

Formation of Electricity Prices



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**for Heinrich Böll Foundation,
Prague
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Agenda

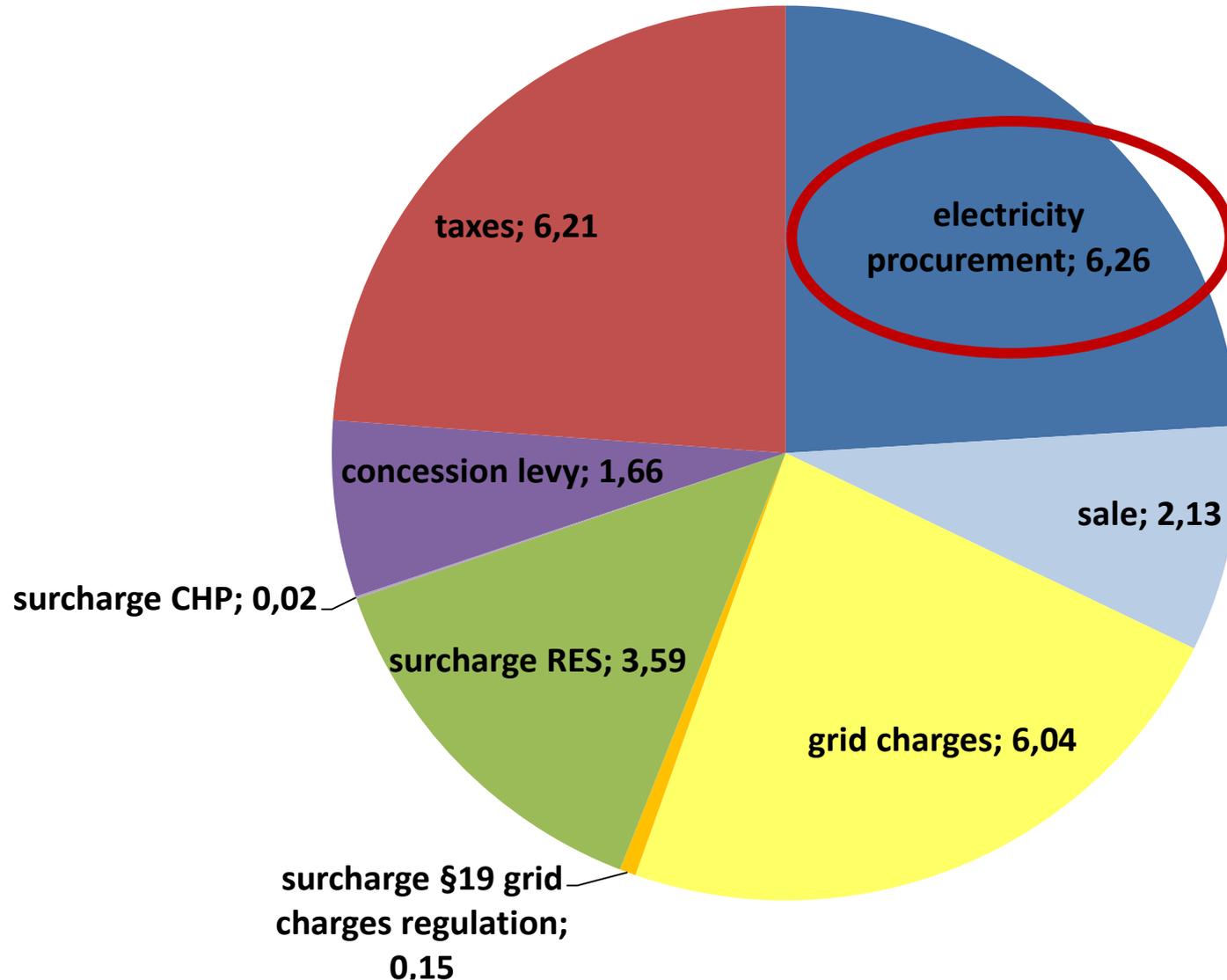
- **Consumer price for electricity**
- **Price Formation at the Whole Sale Market**
- **Historic Prices and Explanation patterns**
- **Surcharge for RES**
- **Special analysis for future solar costs**

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Consumer price for electricity Germany 2012

