

Deutsch-Spanische Fachkonferenz
„Biomethan und grüner Wasserstoff im spanischen Energiesektor“

Biogas(es) for a Circular Economy

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International Affairs

Fachverband Biogas e.V. - German Biogas Association





Fachverband Biogas e.V. – The German Biogas Association



- Operators of biogas plants
- Technology manufacturers
- Research institutions
- Public authorities
- Feedstock providers
- Interested individuals

> 4700 members

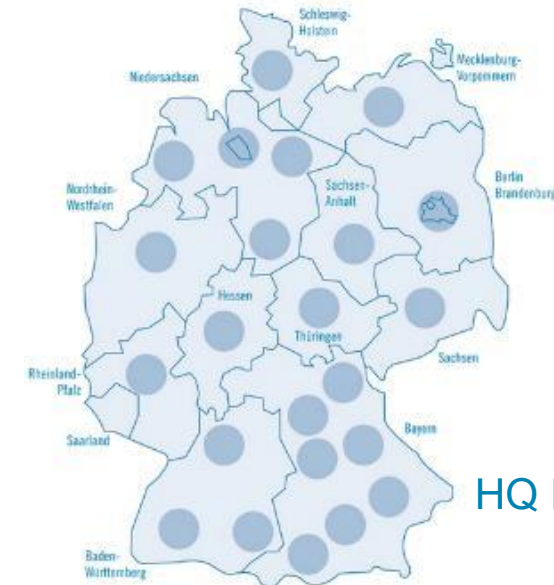
Member of...



