

The German *Energiewende* – after the Elections and before the EU-2030-Debate

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Introduction: Milestones in German Energy Policy

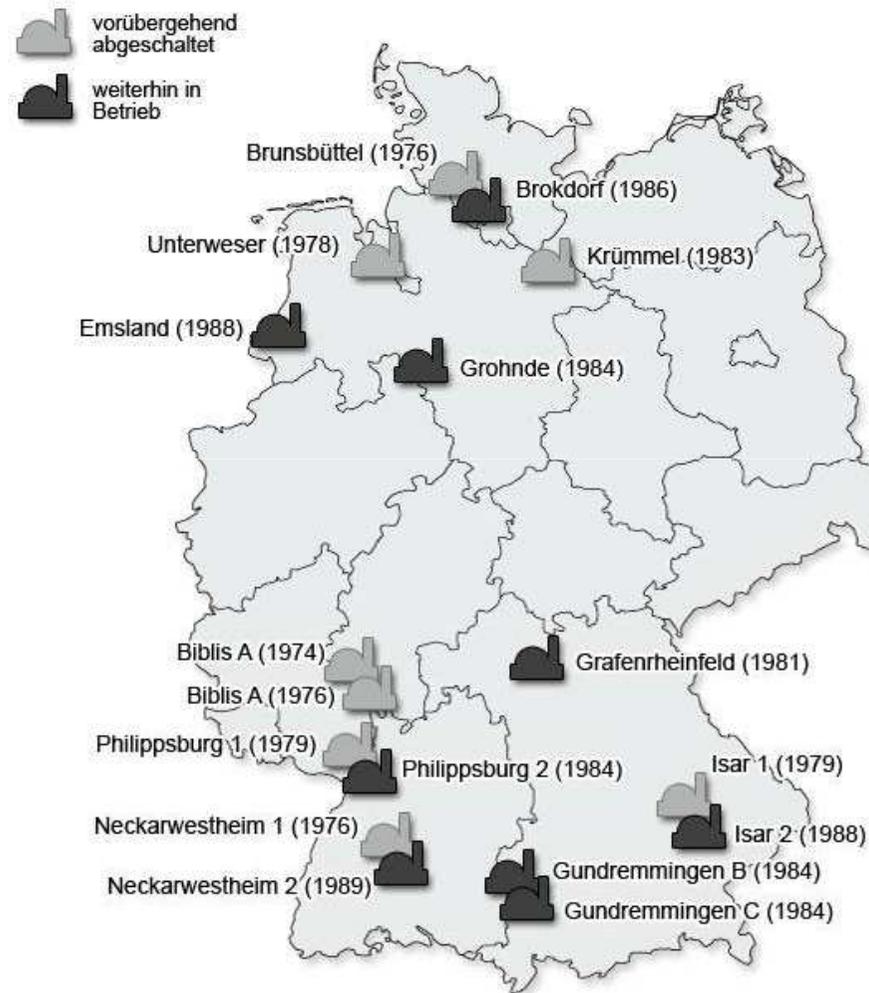
- **2000: „*Atomausstieg*“** (SPD/Greens)
 - Decision to exit nuclear power
 - Introduction of German Renewable Energy Act (EEG)

- **2007: „*Meseberg-Programm: Integriertes Energie- und Klimaprogramm*“** (CDU/CSU/SPD)
 - Climate policy-induced program for the German energy sector

- **2010: „*Energiekonzept*“** (CDU/CSU/FDP)
 - Combination of the life-time extension of nuclear powerplants with RES and climate targets („bridging technology“)

- **2011: „*Energiewende*“** (CDU/CSU/FDP)
 - „Energiekonzept“ without nuclear power
 - Constructed as „societal project“

Energiewende I: The Nuclear Exit



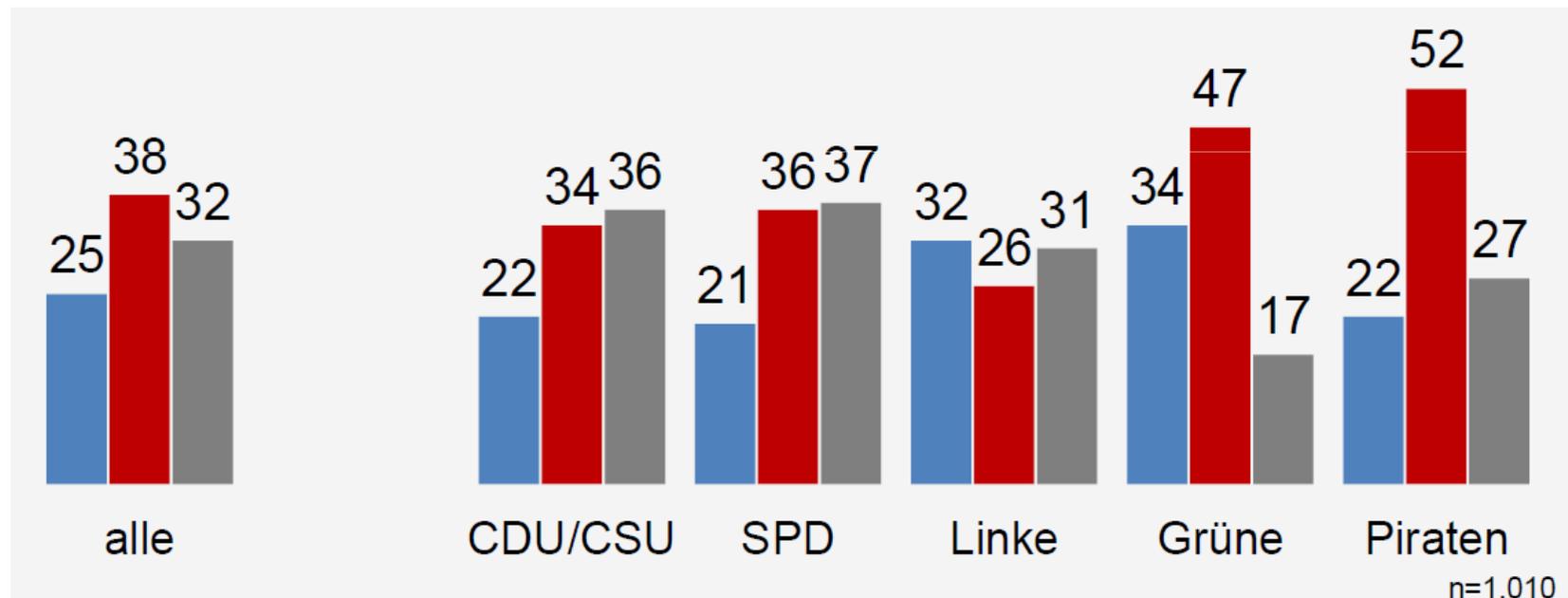
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Energiewende II: The Matrix

