



# Strengthening the market position of the products and services in the biogas value chain

through environmental product declarations (EPDs)

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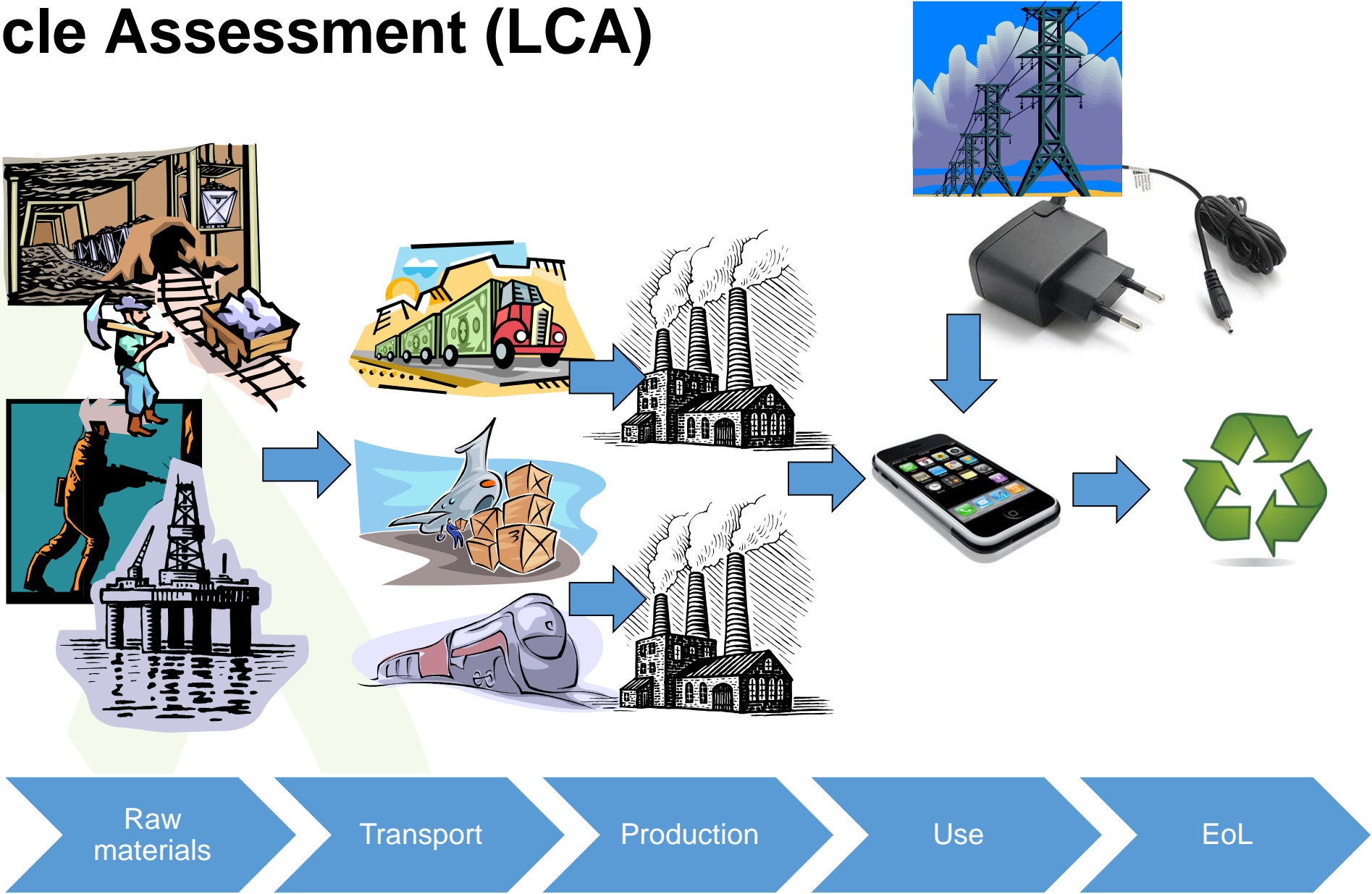
National research institute that has been working 30 years with sustainable innovation

