



Federal Ministry
for Economic Affairs
and Energy

Germany's New Energy Policy

Heading towards 2050 with

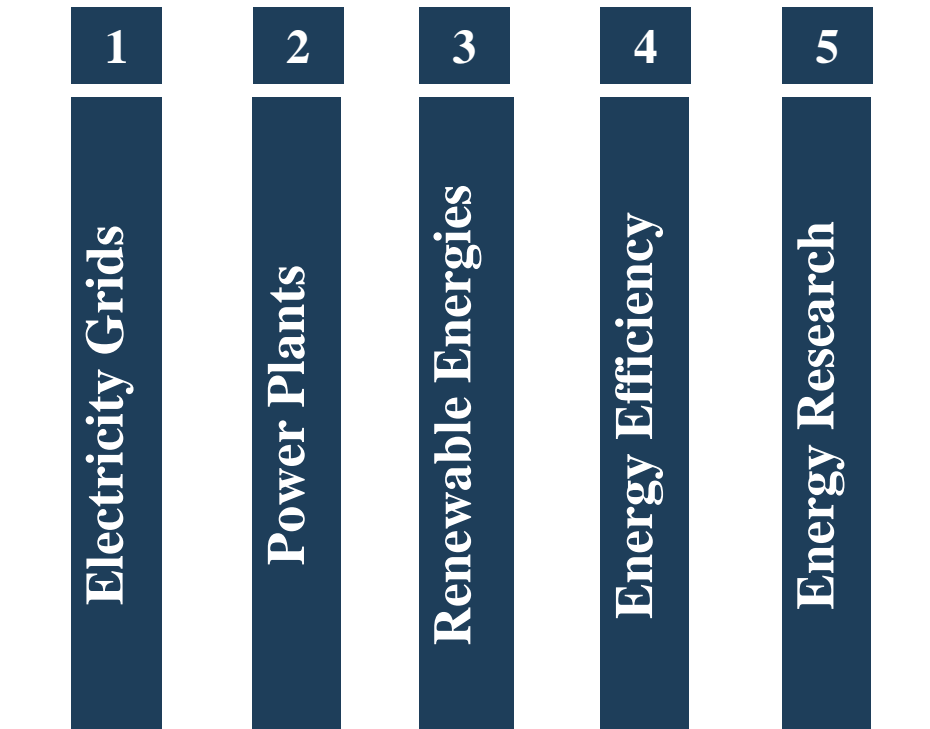
Secure, Affordable and Environmentally Sound Energy

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Federal Ministry for Economic Affairs and Energy

5 May 2014
www.bmwi.de

„Energiewende“ in Germany: conceptual action plan





Federal Requirement Plan Act (transmission grid)

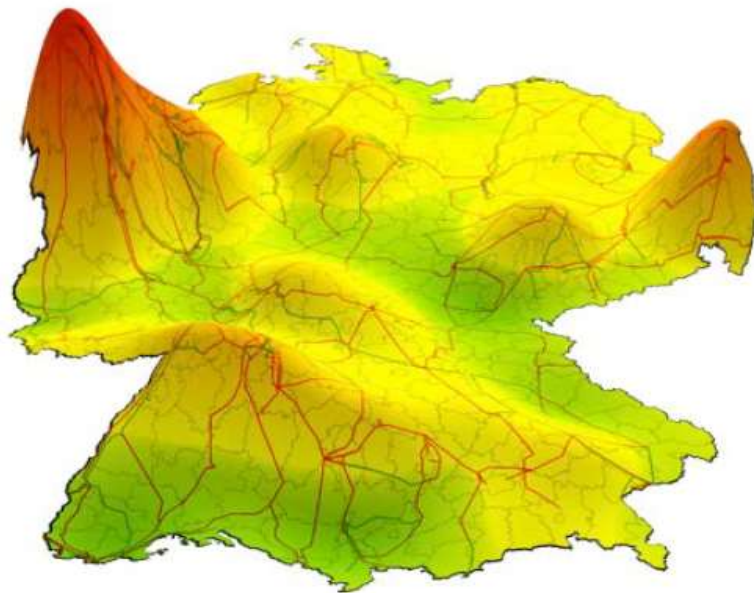
- Basis for the **expansions of the transmission grids** and the planning of power lines.
- Need for **2800 km of new power lines** and the upgrading of **2900 km existing power lines**.