	2011	2020	2050		
GHG emissions					
Reduction (base year 1990)	-26%	-40%	2030 -55%	2040 -70%	2050 -80 to 95%
Efficiency					
Primary Energy (base 2008)	-6,0%	-20%	-50%		
Energy productivity	2.1% p.a. (2008-2050)				
Electricity consumption	-2,1%	-10%	-25%		
Buildings					
Heating	-	-20%	-		
Primary Energy consumption	-	-	around 80%		
Transport					
Final energy consumption (base year 2005)	ca. -0.5%	-10%	-40%		
Number of electric vehicles	Ca. 6.800	1 Mio.	2030 6 Mio.		
Renewable Energies					
Share in Net Electricity Consumption	20.3%	min. 35%	2030 min. 50%	2040 min. 65%	2050 min. 80%
Share in Net Overall Primary Energy Consumption	12.1%	18%	2030 30%	2040 45%	2050 60%

“Energiewende“ means to me...

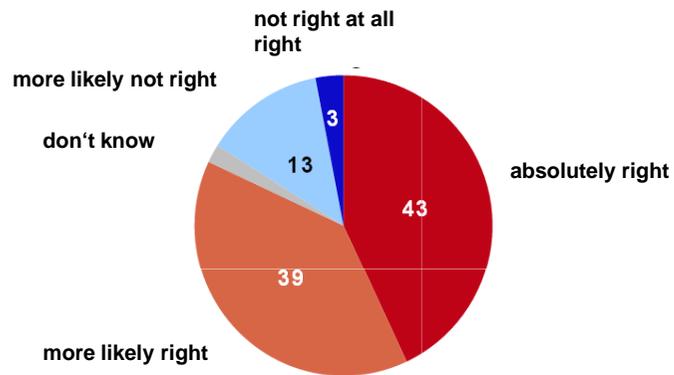
- ...exit from nuclear energy
- ...increasing the share of renewables
- ...climate protection



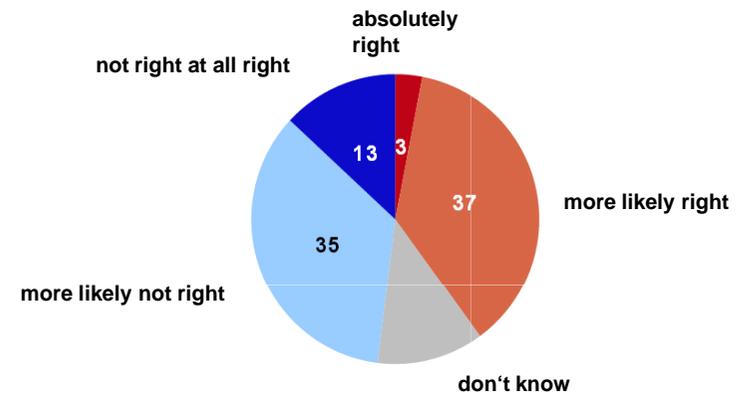
Source: BDEW Survey 2013

Public opinion on the “Energiewende“

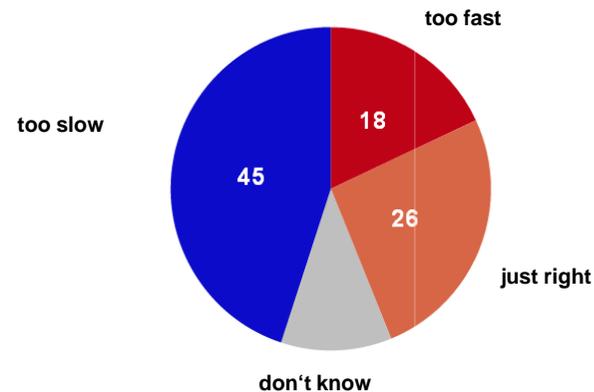
In my opinion, the aims of the „Energiewende“ are...



In my opinion, the way of implementing the „Energiewende“ is...



In my opinion, the speed of implementing the „Energiewende“ is...



