

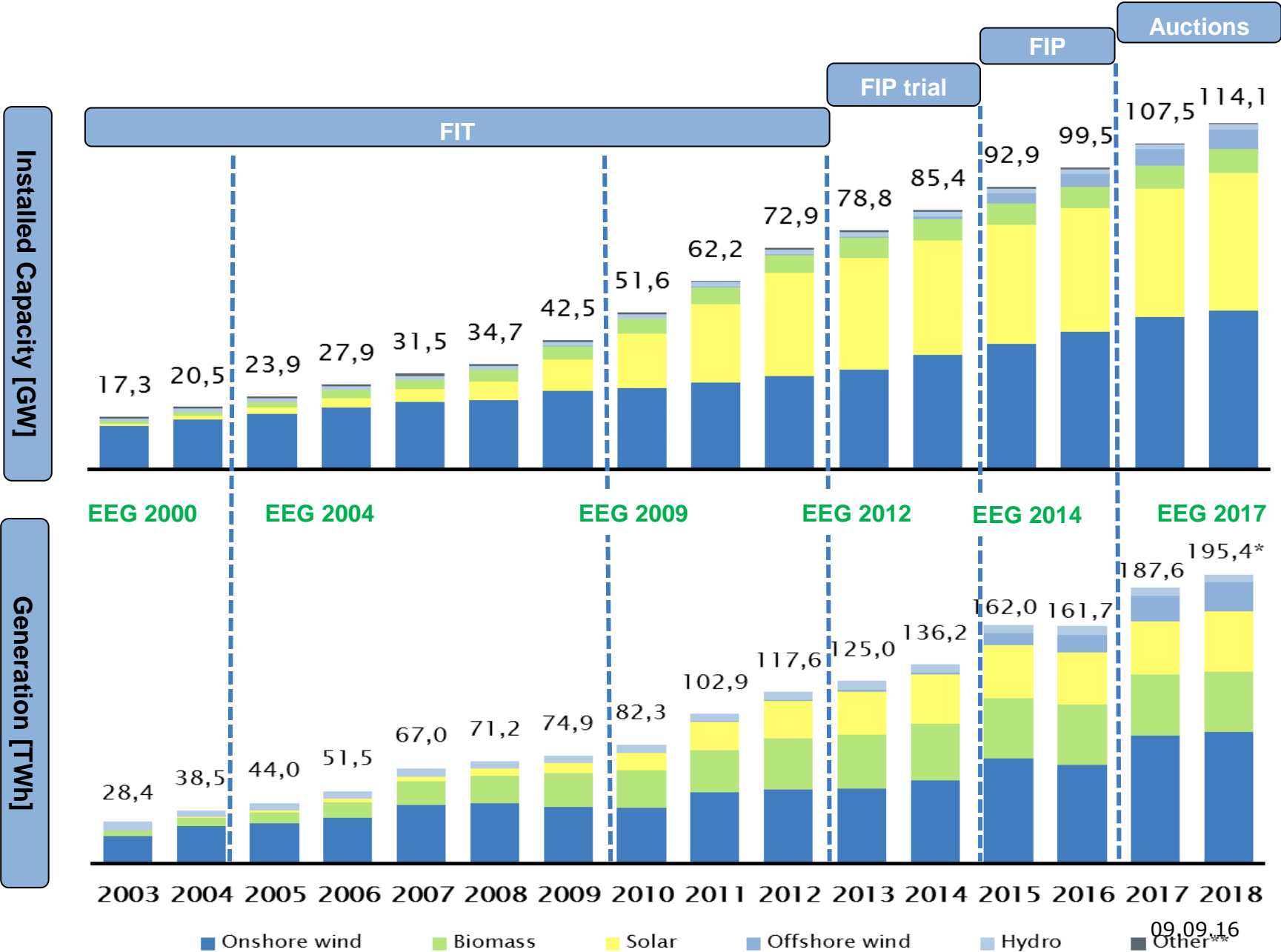


# Wind onshore projects in Germany - a brief status analysis

Konferenz zur Projektfinanzierung der Windenergie in  
Deutschland und Frankreich: Rahmenbedingungen,  
Herausforderungen und Ausblick

