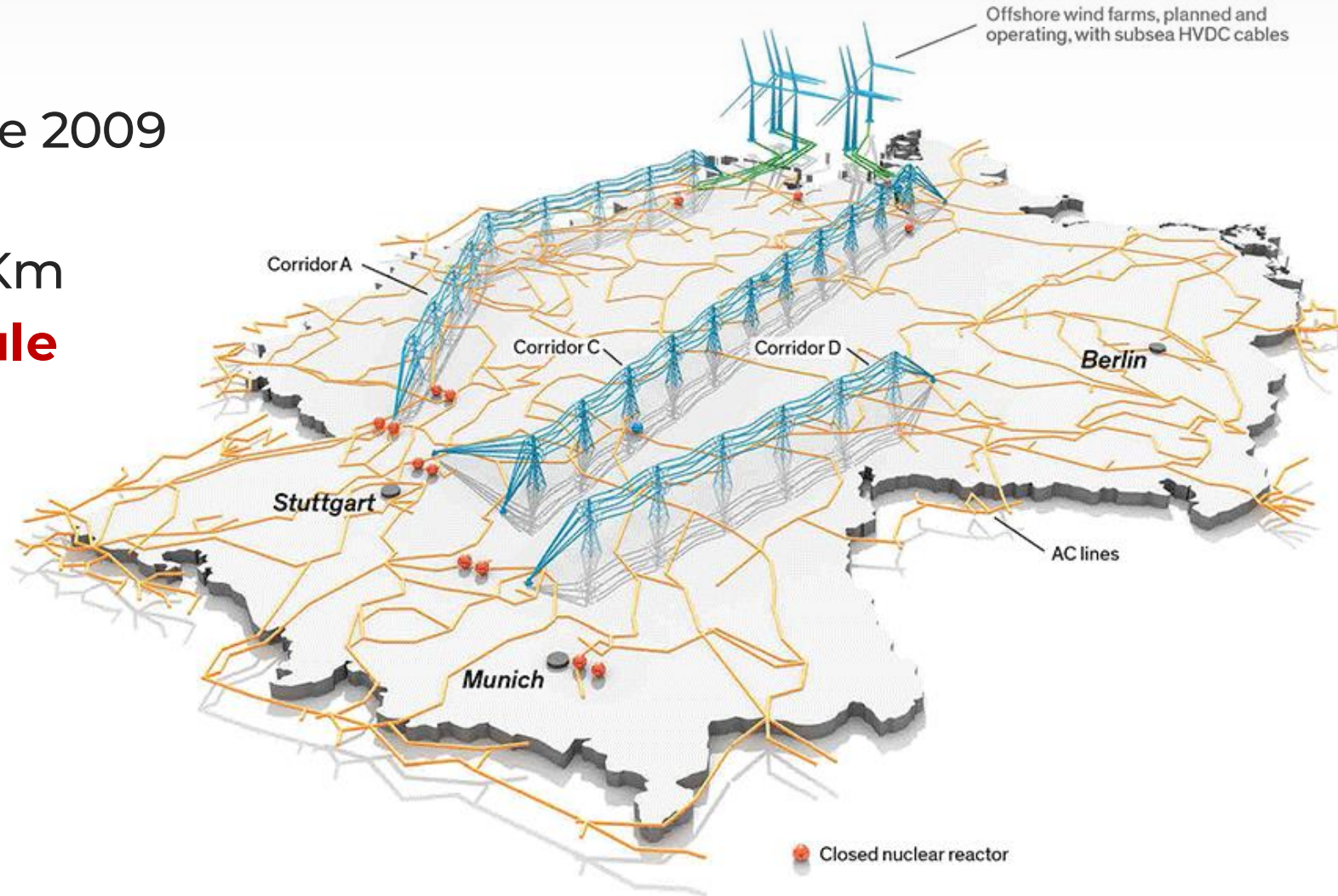
A total of 437 TWh (**95%**) were produced by 261.0 GW of installed capacity.