26,06 ct /kWh

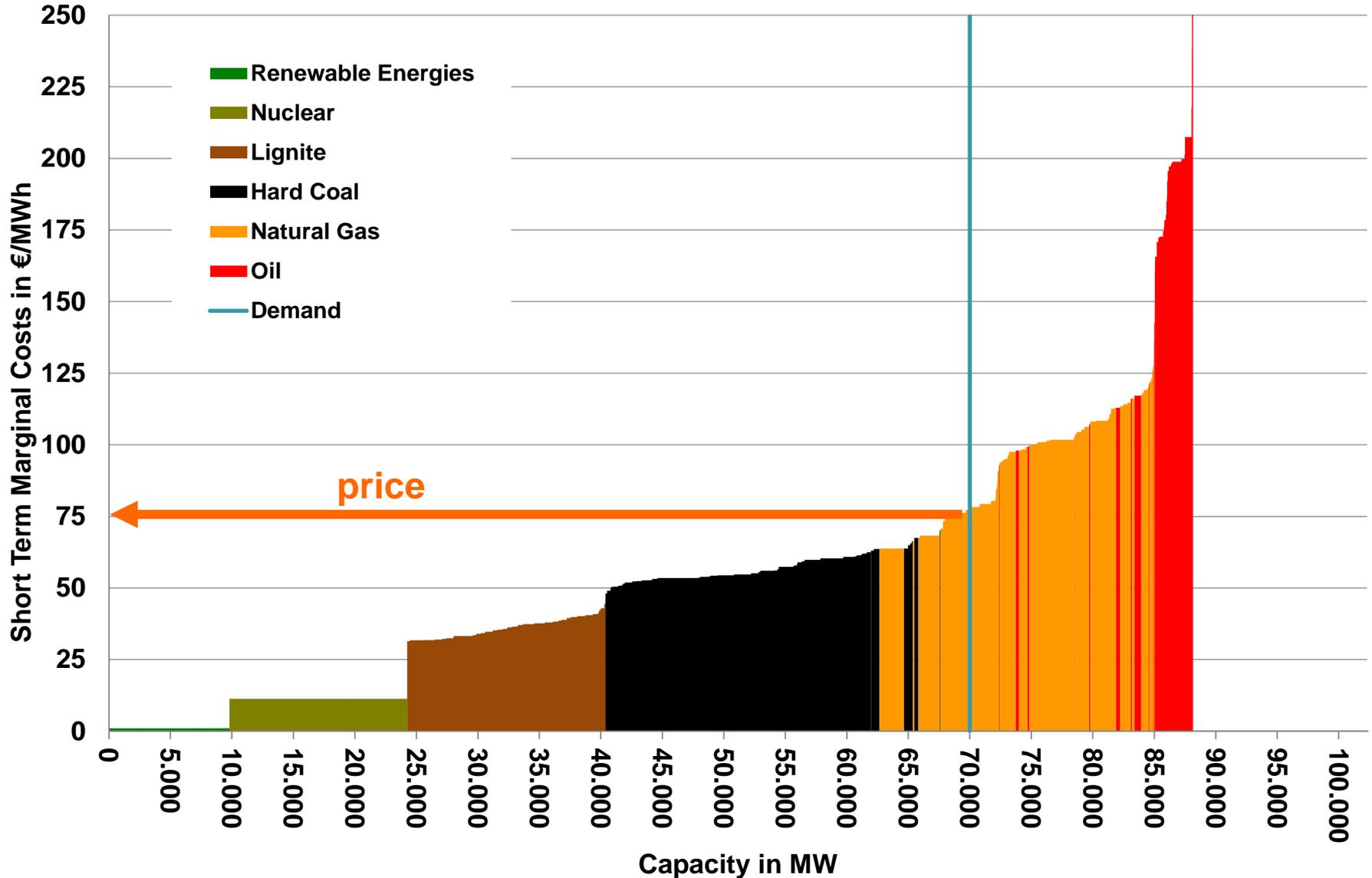


Source: Federal Network Agency, own figure

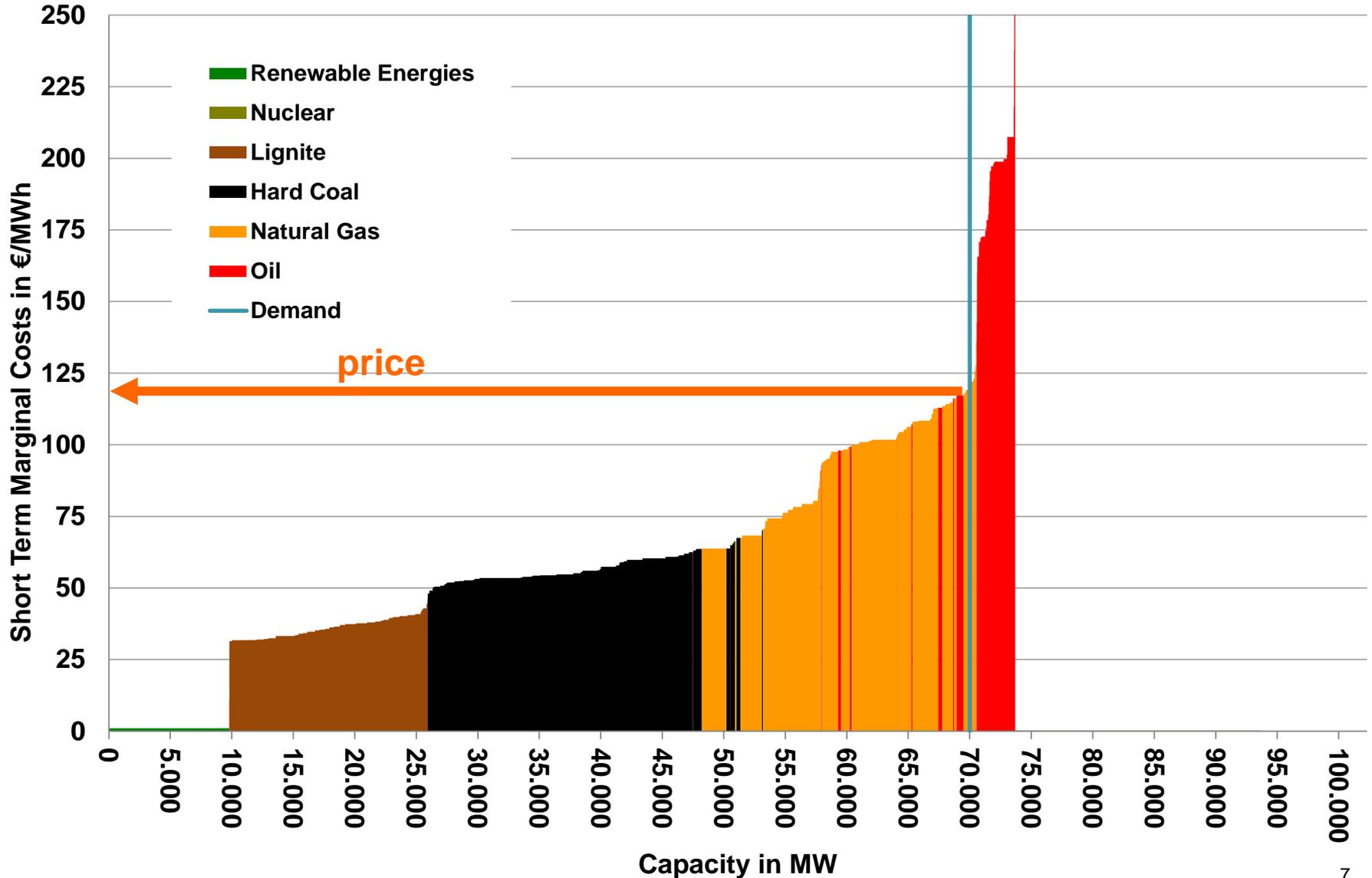
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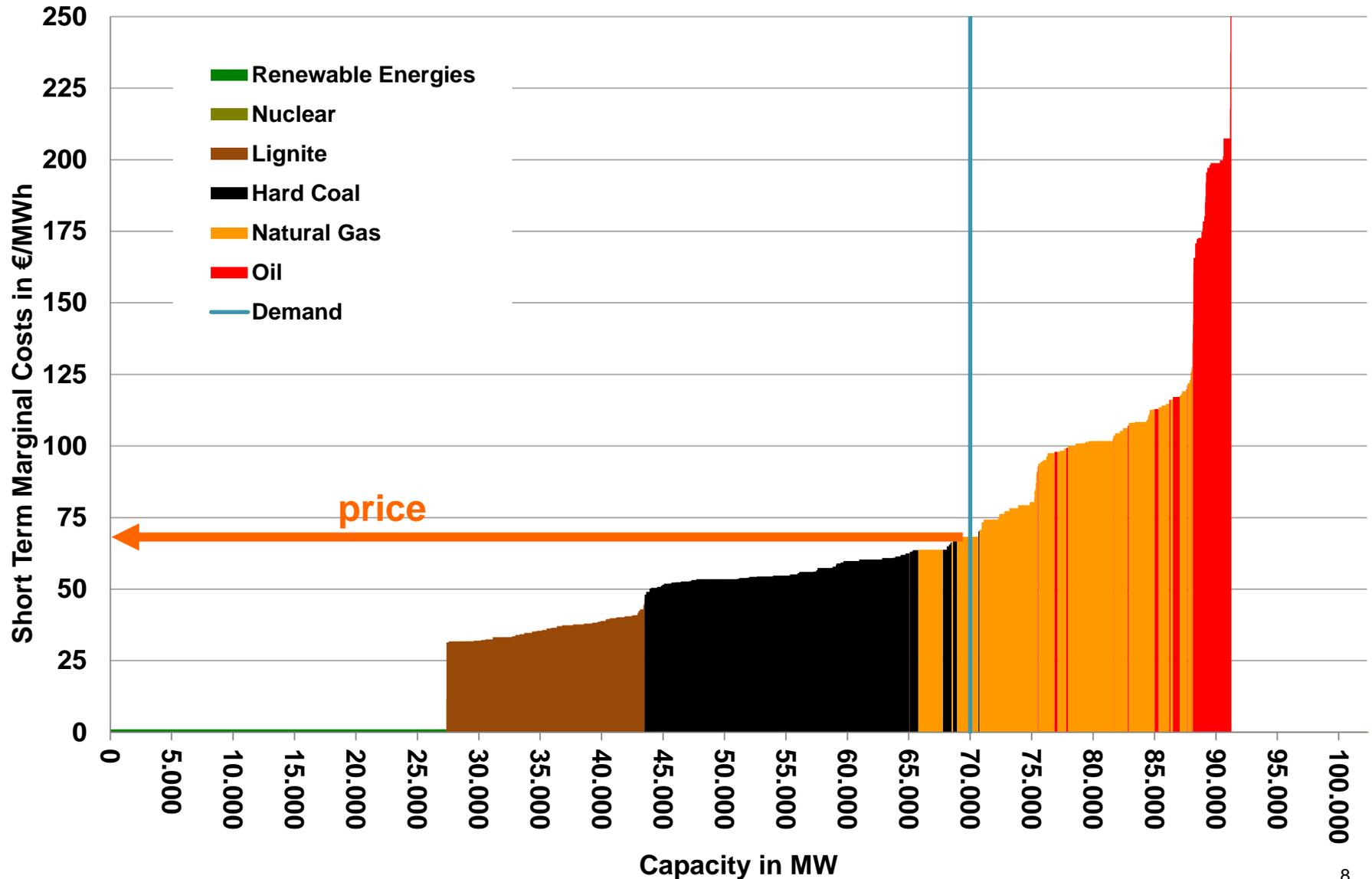
Merit order of power plants



