## BIOFUEL

## Definition

A **biofuel** is any fuel whose energy is obtained through a process of biological carbon fixation. To be considered a biofuel it must contain over 80 % renewable materials. It can be derived directly from plants, or indirectly from agricultural, commercial, domestic, and/or industrial wastes.

Biofuels generally involve carbon fixation through the process of photosynthesis. It is produced by conversion from biomass in three different ways:

- a) thermal,
- b) chemical and
- c) biochemical.

Biofuel can be solid, liquid or gaseous. The most common types of biofuels are bioethanol and biodiesel, which are predominantly used in the transport and heating sectors.

## **Related terms** Biomass, Biogas **Keywords** Carbon fixation, Bioethanol, Biodiesel, Transportation fuel, Heating fuel

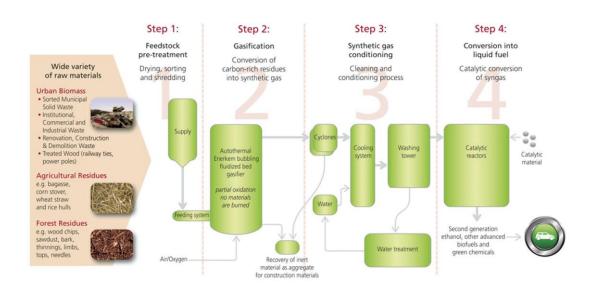


Figure 18a Scheme of production of biofuels from the waste. (Source: http 14)

## Sources

http15: http://biofuel.org.uk/glossary.html

http16: https://ec.europa.eu/energy/en/topics/renewable-energy/biofuels

http17: http://www.alternative-energy-news.info/technology/biofuels/

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