**net import 22 TWh = 459 TWh**



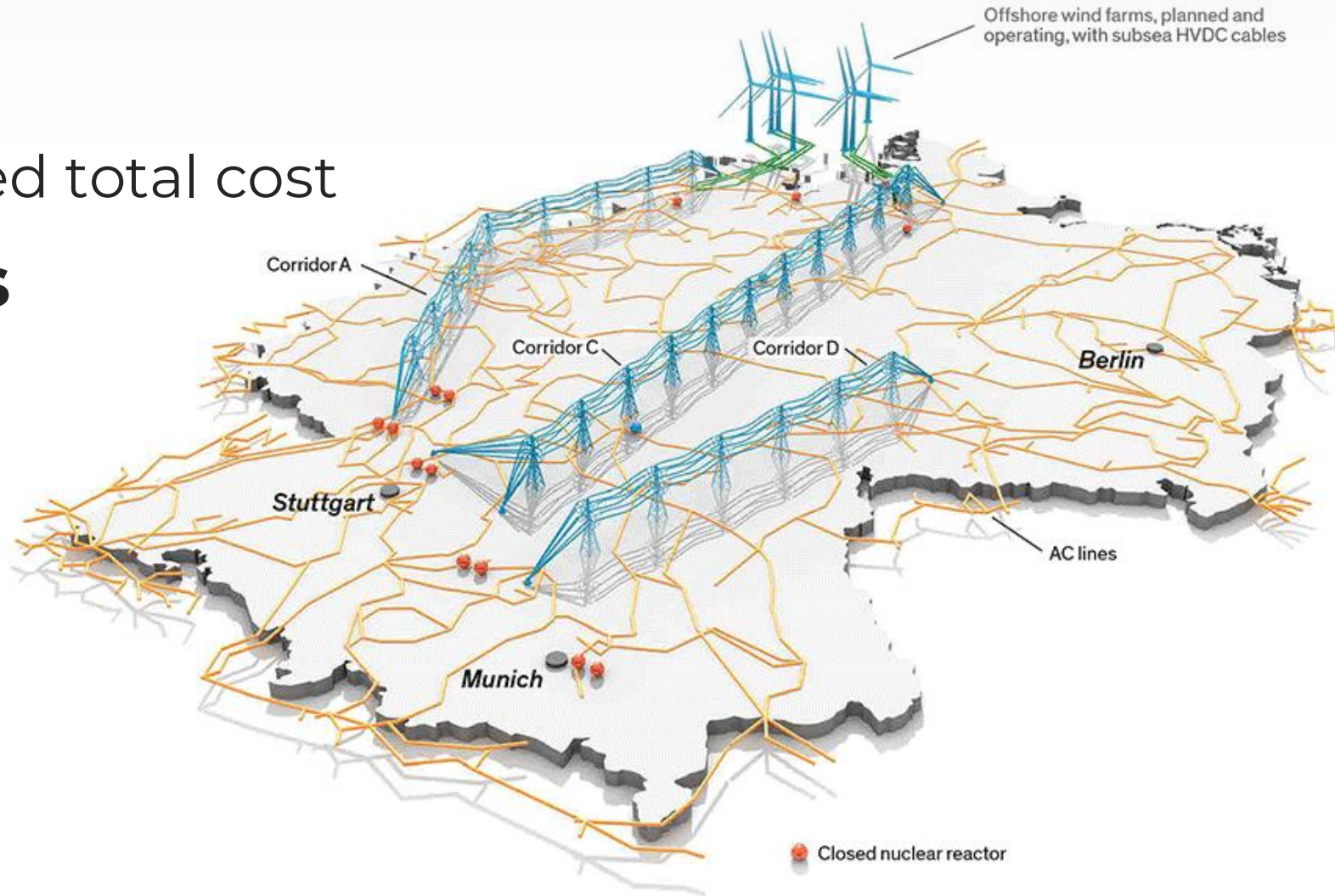
# Required expansion of the high-voltage grid | 17.000 Km

- Completed 3.350 Km since 2009
- Approved 4.530 Km
- Under Construction 780 Km
- > **6.000 Km behind schedule**