BBE



Regional groups



Berlin Office

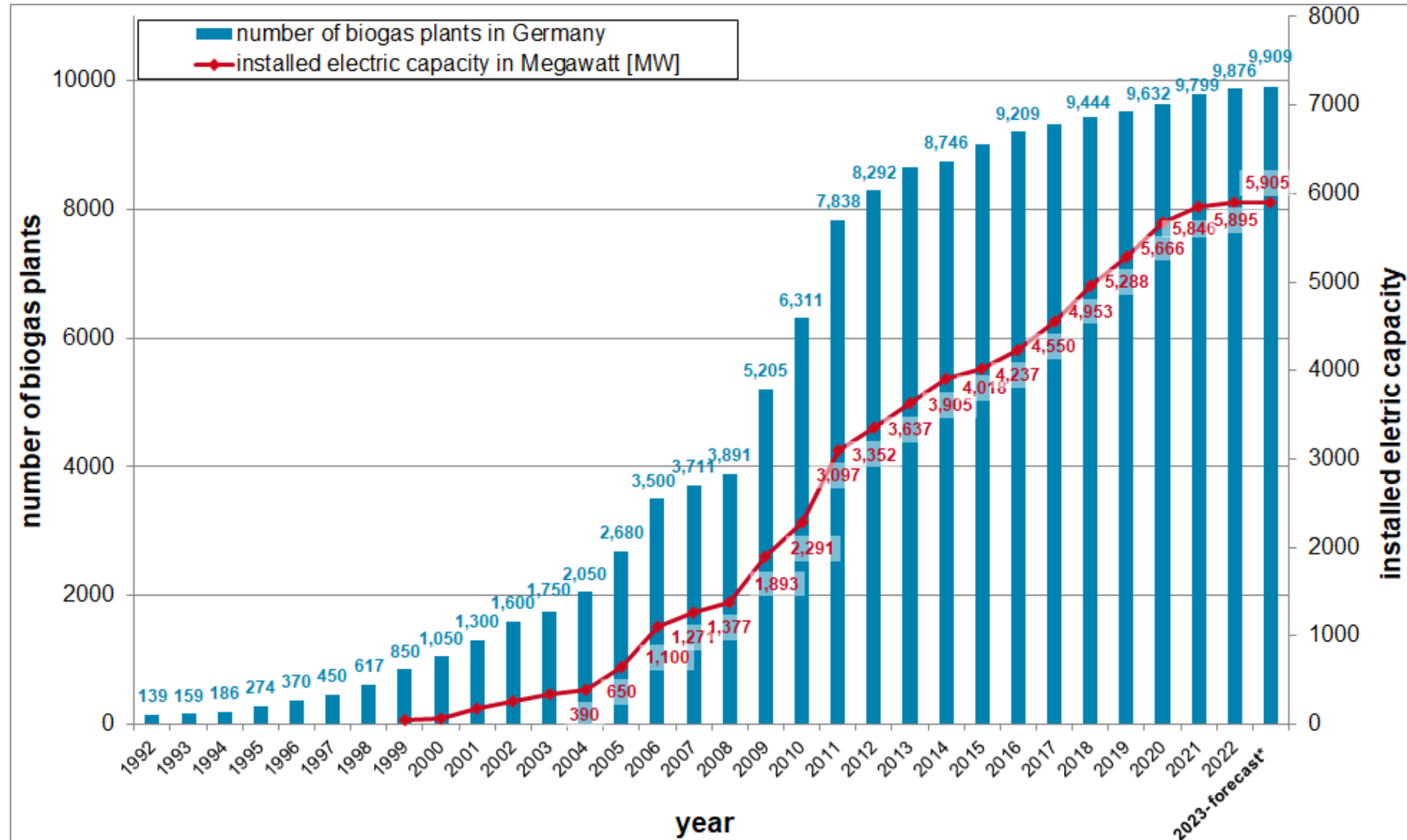
HQ Freising

Objective: promotion of biogas for climate protection

- ✓ Definition of legal frameworks, guidelines & standards
- ✓ Information exchange, knowledge transfer
- ✓ Advocating on EU-, national and regional levels