DFBEW, Paris, 12. November 2019







## Key Elements 1/2

### Awarded volume

- **2017:** 2800 MW (3 rounds: 800 MW/ 1000 MW/ 1000 MW)
- **2018 & 2019:** 2800 MW (4 rounds: 700 MW each)
- **2020:** 2700 MW (3 rounds: 900 each)
- **Additional 2019:** 2 rounds 500 MW each
- **Additional 2020:** 4 rounds 1400 MW

### Participation

- **Project size:** min. 751 kW
- Bidders bid for a **project specific reference value** (€ per MWh) & a **capacity** (in kW) at the 100% location of the reference yield model
- **Maximum reference value** (bid price): 7,00 ct/kWh (2017); 6,3 ct/kWh (2018); 6,2 ct/kWh (2019)
- Introduction of the network expansion area

### Local Energy Communities

- **Special definition** for local energy communities
- uniform pricing for local energy communities
- Two years in addition to realize projects
- **No** building permit as prequalification and slight changes of the final site possible (only in 2017)



### Awarding mechanism

- In general **Pay-as-bid**; uniform pricing for local energy communities
- **Ranking by price** (lowest first) & in case of price equality, ranking by project size (smallest first)
- **No** other evaluation criteria e.g. local content etc.

### Prequalification

- 30 €/kW; Bank guarantee possible as alternative to deposit
- Building permit mandatory for participation

### Support entitlement

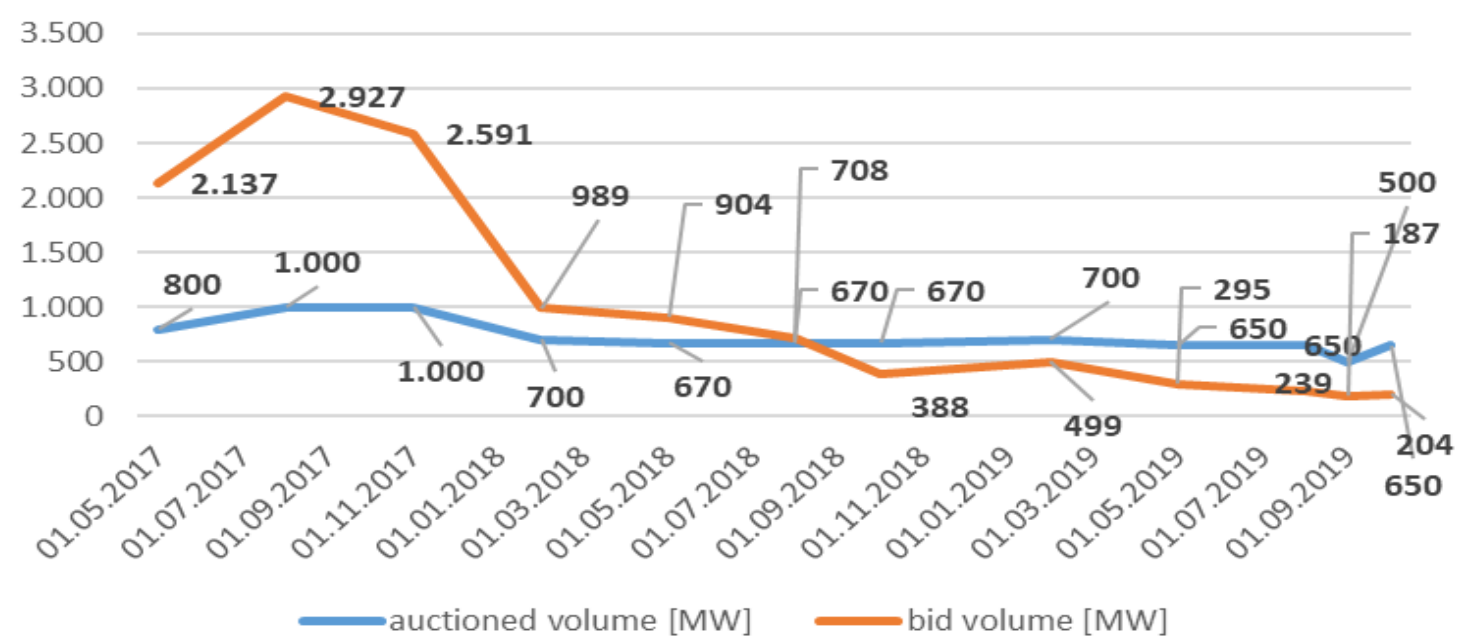
- **Project specific** (connected to the building permit)
- **No trading of awards or support entitlements.** Realized projects incl. support entitlement can be sold to other investors

