The Renewable Energy Act in Germany

Eberhard Waffenschmidt

May. 2016

IRENEC 2017, Istanbul

Cologne Institute for Renewable Energy

Technology Arts Sciences TH Köln

Climate Change

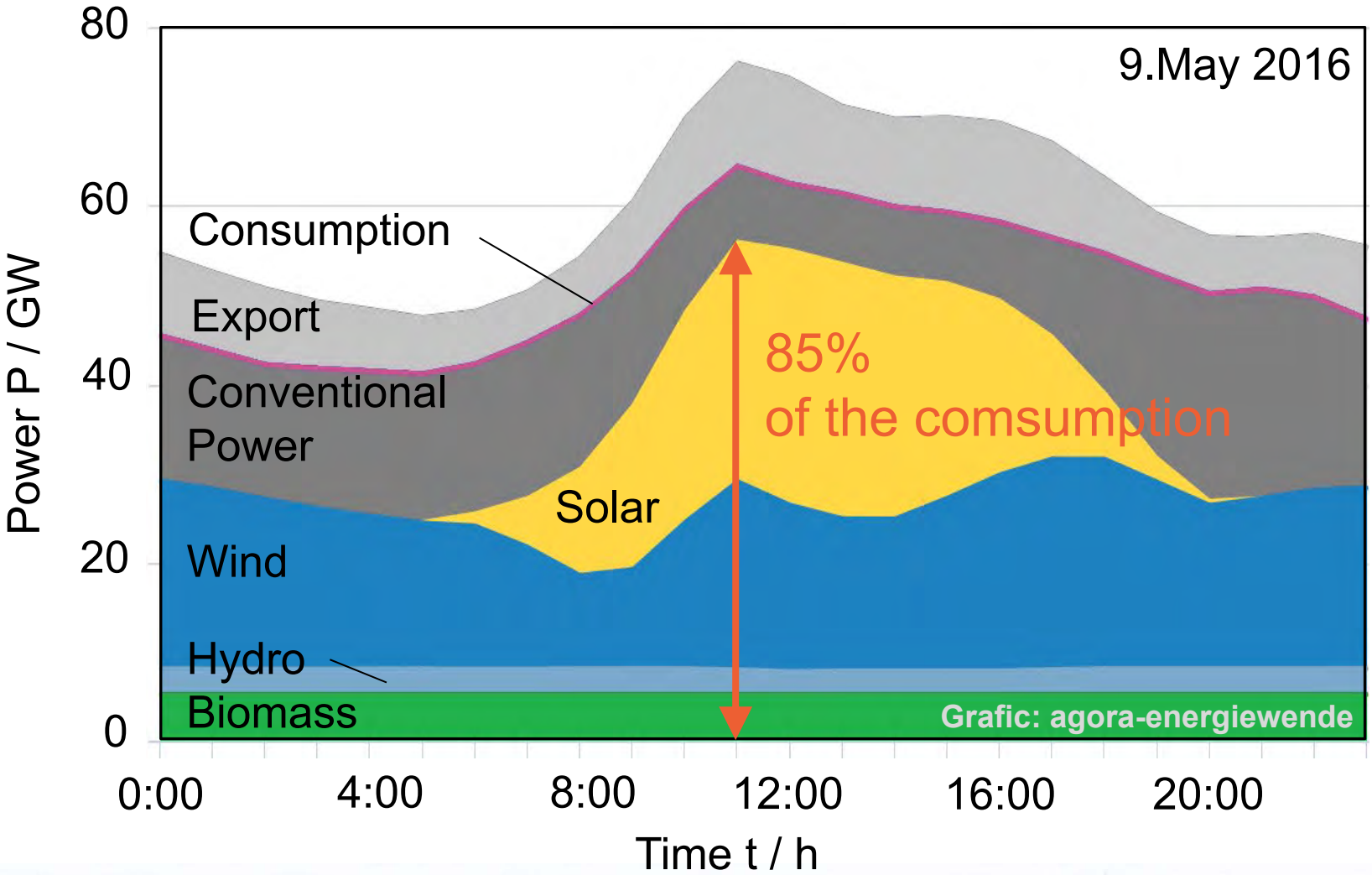
Finite Ressources

Sustainable use of energy

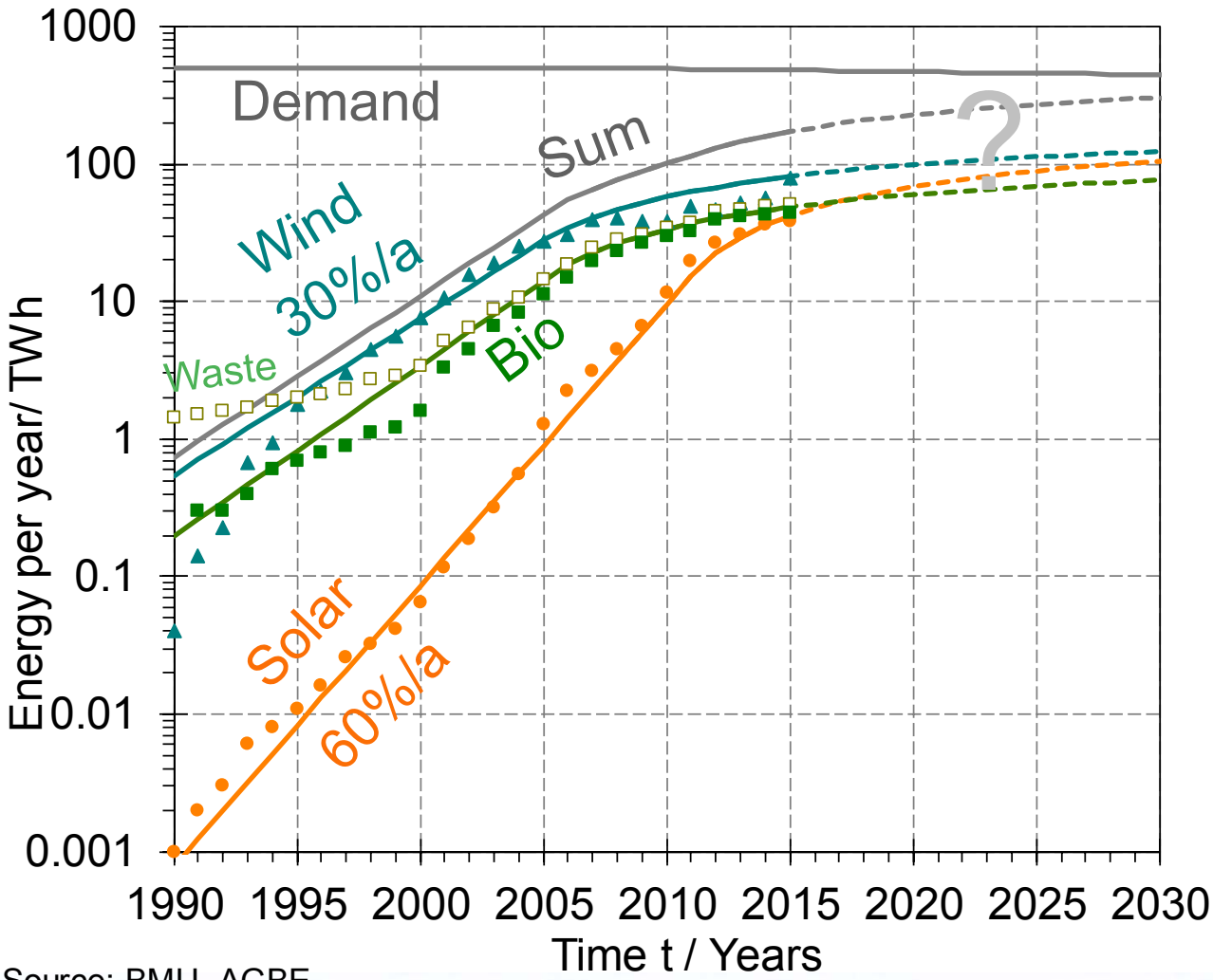
- Largest challenge of our age
- Change to 100% Renewable Energies is the only solution