Value chain perspective

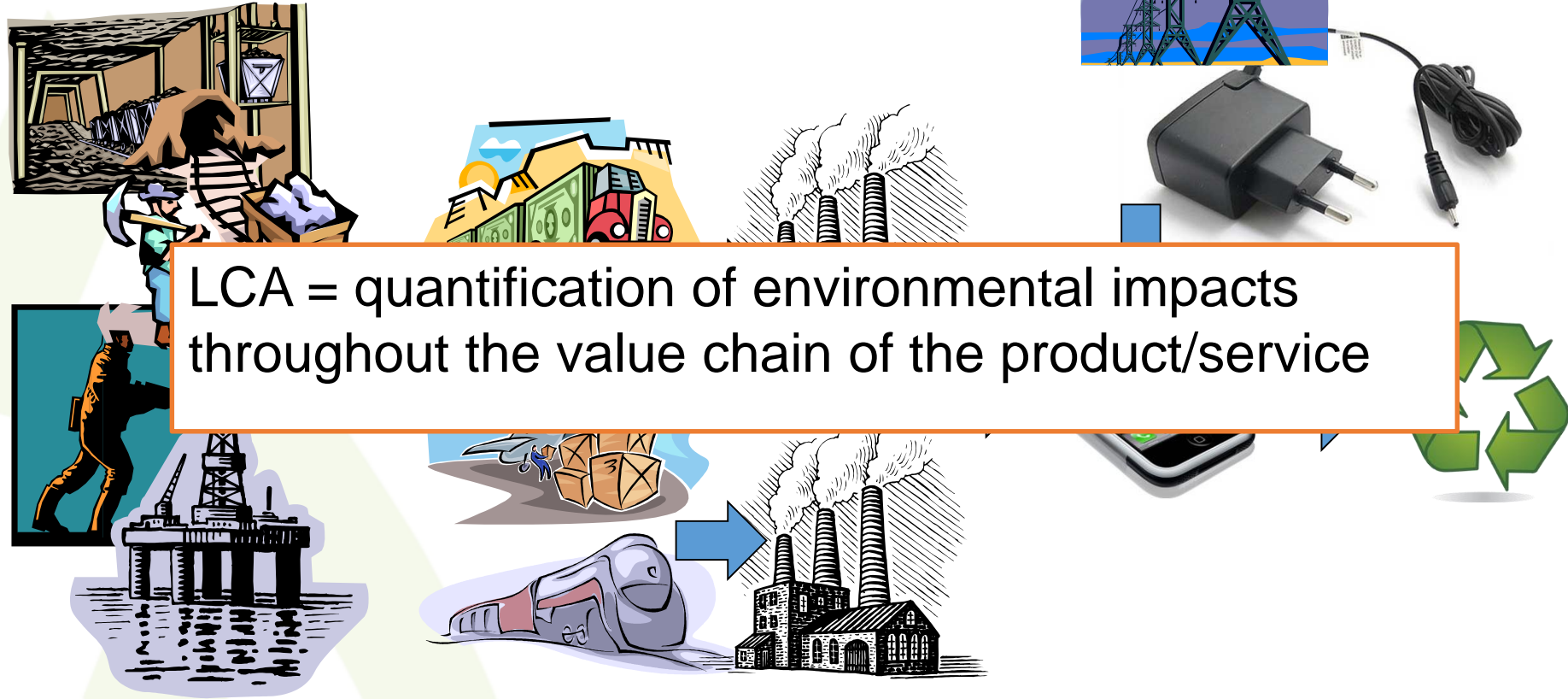
Experts in Life Cycle Assessment (LCA)



# Life Cycle Assessment (LCA)



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# Challenge

How can I evaluate the environmental performance of products/services that i buy?

