



The legal framework for agricultural biogas generation in Germany



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Presentation on 04 April 2019

Renewable energy expansion targets



- Renewable Energy Directive 2009/28/EC
- Article 3 (1) read in conjunction with Annex I
- Target for renewables share by **2020**:
 - Germany **18%**
 - France: 23%



- Renewable Energy Sources Act (EEG)
- Section 1 (2) EEG
- Target for renewables share
 - **by 2025: 40%**
 - **by 2035: 55%**
 - **by 2050: 80%**
- 2020 forecast: 19.6%

Renewable Energy Sources Act

- Ongoing **decrease in level of support for biogas** since 2000
- Reasons:
 - Biogas **increasingly established** as a fuel
 - **Increasingly competitive** with other conventional energy sources
 - Application of **cost-effectiveness principle**
- Most recent step (2017): Fixed remuneration replaced by **bidding system**
- Separate bidding for wind, solar and bioenergy, i.e. **technology-specific**
- **Average result for biogas: 14,5 Ct/KWh**; slightly below maximum threshold (14, 88 Ct/KWh)

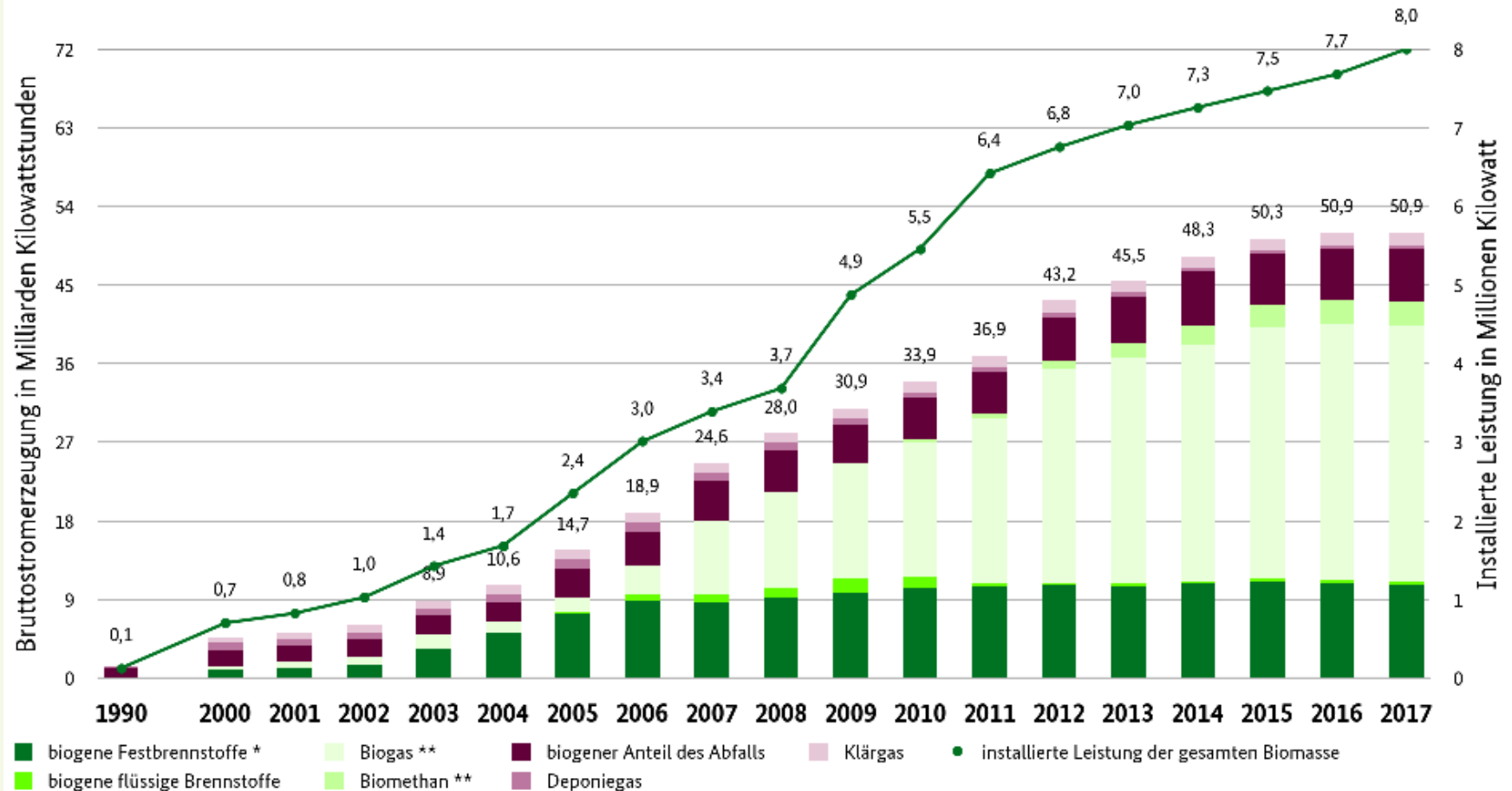
Further Conditions

- **Small installations** with <150 kW installed capacity exempted from bidding
- **Expansion pathway** for energy from biomass: 150 MW/a
From 2020 to 2022: 200 MW/a
- Support only provided for quantity of electricity up to 50% of installed capacity (**'capacity doubling'**).
- **Funding period:** 20 years

Renewable Energy Sources Act (EEG)

Development of Biomass-based Electricity Generation

Entwicklung der Stromerzeugung und der installierten Leistung von Biomasseanlagen in Deutschland



Source: Bundesministerium für Wirtschaft und Energie

Inputs

- Support is provided for all types of biomass as defined in the **Biomass Ordinance**:
- **Organic matter of plant or animal origin**; there are exceptions
- Basically, biomass from energy crops and from waste and residual matter are **treated equally**.
- **Exceptions:**
 - Particularly attractive fixed remuneration for **small manure installations**
 - Proportion of corn and maize in substrate capped at 47% (**'maize cap'**)
- Growing Interest in **"cup plant"** (silphium perfoliatum)



Funding

- Electricity generation from renewable energy sources is funded by a **surcharge system**.
- Transmission system operators can claw back the costs incurred from electricity suppliers.
- These pass on the cost to consumers.
- Companies in sectors with exceptionally high electricity costs can demand a **cap on the EEG surcharge**.
- However, this is limited to companies with energy consumption in excess of 1 GWh/a.
- Considerations of opening up **alternative financial resources**.



Outlook

- A suitable framework to support bioenergy is in place.
- However, **technological developments and market conditions must be watched at all times.**
- New challenges by the **Extension of the sustainability requirements** for inputs to **gaseous and solid biomass** on revision of the Renewable Energy Directive (RED II).
- **Threshold of 20 MW** for the application of the requirements to solid biomasse warmly welcomed.





Thank you for your attention.

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