



Bundesministerium
für Wirtschaft
und Energie

2017 revision of the Renewable Energy Sources Act

The introduction of competitive tendering schemes for renewable energy support in Germany - Onshore Wind

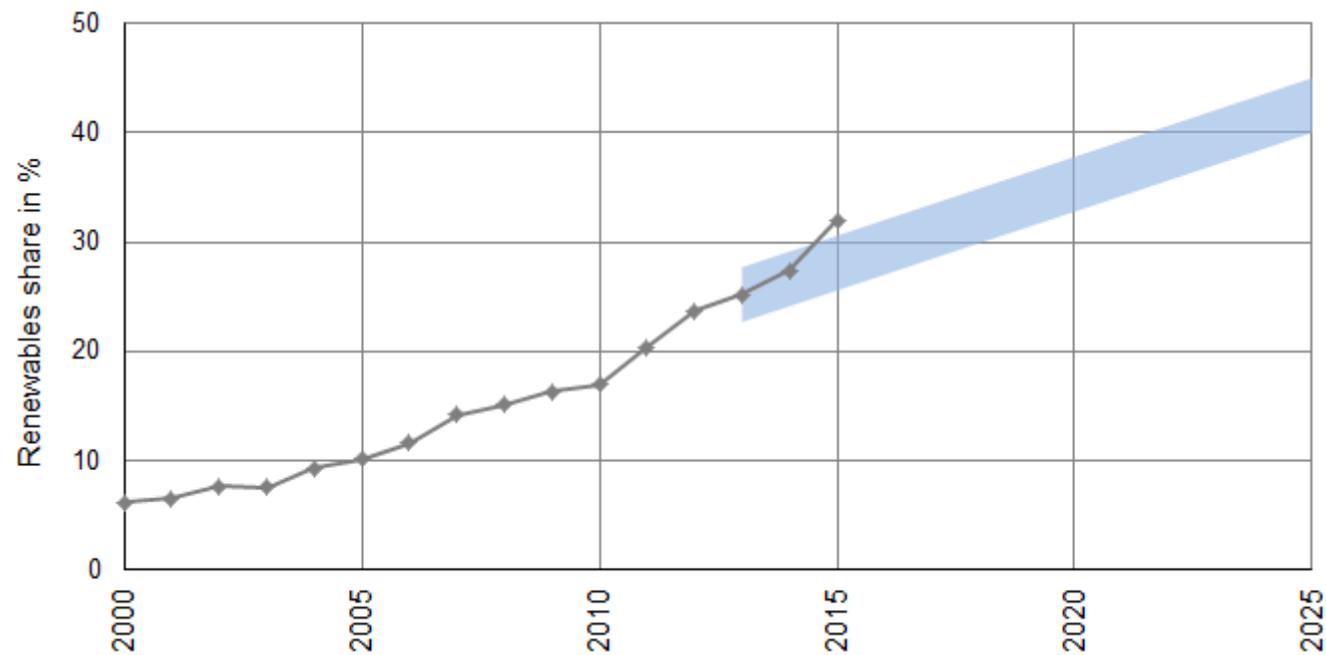
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Guiding principles

The revision is based on the following **three principles**:

1. Future RES expansion will be **cost-efficient**.
2. All stakeholders will have a fair chance in the auctions.
Stakeholder diversity will be maintained.
3. The **deployment corridor** for renewable energy will be **adhered to**.

corridor for renewable energy



Overall target corridor

- In 2025: between 40% and 45% RES-E
- In 2035: between 55% and 60% RES-E
- Focus on Wind and PV as most cost-effective solutions

RES technologies up for auction

- From 2017, funding will be **auctioned** for:
 - onshore wind energy
 - offshore wind energy
 - photovoltaics (pilot auctions for ground-mounted PV installations have already taken place)
 - biomass
- **Exempted:** installations ≤ 750 kW (biomass: ≤ 150 kW).
- Auctions will cover **80% of newbuild**.

dovetailing RES and grid expansion

- Until the necessary transmission grid capacity is in place, **3 measures** will be taken to limit re-dispatch costs:

1. In order to reduce curtailment, an instrument to **use electricity in the heat sector** as an interruptible load will be introduced.

2. **Restriction of onshore wind newbuild in areas with grid bottlenecks**

- The Federal Network Agency defines areas with grid bottlenecks as **grid expansion areas**.
- In the grid expansion area, the amount of onshore wind newbuild is restricted to **58% of the average newbuild between 2013 and 2015**.
- The compensation rules for feed-in management remain unchanged.