Germany as „Weltmeister“

Sometimes 85% RE in the grid

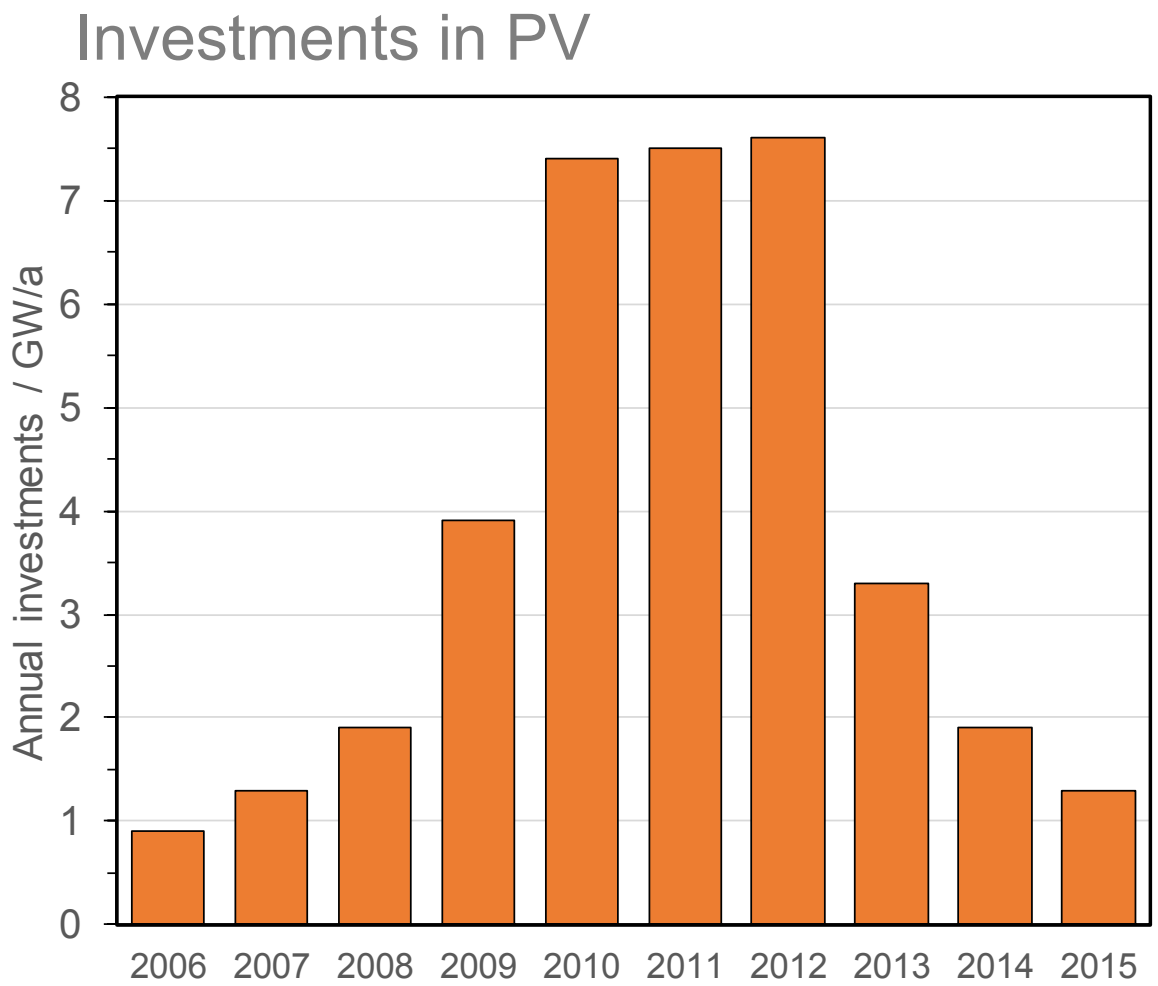


Development in Germany



Source: BMU, AGBE

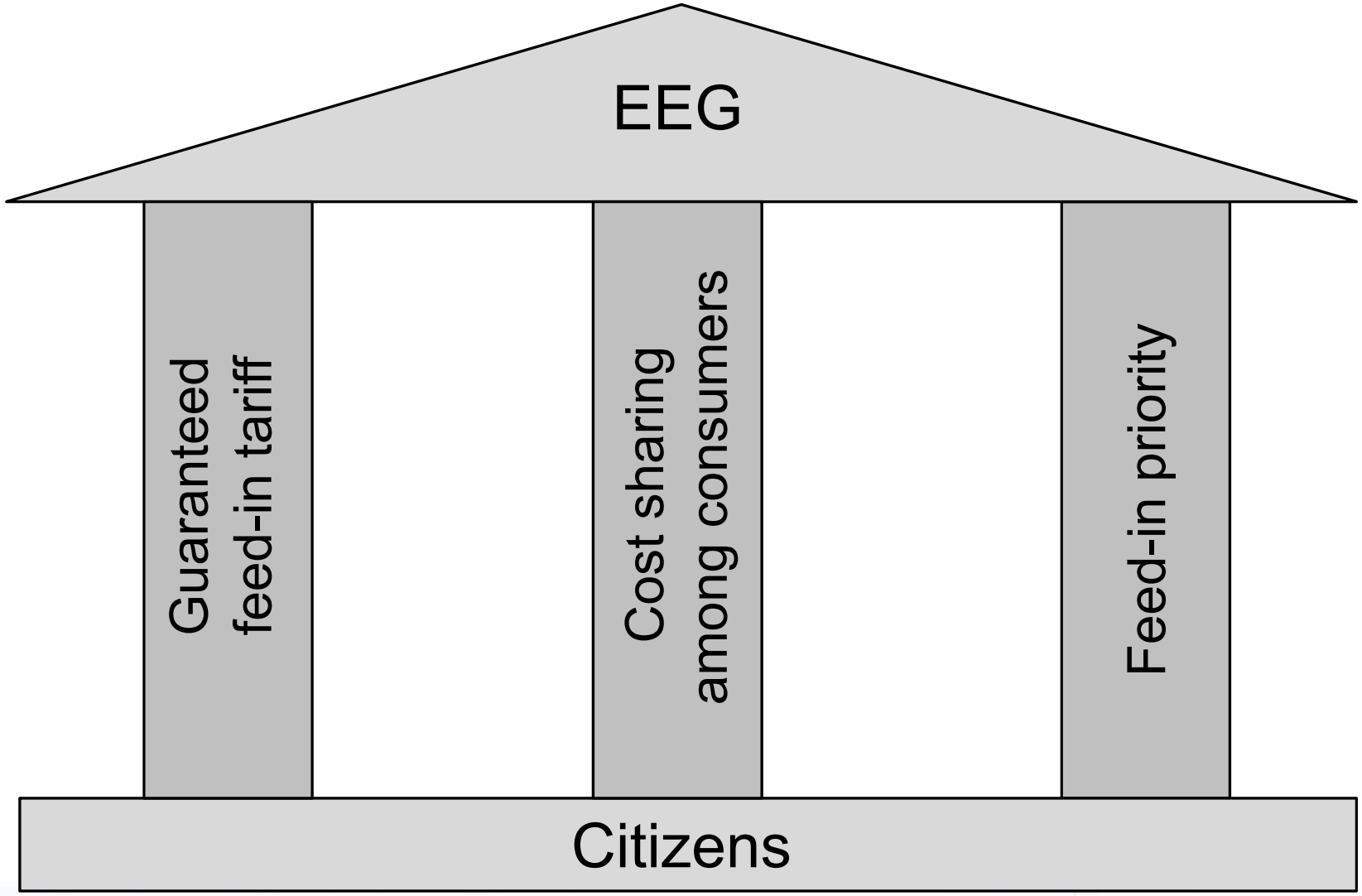