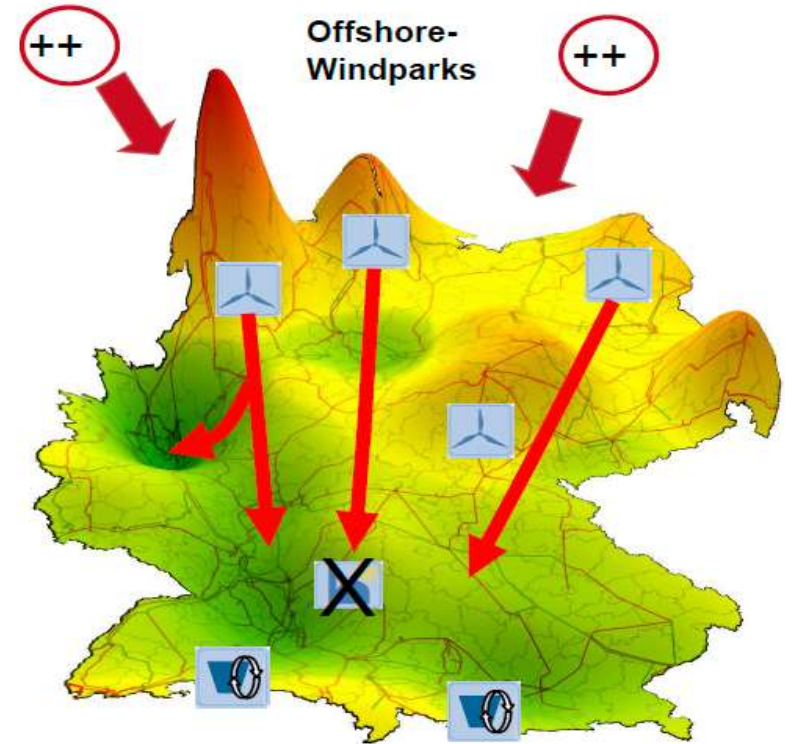
Source: Federal Network Agency (BNetzA)



Consequences for electricity grid requirements



Leistungsbilanz 2012 [MW]



Leistungsbilanz 2022 [MW]



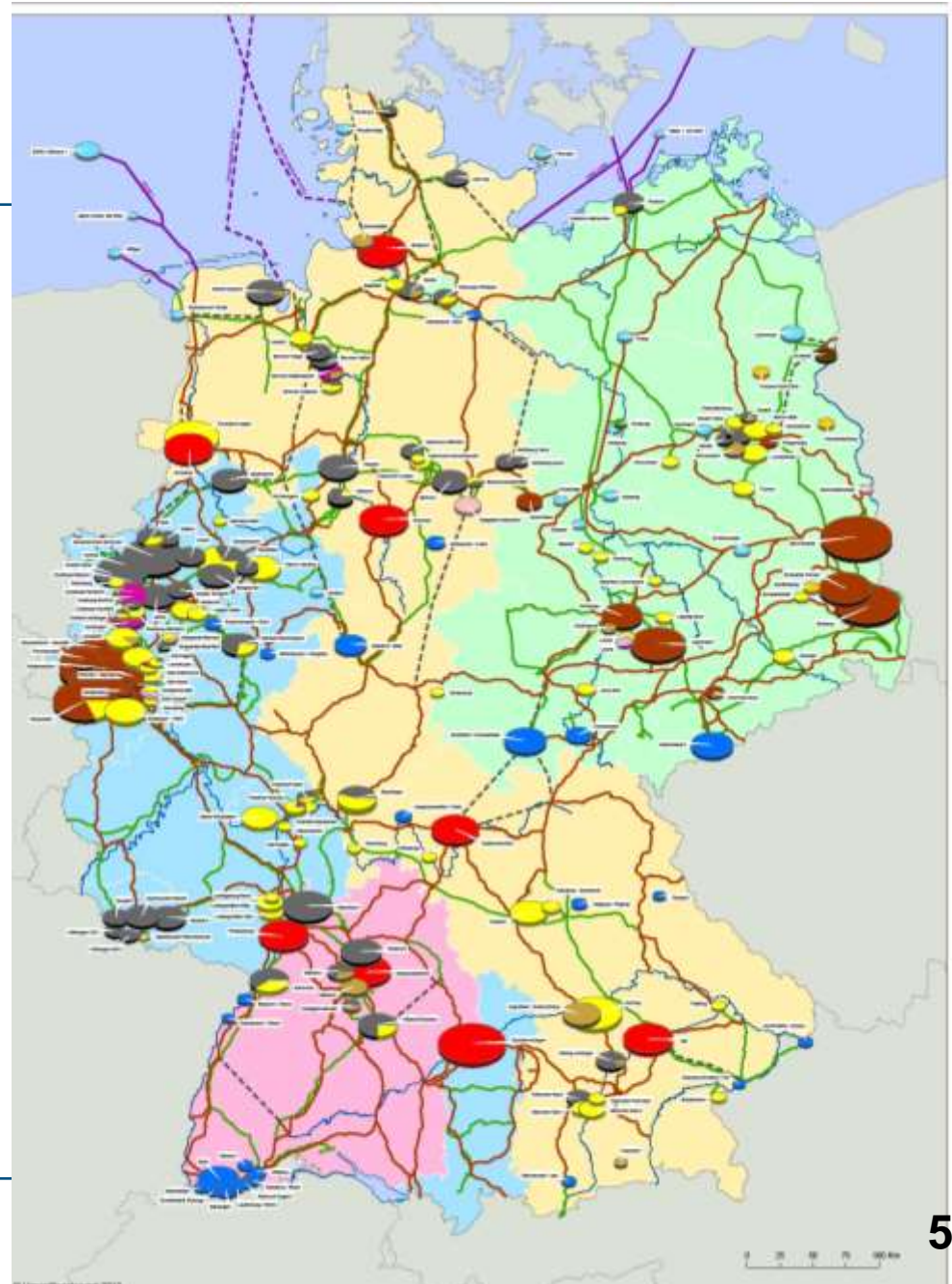
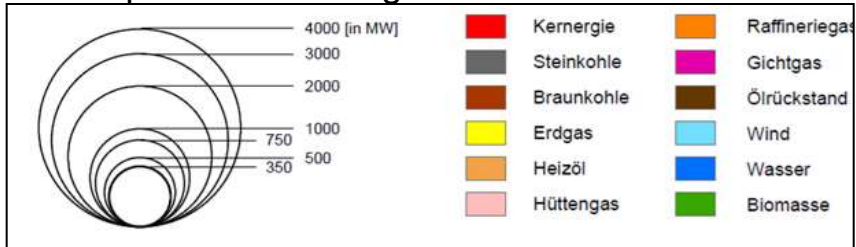


