Remuneration for power from onshore wind in Germany – reduced by auctions?

>> ***Strommarkttreffen***

Berlin, 04.05.2018

Katherina Grashof, Institut für ZukunftsEnergie- und Stoffstromsysteme gGmbH (IZES)

Comparison of price-setting instruments not straightforward

Theoretically, auctions reduce prices via competition. Empirical comparisons are popular, but difficult:

- Usually, auctions and other instruments do not co-exist in same jurisdiction for same technology and size
- General trend for cost reductions, not only in jurisdictions with auctions
- Often, timing not comparable (time of price-setting, date of commissioning etc.)
- Country conditions differ (meteorology, installation costs, interest rates etc.)

Example of remuneration for power from onshore wind in Germany:

- For plants commissioned in December 2016: 6,98 ct/kWh (nominal average, ‘100%-site’)
- Auctions carried out in 2017: 5,71 to 3,82 ct/kWh (nominal average, ‘100%-site’)

→ Are prices comparable?

→ Have auctions *caused* a price reduction?

Approach used for analysis of remuneration for onshore wind in Germany

izes gGmbH
Institut für ZukunftsEnergie- und Stoffstromsysteme

Administratively set remuneration

(pursuant to EEG 2017)

- Set to regulate transition period to auctions
- Expansion of wind capacity influences remuneration for new capacity (flexible cap): 2,4% digression / quarter
  if expansion > 3,5 GW / year

Auctions carried out in May, Aug, Nov 2017

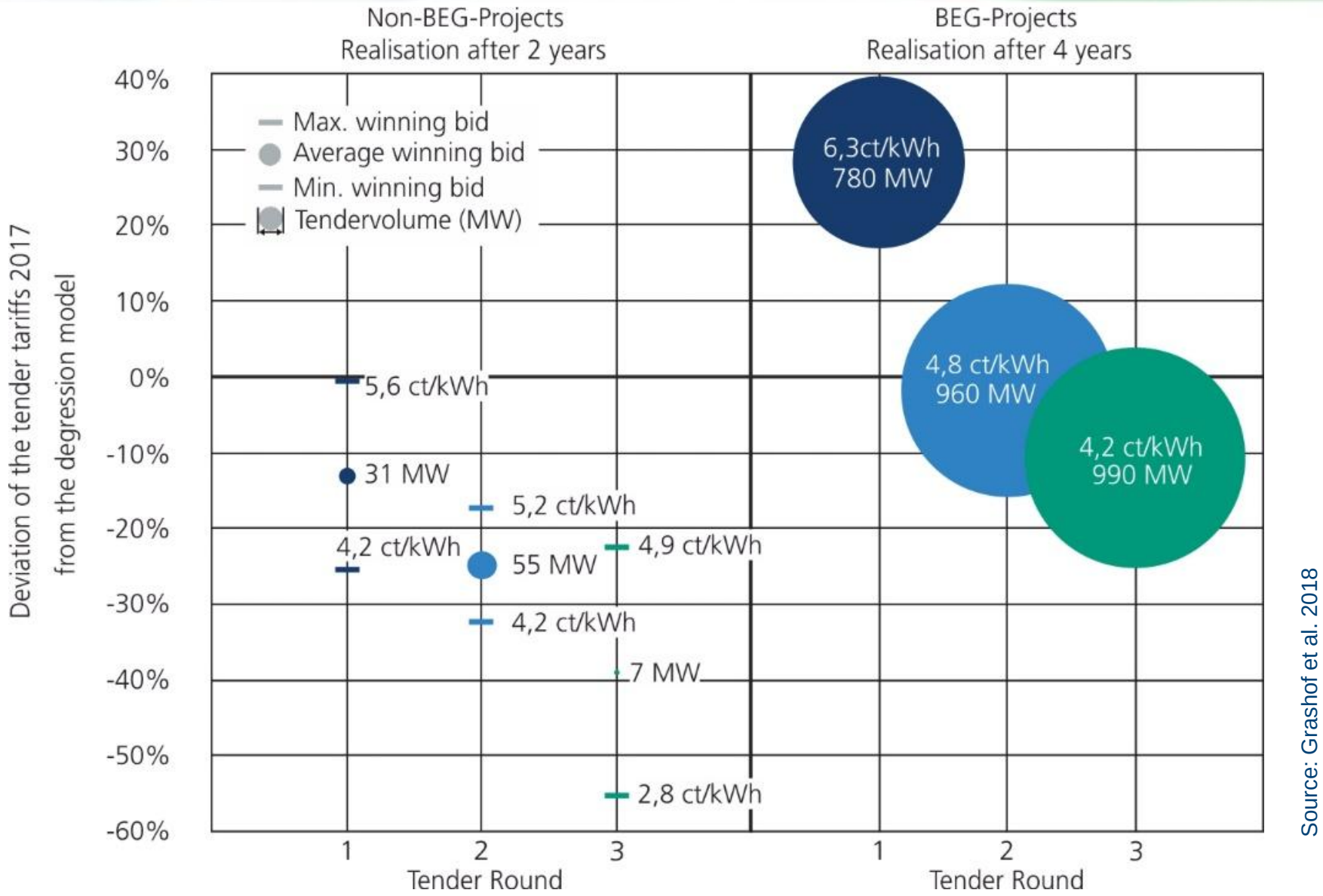
(pursuant to EEG 2017)

- So-called Bürgerenergie / Community Energy (BEG / CE) bids
  - required no building permission,
  - have 4.5 (instead of 2) years for commissioning
- BEG/CE won 93% of successful bids

Analysis accounts for

- *Remuneration adapted to site quality*
- *Date of commissioning*
- *Tariff digression pathway by law*
- *New reference yield model in EEG 2017*
- *But: no consideration of transaction costs*

Comparison of administratively set prices with those determined in 2017 auctions



Source: Grashof et al. 2018

Katherina Grashof: Remuneration for power from onshore wind in Germany – reduced by auctions?, presentation at Strommarkttreffen 04.05.2018

Conclusions

- Quality of wind sites higher in 1st than in 2nd and 3rd round
- > 90% of awarded bids: BEG/CE-projects without permission and realisation deadline of 4.5 years
- Expected date of commissioning crucial to compare prices
- Level of successful non-BEG/CE bids not indicative for future bids

- In 2017, switch to auctions caused marginal cost reduction at best
- At the same time:
  - High efforts and uncertainty within the industry and the administration
  - Challenges regarding permitting and costs → Significant risks for high realisation rates

Further reading

Grashof, Katherina; Berkhout Volker; Cernusko Robert (2018): Durch Auktionen wirklich günstiger? In Michael Durstewitz, Kurt Rohrig (Eds.): Windenergie Report Deutschland 2017. Kassel: Fraunhofer Verlag, pp. 99–105.

Thank you for your attention!

Katherina Grashof

IZES gGmbH

Albrechtstr. 22

D-10117 Berlin

+49 (0)30 5683 7292

grashof@izes.de

www.izes.de

Comparison (II) of administratively set prices with those determined in 2017 auctions