

Bioenergy in Germany - Focus on biogas

Status quo and outlook

German Biogas Association

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13th of October 2020

Virtual German-Estonian-Latvian Conference



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- **The German Biogas Association - Fachverband Biogas e.V.**
- The German biogas sector
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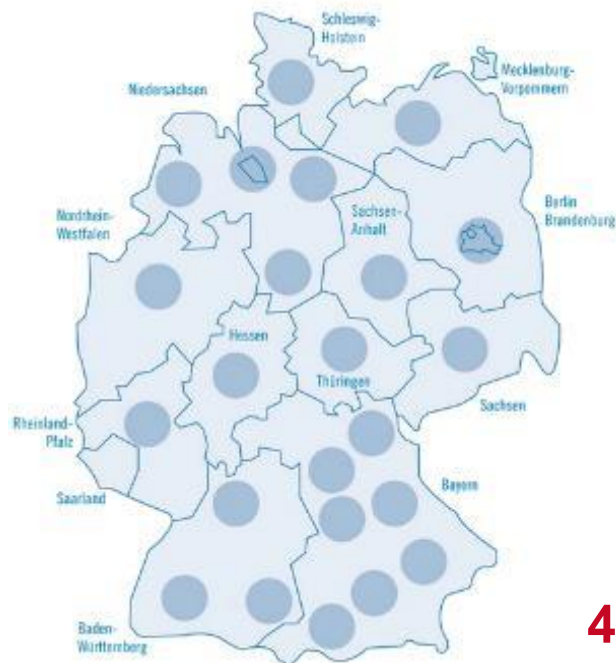
The German Biogas Association

4,800 members from
Germany and abroad



Members

- 3,500 Operators of biogas plants
- 550 Technology manufacturers
- Project developers, planers
- Research institutions
- Public authorities
- Feedstock providers
- Interested individuals



40 employees
GBA is financed by
membership fees

Main objective: promotion of biogas sector

- Definition of legal framework and technical standards
- Exchange of information
- Lobbying on federal, state and EU level

International Agenda of GBA



- **International Affairs Department since 2008**
- **Provides members with information** on international biogas markets and possible collaborations
- **Organizes annual international Biogas Convention** and Trade Fair in Germany
- **Supports biogas associations/organizations around the globe**, provides biogas know-how and trainings
- **Cooperates with international organizations** – promoting Biogas in developing and emerging countries

