



SUSTAINABLE

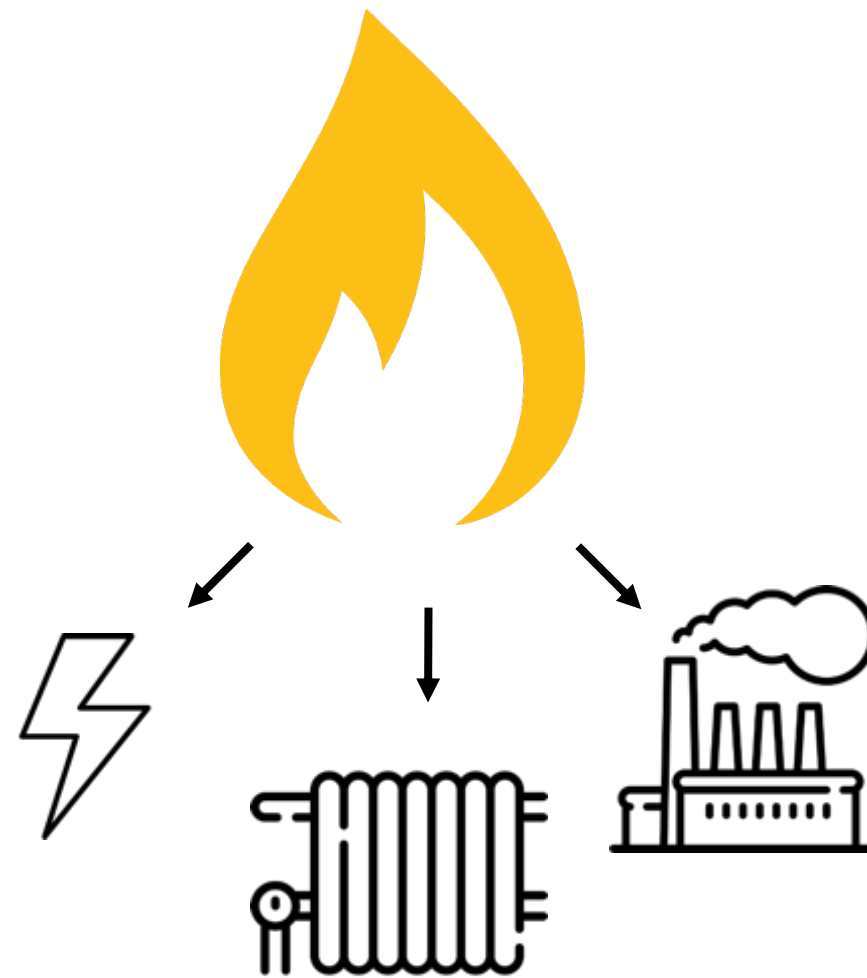
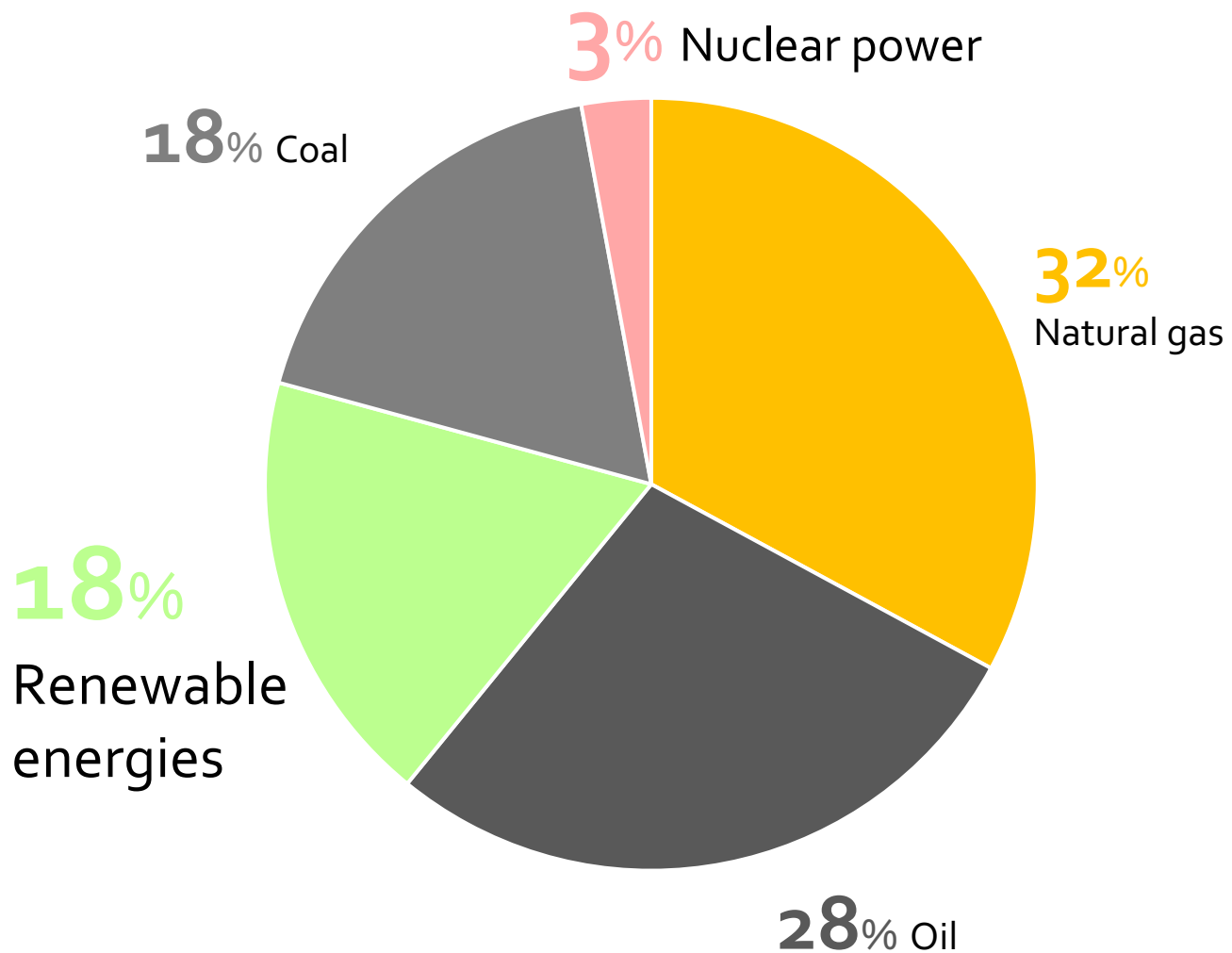
Update on German Energy Policy, Taxonomy and the Debate about Nuclear Power