Downsizing of investments



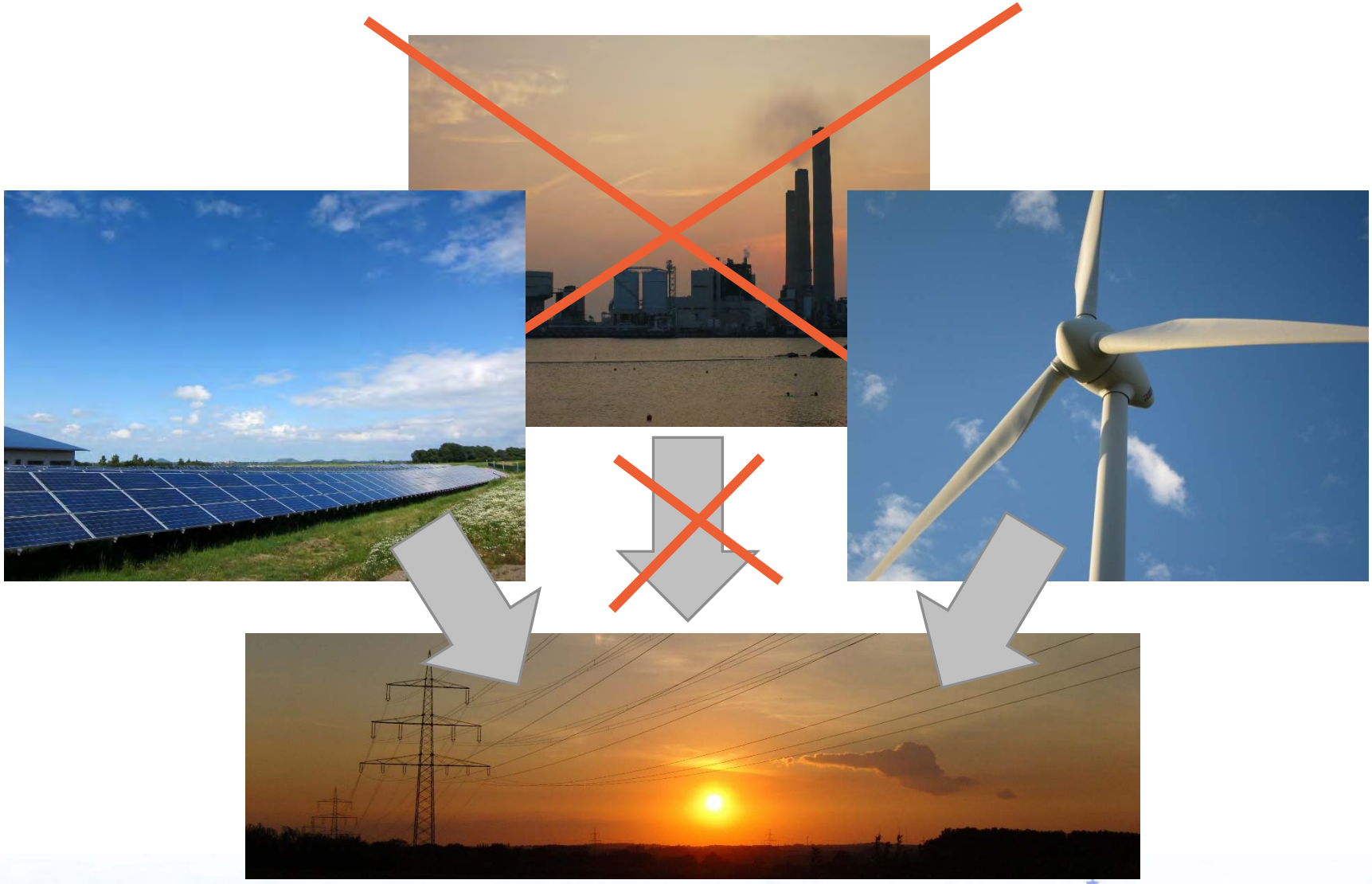
Bürger-Energiewende: Involvement of citizens

The German Renewable Energy Act (EEG)

