

# Advanced biofuels

## Definition

### Bioenergy Producer Program

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#### How 'advanced biofuel' is defined in the Bioenergy Producer Program

An 'advanced biofuel' is a renewable biofuel that demonstrates lifecycle greenhouse gas emission of at least 50% less than the baseline lifecycle greenhouse gas emission of the fossil fuel it is replacing. An advanced biofuel also meets either of the following two criteria:

- 1) Biofuels that are produced by advanced processes from non-food feedstocks, for example, municipal solid wastes<sup>1</sup>, agriculture and forestry residues, black liquor, purpose grown energy crops or algae
  - The end product from non-food feedstocks may be either an equivalent fuel produced by a first-generation technology (for example, ethanol, FAME) or a different type of advanced biofuel (for example, BioDME)
- 2) Biofuels with advanced properties, such as renewable diesel (HDRD), biopetroleum, biojet fuel, biobutanol
  - The end product is more compatible with existing fuel infrastructures and/or offers other technical benefits

<sup>1</sup> Note: The Annual average biogenic carbon content of the municipal waste feedstock stock or the finished fuel product from the processing of the feedstock should be greater than 50% by mass, based on sampling performed at least once every year. The biogenic carbon content should be determined using Method B or Method C of ASTM D6866 or an alternate test method approved by the Alberta Climate Change Office.