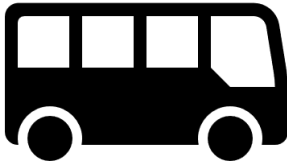


Purchaser

How can I communicate the environmental impact of my products to customers?



Producer



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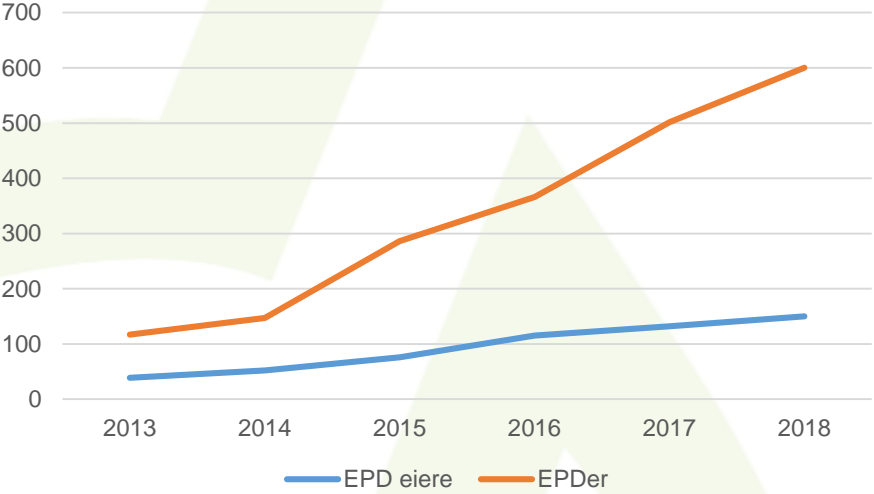