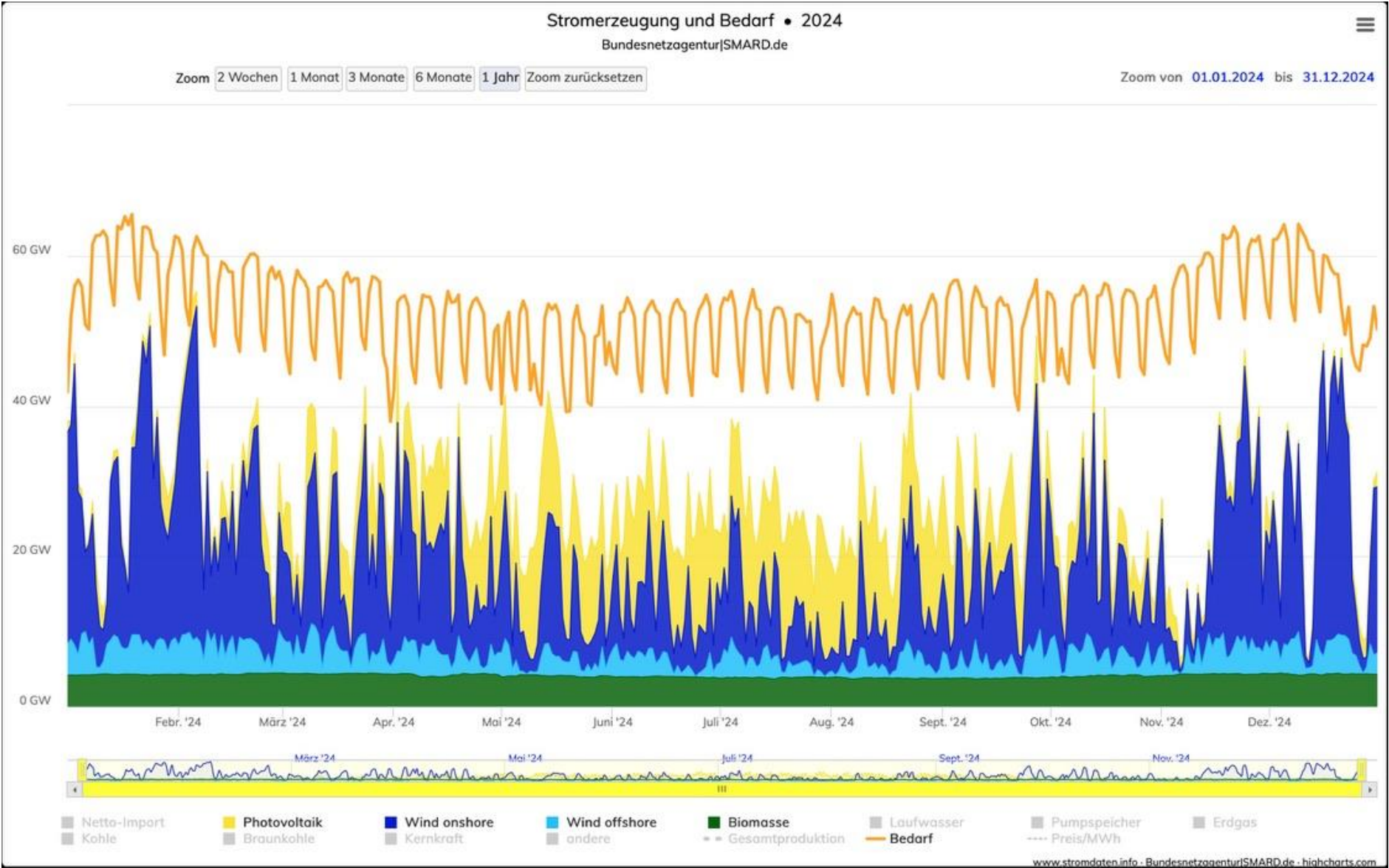
„Energiewende“ cost until today 600 Billion Euros

