

Smart Bioenergy – Innovations for a sustainable future

Deutsches Biomasseforschungszentrum – Opening words

Dr. René Backes



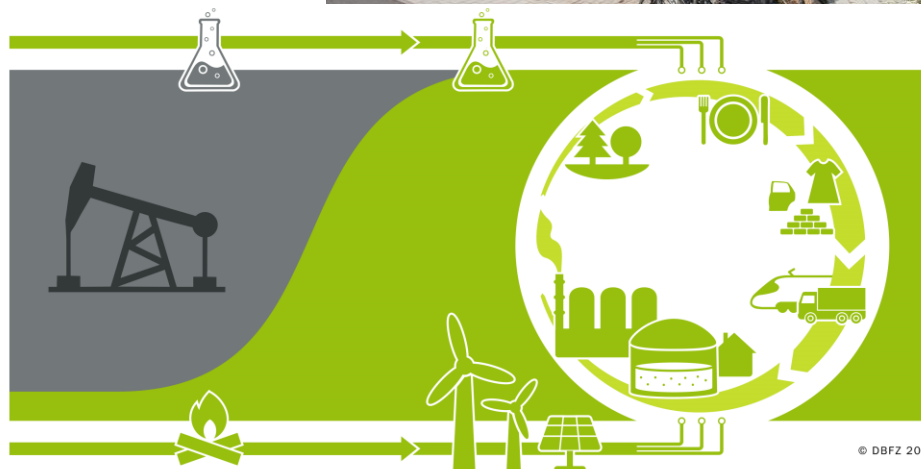
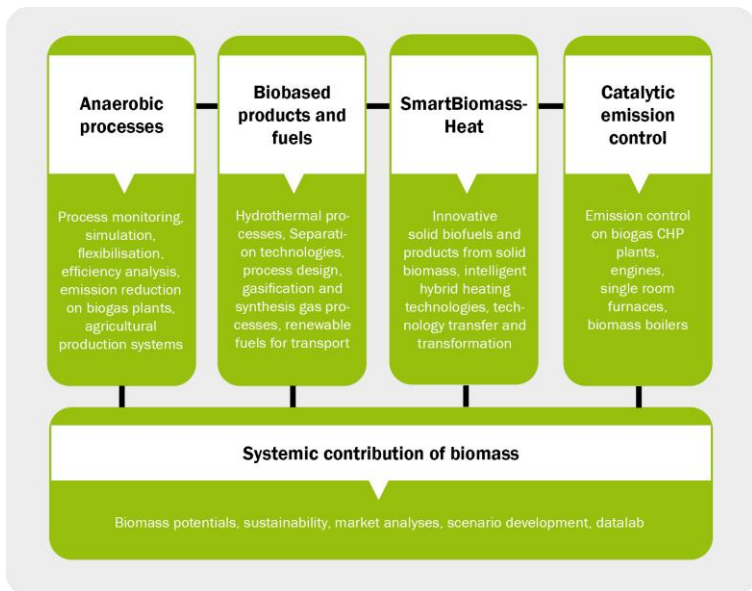
Policy workshop 25 March 2025, Leipzig

DBFZ in a nutshell



Vision

Our research is a key to a climate-neutral society by 2050 at the latest, when closed carbon cycles in the bioeconomy will have replaced the fossil economy.



Key figures (2024)



107

**Projects
ongoing**

40

**Projects
ended**

30

**Projects newly
started**

Third-party funded projects

47

**Peer reviewed
publications**

(of which 41 open access)

271

Employees
(as of 31/12/2024)