### Exclusion/ Penalties

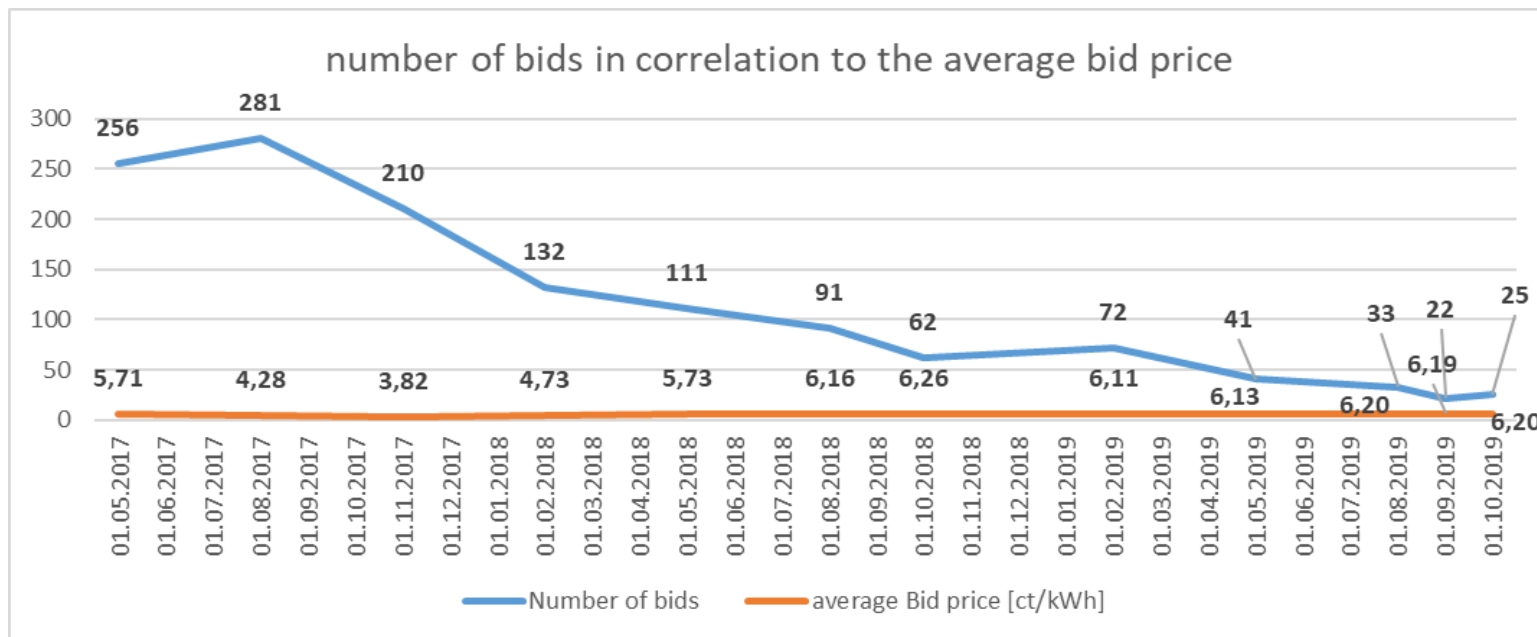
- **Possibilities for exclusion of bids** (participation conditions not fulfilled) and **bidders**
- **Penalty payments** for non realization foreseen
- **Project realization within 30 months.** If > 24 months financial penalties up to a final amount of 30 kW will be charged