Source: BVBZ/forsa 2013
N=1.227

Lessons learned after two years of “*Energiewende*“

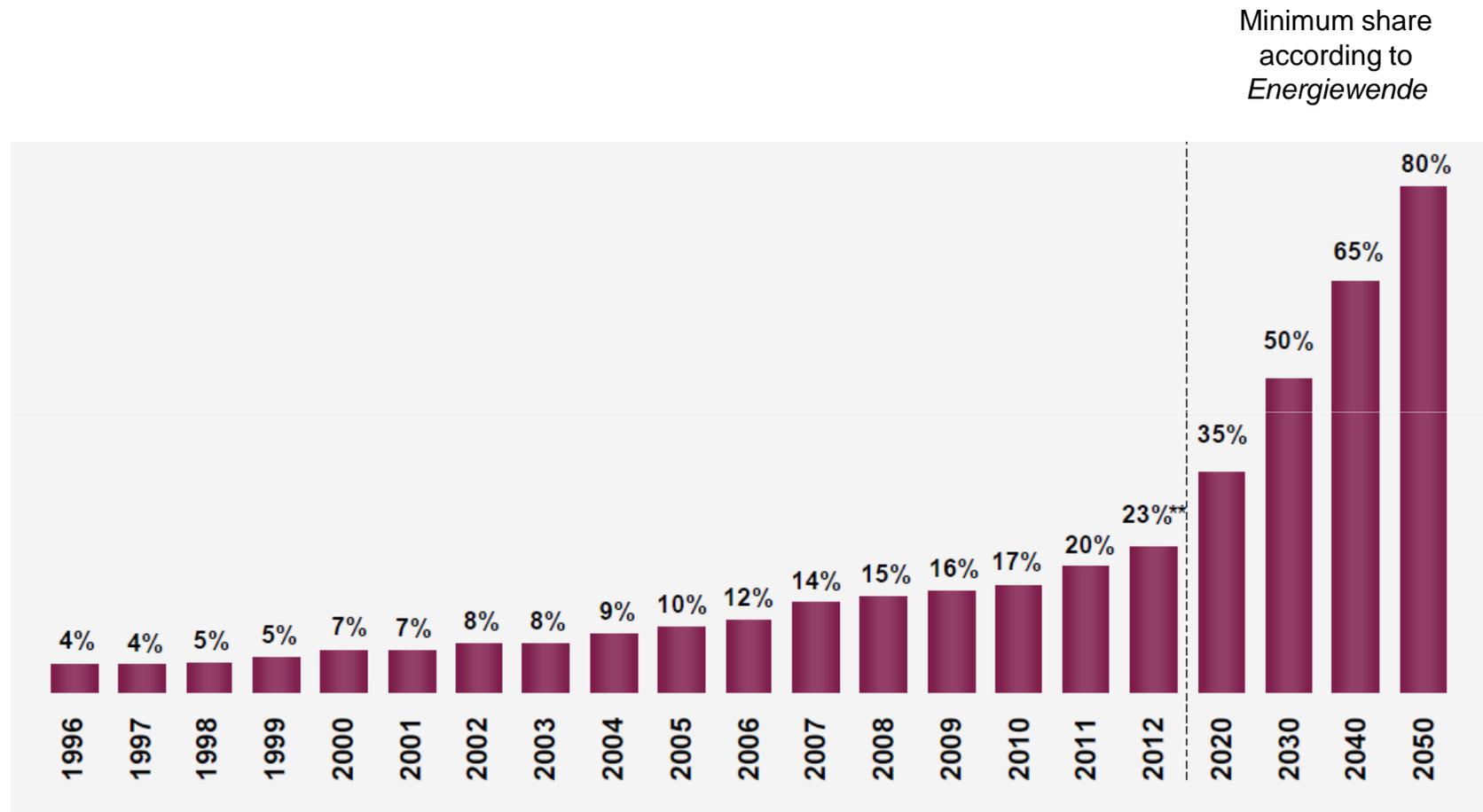
Policy aspects:

- The discussion is purely about the **electricity sector**, not about transport or heating
- **Complexity** is increasing: the end of simple answers in the energy debate has come

Institutional aspects:

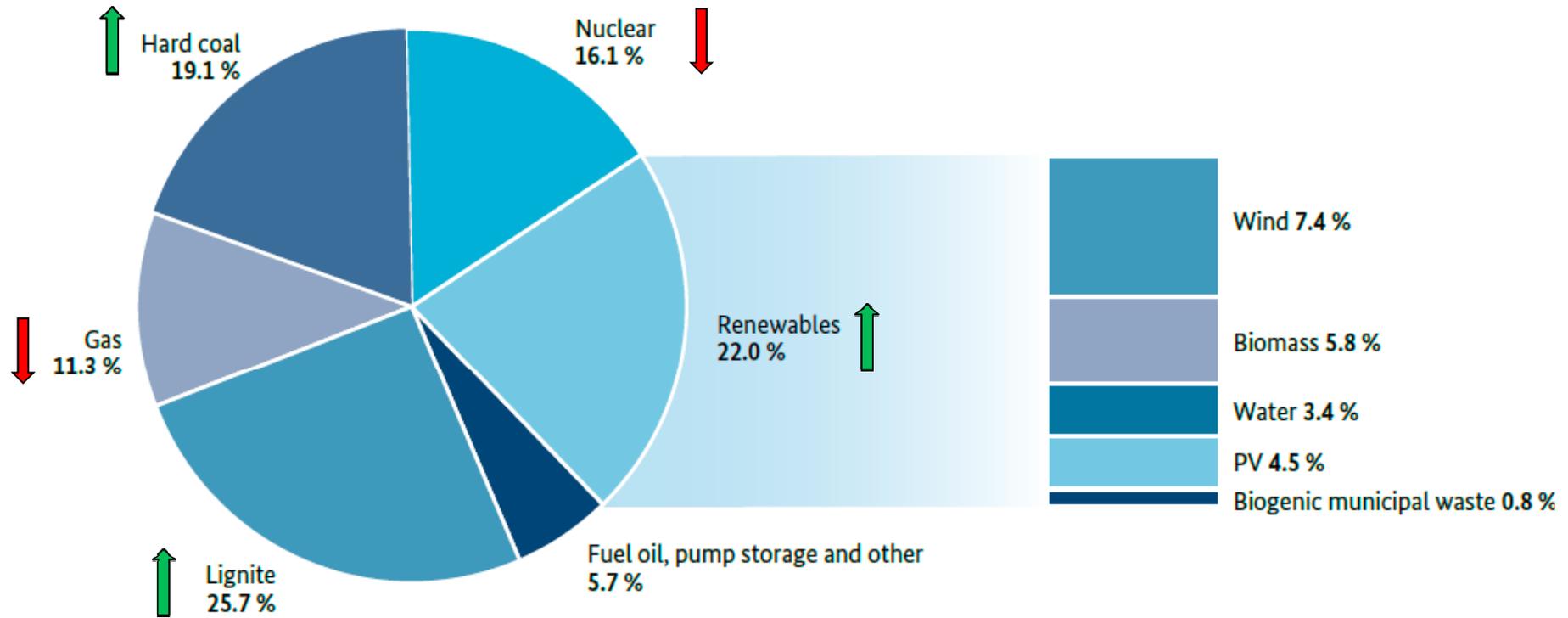
- The German **federalism** is slowing down the speed of policy reforms
- **Four ministries** are responsible for the Energiewende, which requires a lot of co-ordination

Share of renewables in electricity consumption



Source: BDEW 2013

Electricity Production in Germany 2012 and trend 2013



* Provisional figures, some estimated. Discrepancies in totals due to rounding.

