

**The German power grid  
and its impact on France  
and the single European  
energy market:**

**Quick progress in sight? & Bird & Bird**

Johannes Kindler  
Paris, 22 October 2013

SFEN JG-Conference "Atoms for the Future 2013"

# The political scenario after the general elections:

## Angela Merkel has won the elections but

- **needs a coalition.** Great coalition with the Social Democrats likely but the formation of a new government will take time (until the end of the year – or even more?). **Not to exclude:** A temporary minority government or new general elections.
- **national consensus on appropriate solutions extremely difficult.**
- **strong pressure from the EU Commission and particularly neighbouring member states to expect.**

# Germany's Energiewende has lost its glamour

- Strong discrepancy between the rapid growth of renewables and the slow build-up of the grid.
- Renewable surpluses "invading" neighbouring countries.
- Strong distortions in the generation sector that are endangering the viability of even new gas power plants.
- On the other hand regional shortages of conventional generation due to the "Atomausstieg." BNetzA was obliged to react.
- The ramping electricity costs constitute a serious threat not only for energy intensive industries. Deindustrialization has already started.

# After Fukushima: What did Germany decide?



- Shut down of 45 Percent of its nuclear capacity (8.400 MW).
- Between 2015 to 2022: Phase out of the remaining capacity (12.000 MW). **Next shut down:** NPP Grafenrheinfeld (Bavaria).
- **The most ambitious transformation programme of the energy landscape within the EU:** Accelerated build up of renewables (esp. wind), modernisation and extension of the Grid, new base load and backup generation, storage facilities, additional programmes for energy conservation.

# What has been done to transpose the Energiewende?

Radical reform of the German energy legislation – also taking account of the relevant European legislation.

- Renewable Energy Act (EEG) 2011
- Energy Act (EnWG) 2011
- New legislation to speed up the modernization of the transmission grid
  - Energy Line Extension Act (EnLAG) 2009
  - Grid Expansion Acceleration Act for transmission Networks (NABEG) 2011
  - Federal law describing corridors for interstate and cross border transmission lines (BundesbedarfsplanG) 2013
  - Investor friendly regulation (also for distribution grids)

**No EU-Memberstate has carried out  
such radical reforms!**

# What is the state of play of the Energiewende?

## Booming renewables, now facing a crisis

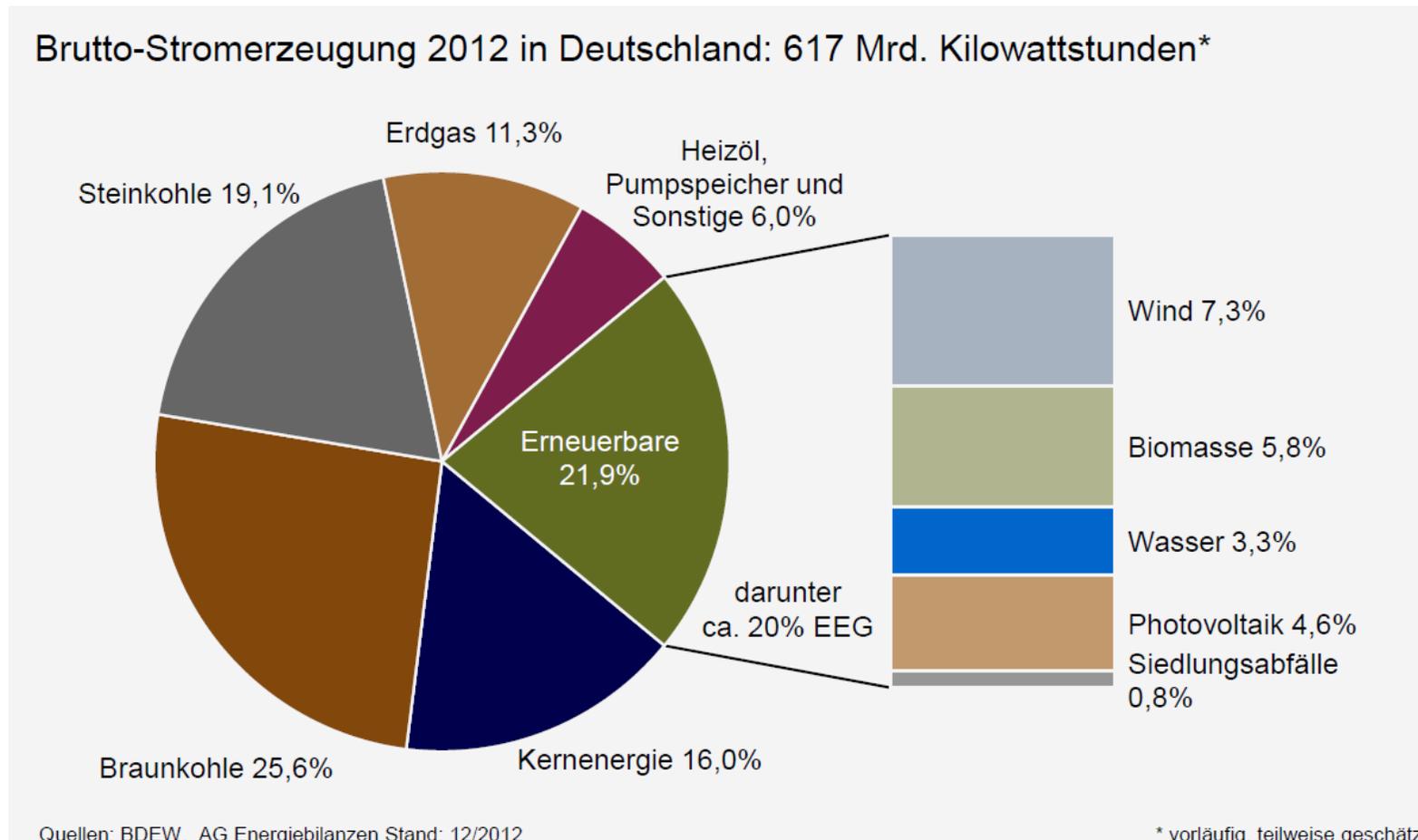
- 77 GW delivering 23% of Germany's gross production of electricity thanks to (over) generous feed in tariffs.
- Have become an important industrial and agricultural factor: 22bn Euro revenue for German companies; 380.000 jobs depending directly or indirectly on renewables.
- Saving currently 10bn Euro for fossil energies, **but**
- Growing risks for the stability of the grid.
- Heavy financial burden especially for low income households and energy intensive industry.