### Auctioned volume vs. bidding volume



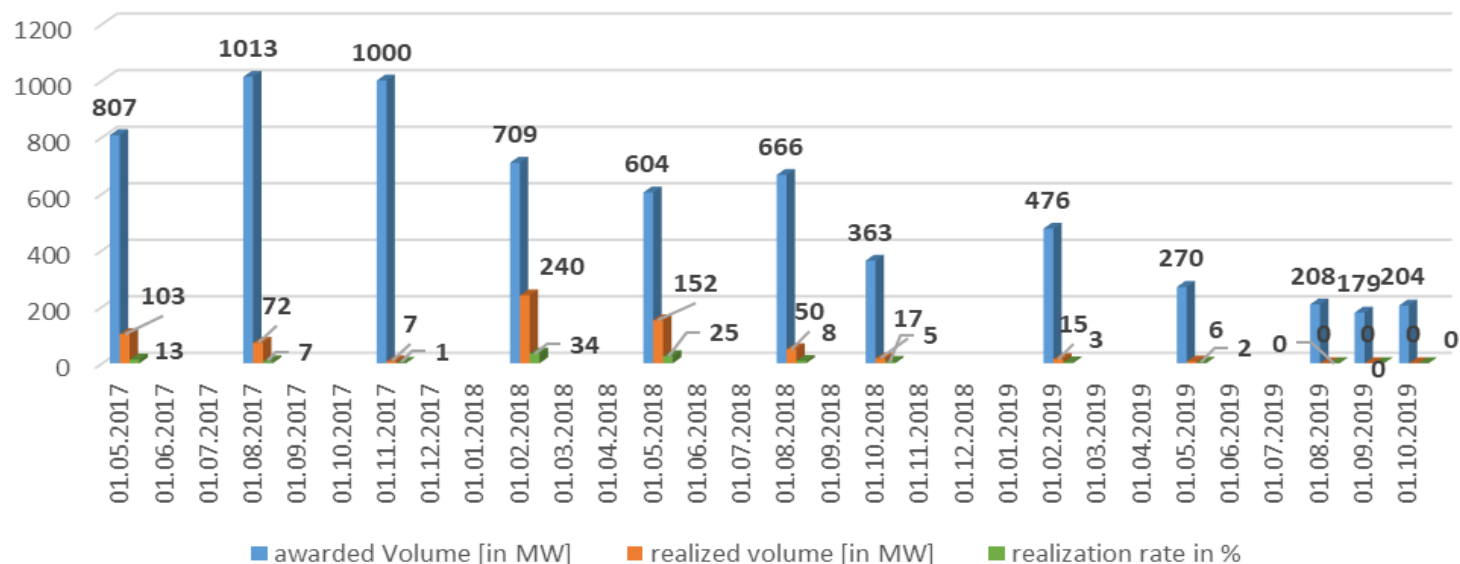
- Special conditions for local energy communities led to an high percentage of awards to this group of bidders. A design parameter which has been introduced to support a minority resulted in a distortion of the results.
- Design has been adopted so that building permits are meanwhile a mandatory prequalification for participation.
- Low level of competition in the last rounds reflects the current situation on the market for building permits.



