The legal framework for agricultural biogas generation in Germany

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Renewable energy expansion targets

- 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 biomass warmly welcomed.
Thank you for your attention.