„Energiewende“ estimated total cost  
**> 1.000 Billion Euros**





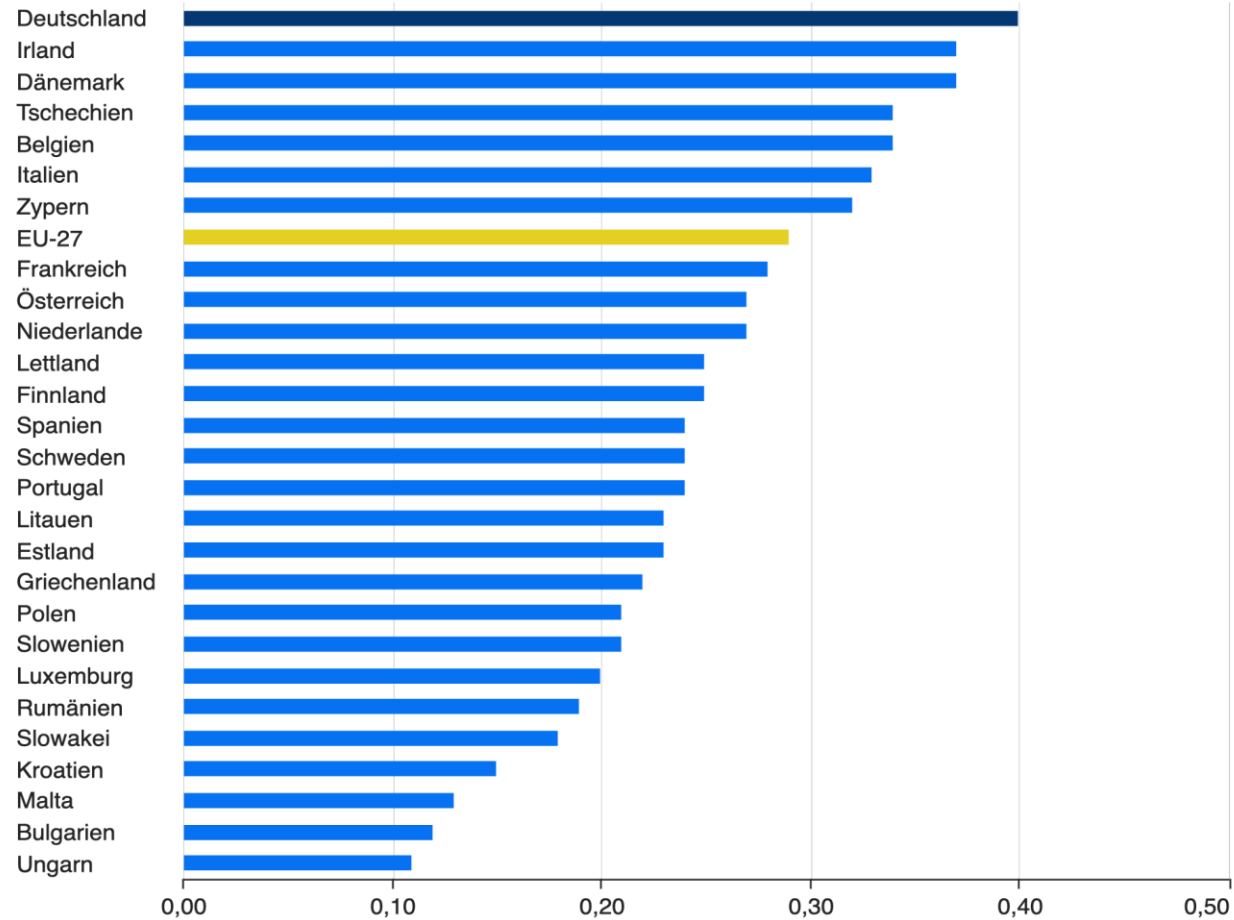
# Renewable Generation and Electricity Demand 2024



# Electricity Prices in the EU

## Strompreise in Privathaushalten 1. Halbjahr 2024

in Euro je Kilowattstunde (kWh)



Inklusive Steuern und Abgaben. Quelle: [Eurostat](#)



# GERMANY'S FUNDAMENTAL DELUSION

Germany a pioneer in climate protection?