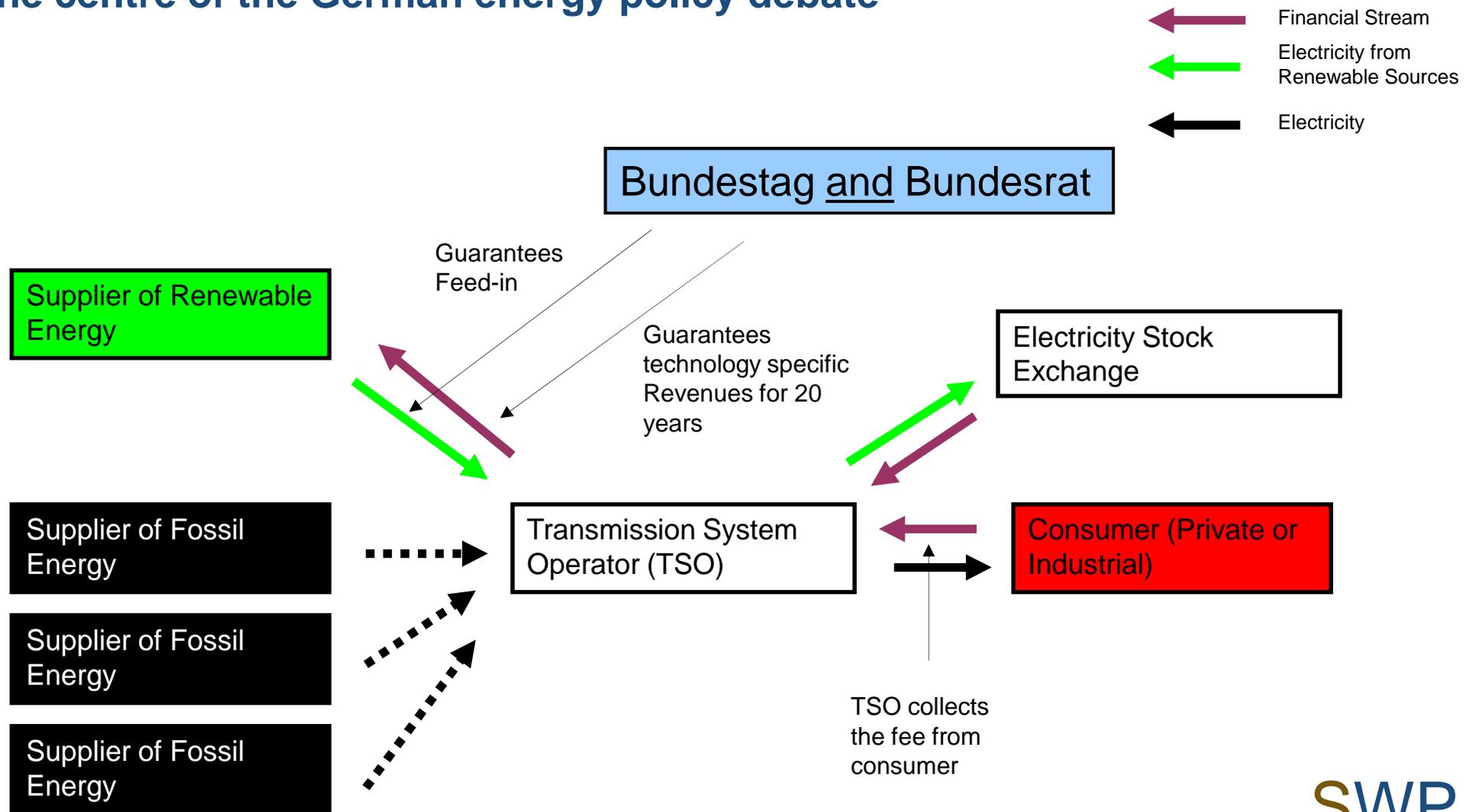
Sources: Working Group on Renewable Energy-Statistics, German Association of Energy and Water Industries