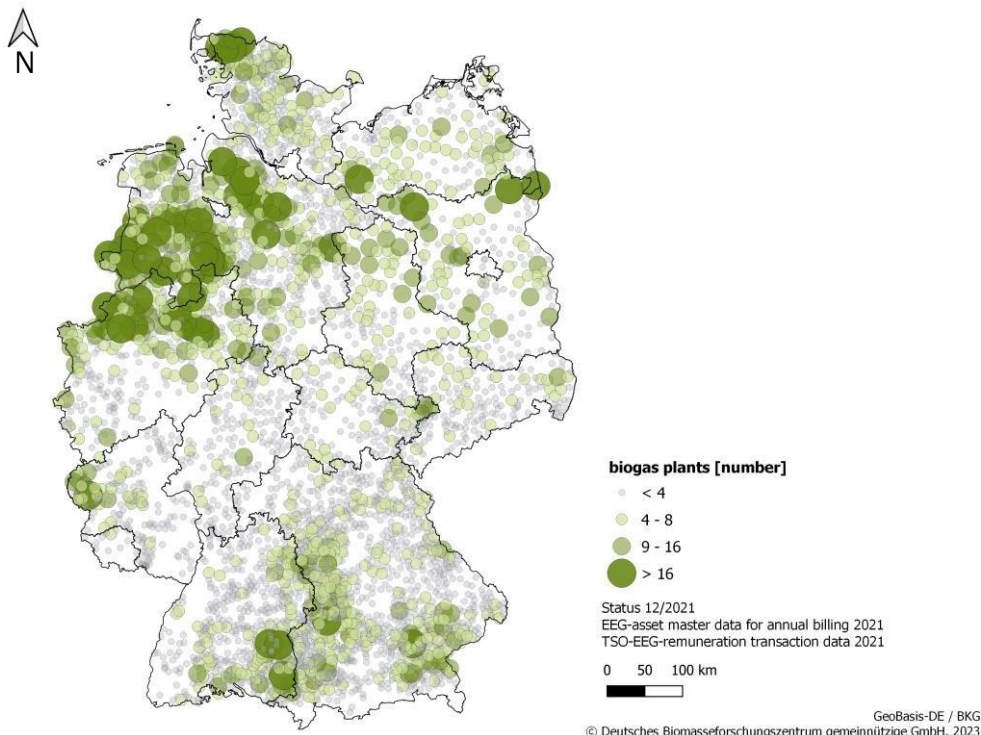
~280.230 €

project volume
(of projects started in 2024)

73

**Internal & external
Events**
(external/internal)

Biogas plants in Germany



as of 12/2023:

~ 8,450 biogas plants

6.5 GW_e installed electrical capacity

Gross electricity production



→ 28.7 TWh_e (11% RE electricity share)

Heat supply

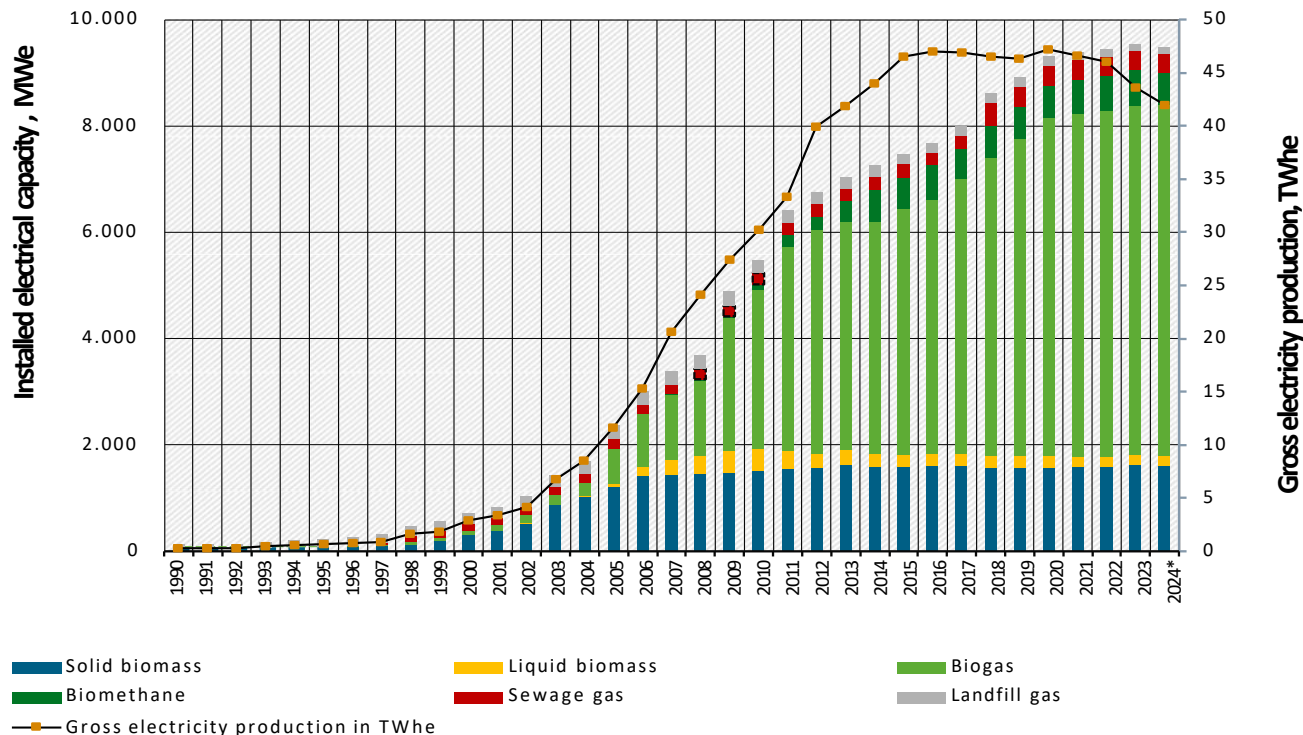


→ 14.3 TWh_{th} (7% RE heating and cooling share)

Sources: (1) DBFZ based on Daniel-Gromke et al. (2024): Scientific analyses on selected aspects of renewable energy statistics and in support of the Working Group on Renewable Energy Statistics (AGEE-Stat), as of 08/2024, under review; (2) Federal Ministry for Economic Affairs and Climate Action: Time series for the development of renewable energy sources in Germany, as of 02/2024