Image: BUND

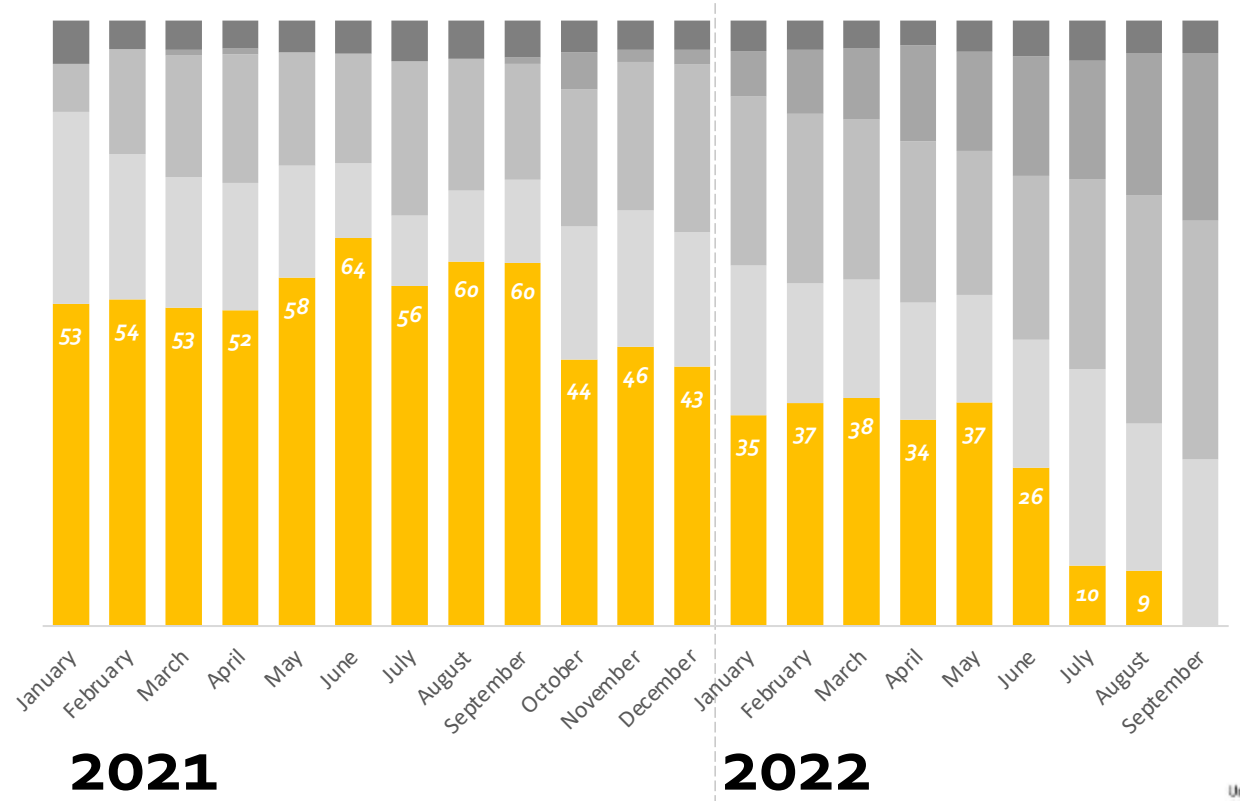
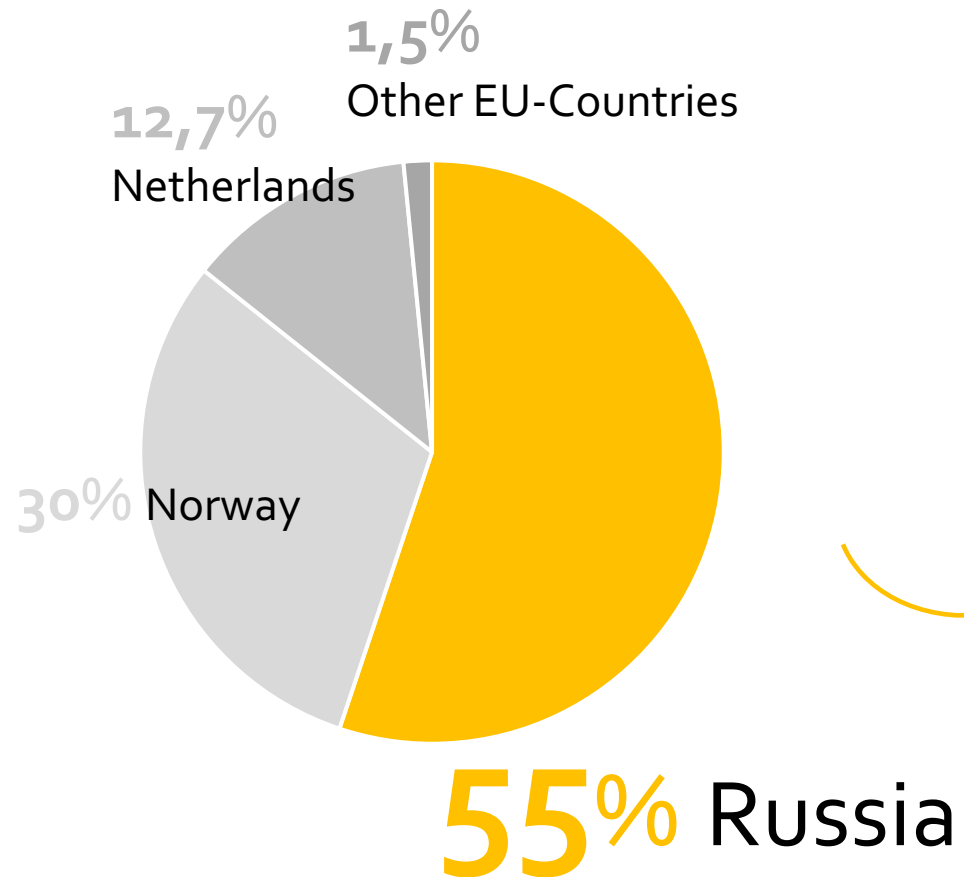
Jan Warode
Campaigner Nuclear Energy Politics, Friends of the Earth Germany