Producer

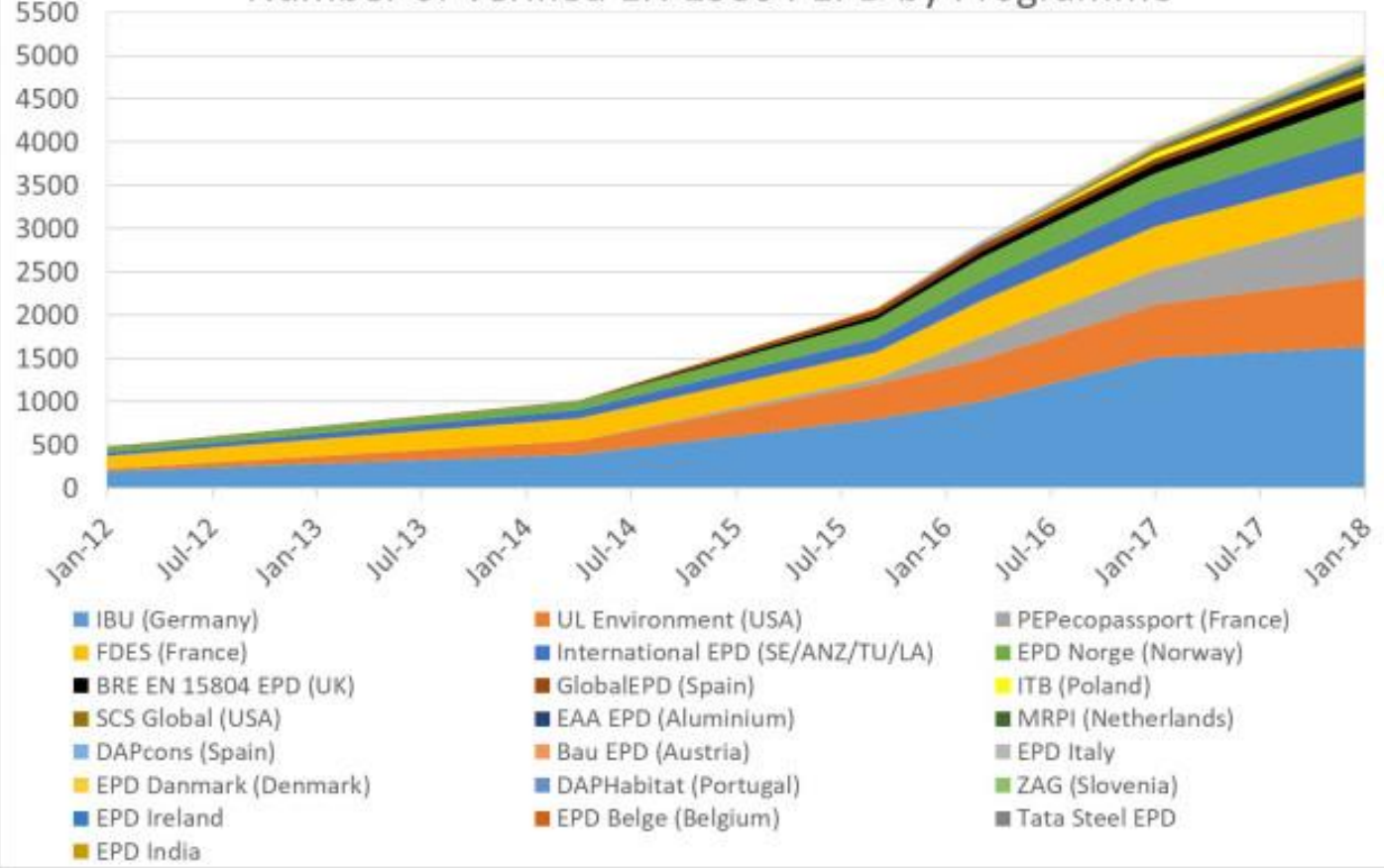


# Development of EPDs

Developments of EPDs in Norway



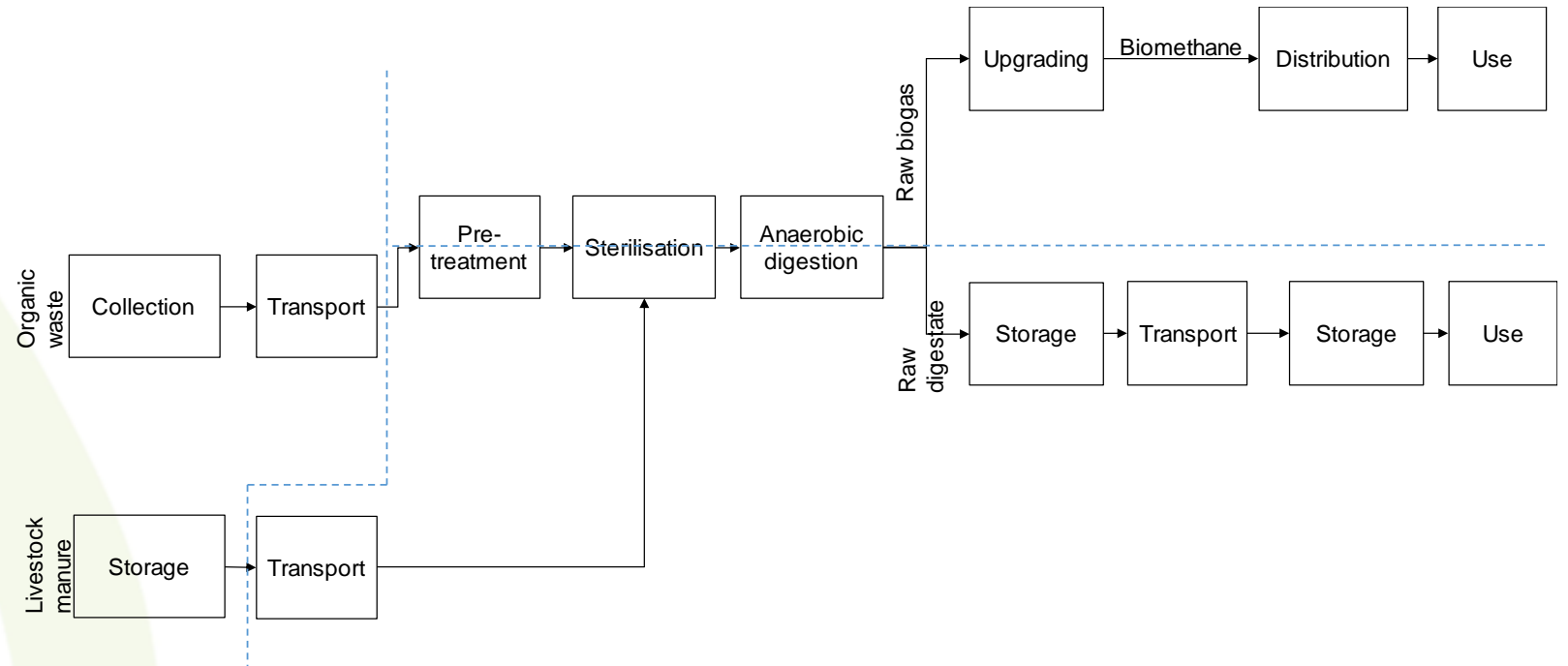
Number of Verified EN 15804 EPD by Programme



