

## Biofuels in France

### Overview of Biofuels in France

France has an installed capacity of 2,3 Mt/y biodiesel and 1,1 Mt/y ethanol, producing more than the national biofuels demand. In 2014 the biofuels share was 6 % (energy blending). The rest of the production is exported. France has a 5 times higher Diesel demand than Gasoline demand. In addition to a decreasing fuels demand in France and a slowly closing export market an overcapacity in France will result.

On 3 January 2015, France's energy ministry issued an order to allow the concentration of biodiesel to increase from 7 to 8%.

### Biofuels policy, regulations, market development

#### Transition énergétique pour la croissance verte

The draft '*Loi de transition énergétique*' in France includes a commitment to increasing the share of renewables in transport fuels to 15% by 2025. The legislation incorporates a progressive strategy to support development of advanced biofuels from wastes. The transport sector will be powered by biofuels, electricity and H2. The goal is to establish 7 million electric charging points and 600 H2 charging stations in 2030.

In addition to the specific target in the transport sector the energy consumption should be reduced by 20 % by 2030 (-50 % in 2050) especially the fossil primary energy consumption (-30 %).

'First generation' biofuels are not allowed to account for more than 7% of transport fuels in 2020.

A number of incentives were introduced to promote the use of renewable energies in the transport sector under the National Action Plan for Renewable Energy. Fuels with high levels of biofuel were authorized for use, including E85. To encourage the E85's development, it is subsidized. (AMF Annual Report 2014)



### Country information

France	
Population	66,616,416
GDP (per capita)	\$40,37
Final Energy Consumption (Mtoe)	150,77
Final Energy Consumption in Transport (Mtoe)	50,27
Final Energy Consumption in Transport Share	33%
Biofuels share in Transport Fuels	
Fuel-Mix	Hydrogen Electricity Biofuels

## Advanced biofuels demonstration and R&D Projects

**FUTUROL** pre-industrial pilot plant at Pomacle-Bazancourt launched in 2008 with the aim to develop and commercialize a complete solution for producing cellulosic ethanol. Industrialization of the project technology is expected starting in 2016. Led by the company PROCETHOL 2G, the Futurol project involves 11 partners.

**BioTfuelL** is a joint Biomass-to-Liquid demonstration project launched by five French partners (Total, Avril, IFPEN, Axens, CEA) and Uhde. The demo is being built in Venette for the torrefaction step and in Dunkerque for the syngas generation and conversion. BioTfuelL aims to integrate all the stages of the BtL process chain (torrefaction, gasification, syngas purification, Fischer-Tropsch Synthesis) and bring them to the market in 2019.

Air Liquide and CEA, France, are developing an innovative process for converting biomass into synthesis gas - the **SYNDIÈSE-BtS project**, Bure-Saudron. The aim of this project is to build a preindustrial demonstrator for producing second-generation biofuels that has a capacity of 10 metric tons per hour (t/h). Pretreated biomass is converted into synthesis gas by using an oxy-burner technology under development at the Air Liquide research centers.

**Total S.A.** has announced an investment of €200m to convert the La Mède oil refinery in southern France to a biorefinery producing renewable diesel from UCO and other feedstocks.

## Biofuels ministries, organisations and agencies in France

ADEME

ANR: Agence nationale de la recherche

ATEE: Association technique energie environnement

Investissements d'avenir (CGI)

Ministère de l'écologie, du développement durable et de l'énergie

SNPAA

Syndicat des énergies renouvelable

## Key biofuels industry and research stakeholders

Avril

Air Liquide

GDF SUEZ

IFP Energies Nouvelles

Axens

CEA

Total

Tereos

Cristal Union

INRA

ONF

Lesaffre International