29/09/2022

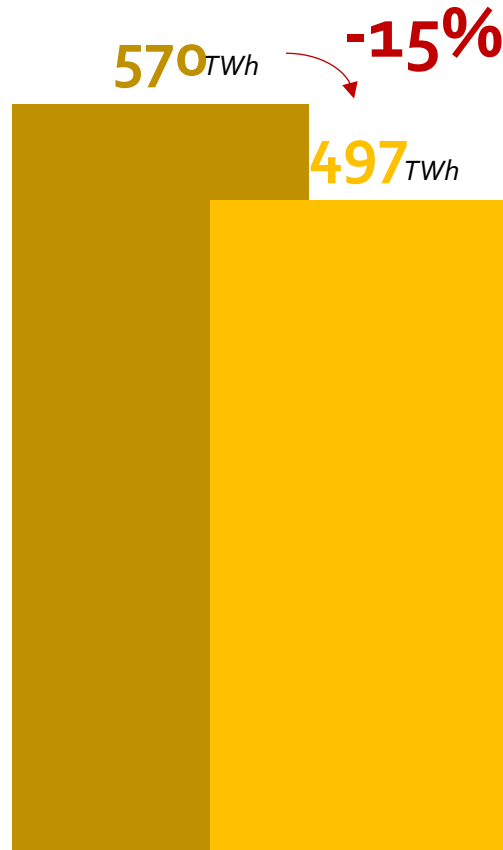
PRIMARY ENERGY CONSUMPTION



GERMANY'S NATURAL GAS IMPORTS BY COUNTRY



GAS CONSUMPTION



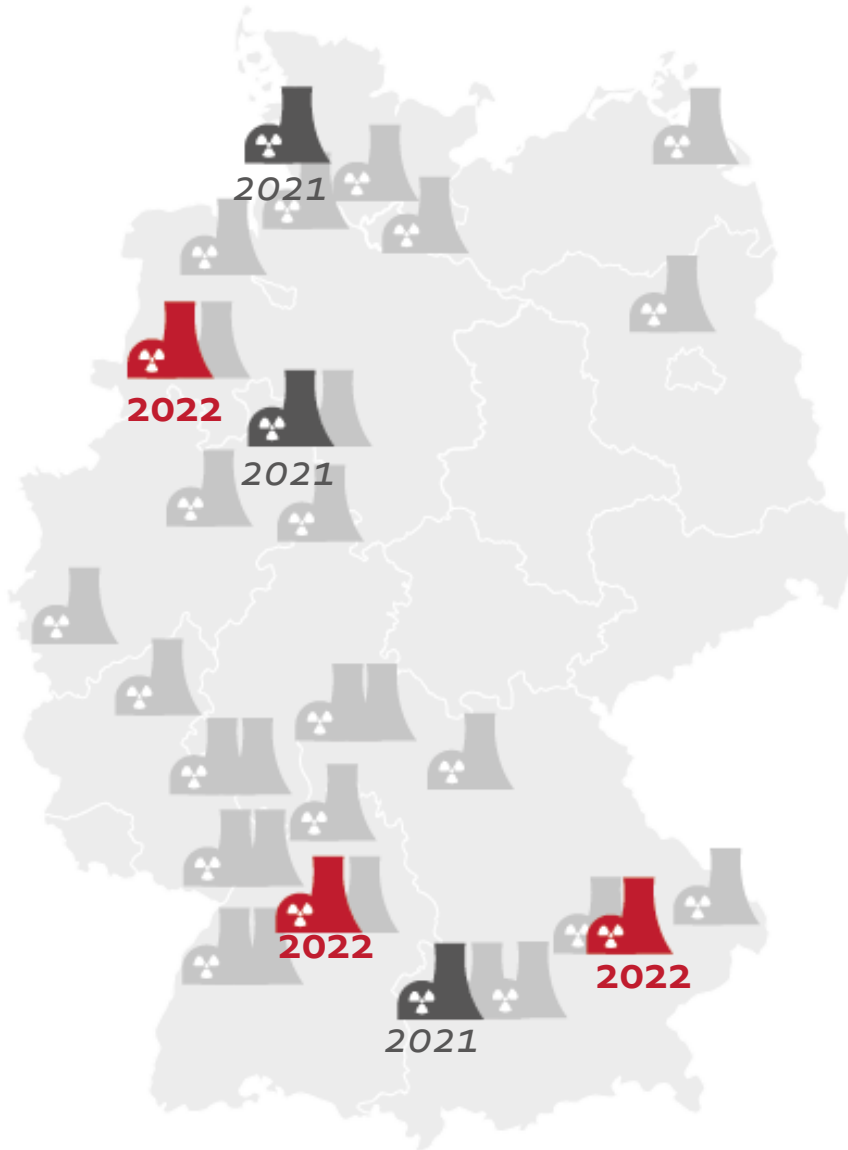
First half 2021 First half 2022

- Adjusted for temperature: -7%