# What is the state of play of the Energiewende?

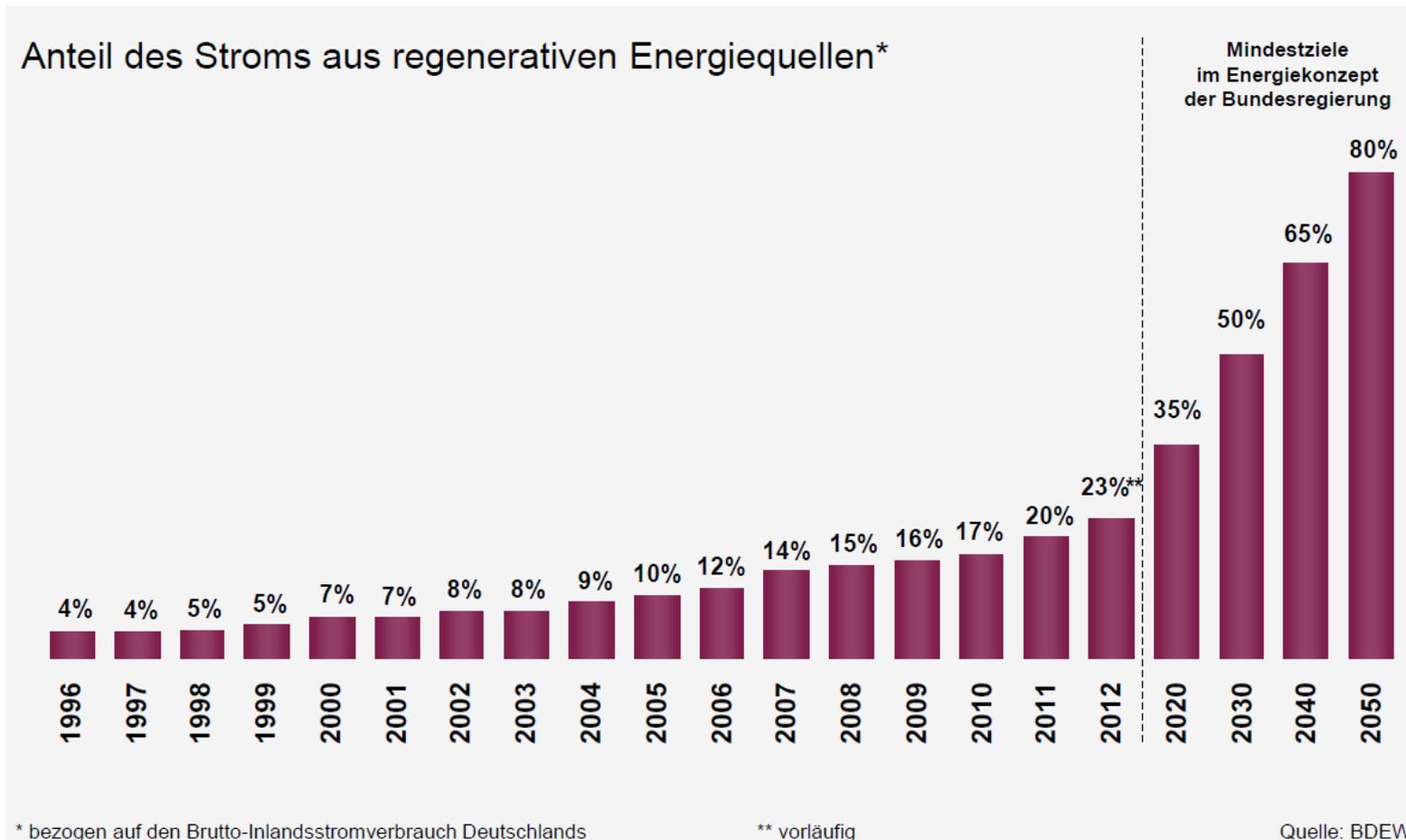
- Germany's neighbour states (including France!)
  - Glad to import cheap electricity (subsidized by the German consumer) when they need it.
  - Complaining about distortions of competition.
  - Complaining about "unwelcome loop flows" threatening the stability of their grids.

