

IEA Bioenergy Task 37, Bern, Switzerland, April 17-19, 2013

Country Report, Germany

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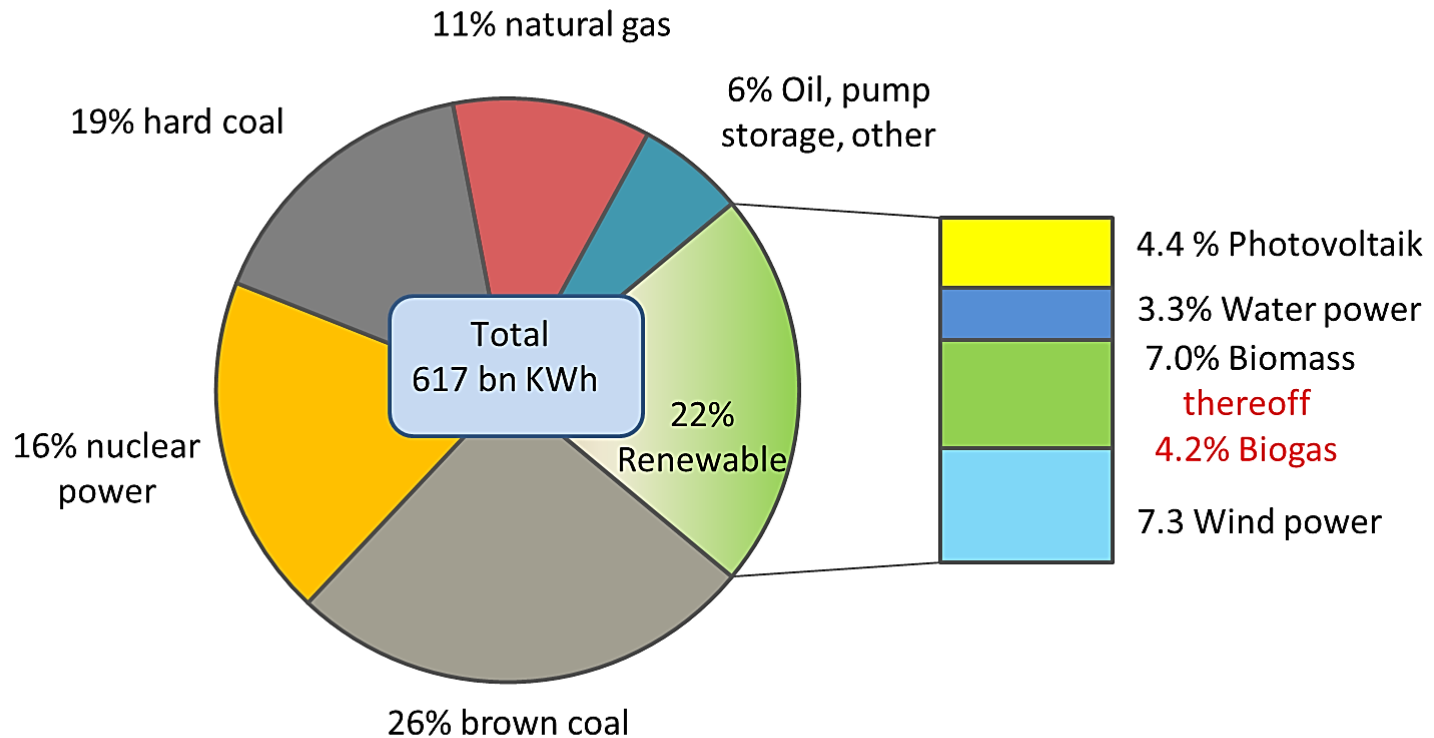
Mitglied der



- Electricity supply
- Biogas inventory
- Distribution of methane upgrading plants
- Energy crops for biogas production
- Research activities