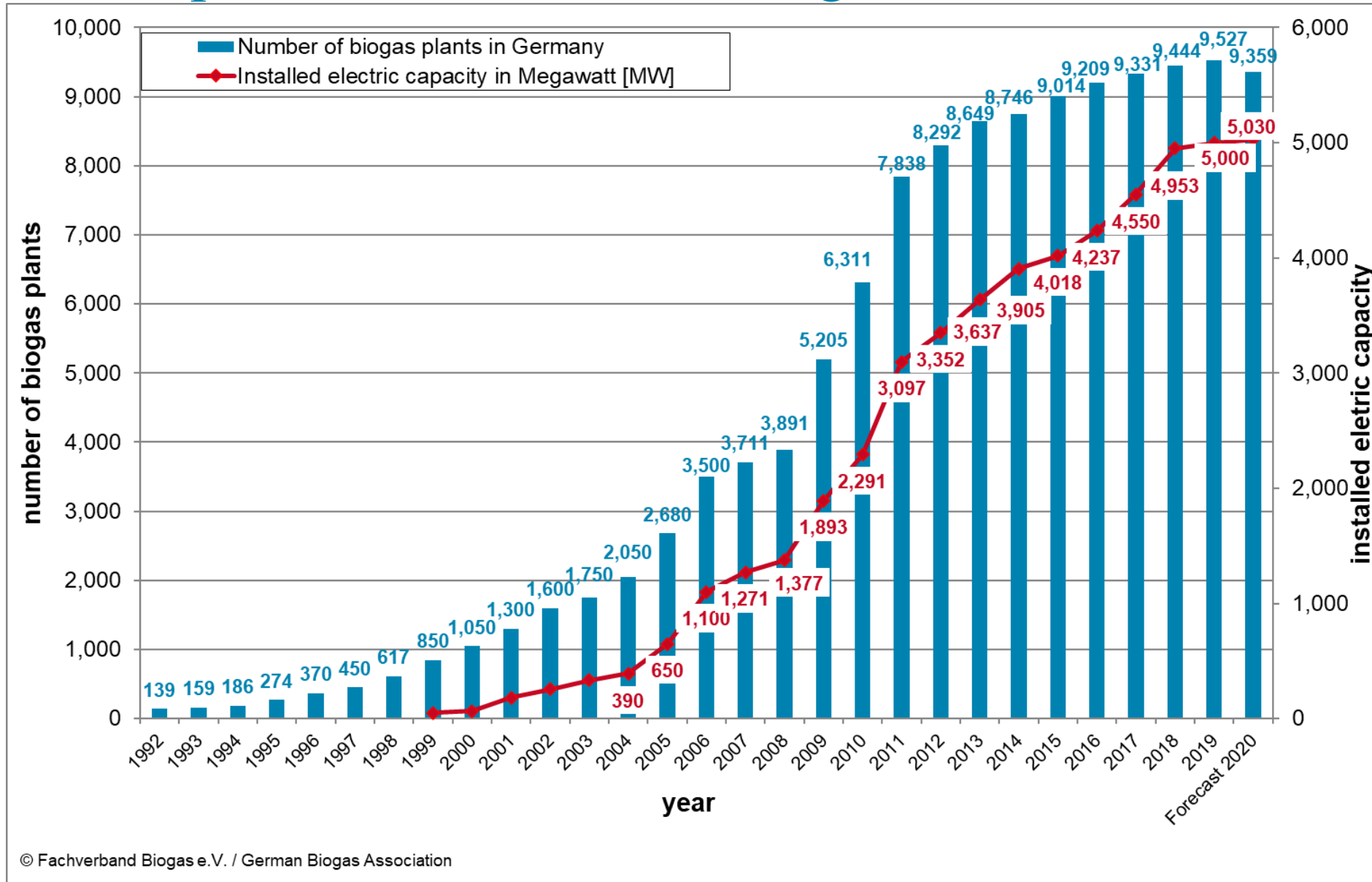


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Development of the German biogas sector



German Biogas Sector: Statistics at a Glance

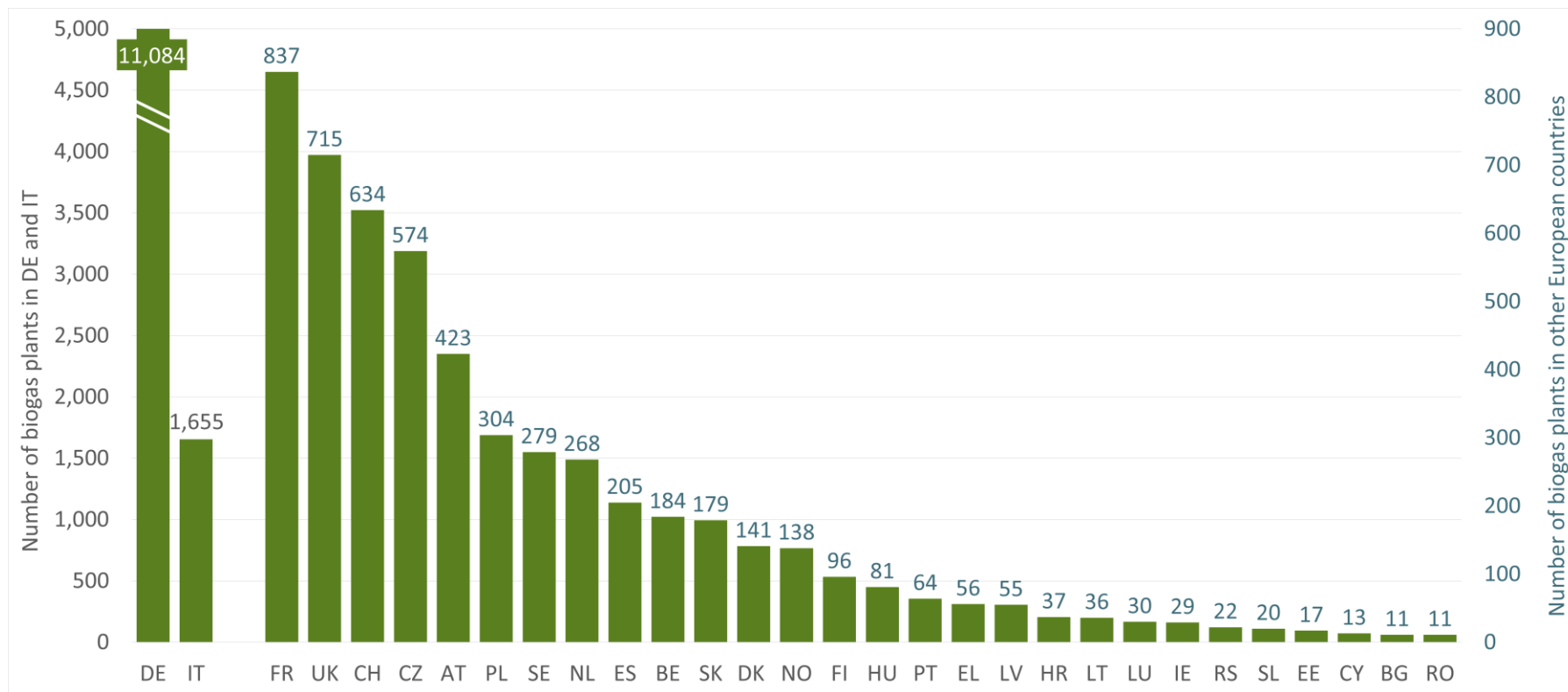
	2019*	Forecast 2020**
Number of biogas plants (biogas plants with biomethane injection)	9,527 (206)	9,359 (208)
Installed electric capacity in MW	5,000	5,030
Gross electricity production in TWh per year	33.33	33.31
Households supplied with biogas-based electricity in millions	9.52	9.52
CO ₂ reduction by biogas in million tonnes	20.15	20.12
Turnover in Germany in Euro	8.8 billion	8.8 billion
Jobs in the biogas sector	46,000	46,000