- Gas storage level: **90%**

Challenges and criticism

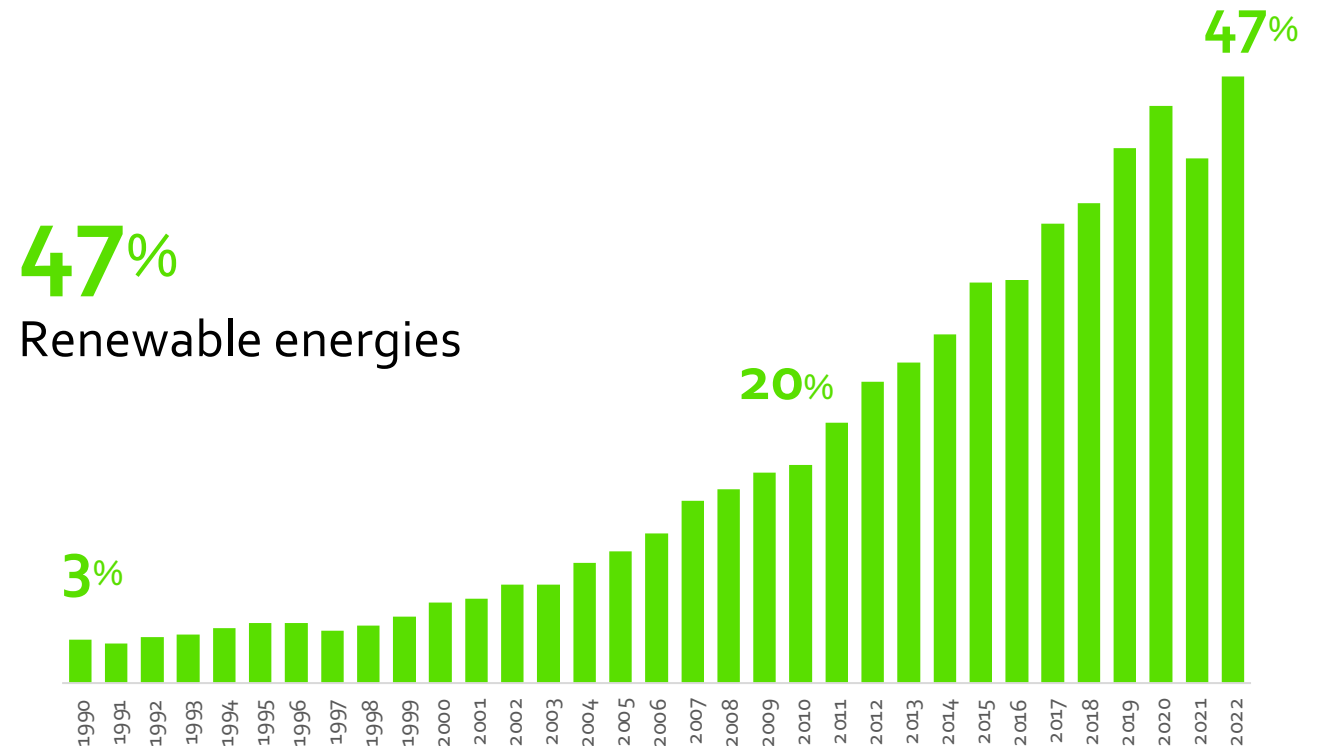
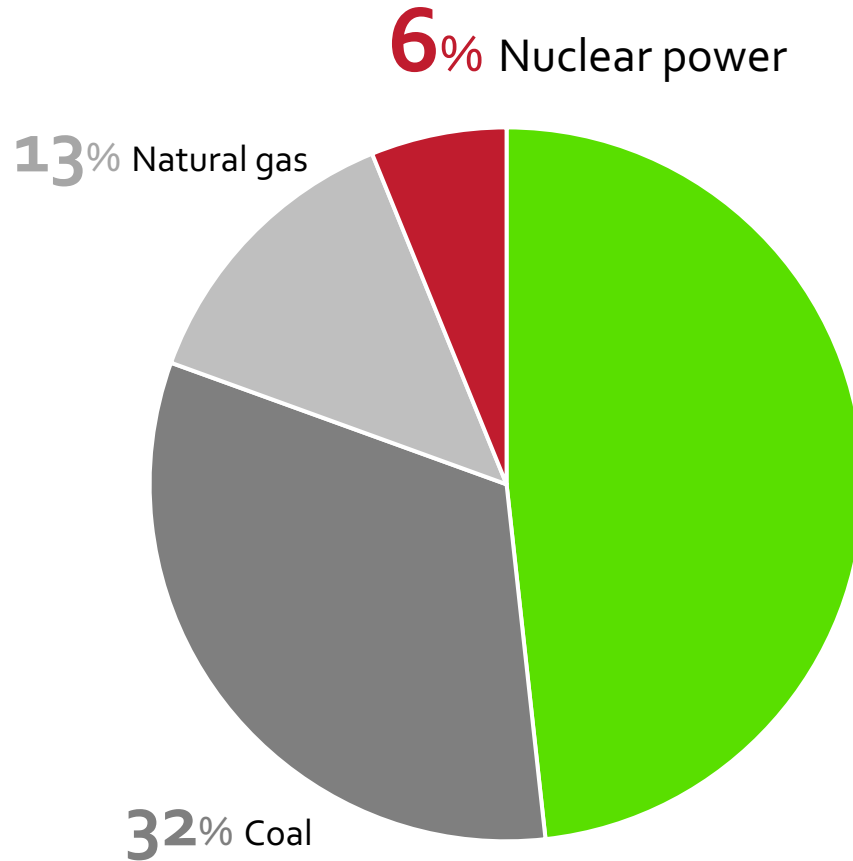
- Required gas savings: **20-25%**
- High electricity and gas **prices**
- **Rollback** to oil and coal
- LNG-Terminals
- **Energy savings**