Since the Nuclear Phase-out in 2023 monthly

**10 Millions tons more CO<sup>2</sup> Emissions**

	DE Germany	FR France
CO <sub>2</sub> content per kWh	350 g	35 g



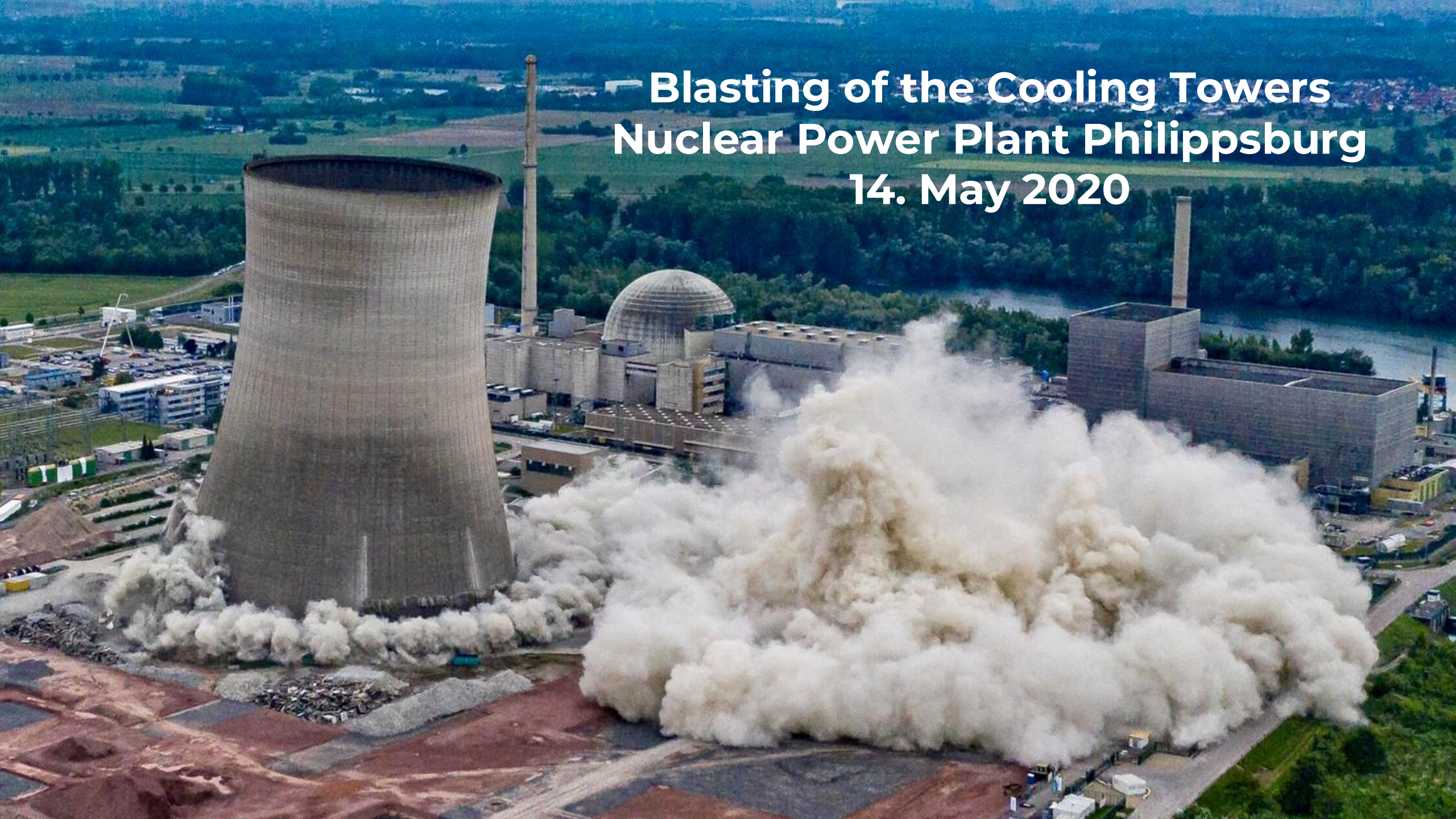
# GERMANY'S FUNDAMENTAL DELUSION

Demolition of its own nuclear power plants, but nuclear power from the neighbors





# Blasting of the Cooling Towers Nuclear Power Plant Philippsburg 14. May 2020





# GERMANY'S FUNDAMENTAL DELUSION

Demolition of its own nuclear power plants, but nuclear power from the neighbors

2024 Germany **imported 19.000 GWh** Nuclear Power from its Neighbours





# **NEW NUCLEAR IN GERMANY ?**

## **Why not!**

Atomgesetz „New Build Paragraph 7“ was modified six times, it could be modified again!

