



## **VIDEO-LESSON**

## **Title**

An overview of biofuels from biomass: technological options and legislation

## **Expert**

Letizia Bua

## **Abstract**

In the presentation, an overview on biofuels and their production has been given. Moreover, the rules by the European Community have been reported. A biofuel is a fuel from biological materials, such as plants or animals. Biofuels can be divided into different "generations". The first generation is defined in competition with food (for example corn). The production of advanced biofuels (second and third generations) is not in competition with food, for example the second generation and, in case of third generation, there isn't competition for the land too. The technology options for the production have been reported and the difference between the biochemical route and the thermochemical one has been underlined. Different biofuels are listed: Bioethanol, Biodiesel (FAME), Hydrotreated Vegetable Oil (HVO), Biomethane, Pyrolysis Bio-oil, Biomass to Liquid (BtL).