3. **Controlling offshore wind newbuild**

- In 2021, 500 MW will be added in the Baltic Sea; in 2022, 500 MW will be added in the North and Baltic Sea combined
- Between 2023 and 2025, 700 MW will be added annually; from 2026, 840 MW will be added each year in the North and Baltic Sea combined

Deployment corridor – onshore wind energy

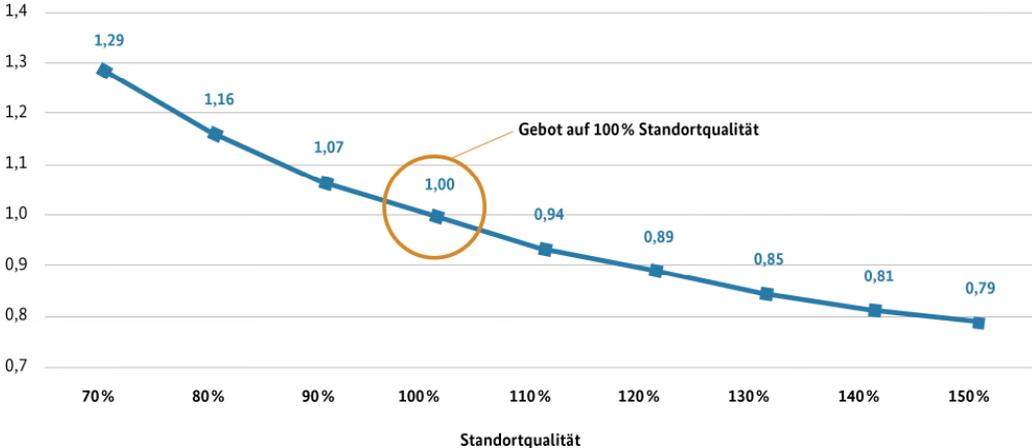
- In **2017, 2018 and 2019, 2,800 MW** and **from 2020, 2,900 MW (gross)** will be **auctioned each year**.
- Installations authorised before the end of 2016 and coming on stream in 2017 or 2018 can still receive the statutory feed-in tariff (transitional provision under the 2014 Renewable Energy Sources Act).
- In order to prevent investment from being brought forward during the transitional period, special funding cuts of 1.05 per cent per month will be implemented between March and August 2017.
- Should the target figure of 2,500 MW be exceeded, additional funding cuts of up to 2.4 % per quarter will be imposed from the fourth quarter of 2017 onwards.

Cost efficiency - reference revenue model

- A uniform feed-in tariff lasting 20 years is determined by competition. This simplifies the system and has a direct cost-cutting effect.
- Auctions are open to installations that have been approved under the Federal Immissions Control Act (BImSchG). → Late stage auction
- 3-4 rounds per year
- Bids based on the reference value of the market premium using a one-tier reference revenue model at a reference site (100%-site)
- Security/bid bond of 30.000 €/ MW
- Maximum price of 7.0 cents/kWh for 100-per-cent

Cost efficiency - reference revenue model

- Bids are made based on a reference revenue value of 100%. A corrective factor is used in order to ensure a level playing field across all German regions.
- Incentives to build efficient installations at windier sites will be provided



Examples of funding levels

	Zuschlagswert									
Referenzertragswert in %	60	70	80	90	100	110	120	130	140	150
Korrekturfaktor	1,29	1,29	1,16	1,07	1	0,94	0,89	0,85	0,81	0,79
Beispielhafte Vergütungssätze in Ct/kWh	7,74	7,74	6,96	6,42	6,00	5,64	5,34	5,10	4,86	4,74
	8,39	8,39	7,54	6,96	6,50	6,11	5,79	5,53	5,27	5,14
	9,03	9,03	8,12	7,49	7,00	6,58	6,23	5,95	5,67	5,53

Stakeholder diversity

- Objective: Maintaining a **high level of stakeholder diversity**
- This is the intention behind the **750 kW de minimis threshold**:
 - This mainly exempts small and medium-sized PV installations from the obligation to take part in auctions.
- This is also the aim of the **simple and transparent auction design**.
- The Federal Government will also be providing **advisory and support services** for smaller players.
- Also, **relaxed rules apply to locally anchored citizens' energy companies bidding in auctions for onshore wind funding**.

Stakeholder diversity

- Special rules for **citizens' energy projects**:
 - Companies consisting of at least ten private individuals, with the majority of voting rights held by local residents. No shareholder may hold more than 10 % of the voting rights.
 - Projects with a maximum of 6 installations and maximum total output of 18 MW.
 - Municipalities will be given the opportunity to contribute up to 10 % of the investment.

Stakeholder diversity

- Relaxed **participation rules** so that these projects do not have to pre-finance excessive costs:
 - When a bid is submitted, no approval under the Immissions Act is required, only proof that the site is available and the presentation of a certified wind survey.
 - Half of the usual security has to be deposited once the Immissions Act approval has been obtained.
 - Extension of the realisation deadline by up to 2 years.
- Citizens' energy projects will not be awarded funding based on the price of their bid, but on the price of the highest bid which won funding. This means that this auctioning scheme is designed to **favour citizens' energy projects**.