Acctually NOT forbidden: the New Build of Nuclear Power Plants for Heat Production and non commercial Electricity Production



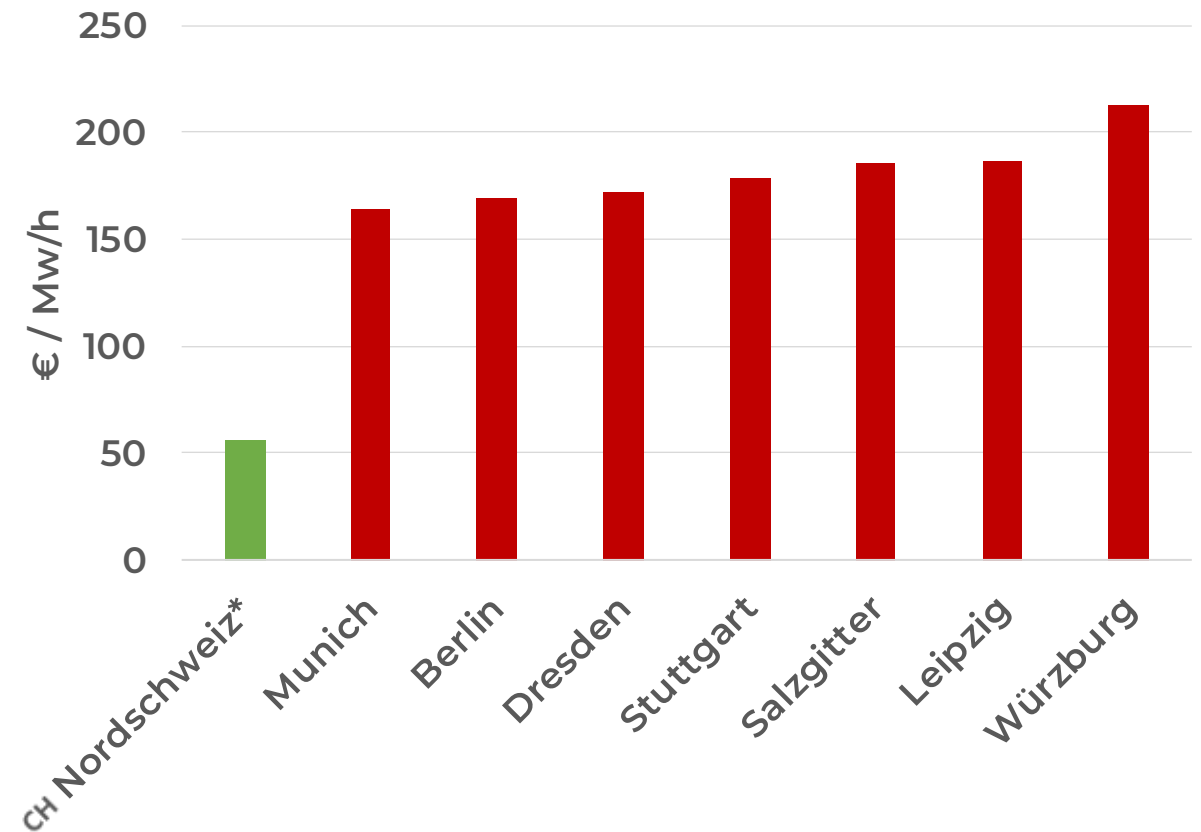
# DISTRICT HEATING IN GERMANY

**Heat capacity: ~71 GW(th)**

**Heat generation: 135–140 TWh for  
6 million homes**

- Very high and increasing heating costs
- Domination of gas as fuel
- Legally binding decarbonization
- Poorly scaling alternatives (heat pump, biomass, biogas)

