

Nuclear Power Plants



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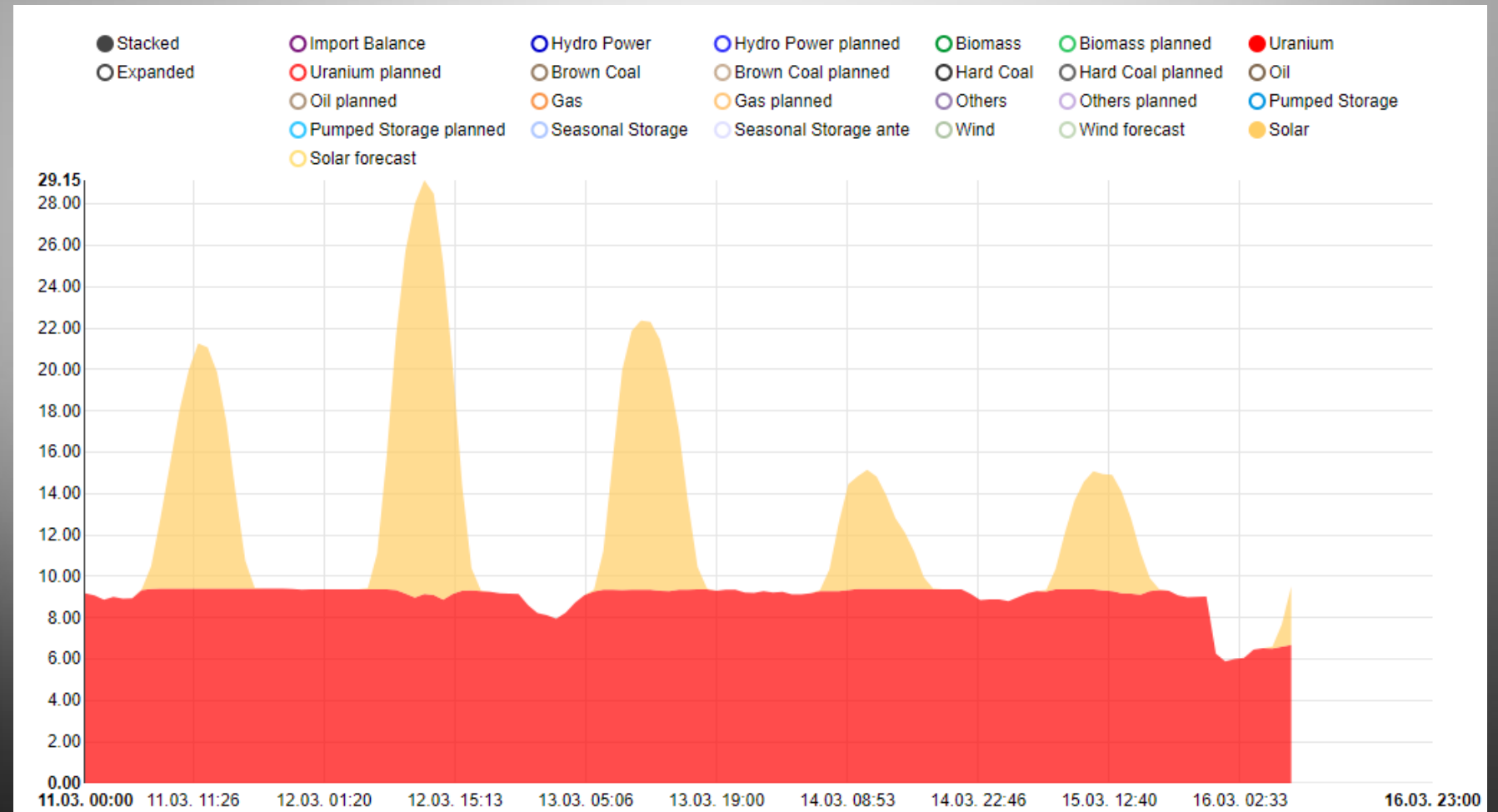
Energy

- **between 1-2 MW (Megawatt) in Germany**
- **7 active power plants**
- **energy is cheaper**



Basic Load

- Make up 34.7% of the energy production in Germany
- Constant source of energy



Jobs



- **About 67,000 employees**
- **Important for the German society**
- **Always new challenges at the workplace**

CO₂ neutral

- **Less emissions while operating than coal power plants**
- **Renewable energy much more sustainable in future**



