

BIOGAS

Definition

Biogas is produced by anaerobic digestion (AD) which is the breakdown of organic material by micro-organisms in the absence of oxygen. Suitable organic materials include animal manure, sewage sludge, the organic fractions of household and industry waste, or energy crops.

The calorific value of biogas is linked to characteristics of the inputs. For example, a high content of sugar and fat will result in biogas with a high calorific value.

Related terms

Biomass, Biofuel

Keywords

Methane, Landfill gas, Agricultural wastes, GHG emissions

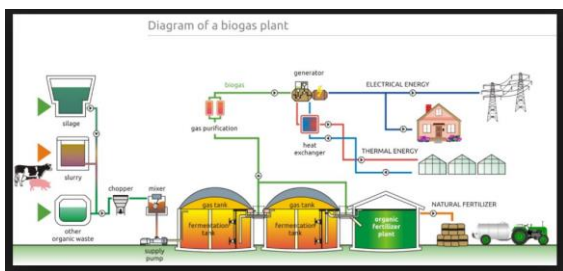


Figure 19a Diagram of a biogas plant. (Source: <http19>)

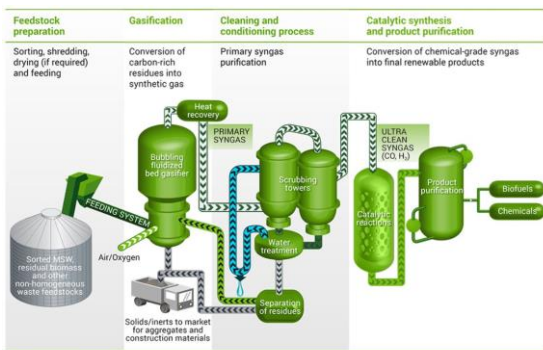


Figure 19b Scheme of biogas production in industrial style. (Source: <http20>, permission by Enerkem)



Figure 19c Bigger biogas plant on a farm in Oberscheid, Germany. (Photo: Alexandra Kruse 2016)



Figure 19d Full-scale biofuel facility in Edmonton, Canada. Publication permission by Enerkem (Source: <http20>)

Source

<http21>: www.biogas-info.co.uk/ (UK Government portal on aerobic digestion)

<http22>: <http://european-biogas.eu/biogas/> (European Biogas Association)

Translations

Bosnia and Herzegovina **Biogas**

Bulgarian **Биогаз**

Croatian **Bioplin**

Czech **Bioplyn**

Danish **Biogas**

Dutch **Biogas**

Esperanto **Biogaso**

Estonian **Biogaas**

Finish **Biokaasu**

French **Biogaz**

German **Biogas**

Greek **Βιοαέριο**

Hebrew **בִּיֹּגָז**

Hungarian **Biogáz**

Italian **Biogas**

Islandic **Lífgas**

Latvian **Biogāze**

Lithuanian **Biodujos**

Montenegrin **Biogas**

Polish **Biogaz**

Portuguese **Biogás**

Romanian **Biogaz**

Russian **Биогаз**

Slovenian **Bioplin**

Serbian **Биогаз**

Spanish **Biogás**

Swedish **Biogas**