**DISTRICT HEATING PRICES IN GERMAN CITIES  
2025**



\*Heat from Beznau Nuclear Power Plant

[waermepreise.info](http://waermepreise.info)

# DISTRICT HEATING IN GERMANY

## HEATING REQUIREMENTS

7.000+ operating hours per year

CO<sub>2</sub>-neutral and stable price

Heat output at: 95–140 °C

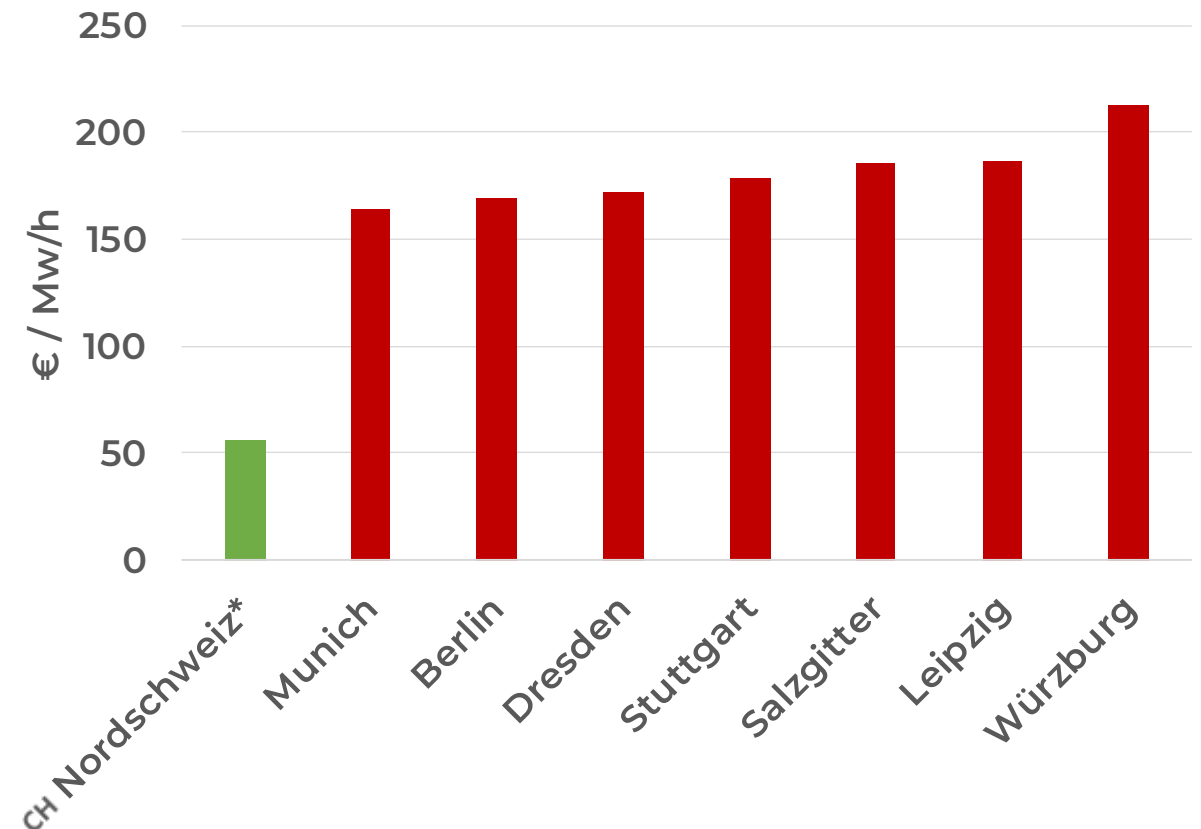


### STEADY ENERGY HEAT REACTOR OFFERS:

Universal Scalability

- Low cost: 40-45€/MWth
- Full decarbonization
- Independence of power price

## DISTRICT HEATING PRICES IN GERMAN CITIES 2025



\*Heat from Beznau Nuclear Power Plant

[waermepreise.info](http://waermepreise.info)

# NEW NUCLEAR IN GERMANY ?

**YES!**

With Fermi Deutschland the new  
SMR Nuclear Technology is

established

and there is a young

Pro Nuclear Generation







Thank you