NUCLEAR POWER IN GERMANY



- Nuclear power phase out 2000/2011
 - Gradual phase-out
 - Three **reactors** run until Dec. 2022
 - Uranium enrichment plant and fuel factory continue to run
- Atomic Energy Act - “Nuclear exit law”
- Nuclear waste is stored in **16 interim storage facilities** at the nuclear power plants or central sites
- No nuclear waste storage facility so far

ELECTRICITY GENERATION IN GERMANY



DEBATE ON NUCLEAR POWER



SPD, Greens, Ministries and environmental organizations against Lifetime extension

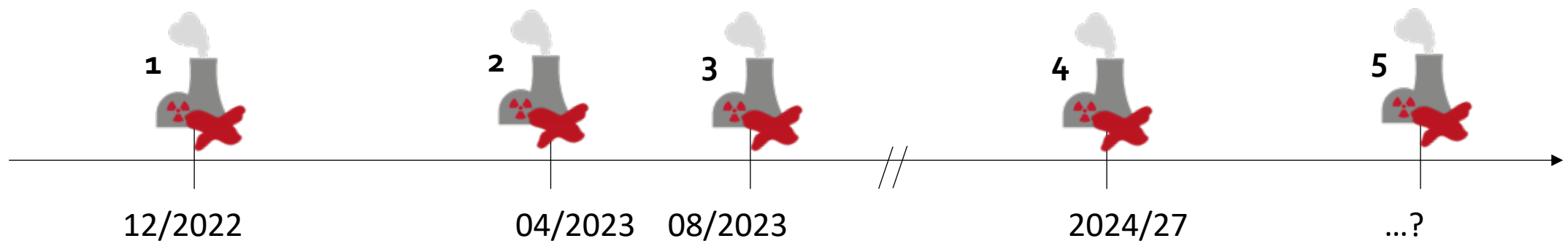


CDU and parts of the FDP in favour of lifetime extension. The popular opinion shifts

DEBATE ON NUCLEAR POWER

Ideas discussed in the debate on nuclear power:

- 1. **Shutdown** of the last 3 NPP in December 2022
- 2. **Deployment reserve**
- 3. **Stretchout operation of three reactors**
- 4. **Extension of lifetimes of 3 (or 6) reactors**
- [5. Construction of new NPP]



NUCLEAR POWER DOES NOT HELP IN ENERGY CRISIS

- Replacement of gas and gas-fired power plants non significant: reducing **gas consumption** of just 0.2-0.6%
- Insignificant impact on **electricity production**: less than 1% of total electricity production; reduce demand at redispatch power plants in other countries only 0.5 GW
- Minimal impact on wholesale electricity prices, resulting in a **price decrease** of just 0.5-0.8%.