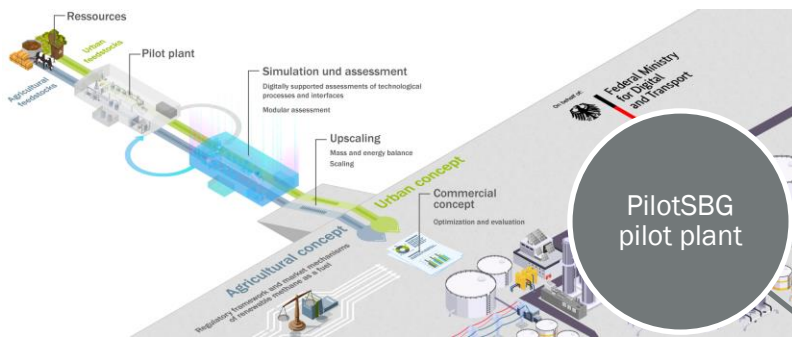
Courtesy for providing the slides to Velina Denysenko, Jaqueline Daniel-Gromke, and Nadja Rensberg (DBFZ)

Development of biomass plants in Germany

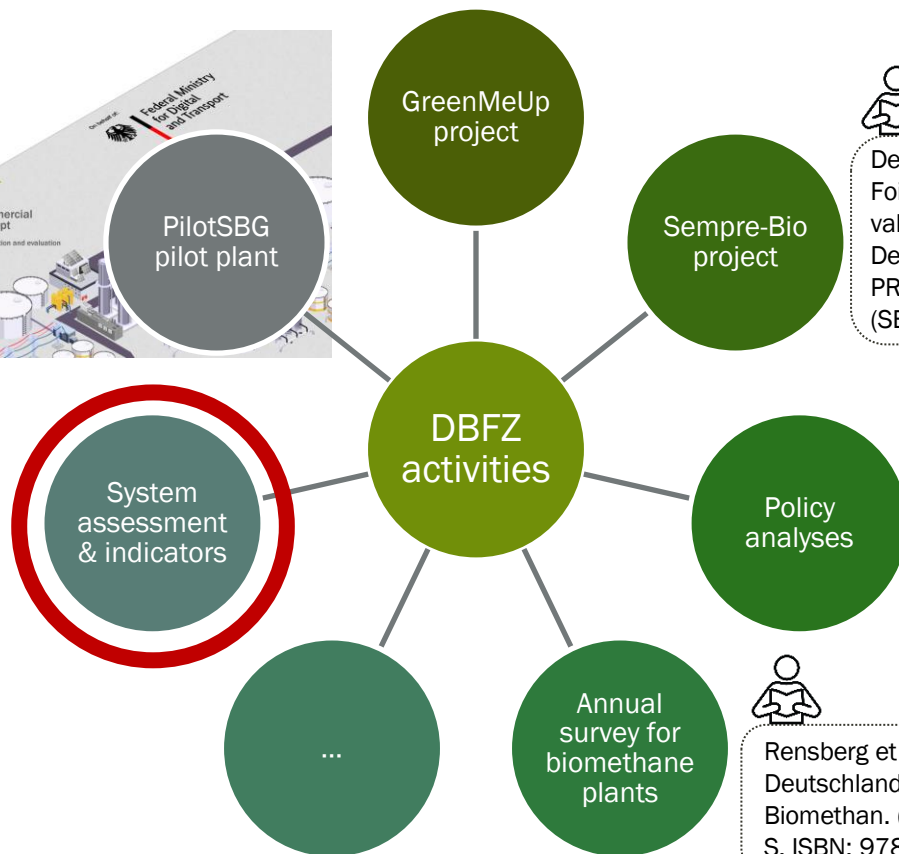


Source: Time series for the development of renewable energy sources in Germany, as of 02/2024; 2024: estimation DBFZ

DBFZ contributions to biomethane research



→ Next slide



SEMPRE-BIO

Denysenko, V.; Daniel-Gromke, J.; Binder, P. M.; Foix, L. (2023): Opportunities for the valorisation of CO₂ extracted from biogas. Deliverable 4.1 EU-Project SEcuring doMestic PRoduction of cost- Effective BIOmethane (SEMPRE-BIO), GA 101084297, 30.11.2023



Daniel-Gromke, J.; Denysenko, V. (2024): Joint policy recommendations on Biomethane. Cluster of Horizon Europe-funded projects on innovative biomethane production. First draft report, as of 02/2024. D5.4



Rensberg et al. (2023): Biogaserzeugung und -nutzung in Deutschland: Report zum Anlagenbestand Biogas und Biomethan. (DBFZ-Report, 50). Leipzig: DBFZ. VII, 9-122 S. ISBN: 978-3-949807-02-2. DOI: 10.48480/zptb-yy32

Biomethane market uptake



GREENMEUP



A holistic framework of Key Performance Indicators for assessing national biomethane market uptake in European countries

Indicator number	PESTEL category	Indicator name
1	Policy	Level of policy commitment
2	Technological	Feedstock readiness
3	Economic	Valorization of by-products
4	Technological	Infrastructure performance
5	Ecological	Emission reduction potential
6	Socio-cultural	Social perceptions
7	Legal	Financial support
8	Socio-cultural	Stakeholder networks



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