- IBU (Germany)
- FDES (France)
- BRE EN 15804 EPD (UK)
- SCS Global (USA)
- DAPcons (Spain)
- EPD Danmark (Denmark)
- EPD Ireland
- EPD India
- UL Environment (USA)
- International EPD (SE/ANZ/TU/LA)
- GlobalEPD (Spain)
- EAA EPD (Aluminium)
- Bau EPD (Austria)
- DAPHabitat (Portugal)
- EPD Belge (Belgium)
- PEPecopassport (France)
- EPD Norge (Norway)
- ITB (Poland)
- MRPI (Netherlands)
- EPD Italy
- ZAG (Slovenia)
- Tata Steel EPD

# Product category rules

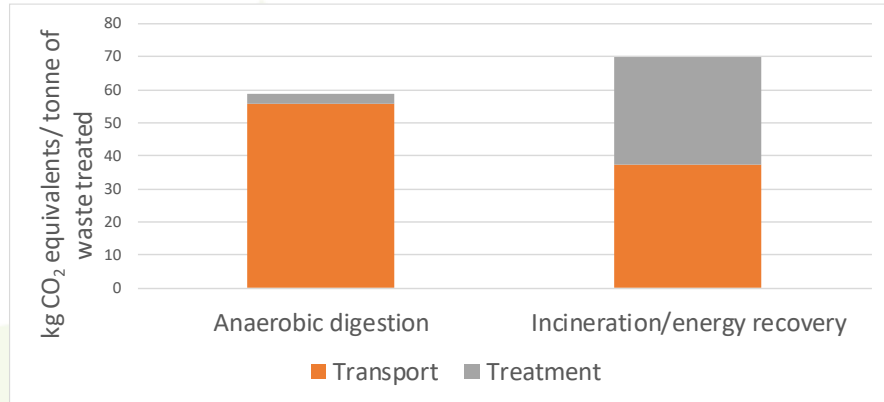
- Standardised (ISO 14025)
- Ensure comparability between products
- Allocate the environmental impacts between the products and services of the value chain