NUCLEAR POWER DOES NOT HELP IN ENERGY CRISIS

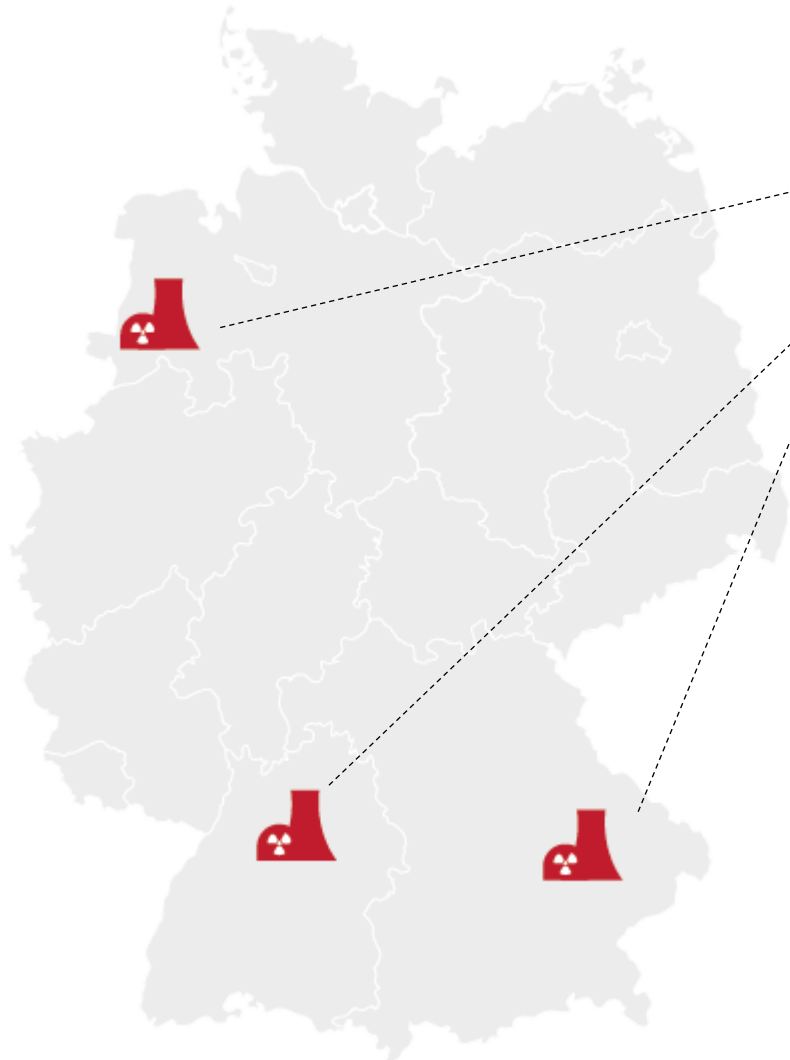
Security risks much higher than benefits

- Periodical safety review not carried out for 13 years – German Atomic Energy Act and European Law
- Crack-like wall thickness degradation was identified in steam generator heating tubes (NPP Emsland and Neckarwest)
- Lifetime: 33-34 years -
- NPP in Ukraine: We face a new threat scenario

Shut down all nuclear power plants. Not a day longer!



NUCLEAR POWER DOES NOT HELP IN ENERGY CRISIS



Energy-Ministry:

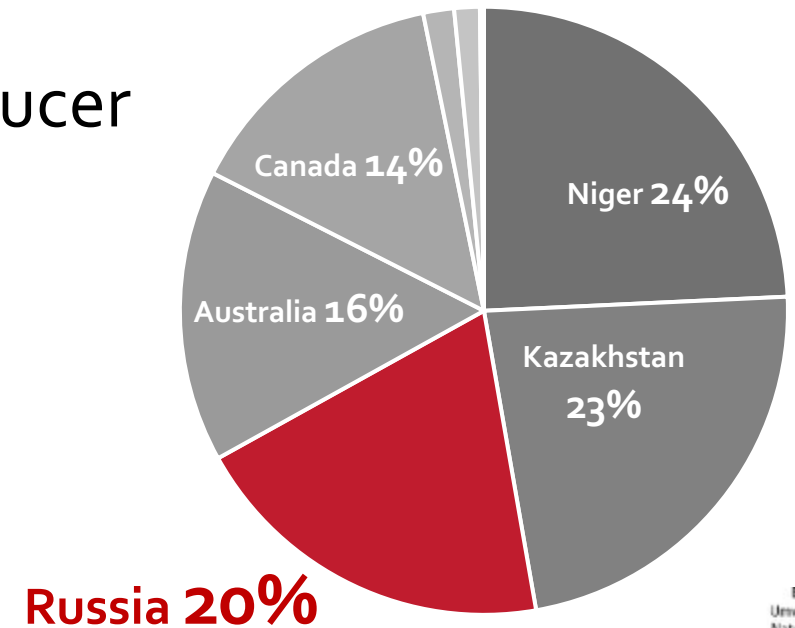
- KKE: shutdown 12/2022
- GKN 2 and KKI2: Deployment reserve till 04/2023

