

# Biodiesel feedstocks

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**NESTE OIL**

refining the future

## NExBTL technology can use all vegetable oils and animal fats as an input

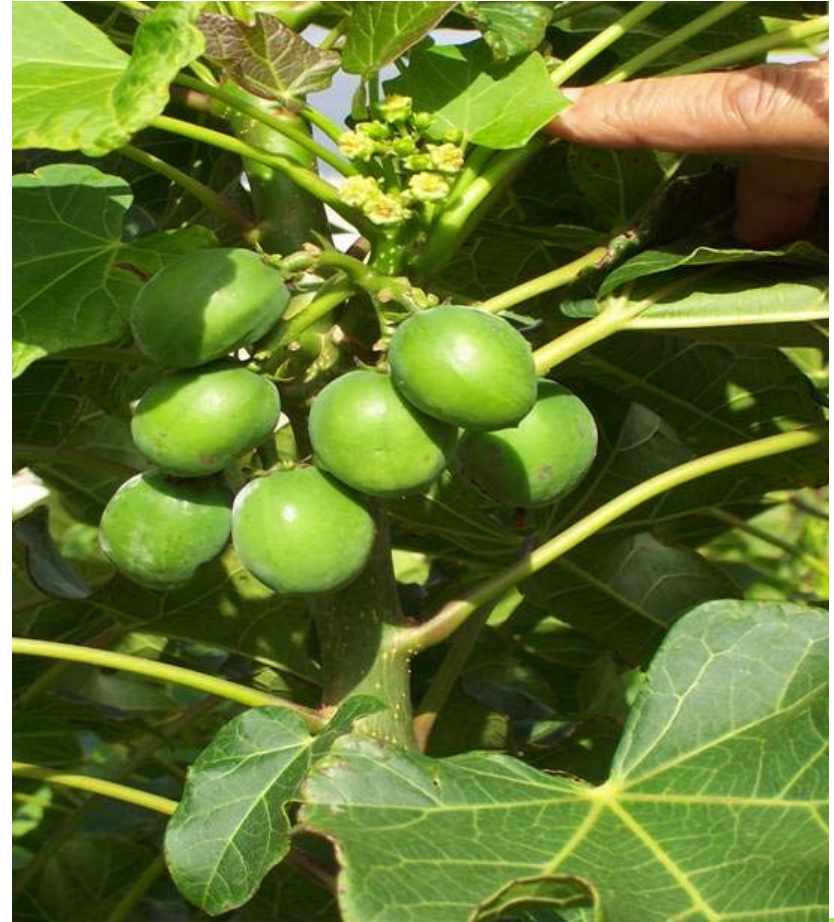
- annual worldwide production of vegetable oils is about 145 million tonnes
- today, vegetable oils are mainly used by food and cosmetic industries
- most common vegetable oils are
  - palm oil, annual production ca. 35 Mt
  - soyabean oil, annual production ca. 35 Mt
  - canola/rapeseed oil, annual production ca. 18 Mt
  - sunflower oil, annual production ca. 10 Mt
- animal fats are as good input as vegetable oils
- NExBTL technology can use any mix of feedstocks without adverse effect on the properties of the end product



## In the future, there is a need to find alternative feedstocks

Neste Oil is interested in R&D projects that focus on alternative feedstocks such as

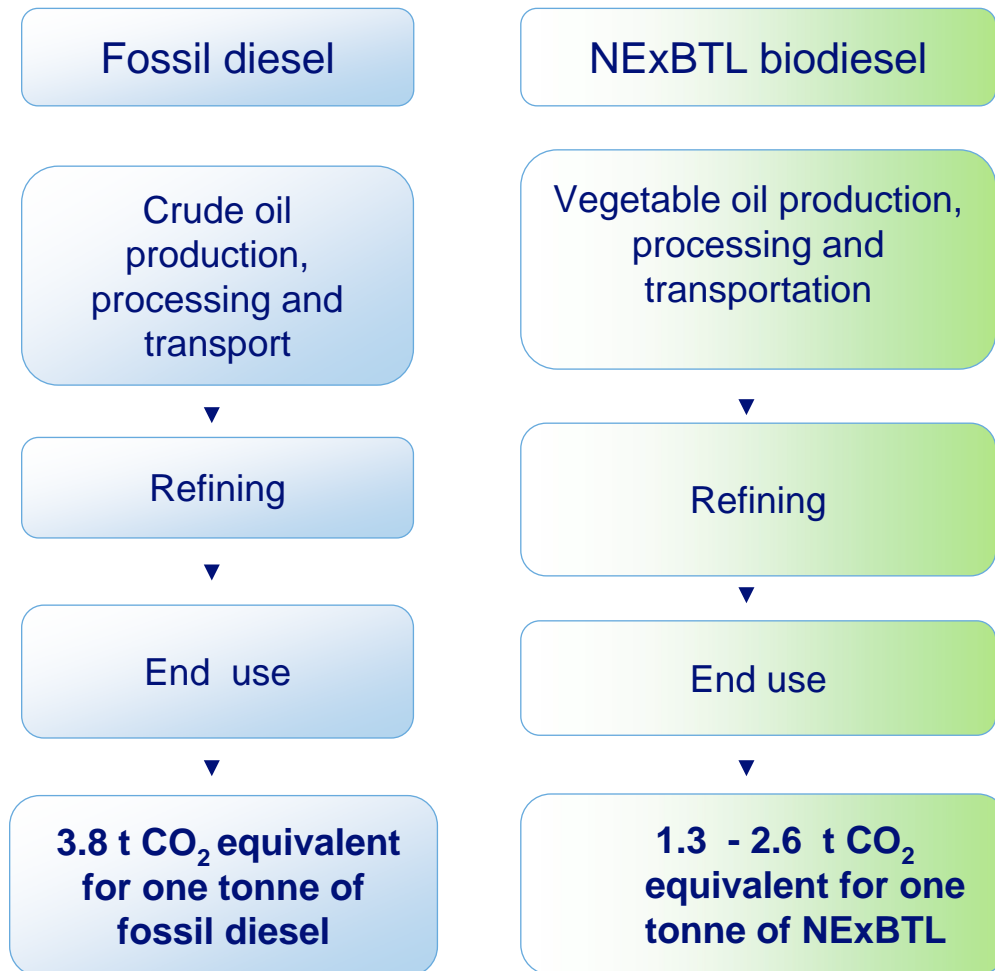
- non-food oil crops cultivation, like Jatropha
- algae, microbes, bacteria



Jatropha Curcas



# NExBTL greenhouse gas emission is clearly smaller compared to fossil diesel



The greenhouse gas emission over the entire life cycle of NExBTL biodiesel is 40-60% smaller compared to fossil diesel.

Greenhouse gas emissions can be further decreased at the raw material production:

- better agricultural practises
- handling of waste and effluents