Merit order – without nuclear



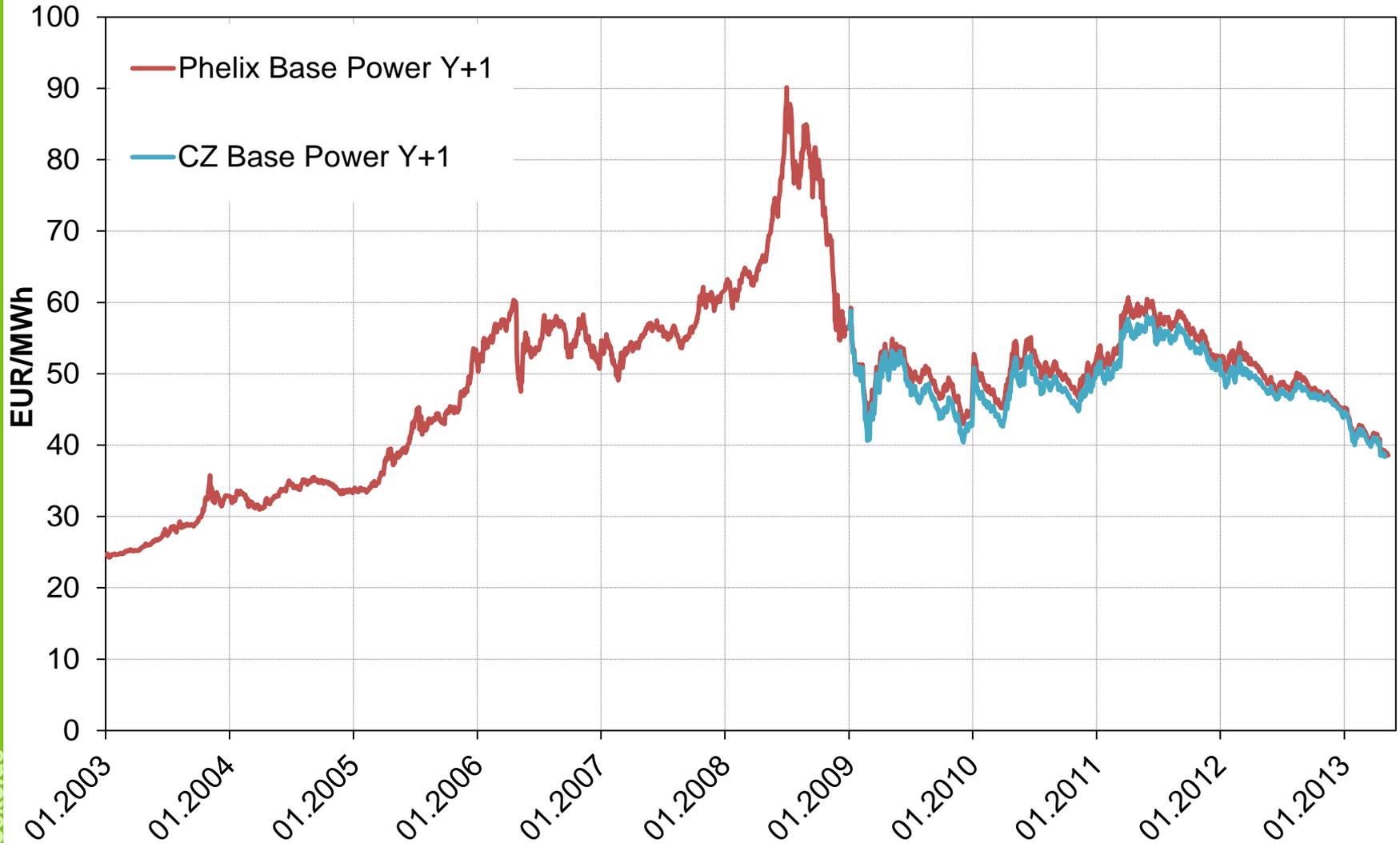
Merit order – with more RES



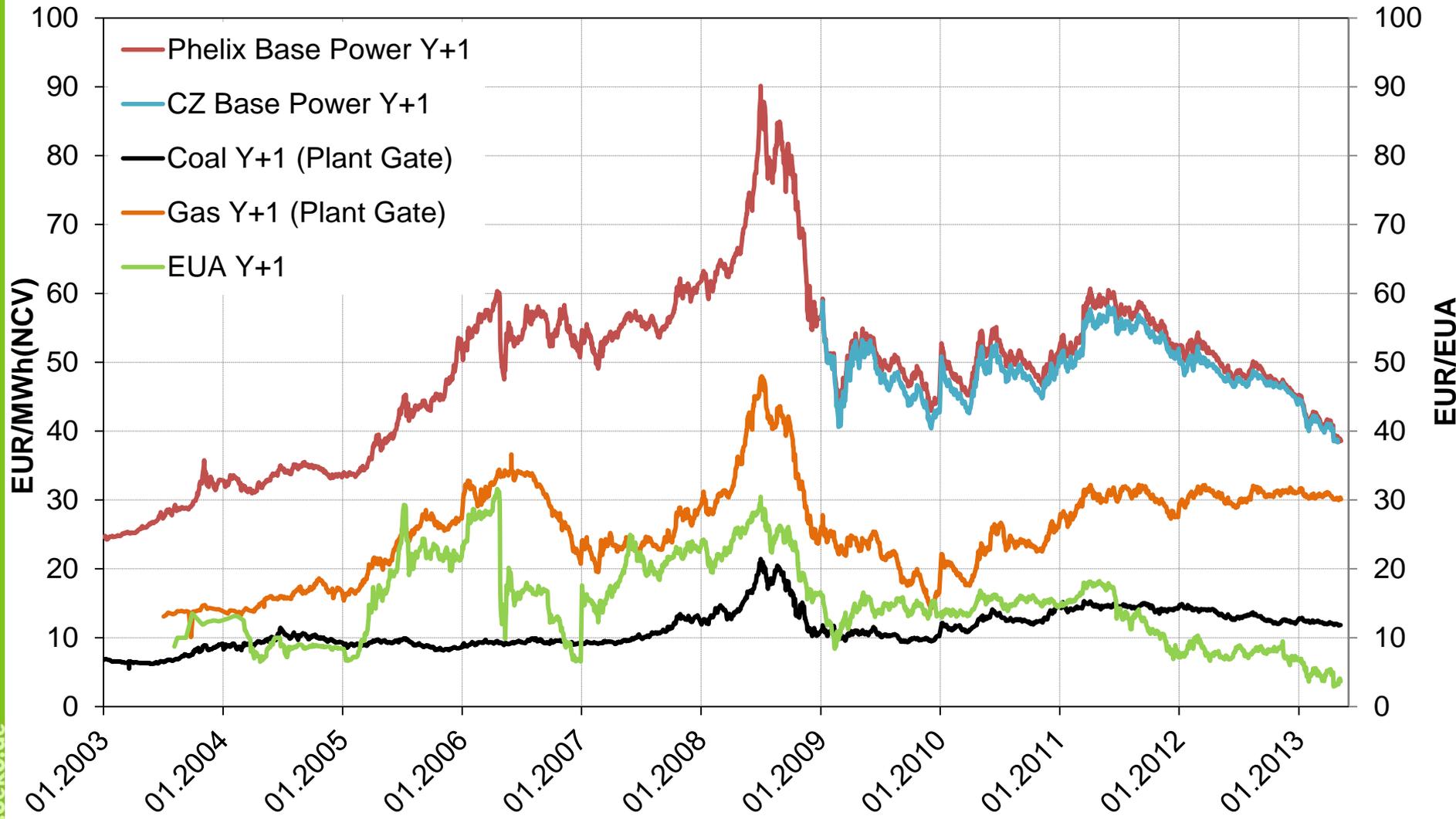
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Historic Power Prices Germany, Czech Republic