But:

- **No technical justification** for continuing to operate the NPP
- Risk of multi-year **extension** of NPP lifetimes
- **Debate focuses on false solution**

EUROPE IS HIGHLY DEPENDENT ON RUSSIAN URANIUM

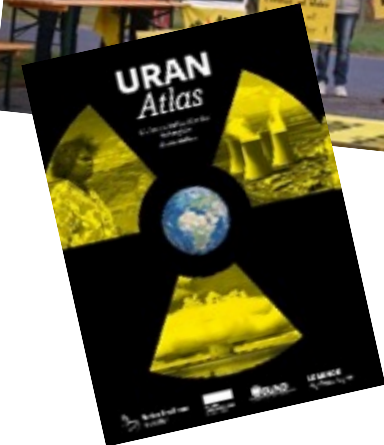
- Russia owns **40%** of the total uranium conversion infrastructure in the world...
- ...and **46%** of the total uranium enrichment capacity
- **20%** of EU`s imported uranium from Russia
- Rosatom is the **second largest** uranium producer in the world
- Rosatom is currently involved in **35 NPP** constructions
- **18 reactors** in the EU are fully dependent on Russian fuel.



Origins of uranium delivered to EU utilities in 2021 (%)

EUROPE IS HIGHLY DEPENDENT ON RUSSIAN URANIUM

- Rosatom Group subsidiary **NUKEM Technologies** for decommissioning NPP
- **Uranium enrichment** in Gronau and **fuel fabrication plant** in Lingen continues to run despite nuclear phase out
- Before the Russian invasion of Ukraine
 - Planned Joint Venture between Rosatom and ANF in Lingen
 - Export of waste from uranium enrichment to Russia
- September 2022: Enriched uranium from Russia was transported to Lingen



EU sanctions for the nuclear sector!

UPDATE ON TAXONOMY

- **EU-Taxonomy:**
 - EU regulation to create a science-based classification of sustainable economic activities.
 - EU taxonomy should prevent greenwashing
- **Dispute** over nuclear and natural gas
- EU-Commission and EU-Parliament (July 6th) decided on including nuclear and gas
- **Threat of legal action** from Austria and Luxembourg
- Taxonomy comes into effect 2023



CDA ON GAS AND NUCLEAR

Sustainable in the sense of the EU taxonomy are:

- **New nuclear power plants** and retrofits of outdated reactors in the course of lifetime extensions (licences until 2045).
- **Condition:** Plans for nuclear waste storage from 2050, best available technology, funds for final storage, compliance with a CO₂ threshold.
- **Gas-fired power plants:** building permits until 2030
- **Condition:** Compliance with annual average emission thresholds and gradual conversion to hydrogen.



REACTIONS TO DECLARING GAS AND NUCLEAR "GREEN"

- Hardly any acceptance from the financial sector
- **Protest from NGOs, FFF and civil society**
- Decreasing attention for the topic
- German government rejects the decision, but no legal action
- **Legal action**
 - Client Earth, WWF and BUND
 - Greenpeace



Bund für
Umwelt und
Naturschutz
Deutschland

LEGAL ACTION

- **Nuclear power** violates "do-not-signify-harm" principle:
- **Fossil gas** also massively violates environmental goals and fuels climate change

Legal challenge

- BUND: CDA clashes with other EU laws, in particular the Taxonomy Regulation itself and the European Climate Law.
- Request the EU Commission to repeal the Complementary Delegated Act (22 weeks)
- Ask the Court of Justice of the EU to rule



CONCLUSION AND OUTLOOK

- Current energy crisis fuels nuclear debate
- Security risks are not taken into account, but risks are way higher than benefits
- Political debate is not over and ties up resources
- **Nuclear power is highly dangerous and not sustainable**
- European Nuclear Power is highly dependent on Russian nuclear industry
- Nuclear and gas contradict the basic idea of taxonomy
- **Shutdown all nuclear power plants!**
- **Energy savings and renewable energy now!**

Thank you for your attention



www.aktion.bund.net/eu-taxonomie

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