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* Own extrapolation based on country data / plant register BNetzA

** Based on a expert survey / plant register BNetzA

Biogas plants in Europe



Source: EBA

Bioenergy outlook in Germany

(Flug- und Schiffs-)Verkehr und Industrie:

Der Einsatz von Biomasse steigt im Verkehrssektor und in der Industrie.

Energiewirtschaft:

Kostengünstiger Strom aus Wind- und Solarenergie eröffnet Spielräume, weniger Biomasse für Strom einzusetzen. Biomasse kann dadurch Anwendungen im Verkehrssektor und in der Industrie zugeführt werden, wo ihr Einsatz volkswirtschaftlich effizienter ist.

Gebäude:

Vor allem in Bestandsgebäuden, die Dämmrestriktionen unterliegen, ist der Einsatz von Biomasse zur erneuerbaren Wärmebereitstellung unverzichtbar. Je nach Umfang der Effizienzmaßnahmen kann ein steigender oder auch sinkender Biomasseeinsatz resultieren.

2020

2050

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- Solid biomass incineration
- **Summary**



Summary: Biogas in Germany



- 9,500 biogas plants in (flexible) operation in Germany
- 5 GW installed electric capacity
- Biogas is a state of the art technology
- Biogas is used for: Electricity, heat, transportation fuel
- Experiences since decades.
- Between 2004 and 2012 the use of energy cops was supported by the FiT system. No bonus since 2014.
- Since 2014 the incentive system has a focus on manure (GHG emission reduction) and use of waste.
- Digestate is an important product of AD - high-quality organic fertilizer (closing nutrient circles)

Summary: Biogas in Germany



- Biogas can be used as energy carrier to generate:
 - Electricity
 - Heat
 - Vehicle fuel (biomethane)
- Biogas is an important factor to balance electricity demand and supply

Publications

www.biogas.org



www.biowaste-to-biogas.com



www.biogas-safety.com



www.biogas-to-biomethane.com



www.digestate-as-fertilizer.com



Federal Ministry
for Economic Affairs
and Energy



MITTELSTAND
GLOBAL
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Thank you for your attention!

Frank Hofmann
13th of October 2020

Virtual Biogas Convention 2020

8th – 10th of December 2020

International programme in English



Facilitator