Historic Prices (Fuel, CO₂, Base Power)

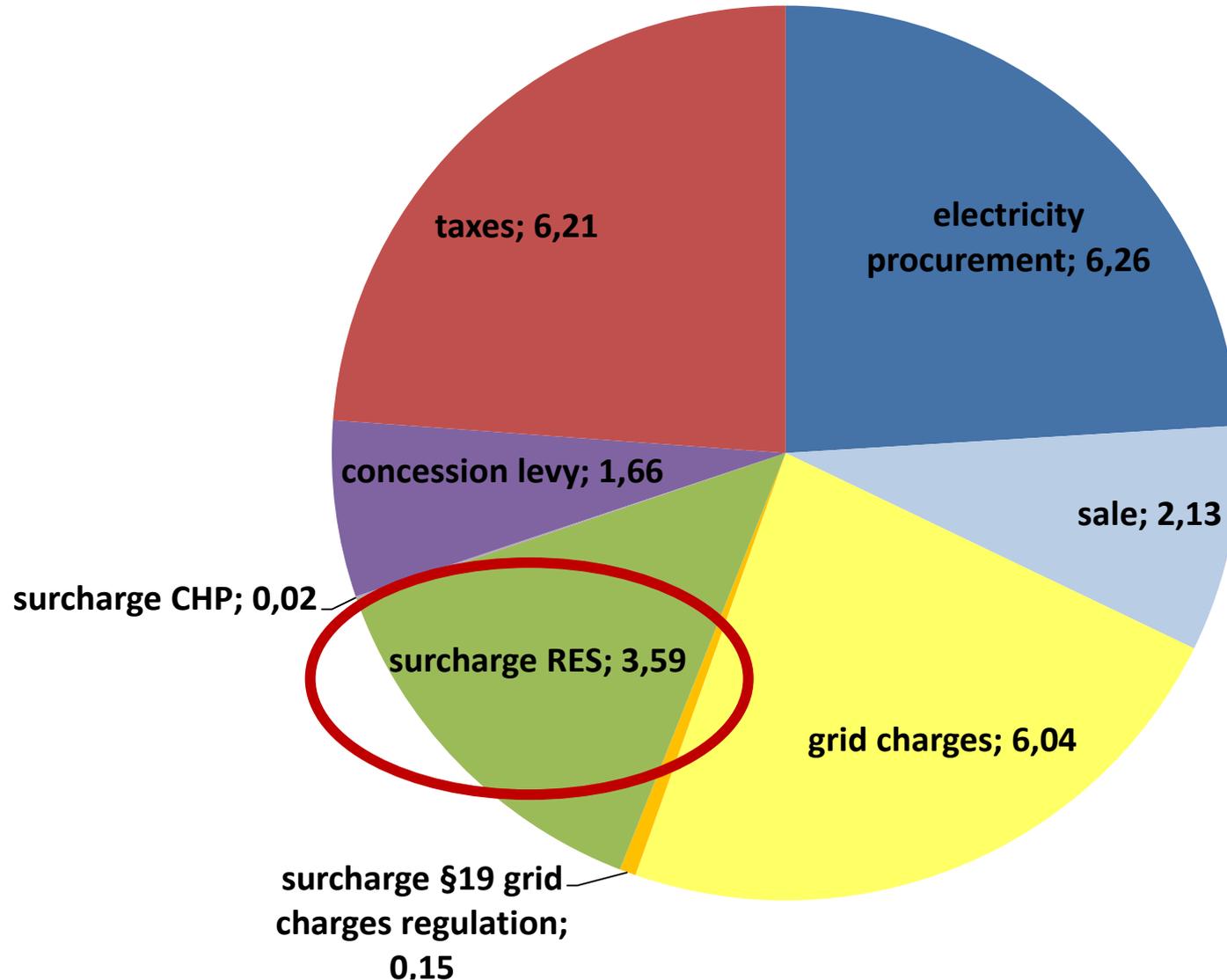


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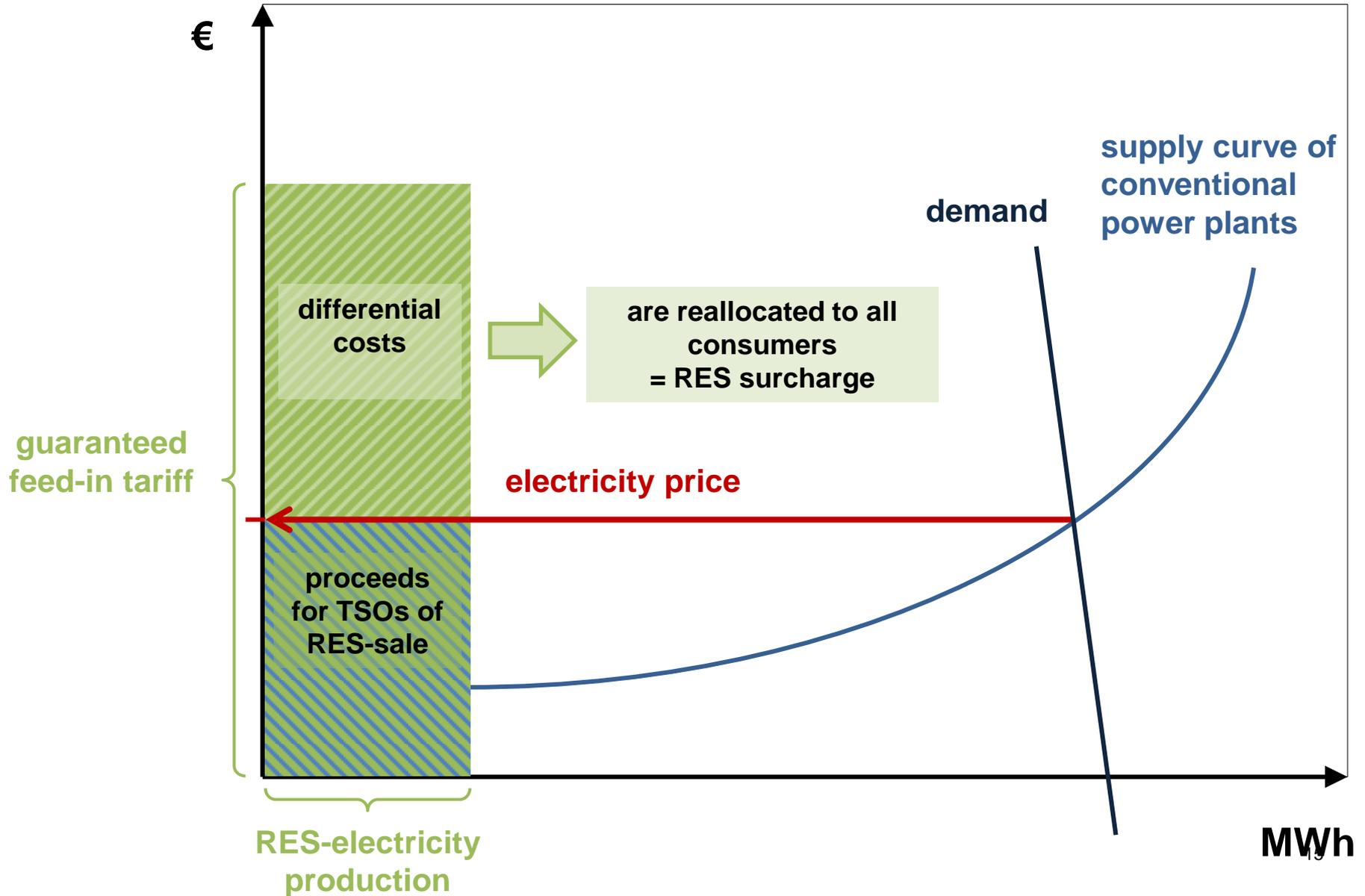
Feed-in tariff for RES