40 employees

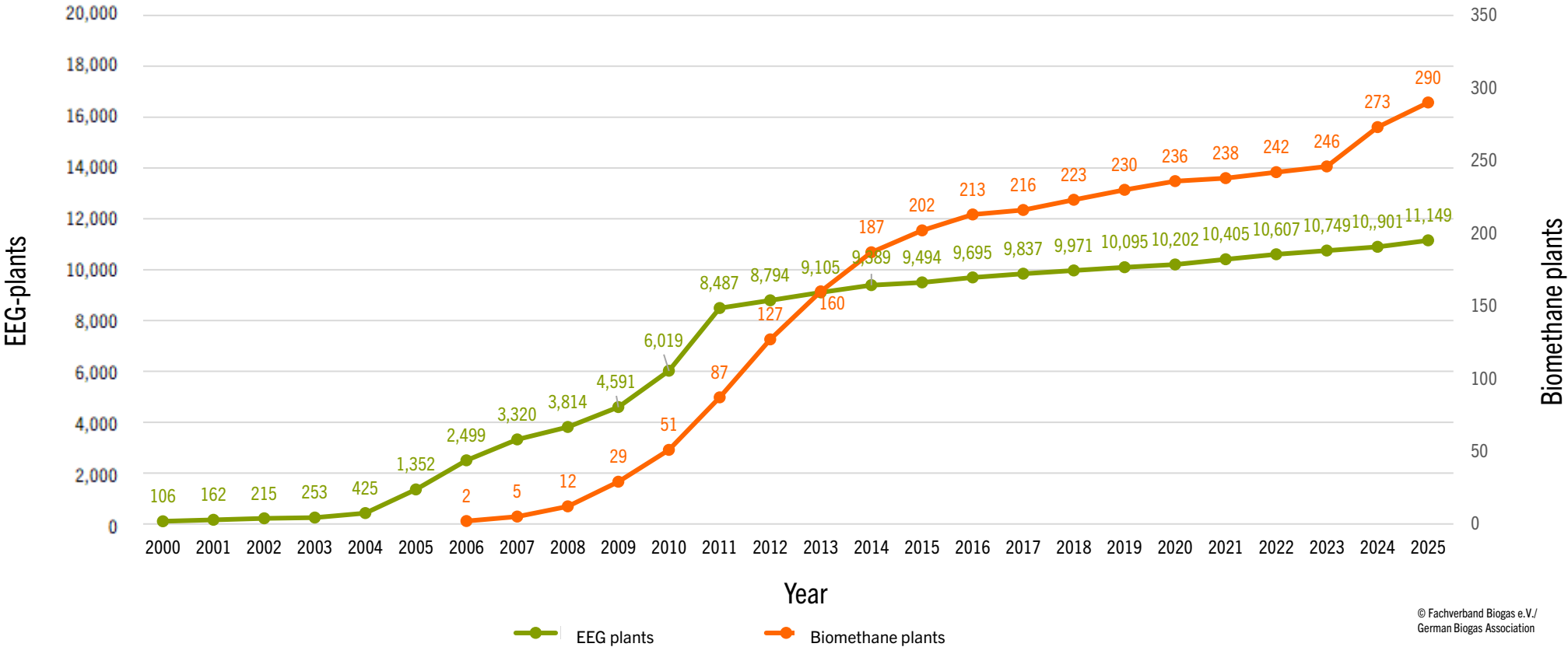
Development of the German biogas sector



Development of the German biogas sector



Biogas plants (EEG) and Biomethane plants

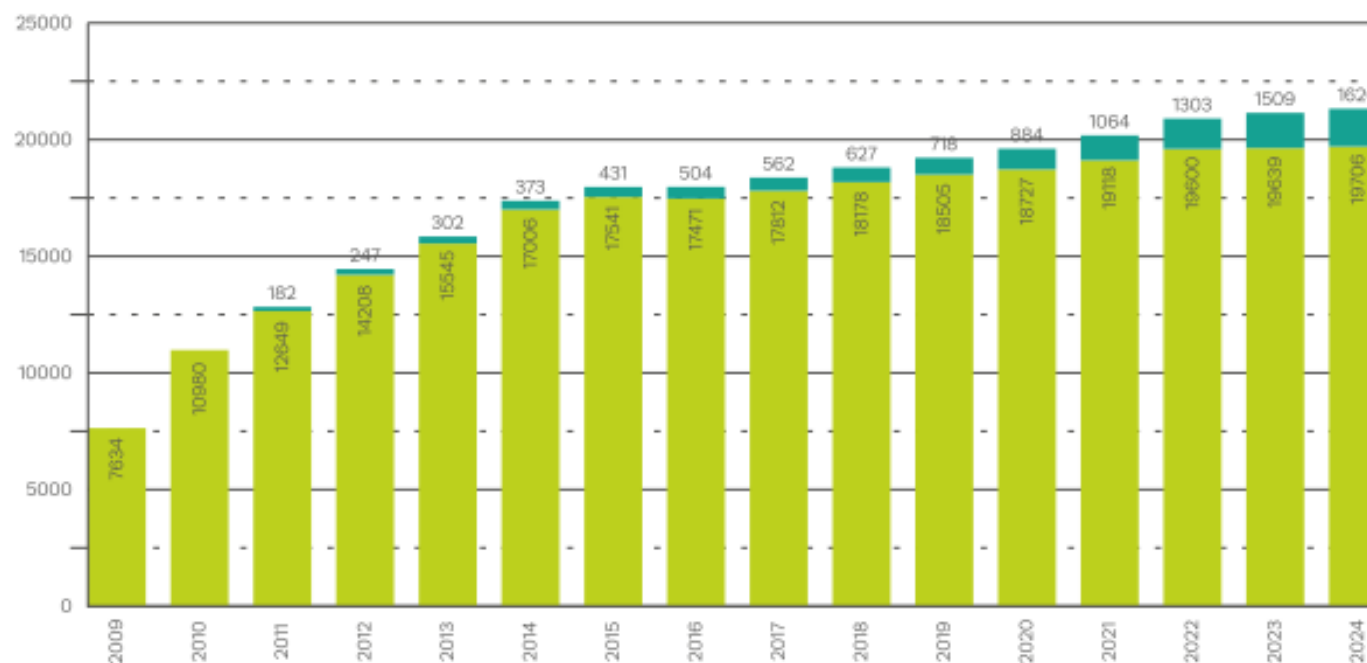


Number of biogas & biomethane plants in Europe

Figure 2.8

Combined number of biomethane and biogas plants in Europe

- Number of biogas plants
- Number of biomethane plants

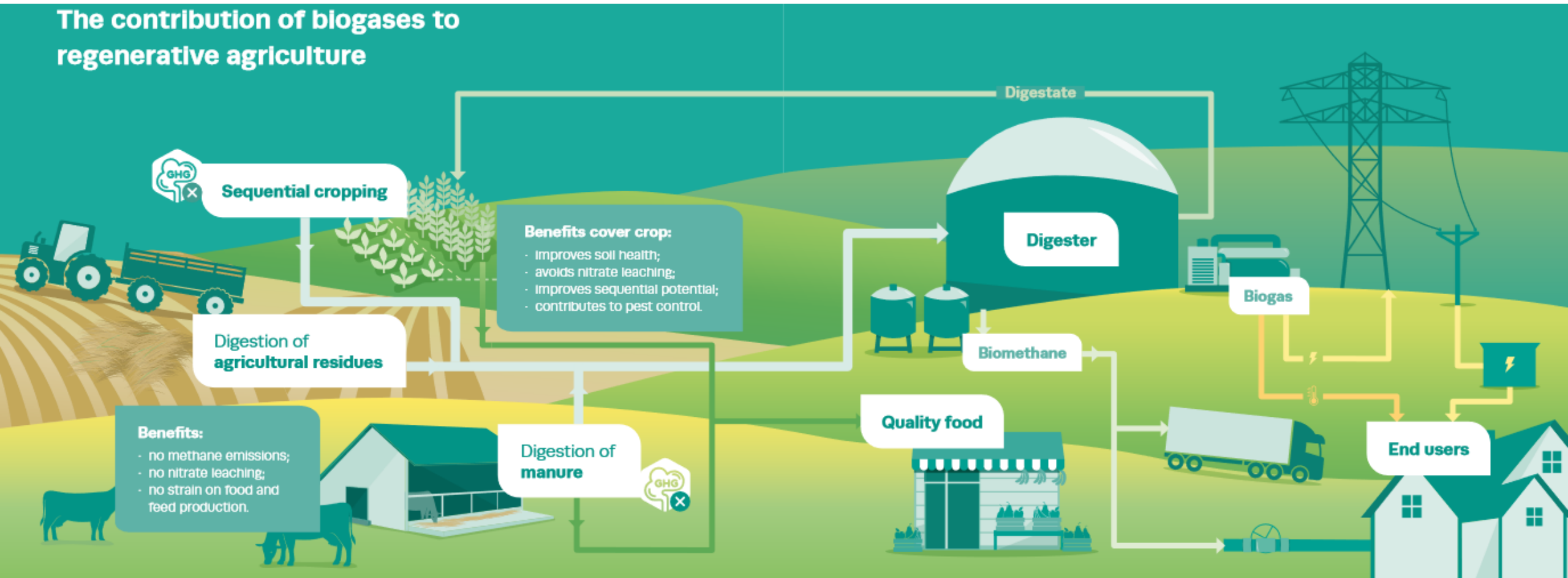


Source: EBA Statistical Report 2025

Why biowaste digestion matters ?

Anaerobic digestion presents an opportunity for low-cost decentralized waste management that creates valuable co-products of renewable energy and organic fertilizer

The contribution of biogases to regenerative agriculture



Benefits of Biogas & Biomethane



Climate Protection

Diverts organic waste from landfill, **reducing methane emissions** and replacing fossil fuels.



Energy Recovery

Generates **electricity, heat, and biomethane** - a storable, flexible and dispatchable renewable energy source.



Nutrient Recovery

Digestate returns **nitrogen, phosphorus, and potassium** to agricultural soils as organic fertilizer.



How do I tell it my neighbour?