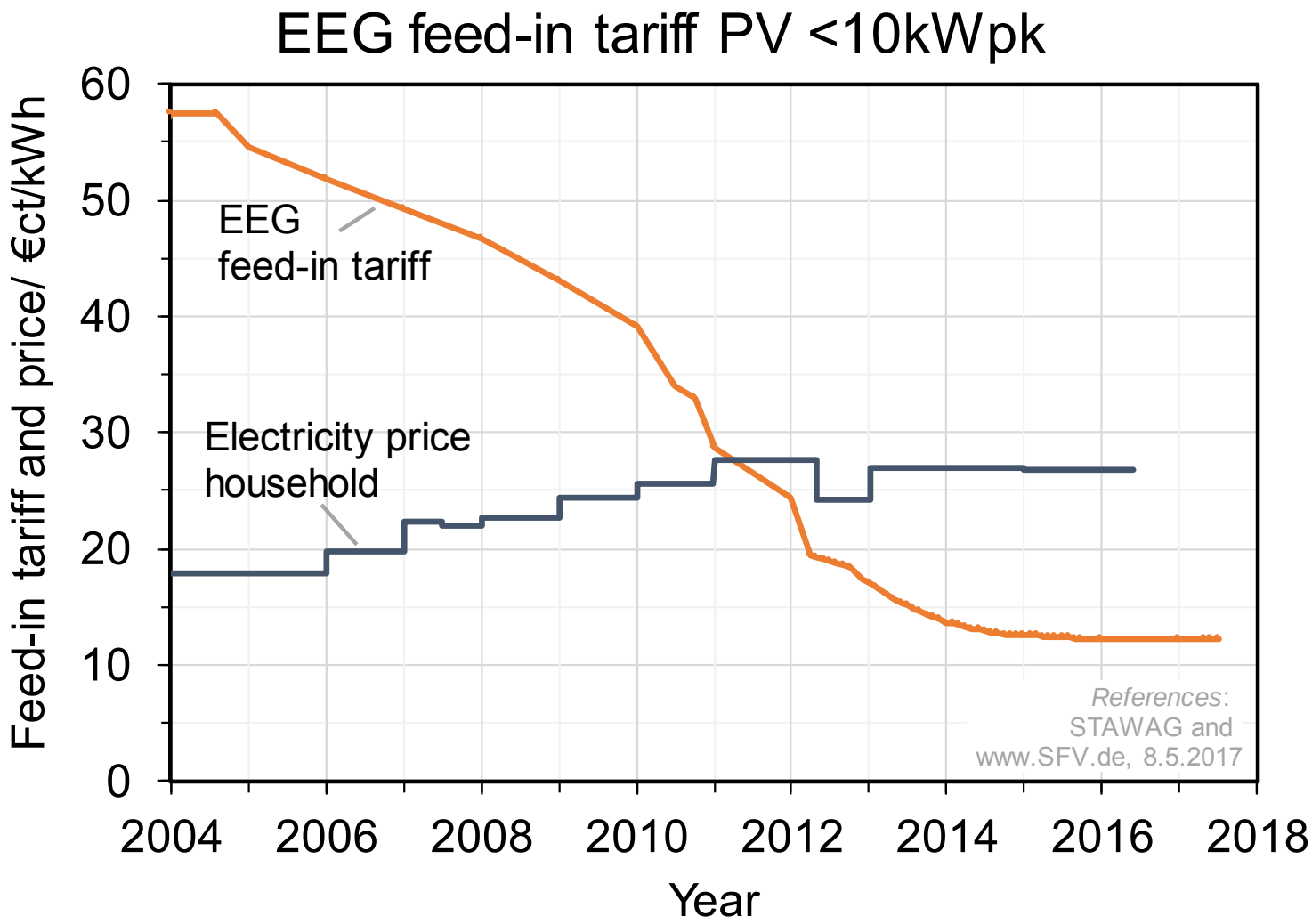
The three pillars of the EEG



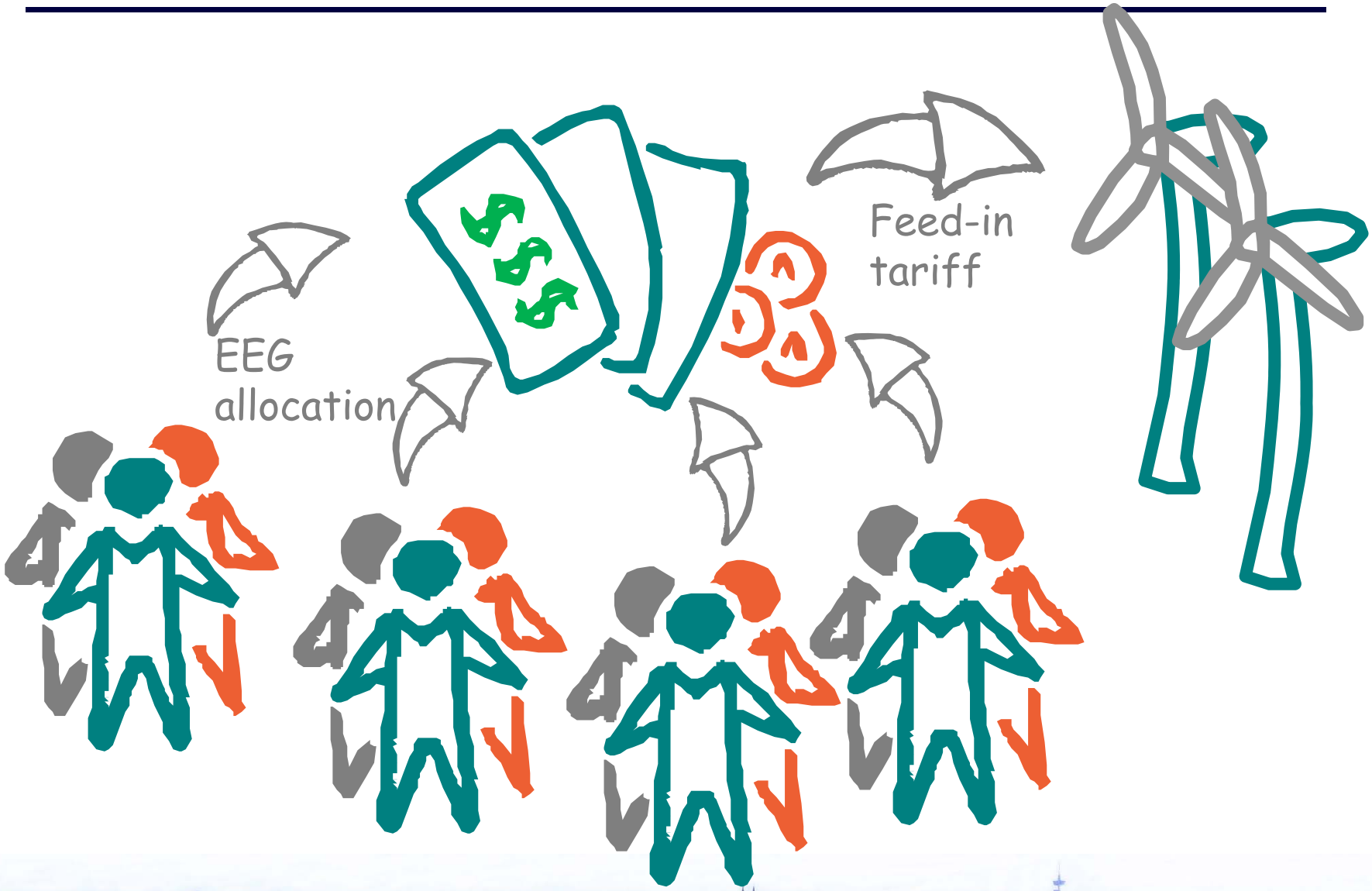
Feed-in priority



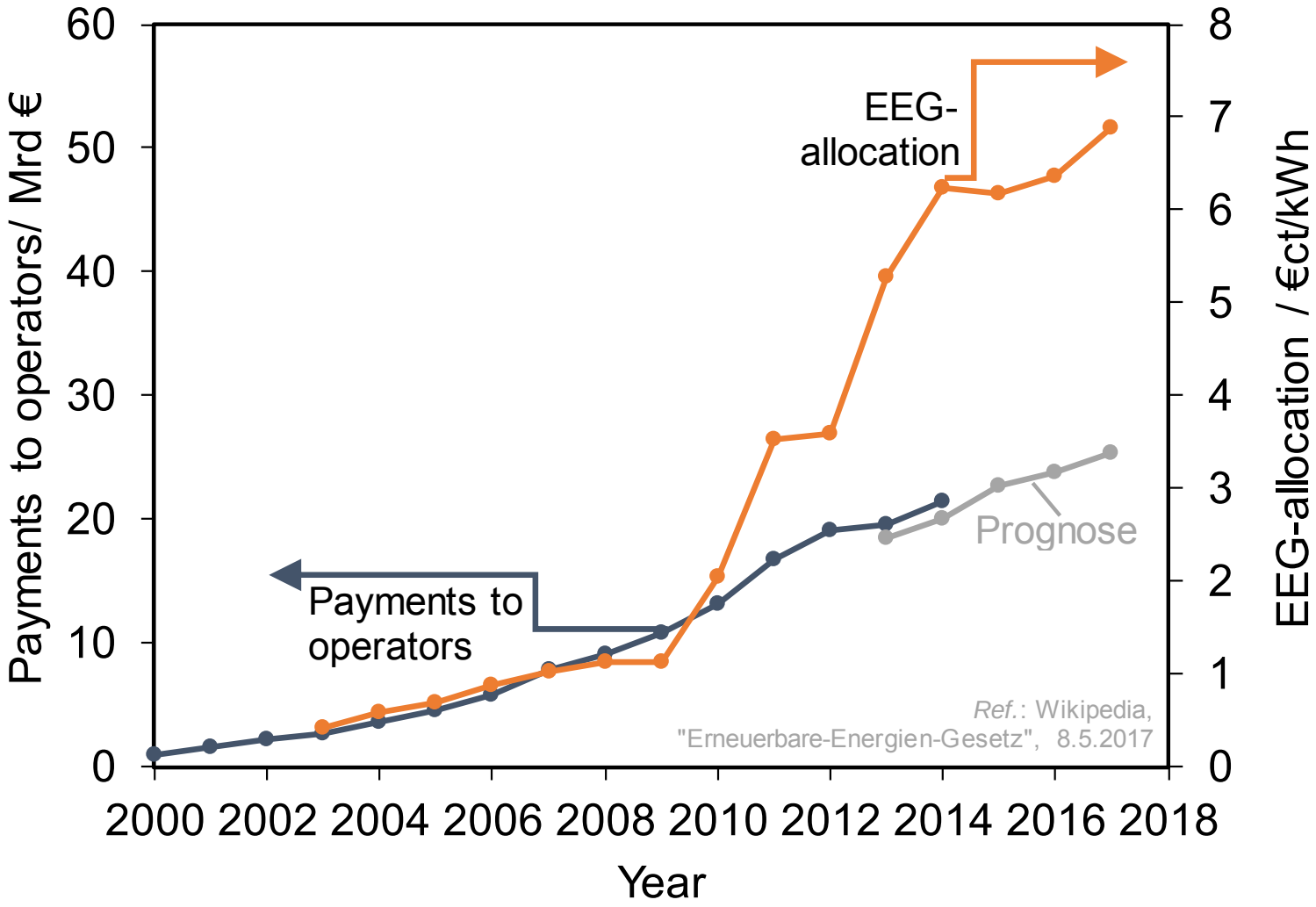
Development of PV feed in tariff



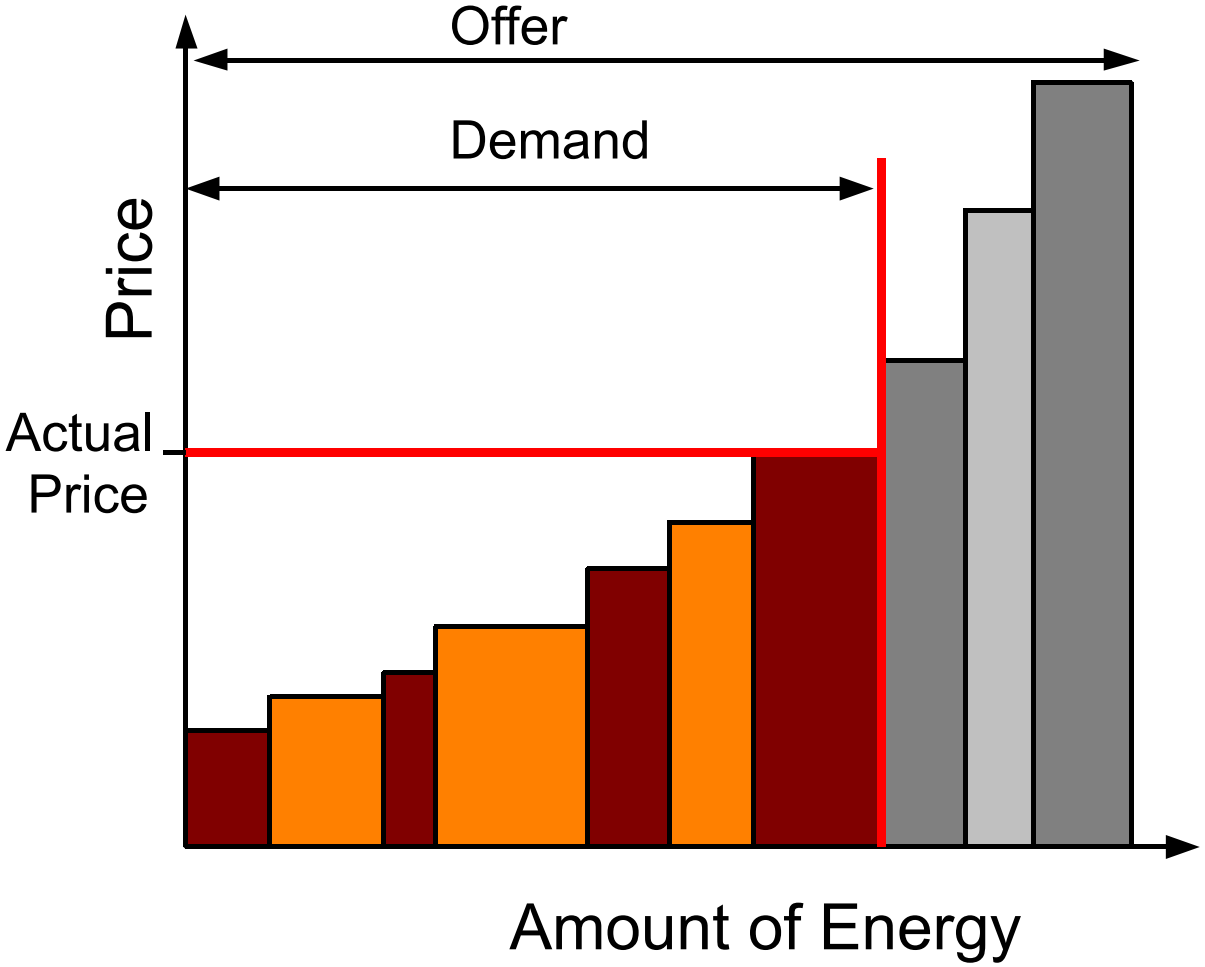
Cost sharing



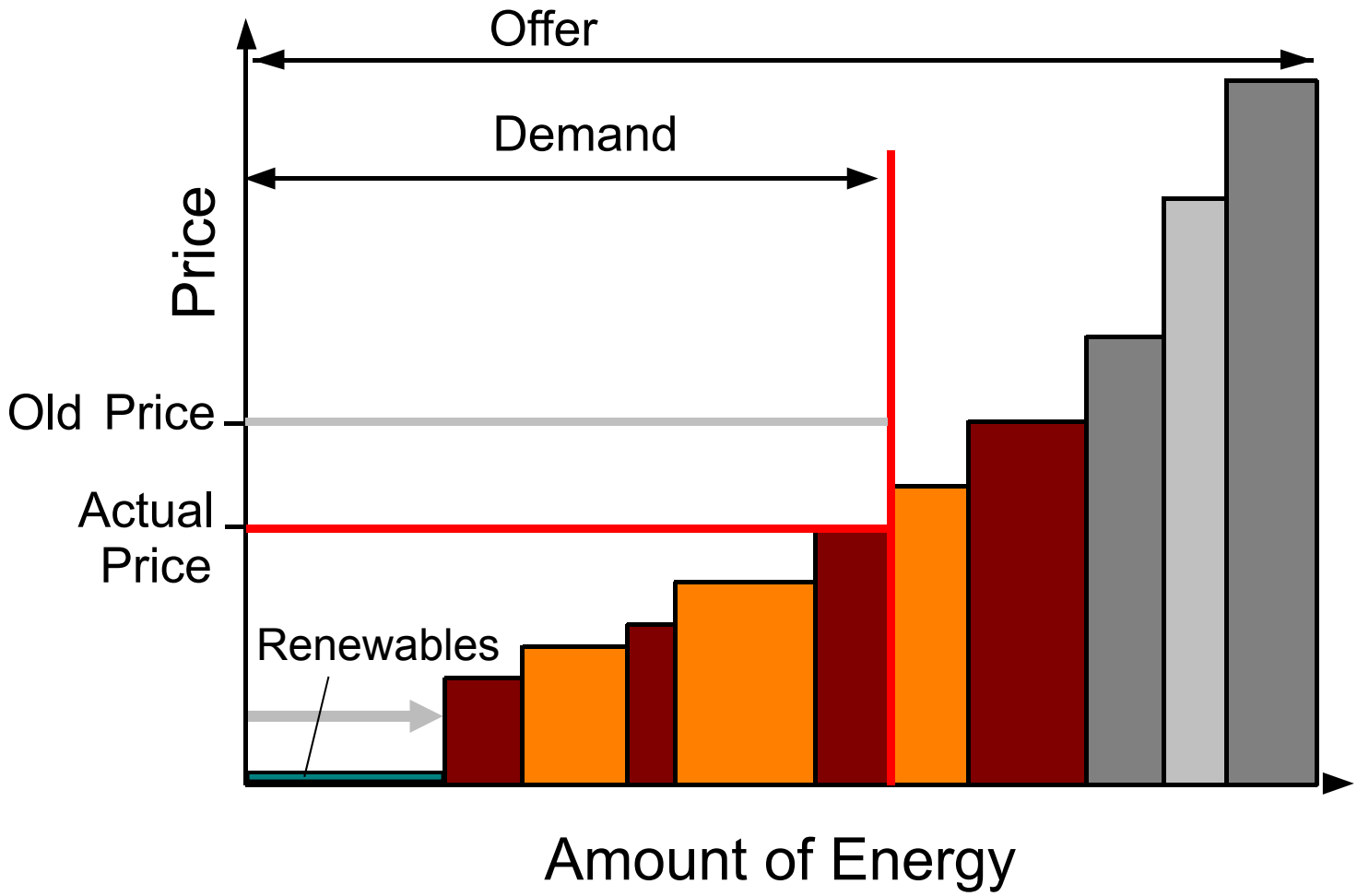
Development of the EEG allocation



Merit Order



Merit Order


Offer
Demand
Price
Old Price
Actual Price
Renewables
Amount of Energy

Companies without EEG-allocation

Picture: DIW 2015, basierend auf Süddeutsche, Heise, Google Maps

- In 2016:
  2137 companies are exempted from EEG-allocation [1]
- EEG-allocation exemtion oer reduction for [2]:
  - Energy consumption > 1GWh
  - Electricty bill >14% of turnaround

Sources:

[1] https://www.oekologische-plattform.de/von_eeg-umlage-befreite-unternehmen/ (8.12.2016)
[2] http://www.photovoltaik.org/wissen/eeg-umlage-ausnahmen-fuer-energieintensive-betriebe (8.12.2016)

Other measures

Eco-power providers

CO2 certificate trading

Contact

Prof. Dr. Eberhard Waffenschmidt
Electrical Grids,
CIRE - Cologne Institute for Renewable Energy
Betzdorferstraße 2, Room ZO 9-19
50679 Cologne,
Germany
Tel. +49 221 8275 2020
eberhard.waffenschmidt@th-koeln.de
https://www.fh-koeln.de/personen/eberhard.waffenschmidt/