§ Renewable Energies Act:

- guaranteed and prioritised feed-in
- guaranteed payment



RES-costs and whole sale market



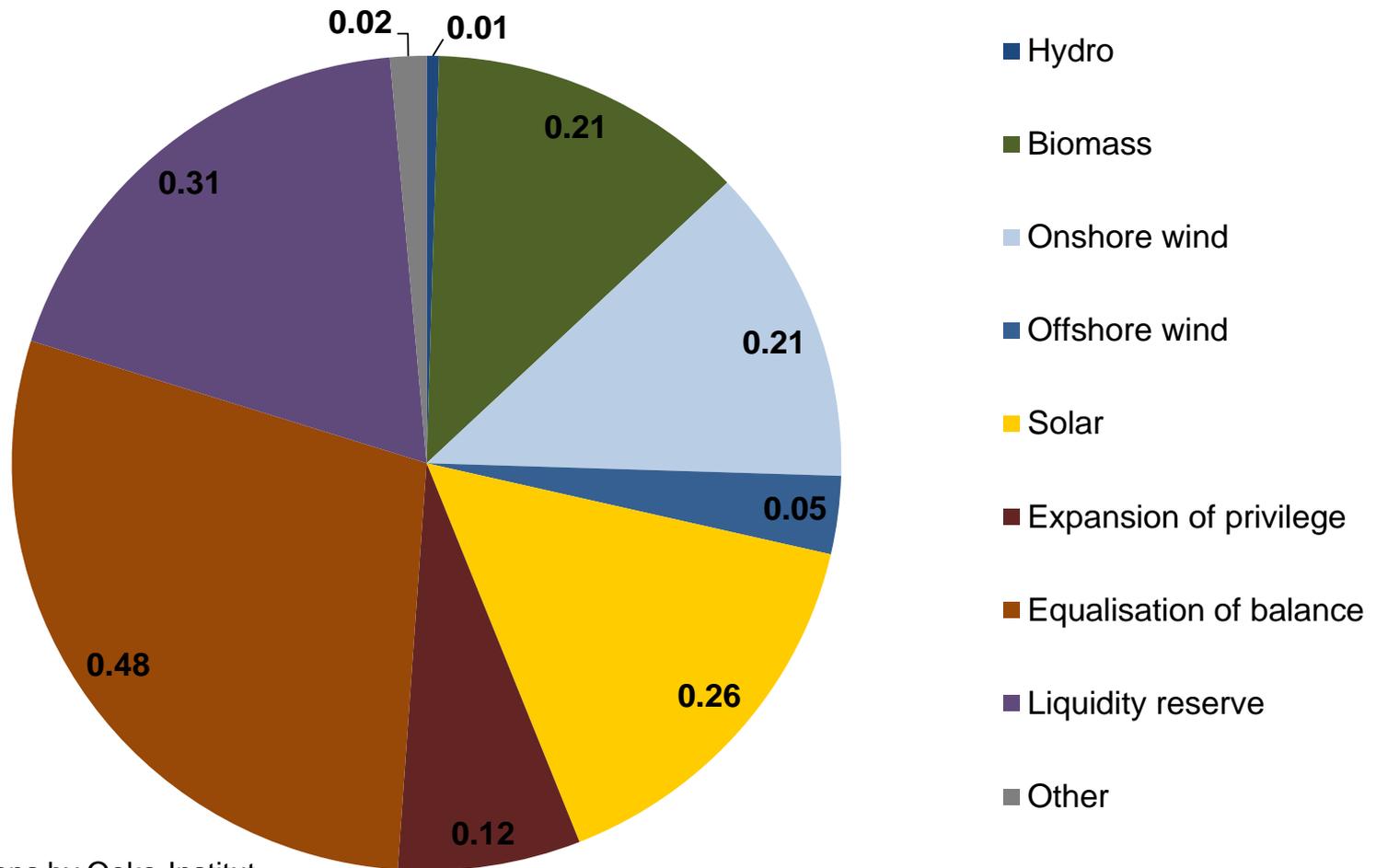
Development of the RES-surcharge



RES-surcharge: difference 2013 - 2012

Contributions of the most important factors influencing the increase of the German EEG surcharge in 2013 (5,3 ct / kWh) compared to 2012 (3,6 ct / kWh)