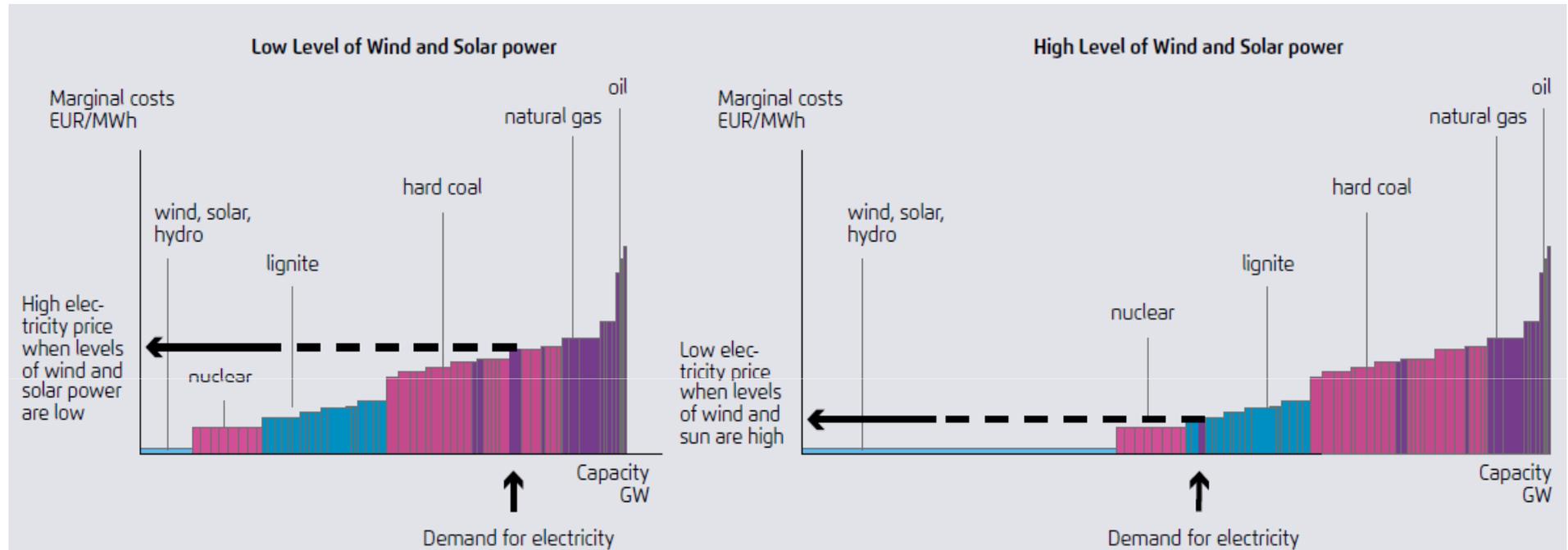
Trend 2012/2013

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„Erneuerbare-Energien-Gesetz“ (EEG): The renewable energy law at the centre of the German energy policy debate



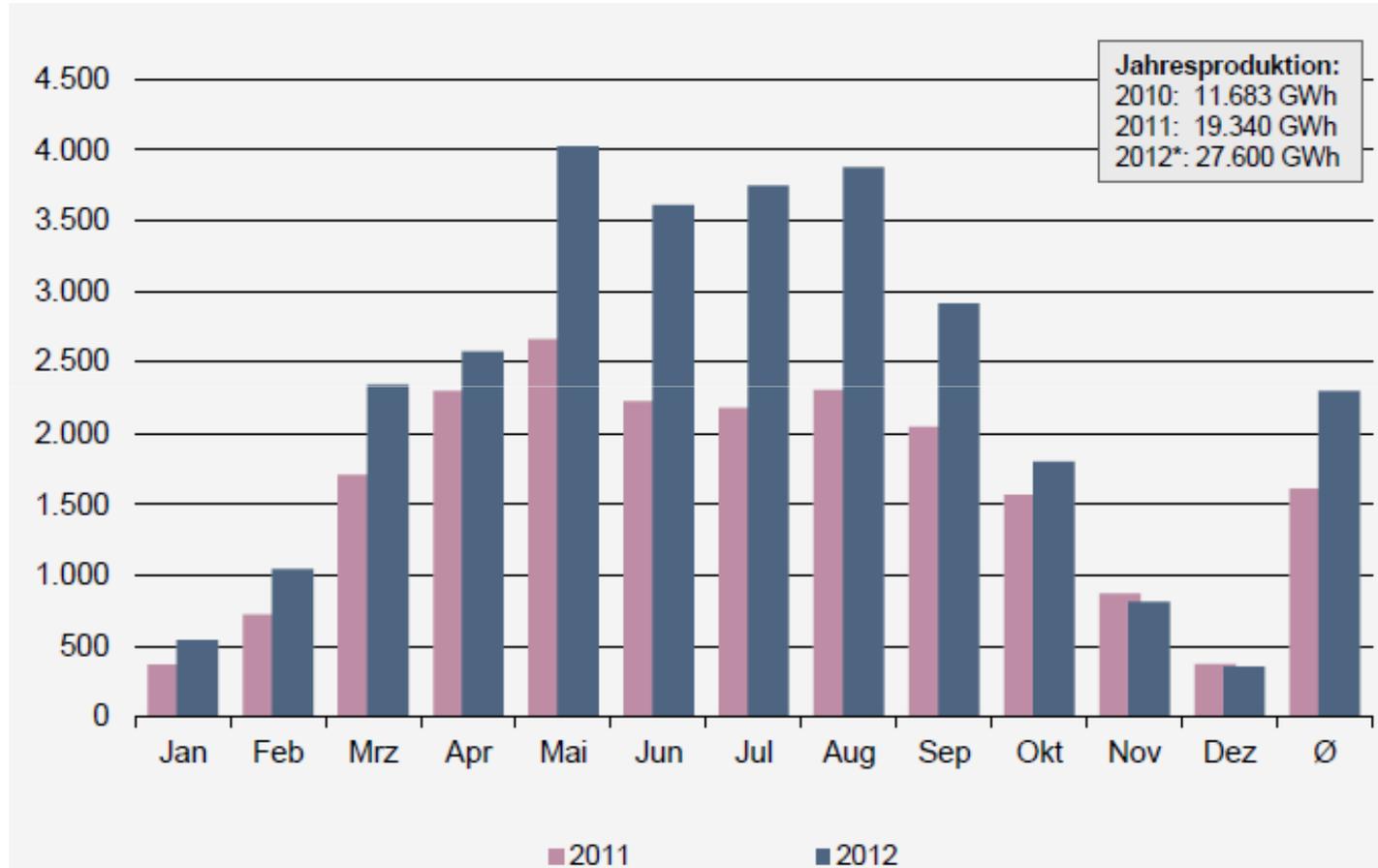
Effects on the electricity market in Germany