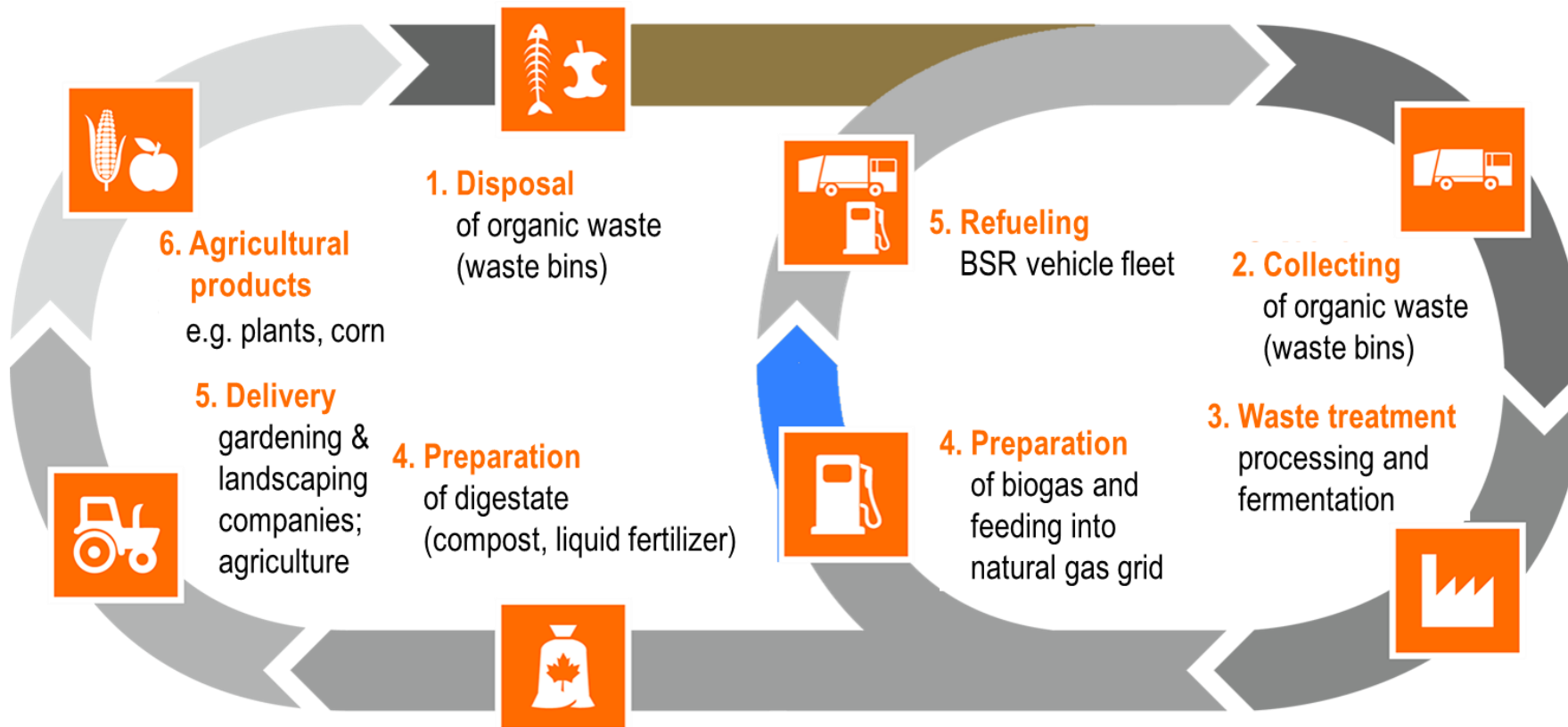
<https://www.europeanbiogas.eu/publication/eba-manual-on-social-acceptance/>

Social Media “Peace” Campaign



Example: Circular Economy in Berlin

Bio-CNG from organic waste for garbage trucks



- Local waste handling provider BSR
- 80,000 t/a sorted waste from households are transferred to 31 GWh/a energy
- Biogas is upgraded to biomethane
- 160 garbage trucks run on Bio-CNG

Conclusions & Trends

- Decades of experience in Germany with more than 10,000 biogas plants
- Flexible, market-oriented biogas production
- Feedstock is key: biowaste and (agricultural) by-products
- Beyond renewable energy: environmental, economic and social benefits
- Biogas is circular economy & climate protection (GHG certificates)
- Digestate: organic fertilizer
- Biomethane (Bio-LNG/CNG) & Biogas clusters
- Renewable Gases: Biogas, H₂ & Fuel Cells
- CO₂ utilization (CCU/CCS)
- Bioeconomy and Biorefinery

Biogás – para una economía circular



Español

giz

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für Internationale
Zusammenarbeit (GIZ) GmbH



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BIOGAS

German Biogas Association
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