1.68 ct/kWh overall

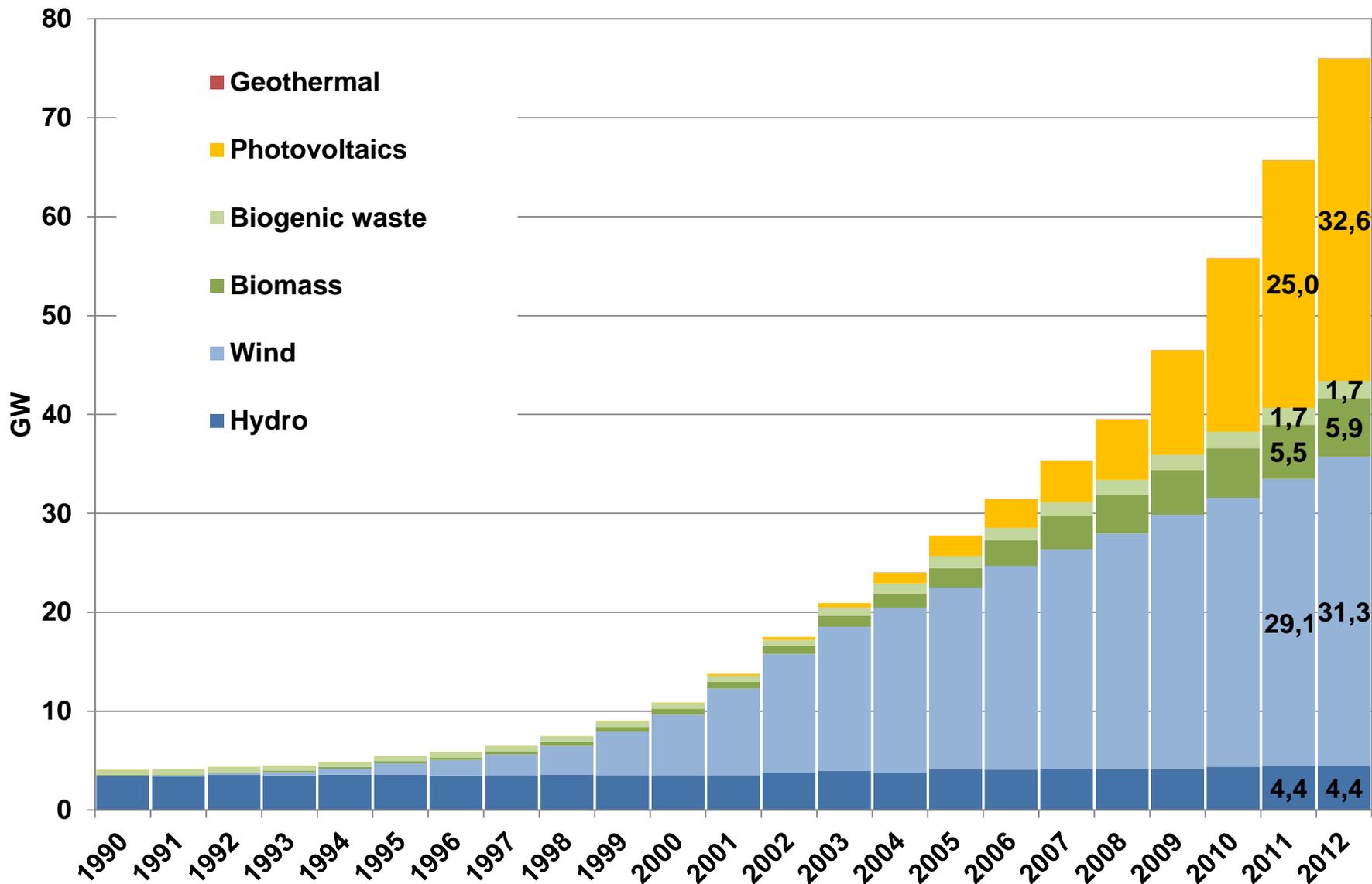


Source: Calculations by Oeko-Institut

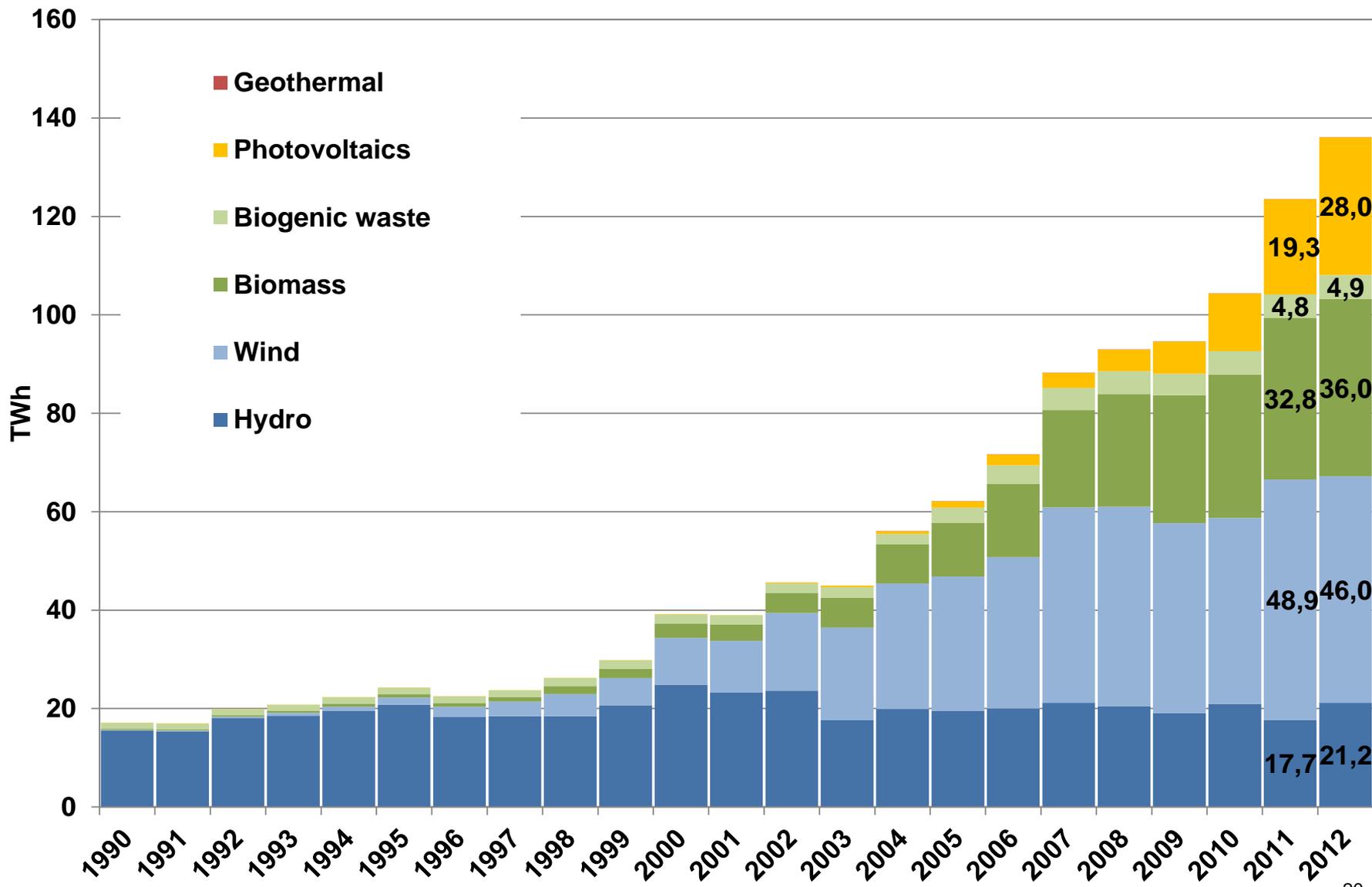
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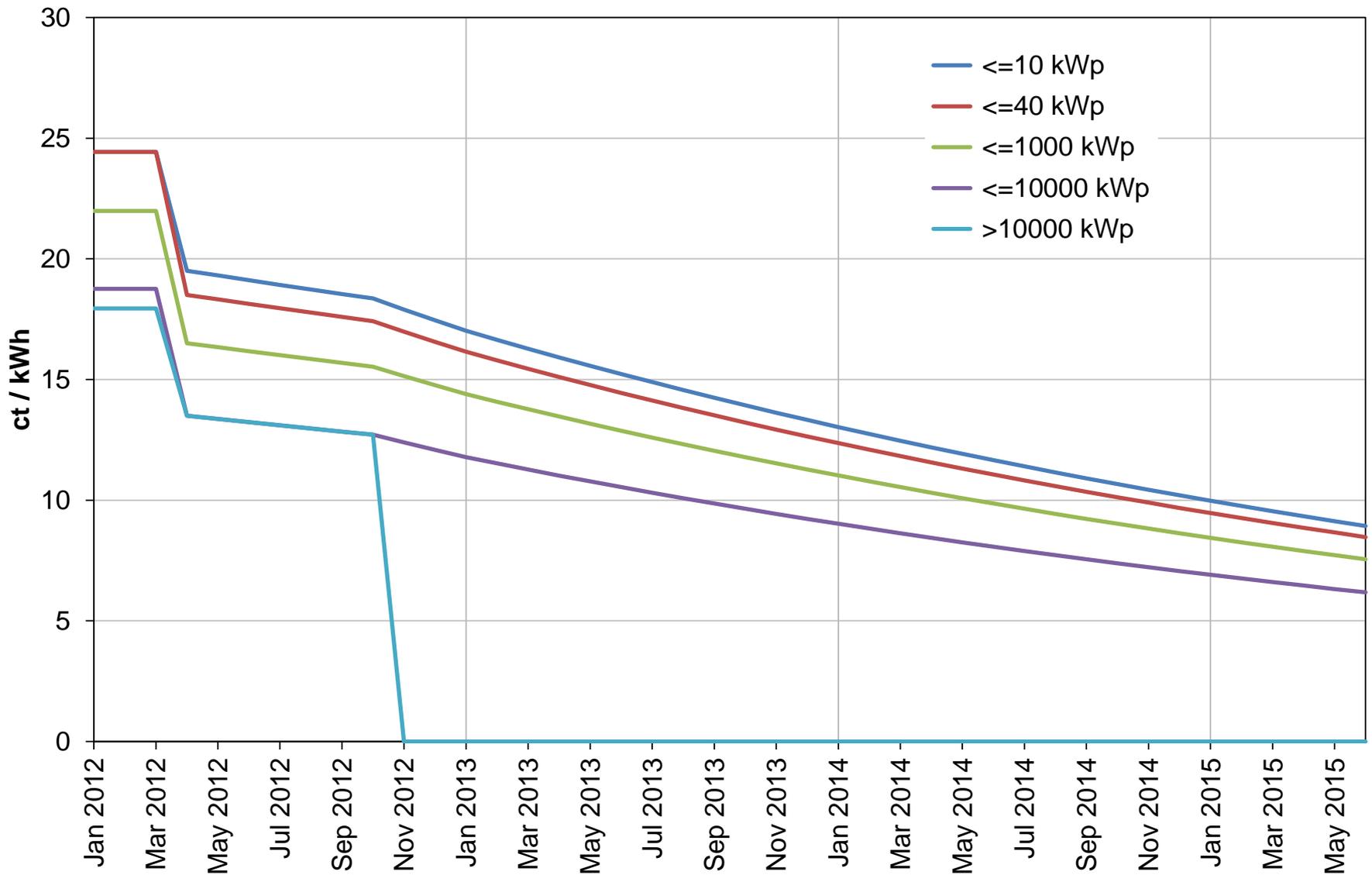
Development of renewable capacities in Germany