Source: Agora Energiewende 2013

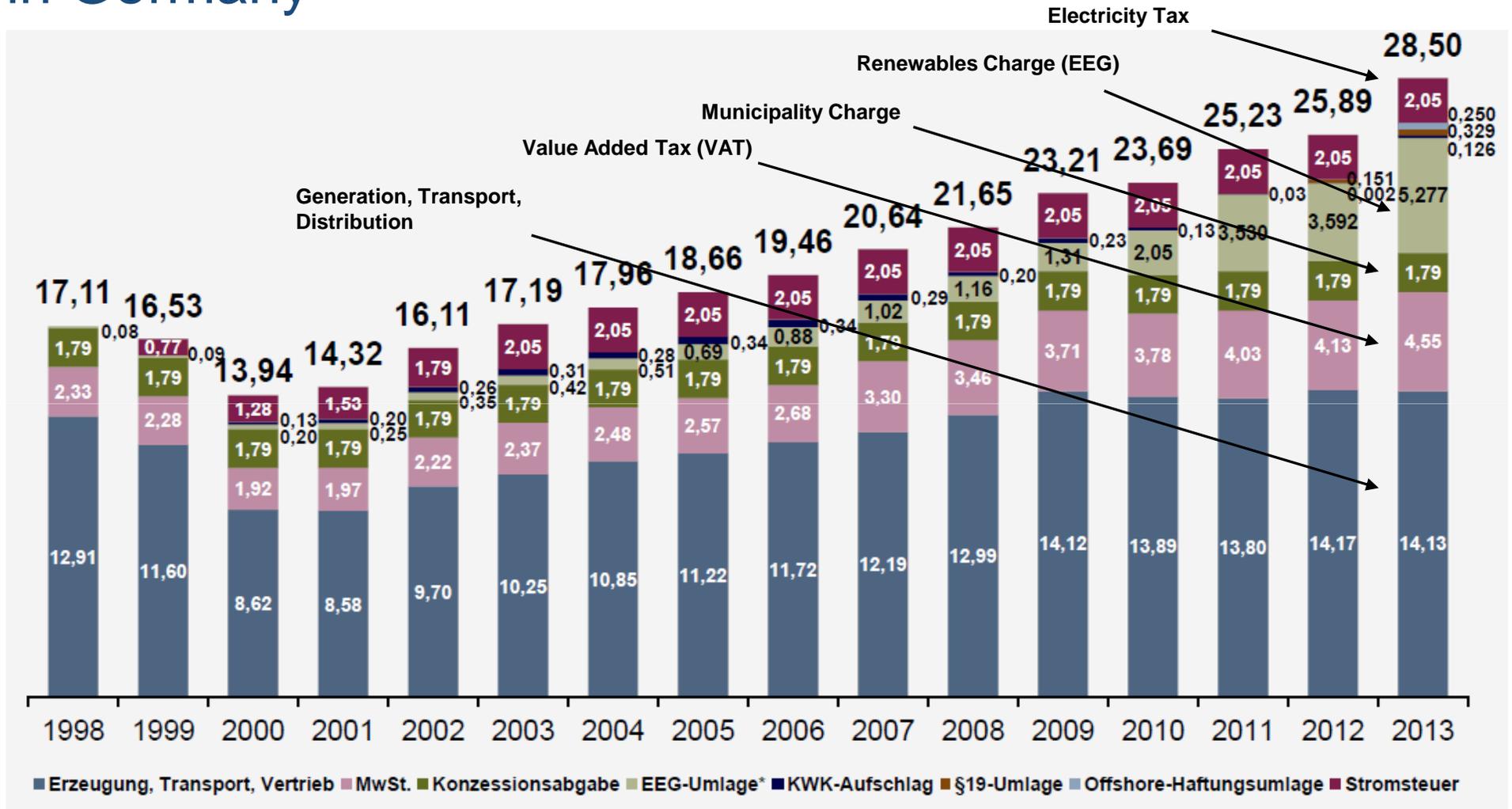
- In general: lower retail price on the electricity markets
- Higher public payments for renewables via EEG

Electricity Production from Photovoltaic (in GWh)



Source: BDEW 2013

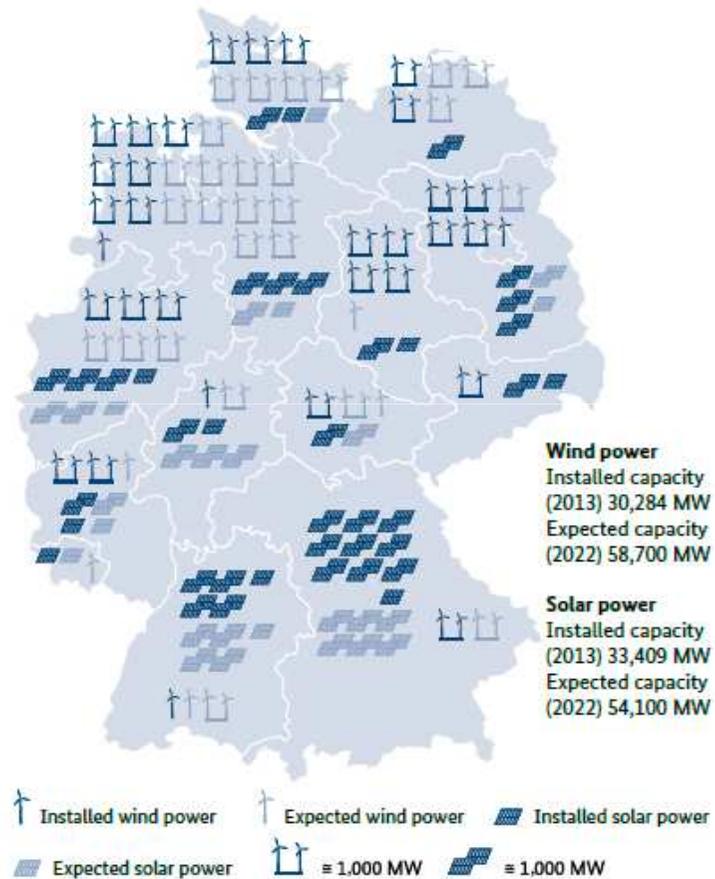
Development of electricity prices for private households in Germany