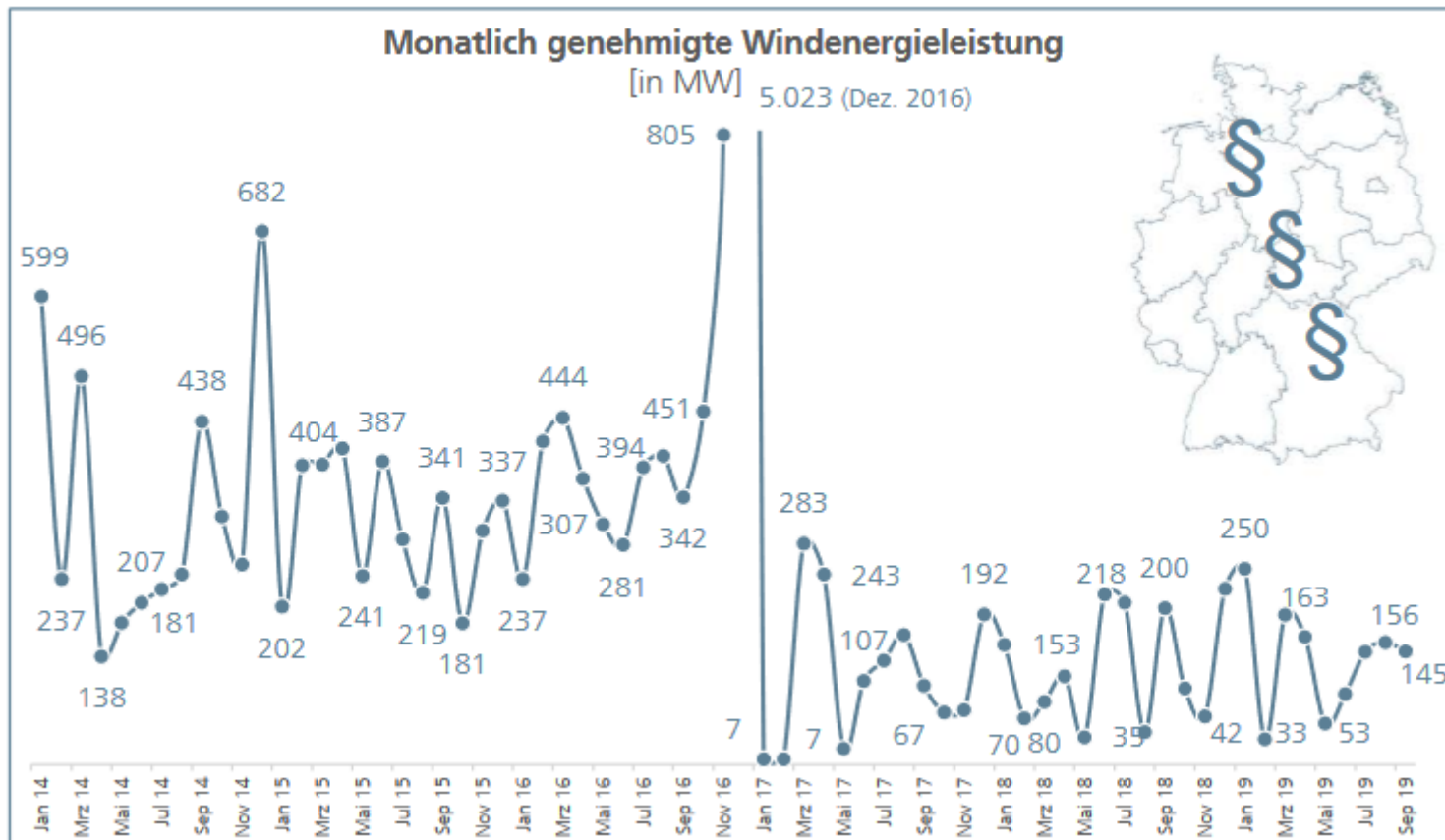
- **Level of competition** strongly influence the outcome (average awarded bid price)
- Due to **transparent information** about the level of existing building permits (material prequalification) bidders could forecast the level of competition → this led to rising award prices up to the maximum bid price.



Annual installation level



- **Realization rate** is a key factor to evaluate the success of an auction
- A **main factor** of these low realization rates is caused by the special conditions of local energy communities. In 2017 they could take part without building permits but were not excluded to take part once again in the auctions once they get their building permit. In combination with rising award prices this leads to a strong incentive to follow this ratio.



Monthly permitted volume of wind onshore installations 01/2014 - 09/2019; Data: BNetzA; Analysis and graph: FA Wind

- On top of this bottleneck for new installations the support period of the first installations ends by December 31<sup>st</sup> 2020. Repowering of this installations require new permits.





- Distance constraints due to flight radar stations. A radius of 15 km around each radar station is basically a “red zone” for wind onshore installation which causes hundreds of MW of potential wind onshore installations.
- Many building permits are taken to court due to various reason:
  - nature and species conservation, mainly birds, bats etc.
  - noise emissions
  - preservation of landscape
- Lack of acceptance of the affected residents
- Strict distance rules to housings in Bavaria (10- times the height of the installation) which completely stopped new installations there. Within the new climate action plan the German government plans to implement a similar rule (1 km) which would minimize the location potential for at least 10%.



- Experts and the German government discuss many ideas as for example a simplification of the approval process but final solutions are not yet found.
- Most ideas probably will not help in the short term but in the medium term.



- With an installed capacity of 53 GW wind onshore is a **main pillar** of the German energy transition.
- A continuous **adaptation of the renewable energy sources** act ensured a continuous growth of wind onshore installations so far.
- Due to continuous technical progress costs decreased massively over the years.

## **But:**

- To reach its own climate goals the upcoming trend of very low additional volume installed has to be stopped and led back to a higher expansion path.



Bundesnetzagentur

Vielen Dank et merci beaucoup.

Malte Luks

Referent im Referat für Erneuerbare Energien

+49 228 14-5779

Malte.luks@bnetza.de