Development of renewable electricity production in Germany

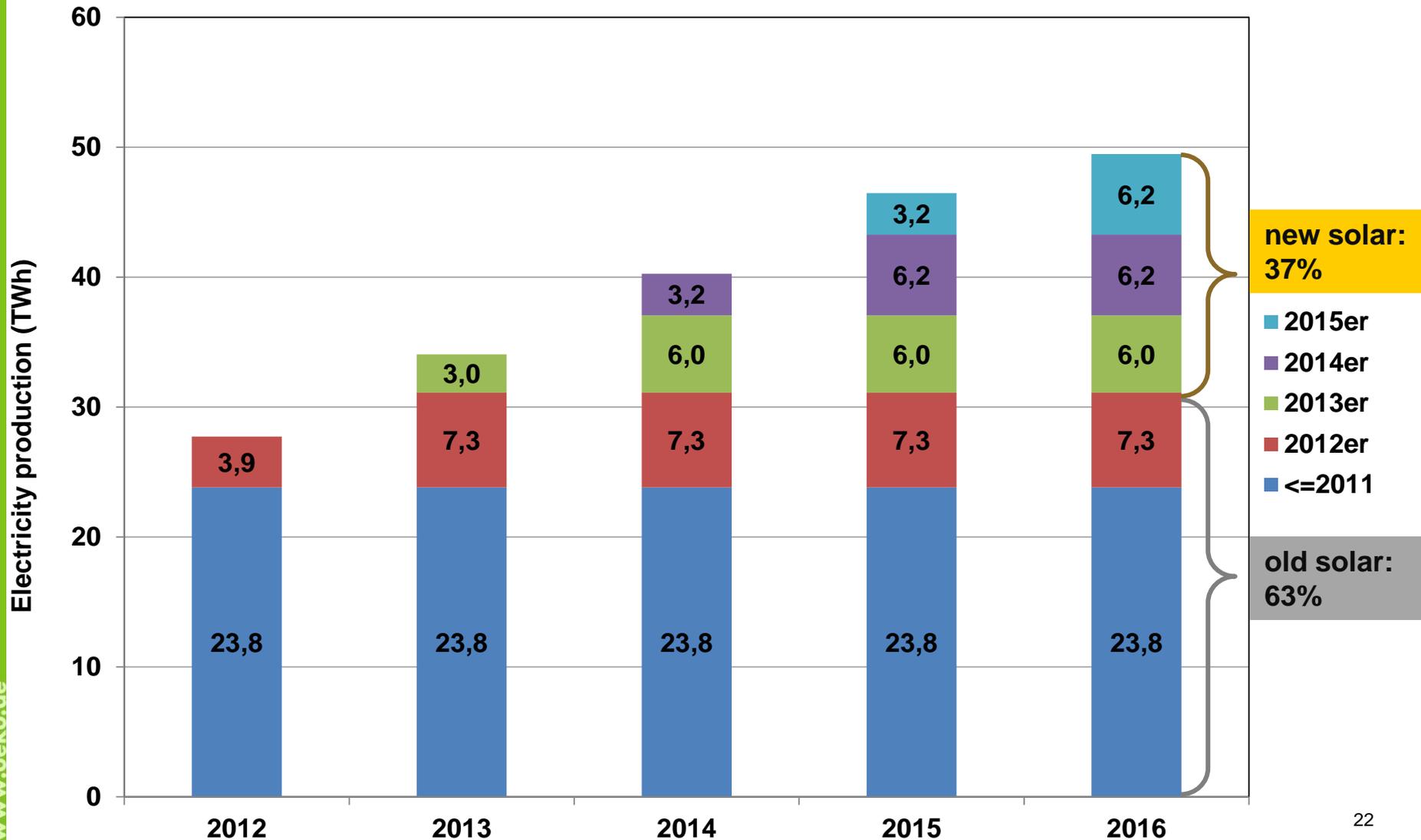


Decrease of future feed-in tariff for solar (for continuing future installation like today)