Source: BDEW 2013

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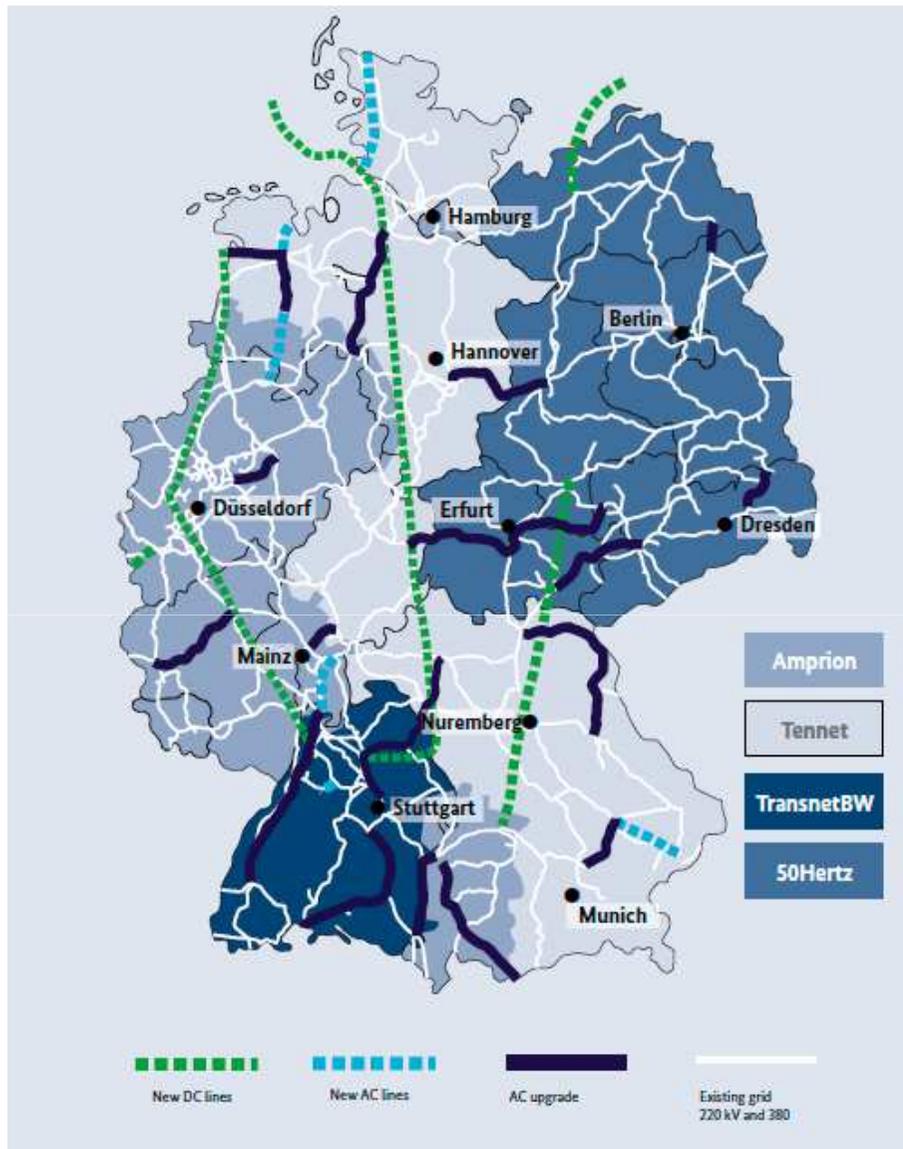
Figure 5: Generation capacity of renewables – installed and expected output of wind power and photovoltaic facilities



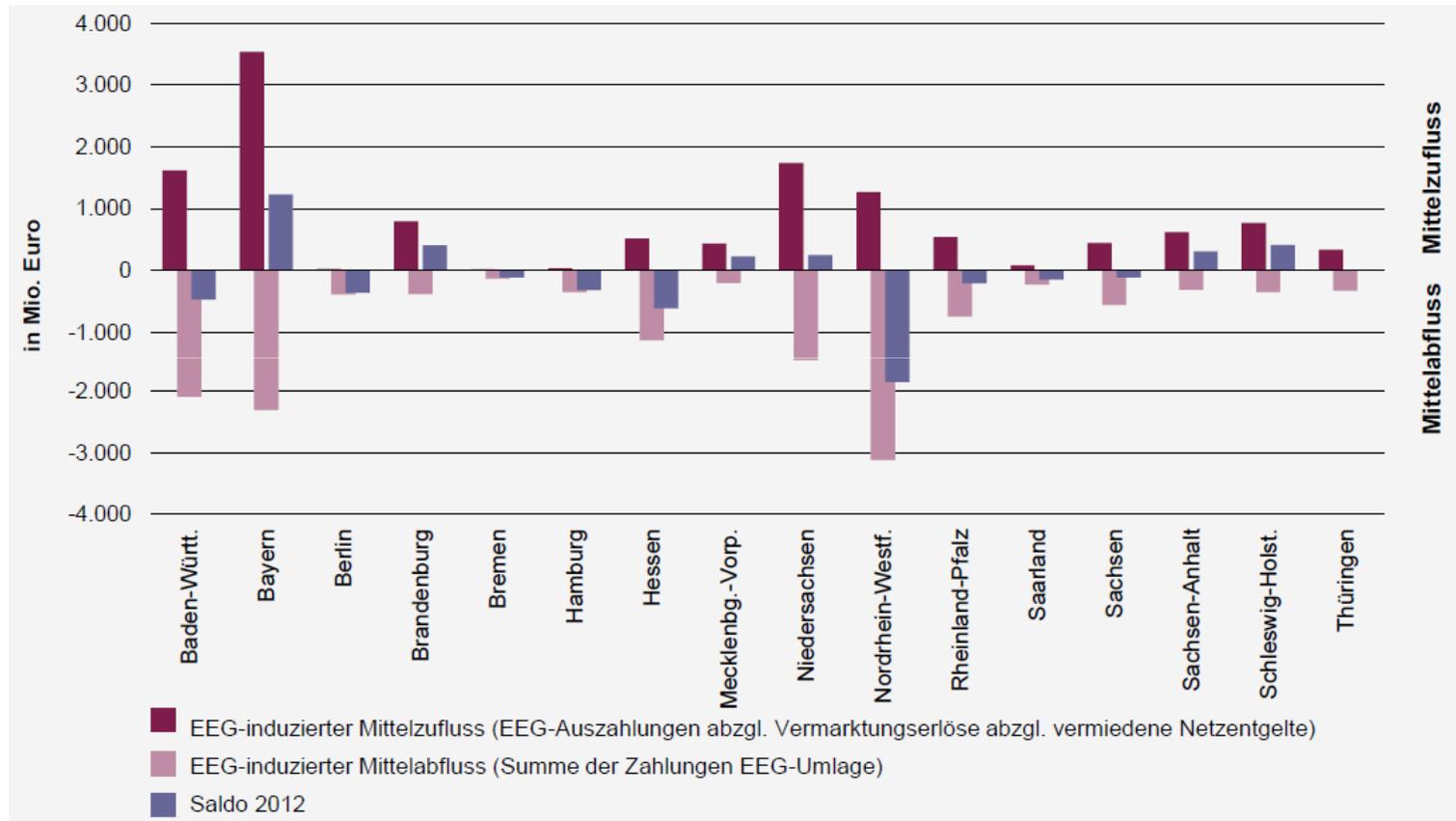
Source: Grid Development Plan 2012, scenario B 2022