Conventional Power Plants are still needed:



Security of supply requires non-fluctuating capacity

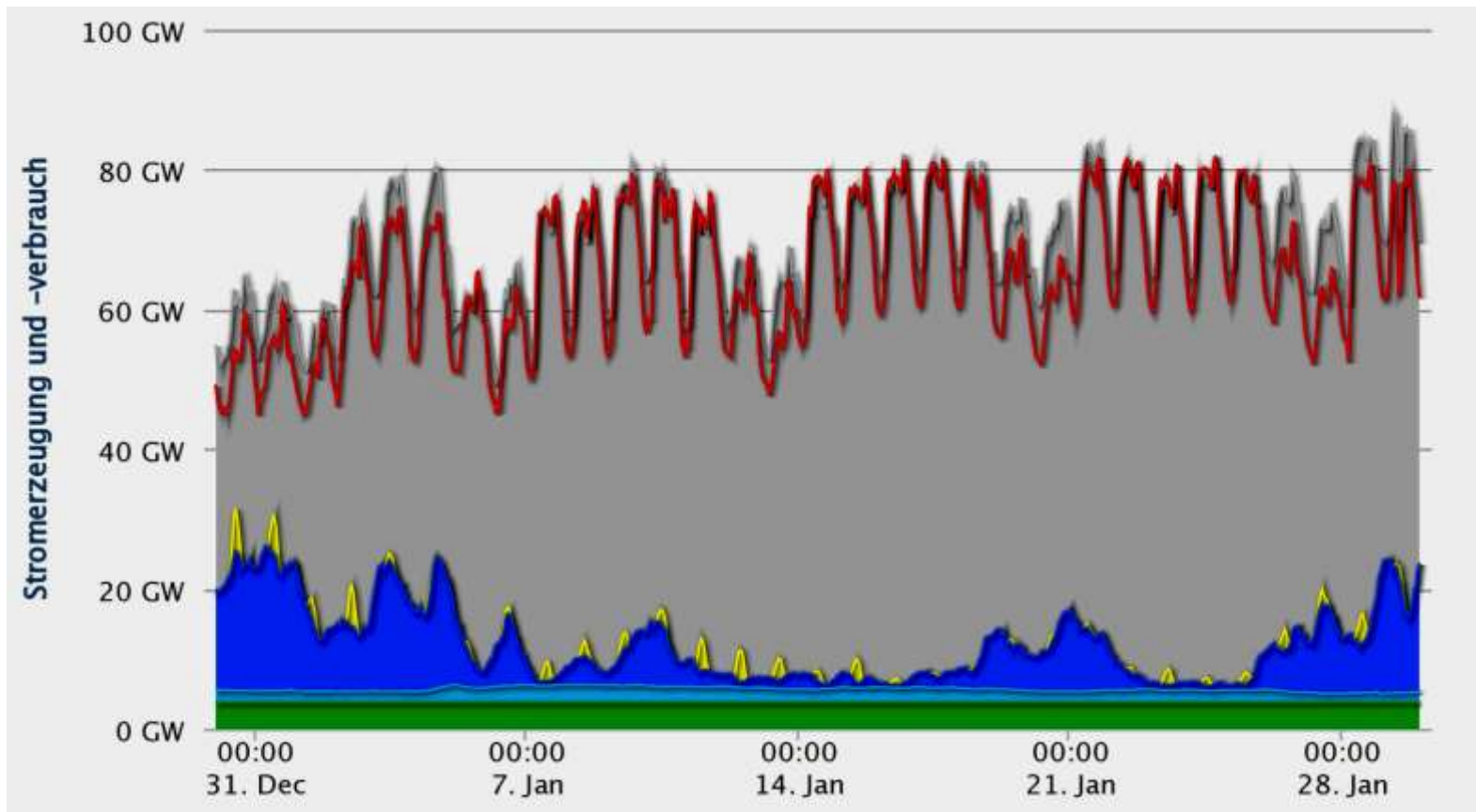
Power plants >100 Megawatt



Source: Federal Environmental Agency, 2013



Challenge: Volatile electricity generation from renewables (e.g. Jan. 2013)



Conventional power plants Solar hydroelectricity wind biomass Electricity consumption

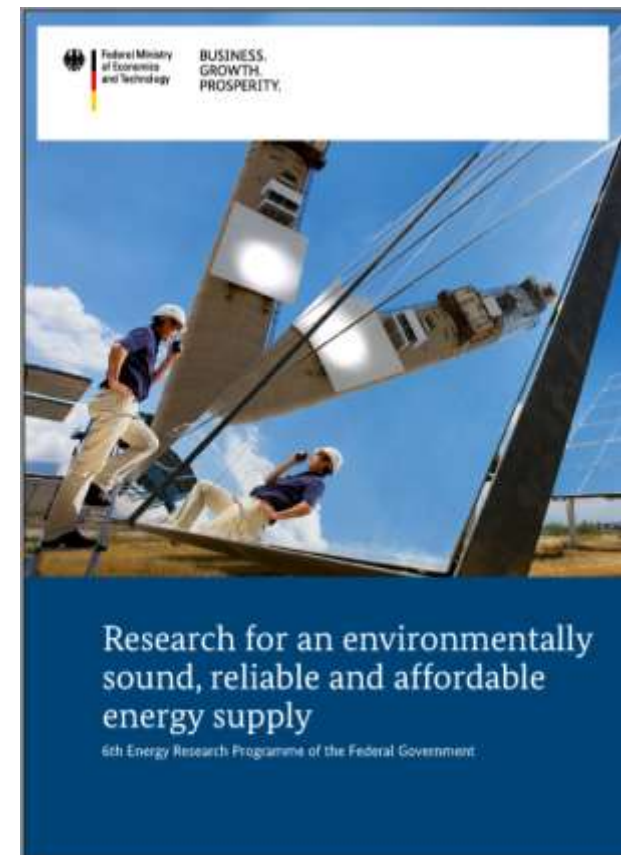
Energy efficiency: Information, incentives and regulatory standards

- **Buildings** account for **40 %** of German energy consumption
- **Building support**: “Energy efficient retrofits” program
> increased to 1.5 bn € per year
- **Consumer information**: “Energy efficiency fund”
> for households and enterprises
- **Product standards and labeling**: EU standards for minimum energy efficiency and energy labelling



Energy research for cutting-edge technologies

- **New Energy Research Program of 2011:**
German federal government has raised funding for energy research by 75 %
 - > **3.5 bn €** for 2011 to 2014
 - > projects of **companies** and **research institutes**
- **First programs**
 - > Energy **storage** (already started)
 - > Electricity **grids** (procurement process)



International cooperation yields mutual benefits

International cooperation leads to mutual benefits
(security of supply, climate protection/ R&D)

- Cooperation with international partners in different international and multilateral fora:
- Bilateral energy dialogues and partnerships (e.g. India, Tunisia, Morocco)



Thank you for your attention!

Further information on energy policy in Germany:

<http://www.bmwi.de/EN/Topics/energy.html>