Electrical power supply in Germany 2012

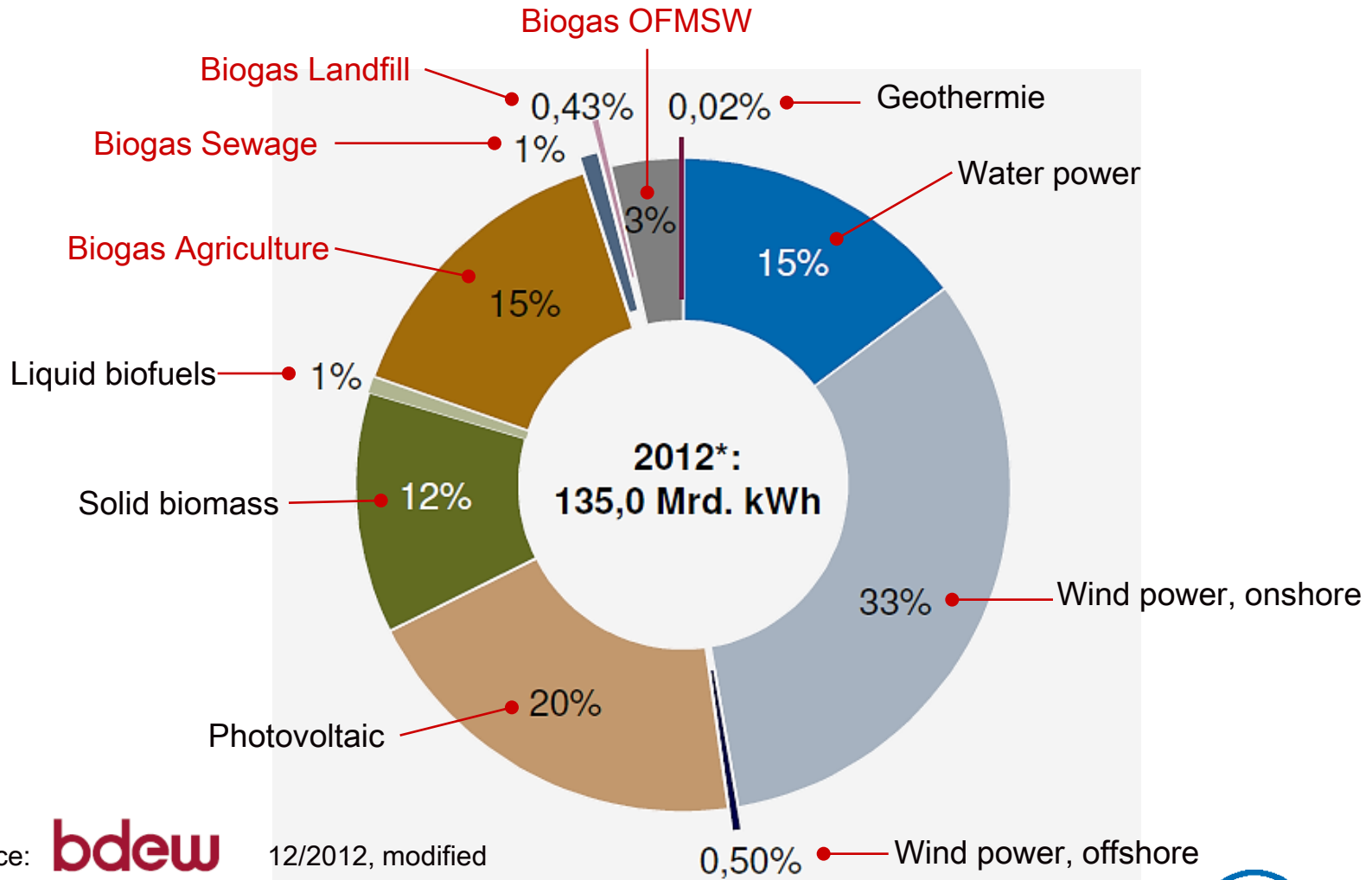


Source:

bdeu
Energie. Wasser. Leben.