The Regional Dimension I:
 The renewables landscape
 of the future – according to
 the network development
 plan

The Regional Dimension II: Where will the future grid run through?



The Regional Dimension III: Who profits from the EEG?



Source: BDEW 2013

The Negotiations on the Coalition Treaty of CDU/CSU und SPD

- Climate Protection Law with binding targets (SPD)
- Reduction of electricity tax (SPD)
- Binding corridor for the development of renewable energies in electricity (CDU)
- Keeping support for all bio-energies, not only waste (CSU)
- Reducing exemptions from EEG-surcharge for industry (SPD)
- More funding for Energy Efficiency in Buildings (SPD)

Energy Policy in the Coalition Treaty: Final results I

- Keeping Energiewende on track
- Ambitious targets on EU level
 - Three targets (CO₂: 40%, RES, EE)
 - EU Climate Policy shall not lead to industrial carbon leakage!
 - „Backloading“ was a unique measure!
- Reform of EEG until Easter 2014: However, clearly no retroactive measures!
- No climate protection law, but keeping national targets until 2050
- Legally consolidated growth of RES electricity
 - 2025: 40-45%
 - 2035: 55-60%
- National Action Plan for Energy Efficiency

Energy Policy in the Coalition Treaty: Final results II

- Renewables in the heating sector only voluntarily
 - No changes to the support for Photovoltaic and Offshore-Wind, but reducing support for Onshore-Wind and Biomass
 - Moving from Feed-in to Premium-Model for RES-support
 - No mentioning of capacity mechanisms
 - No fracking/shale gas
 - Institutional issues will be announced after party votes on treaty
- **Pragmatism is the dominating narrative in the coalition treaty**
- **Not giving up targets, but also not doing enough to realize most of them**

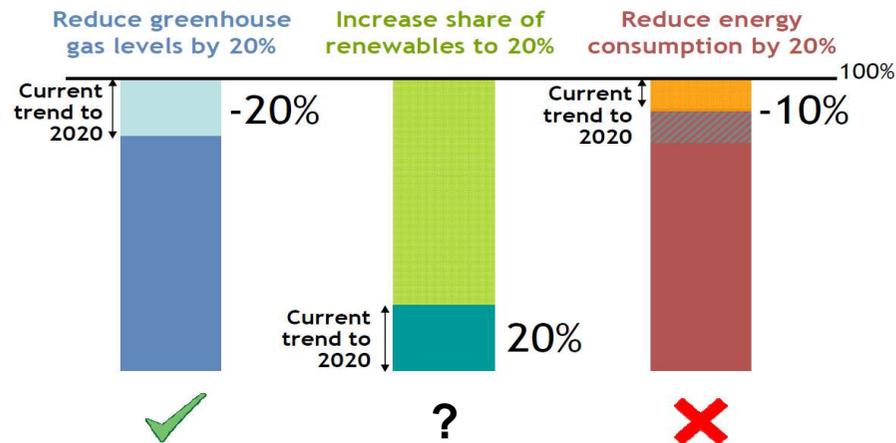
The EU-2030-Debate and Germany's potential role in the negotiations

The Process

- 20-20-20-Framework and Sustainability Paradigm dominate the discourse
- Policy-makers do not follow macro-economic modelling, but political and social rationality
- Two-Phases-Decision-Process
 - Intergovernmental Strategy Decision
 - Community Implementation
- Non-decision and ambiguity are part of the negotiation process

Actors' Preferences

- Member States are at the centre of the debate
- Economic crisis is influential
- National planning has become more important
- Experience with EU level instruments



Cornerstones of a Compromise

- Architecture of the framework (number of targets)
- Time horizon (2025, 2030, 2050)
- Quantity of targets
- Quality of targets (CO2-domestic, RES electricity)

→ No masterplan, but process oriented governance structure!

Germany's role in the negotiations

- Since 2011, German energy policy is focussing at the domestic topics
- High complexity of the process leaves EU level out of sight
- Trend: National organization of electricity market, the others will follow
- Unpleasant interference by EU level (eg. EU competition law, ETS) is widely ignored
- German position on 2030 debate in the coalition treaty: Three targets, CO2: -40% on EU level by 2030
- No public debate so far

Three scenarios

- „Death of a hero“
- „Don't interfere in my business“
- „Playing pool billiard“

Thank you very much!

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