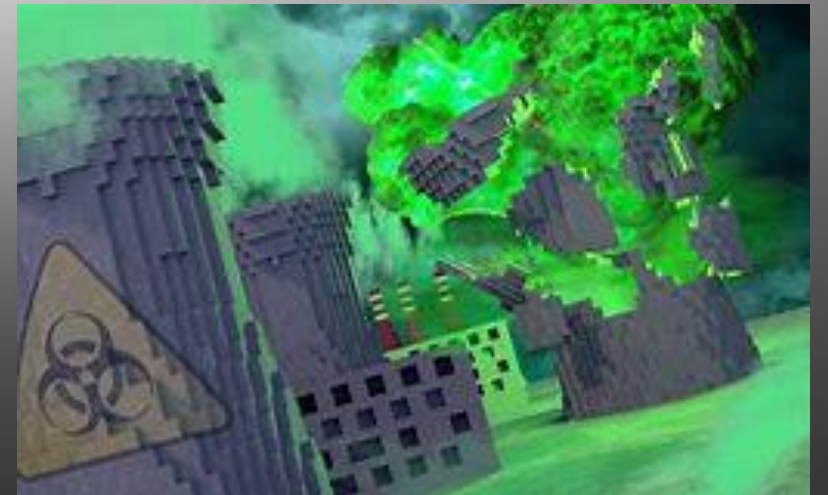
Pros

- **Generate a lot of energy**
- **Basic load / base load**
- **Many jobs**
- **CO2 neutral**



Risk of meltdown

- **Tschernobyl 26th April 1986**
- **Fukushima 11th March 2011**
- **Power plants get older**
- **Little investment in older plants**
(only get few upgrades)



Nuclear waste

- **Not usable or the use is not allowed by politics**
- **Has to be stored for a long time until it is not radioactive anymore**
- **Population near the depots is worried**
- **The rock around has to be special (stable for millennia)**



Expensive

- **One nuclear power plant between 3-21 billion €**
- **High cost of staff to operate**



Uranium

- **Finite resource**
- **Can be used for ~120 years profitably**



Cons

- **Risk of a meltdown**
- **Nuclear waste**
- **Expensive**
- **Uranium is a finite resource**



Timeline



2000
(Schröder)

Total phase-out till
2020

2010
(Merkel)

lifetime
extensions of the
power plants

2011

Fukushima

2011

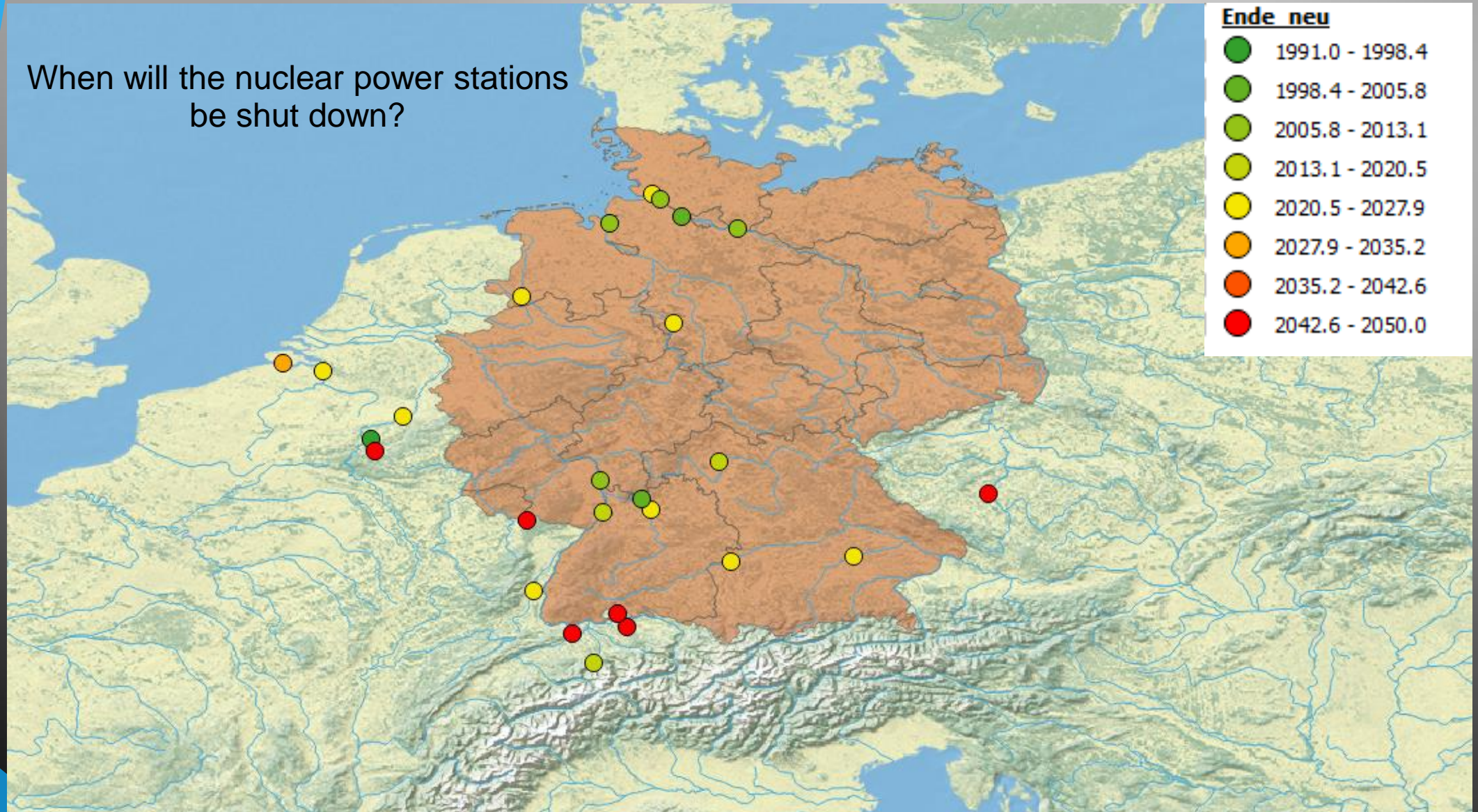
14 March 2011: Shut down of the seven oldest and one malfunctioning power plant