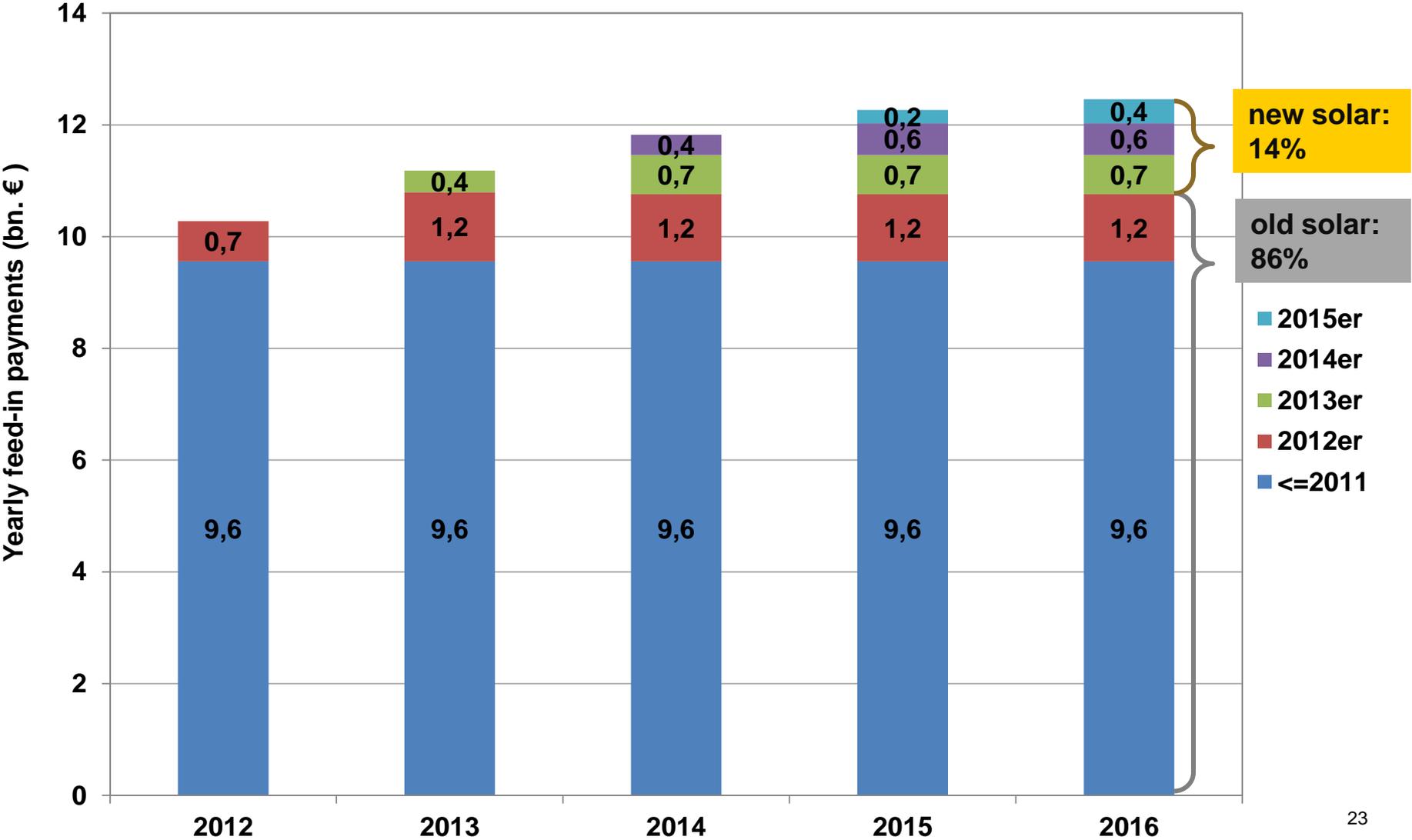
Future solar electricity production

... in the years 2012 bis 2016 sorted by construction years of plants



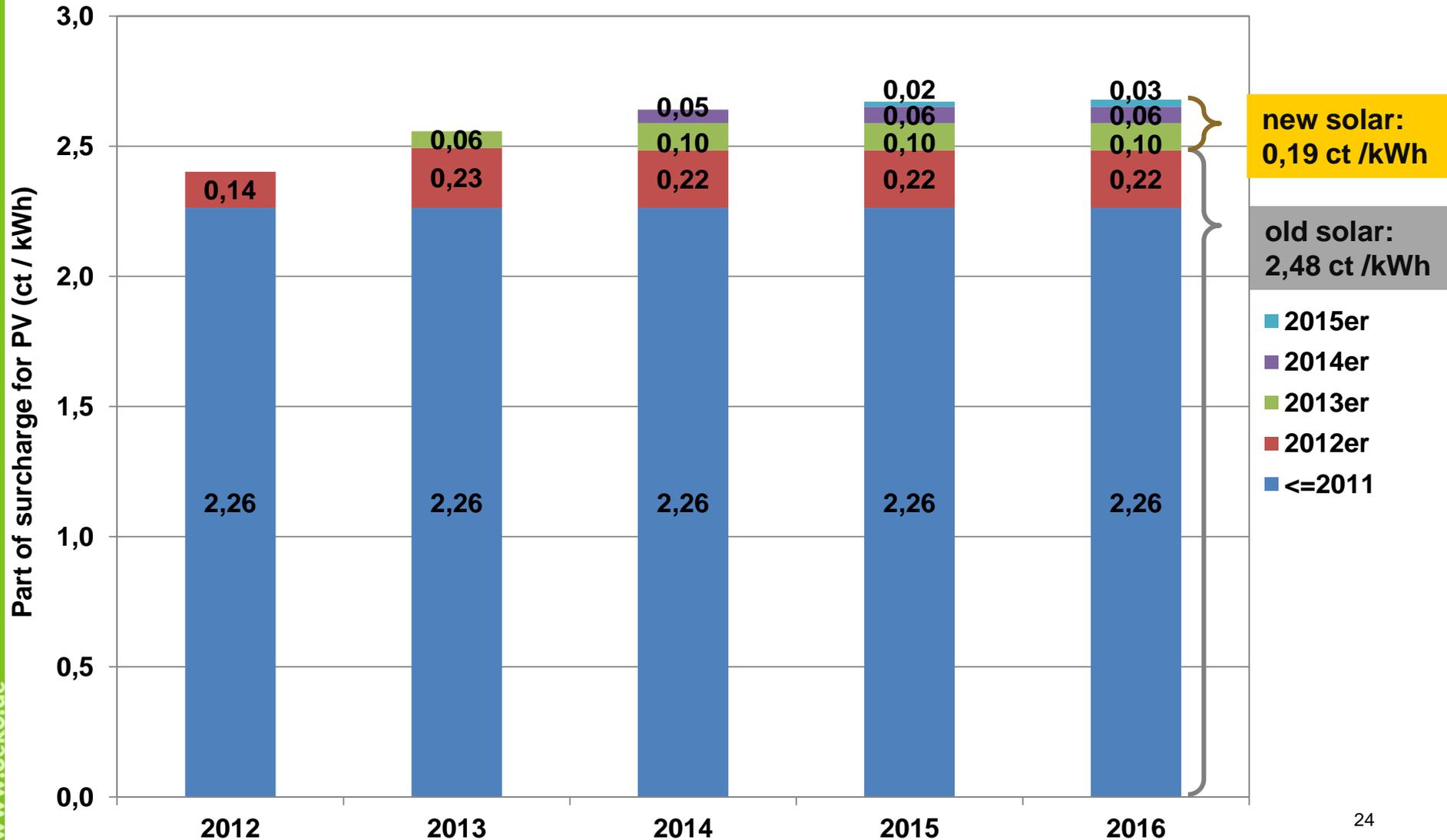
Future costs for solar electricity

... in the years 2012 bis 2016 sorted by construction years of plants



Future share of RES surcharge for solar electricity

... in the years 2012 bis 2016 sorted by construction years of plants



Summary

- **Consumer prices have different components**
- **Whole sale market is based on merit order of power plants and their short term marginal costs**
- **Whole sale market prices are in decrease in Germany and the Czech Republic**
- **German RES surcharge is the difference between guaranteed feed-in-tariff payments and revenues from wholesale market**
- **Decrease of solar feed-in tariff was necessary (and a bit late)**
- **But: future solar in Germany will not increase surcharge substantially anymore**

Thank you!

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