12/2012

Proportion of renewables to electric power production in 2012

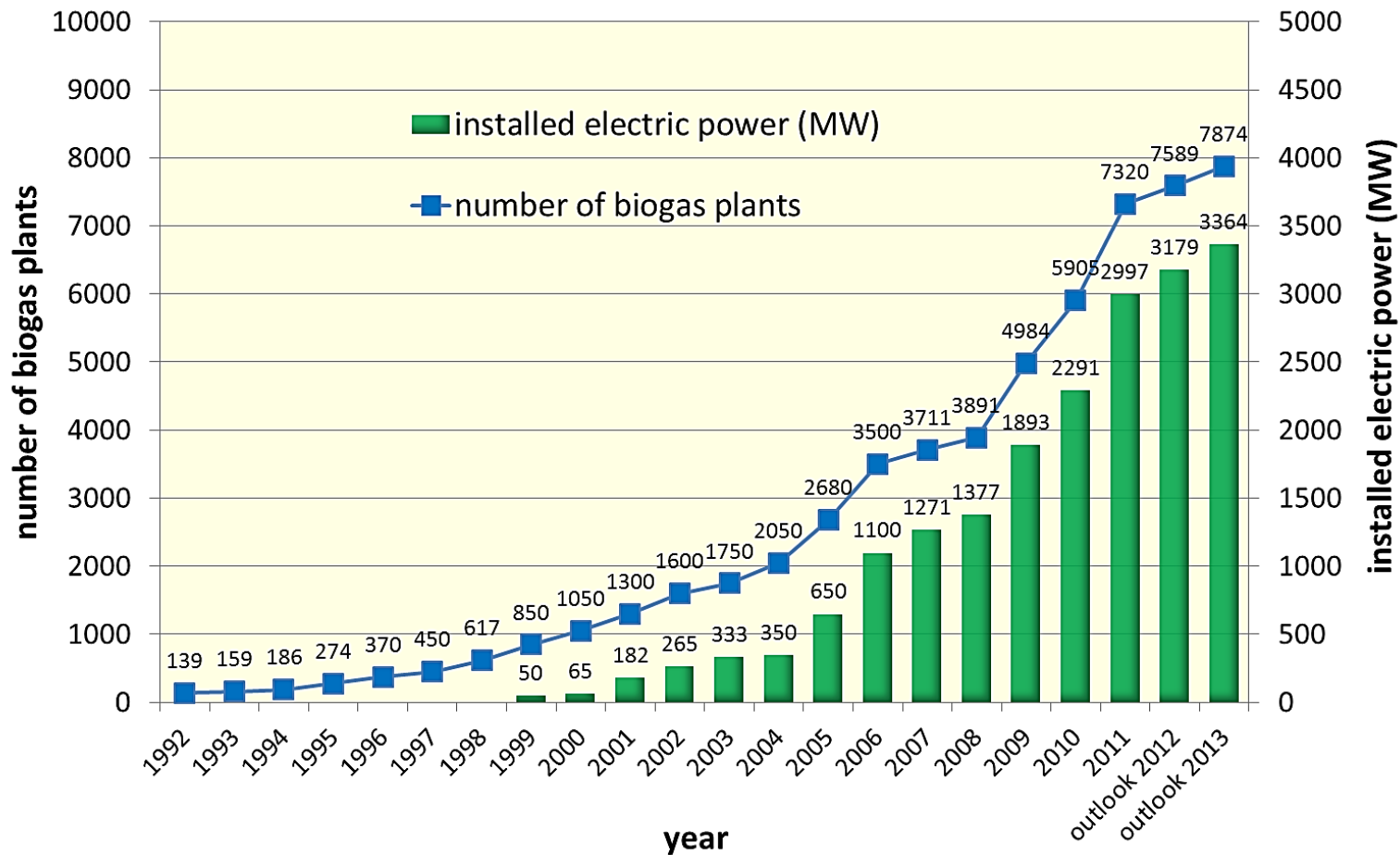


Source: **bdew**
Energie. Wasser. Leben.