06 June 2011: phase-out in steps until 2022, amendment per law

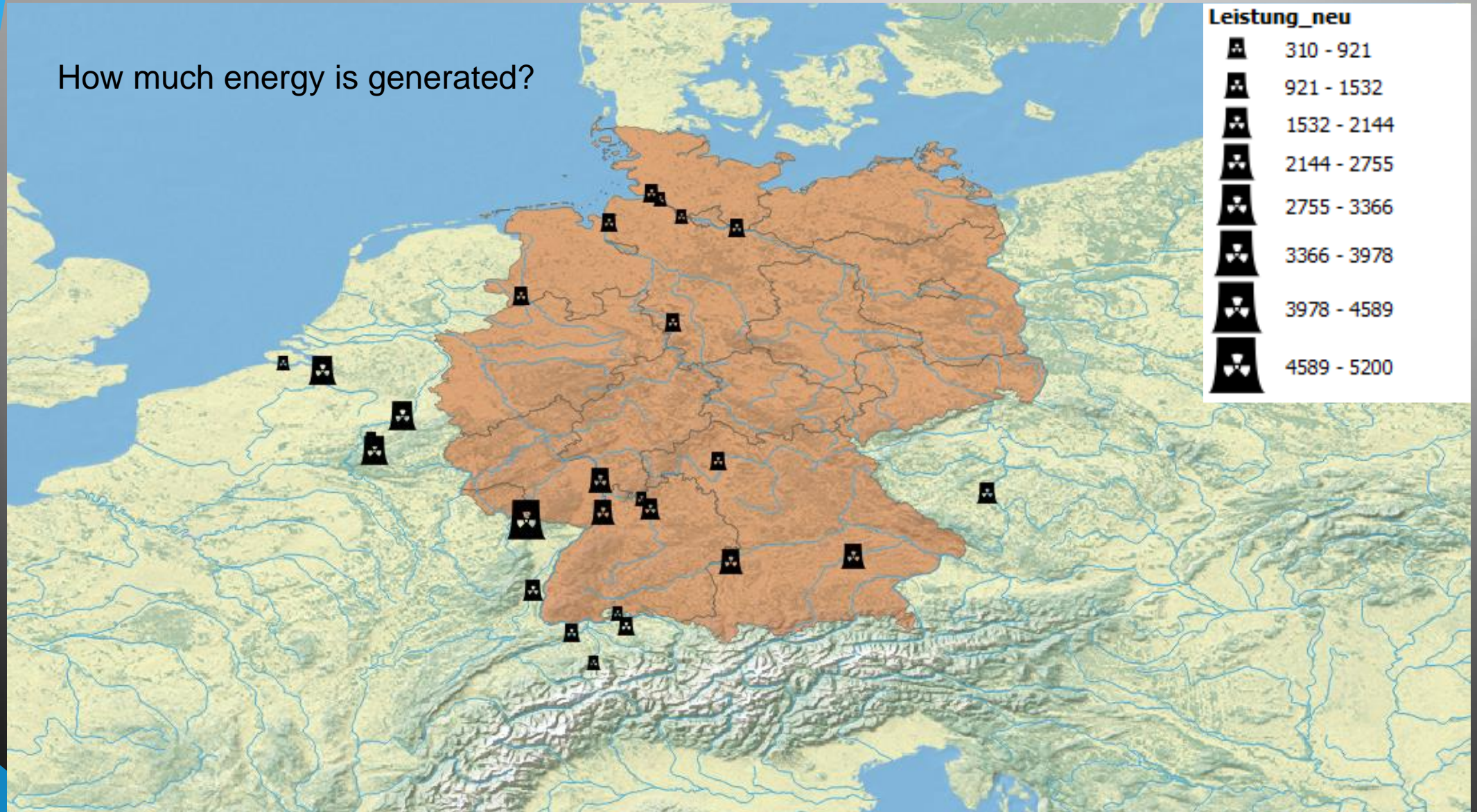
06 August 2011: eight power plants lost their operating licences

2011 decommissioning of the power plants by 41%, next ten years by 19%, 2022 by 40%

When will the nuclear power stations be shut down?



How much energy is generated?



Our Opinion

- **Nuclear power can be a solution only until we produce more energy in a renewable way**
- **For now it's important to us, but we should find a better way to generate power carbon-neutrally**

Sources

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THANKS

FOR YOUR ATTENTION!!

ANY QUESTIONS?