**Action to improve this situation is needed!! However a crucial question remains: Will the EU be creative and pragmatic enough to organize a new and fair financial regime for everybody and allow Germany a soft landing?**

# Brutto-Stromerzeugung Anteile nach Energieträgern 2012



# Beitrag und Ziele der Erneuerbaren Energien



# The German grid: Facing stormy times

**The good news:** Currently the German electricity grid is – still – best in class in Europe and one of the best performing grids in the world.

**But dramatic challenges – not only caused by the Energiewende are to be overcome:**

- **The German grid is under stress.** Investments between 30-50bn Euro needed for expansion and modernization (transmission **and** distribution)
  - to absorb the expansion of renewables,
  - to compensate the impact of nuclear phasing out,
  - to prepare Germany's role in the emerging European single energy market.

# The German grid: Facing stormy times

## The state of the investment is not satisfying:

- **EnLAG-Investments:**

Planning: 1800km by 2015. Realized 270km. TSO's expect realization of 50% by 2016.

- **NABEG-Investments:**

Relevant planning law ("Bundesbedarfsplan") came into force at the beginning of 2013. 8300km entirely new lines (3200km HDVC; 1700AC; 3400km extension of the existing grid; 1300km strengthening of the existing grid. Realization planned by 2023. Regulator is waiting for first applications for permit.

# The German Grid: Facing stormy times

## **Some remedies to mitigate the growing imbalances**

- Reasonable "speed limit" (Günther Oettinger) with regard to the expansion of renewables needed. Not only for financial reasons. The main reason is stability of the grid.
- A credible regime of back up capacities to balance the volatility of renewables needed.
- Regulator has created a provisional "capacity market" by forbidding the shut down of fossil power plants or requiring the reopening of shut down capacities.

**Starting with 1200MW for 2011/2012 the planning for 2015/2016 has reached 4800MW.**

# The German Grid: Facing stormy times

So far this kind of "patchwork capacity planning" has proved successful.

- Several very critical situations have been overcome.
- Also during the last winters Germany has continued supplying its neighbouring countries.

**But the situation is not sustainable!!**

Taking account of all these adds and odds:

**Was the decision to abandon nuclear power justified?**

Yes. But the initial decision were chaotic and didn't take account of the legitimate interest of our neighbours.

**There are serious doubts that new nuclear power plants will be economically viable.** Thus the shift to a new more sustainable world is justified.

# Taking account of all these adds and odds:

There are first signs of convergence between France and Germany with regard to the future. Germany's Energiewende is getting more pragmatic. France is starting to get more courageous ("Transition energetique").

Both countries continue to have a crucial interest to cooperate on the way to the European single market of Energy which contains not only chances but also many risk.

**C'est la force des choses!**

Thank you & Bird & Bird

Johannes Kindler

Dir: +49 211 2005 6925

Tel: +49 211 2005 6000

Fax: +49 211 2005 6011

[johannes.kindler@twobirds.com](mailto:johannes.kindler@twobirds.com)

Bird & Bird is an international legal practice comprising Bird & Bird LLP and its affiliated and associated businesses.

Bird & Bird LLP is a limited liability partnership, registered in England and Wales with registered number OC340318 and is authorised and regulated by the Solicitors Regulation Authority. Its registered office and principal place of business is at 15 Fetter Lane, London EC4A 1JP. A list of members of Bird & Bird LLP and of any non-members who are designated as partners, and of their respective professional qualifications, is open to inspection at that address.

[twobirds.com](http://twobirds.com)