12/2012, modified



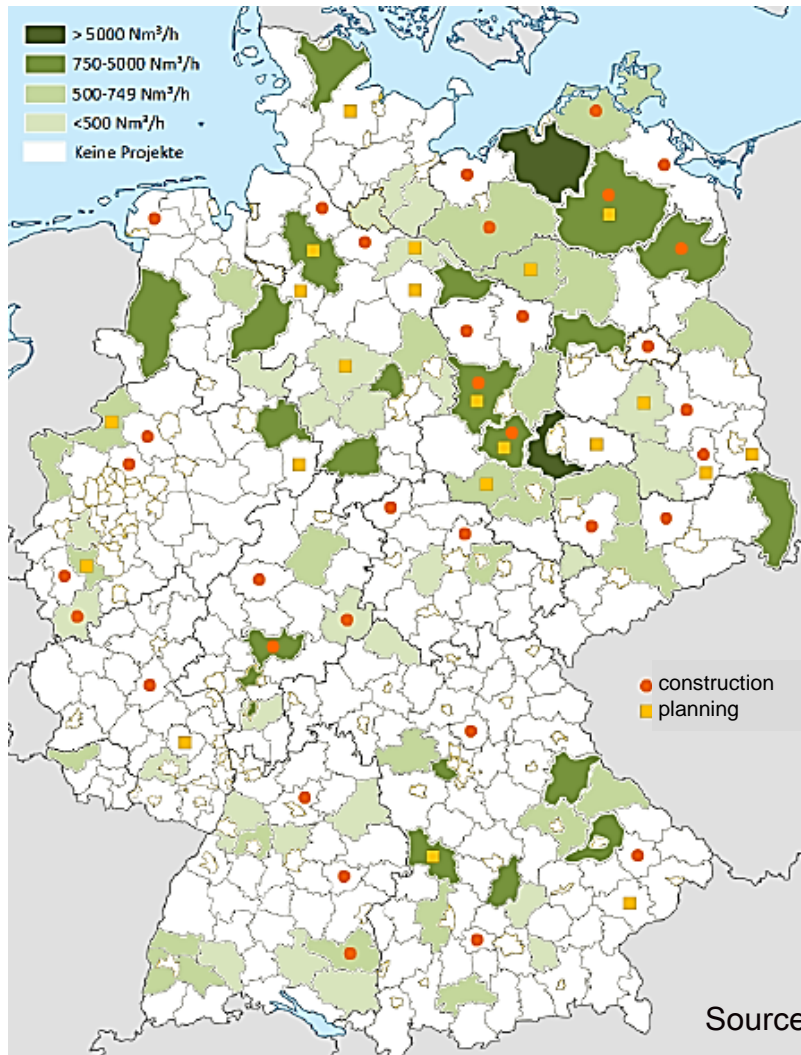
Development of agricultural biogas plants in Germany



Source: German Biogas Association, 2/2013



Methane upgrading plants in planning and under construction in Germany



- 36 upgrading plants under construction and 26 in planning
- November 2012 a total number of 107 upgrading plants in operation with feed-in capacity of 67.000 Nm³/h to the gas grid
- The price of biomethane from biogas crops amounts to 6,9 - 7,4 ct/kWh_{HS}

Area under crops for energetic use (ha) and percentage of total crop land

Energy crops	2011		2012	
	ha	%	ha	%
Rapeseed oil for biodiesel	910,000	7.71	913,000	7.73
Crops for bioethanol	240,000	2.03	243,000	2.06
Crops for biogas	900,000	7.63	962,000	8.15
Solid biomass for combustion	6000	0.05	6500	0.06
Total	2056,000	17.42	2124,500	18.00

11800,000 ha crop land

Source: FNR (Agency for Renewable Resources), 2012

Actual research projects on the subject of Biogas supported by DFG



Biogas crops

Analyse und Modellierung der Biomethanisierung von pflanzlicher Biomasse (BioMetModell)

Analysis and Modeling of Biomethanation from plant biomass (BioMethModel)

Dr. Michael Klocke

Leibniz Institut für Agrartechnik Potsdam-Bornim

Dr.-Ing. Manfred Lübken

Ruhr-Universität Bochum, Fakultät für Bau- und Umweltingenieurwissenschaften

Professor Dr. Adrian Immenhauser

Ruhr-Universität Bochum

Institut für Geologie, Mineralogie und Geophysik

Wastewater from food processing industry

Modellierung anaerober Umsetzungsprozesse mit dem Anaerobic Digestion Modell No. 1 (ADM1)

Modeling of anaerobic degradation processes by means of Anaerobic Digestion Model No. 1 (ADM1)

Professor Dr.-Ing. Karl-Heinz Rosenwinkel

Gottfried Wilhelm Leibniz Universität Hannover
Institut für Siedlungswasserwirtschaft und Abfalltechnik



Source:



Thank you for your attention!