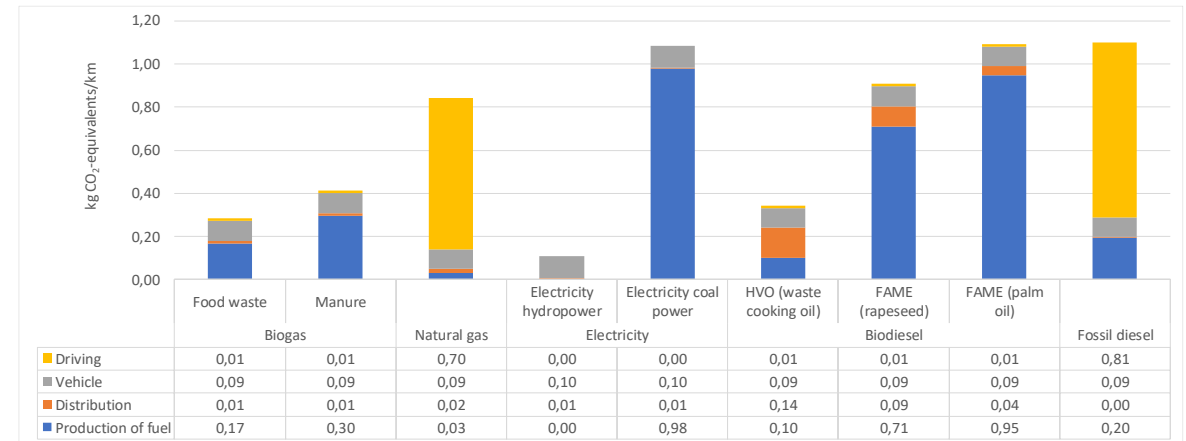


# Calculation examples

## Treatment of food waste

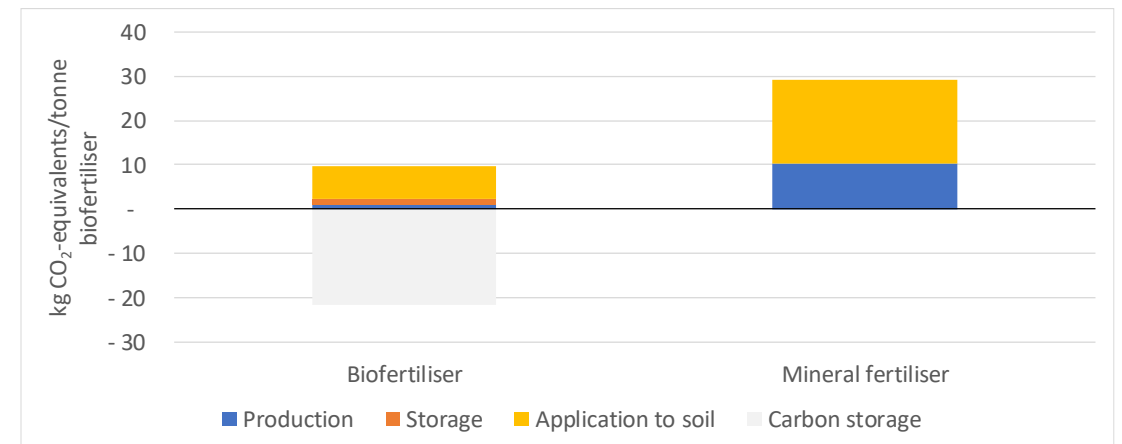


## Biogas as a fuel compared with alternatives



The products and services in the biogas value chain has low environmental impacts compared with alternatives

## Digestate as fertiliser



# Conclusion and further work

- *Product Category Rules for:*
  - *Anaerobic treatment of biowaste*
  - *Upgraded biogas (biomethane) from anaerobic digestion (CBG and LBG)*
  - *Biofertiliser from anaerobic digestion*
  - *Compost and soil improvement products from anaerobic digestion and CO<sub>2</sub> from upgrading of biogas*

*is being developed in the project Bærekraftig Biogass.*

The document will be sent to a hearing conducted by EPD Norway in 2019.

EPD for two biogas plants is under development.



[www.ostfoldforskning.no](http://www.ostfoldforskning.no)

Bærekraftig biogass-prosjektet

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