



The European Union Biofuels Policy

EU biofuels policy

One of the major applications of renewable ethanol is as a biofuel or fuel ethanol. As with all pioneering technologies, the development of biofuels worldwide is driven by policy and regulations. The main goals behind the promotion of biofuels are environmental protection, sustainable development, increased energy security, job creation and economic growth in Europe.

Did you know?

- In Europe, all sectors covered by the Kyoto Protocol have decreased their **greenhouse gas** (GHG) emissions since 1990 except one: transport. In fact, transport emissions have increased since then by almost 30%. Road transport represents over 90% of transport emissions and over one fifth of total GHG emissions in the EU.¹
- Unlike other alternative fuels and new vehicle technologies that are years away from commercialization, biofuels can be used in **today's car fleet**. They are blended easily into the fossil fuel stream and as they are carbon neutral they provide substantial GHG emission reductions (up to 95% depending on raw material used and processing technology applied).² **Biofuels** can therefore bring an immediate **solution** to the problem of rising GHG emissions in the road transport sector.
- There is limited diversification of energy sources in transport: crude oil fuels 98% of EU transport. Today, 82% of the EU oil demand is met by imports. A substantial proportion of this imported oil originates from politically unstable regions. Forecasts indicate that the share of oil imports could even rise to 93% by 2030³ while many forecasts suggest that Peak Oil levels will be reached by 2040. Domestically-produced biofuels can alleviate this tremendous threat to **energy security** (for more information please see our Energy Security fact sheet).
- The production of renewable ethanol in Europe creates **jobs** and **economic opportunities** in rural areas. Skilled jobs are also created in the fields of scientific research, technology development and engineering, as well as throughout the whole renewable ethanol value chain (for more information please see our Growth and Jobs fact sheet).

European legal framework

EU biofuel policy is based primarily on 2 Directives: the 2003 Biofuels Directive and the 2009 Renewable Energy Directive (RED).

The old approach

The Biofuels Directive (2003/30/EC) was adopted in 2003.⁴ Although the terms of the directive were not legally binding it did set indicative targets of 2% renewable fuels in transport by 2005 and 5.75% by 2010, as a proportion of overall transport fuel use. The only obligation for member states was to report on their progress in terms of biofuels use. This Directive was not very successful: only Germany, Austria and Sweden reached the 2005 target, and it seems very unlikely that the majority of member states will fulfill the 2010 target. At present, biofuels use in the EU is 4% of the overall fuel use in the road transport sector. In 2011 the Biofuels Directive is to be replaced by the RED.

¹ European Environment Agency, Transport emissions of greenhouse gases (Term 002). Assessment published September 2010: <http://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases/transport-emissions-of-greenhouse-gases-2#toc-0>.

² Renewable Energy Directive, Typical default values for biofuel pathways, Annex V.

³ Communication from the Commission to the European Council and European Parliament, an Energy Policy for Europe, COM(2007) 1 final, page 3.

⁴ Directive 2003/30/EC, OJ L123/42 of 8 May 2003.

The new approach

Agreed in January 2009, the Renewable Energy Directive (2009/28/EC), or RED, introduces a 10% mandatory use of renewable energy in the EU transport sector.⁵ Due to the limited progress achieved under the previous Biofuels Directive, the targets of this Directive were made mandatory, and therefore legally binding. Member states have submitted National Renewable Energy Action Plans⁶ stating how they plan to achieve these targets by 2020.

Revolutionary policy on biofuels

The RED is a revolutionary piece of legislation, which will shape the future biofuel policies of the EU member states. It will establish the required investor confidence that will play a major role in the development of the European biofuel industry. It is the necessary prerequisite to enable advanced biofuels to be brought to full commercialisation. Furthermore, this Directive contains a comprehensive and unequalled list of requirements to guarantee that only biofuels produced in a sustainable manner are allowed in the EU energy mix.

Unprecedented sustainability criteria

- Emission savings: In order to count towards the 10% target, biofuels must provide a 35% GHG emissions saving compared to fossil fuels. This threshold will rise to 50% as of 2017, and to 60% as of 2018 for new plants.
- Raw material from environmentally sensitive areas are not permitted to be used (no-go areas): land with high carbon stock (old forests, grasslands, protected areas), wetlands and continuously forested areas.
- Bonus for crops produced on idle/degraded land.
- EU biofuels must meet cross compliance environmental rules, as part of the Common Agricultural Policy (CAP).
- Social criteria: the European Commission will report on food availability, compliance with land-use rights and with international labour conventions.
- Indirect Land Use Change (ILUC): End of 2010 the European Commission presents a report explaining how the issue should be addressed.

But there is still a long way to go...

These sustainability criteria make the EU biofuel sector a pioneer in the field of sustainable production. But their application to biofuels alone misses the bigger picture and fails to grasp the unique opportunity to establish more sustainable production and consumption patterns in the EU.

Firstly, applying these criteria to the biofuels industry alone places severe constraints on the sector, with detrimental effects for its competitiveness and its ability to develop new technologies.

Secondly and most importantly, if European Institutions are serious about addressing climate change and promoting sustainable development, then these criteria should be expanded to all products and sectors, from fossil energy to food production and biomass for electricity. If, in the first instance, the EU decided to take the lead in expanding the application of sustainability criteria to other sectors, then the ideal scenario would be to create a global standard- since EU policy alone will not be able to direct macro-trends worldwide.

⁵ Directive 2009/28/EC, OJ L140 of 5 June 2009.

⁶ The member states' National Renewable Energy Action Plans submitted to the European Commission can be found here: http://ec.europa.eu/energy/renewables/transparency_platform/action_plan_en.htm.