The EU submission in response to the Notification 2011-121

Agricultural biodiversity: biofuels and biodiversity. Experiences and results from assessments of the impacts of biofuel production and use on biodiversity and impacts on biodiversity that affect related socioeconomic conditions

The European Union (EU) and its Member States are pleased to share their experiences and the results of assessments of the impacts of biofuel production and use on biodiversity and impacts on biodiversity that affect related socioeconomic conditions, as well as related activities undertaken by the EU and its Member States with the Secretariat of the Convention on Biological Diversity.

This introduction briefly outlines the legal framework for the production and use of biofuels that has been adopted in the EU. Information on experiences and results from the EU and individual Member States is provided at the end of the submission.

Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources (hereafter referred to as the Renewable Energy Directive) establishes a legal framework in the EU for the production and use of renewable energy in the sectors of electricity, heating and cooling, and transport, including biofuels. The Renewable Energy Directive aims at reaching a minimum share of 20% of renewable energy overall and 10% of renewable energy specifically in the transport sector by 2020. Furthermore, Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 (hereafter referred to as the Fuel Quality Directive) requires a minimum 6% reduction in the greenhouse gas intensity of fuels used in road transport, with biofuels being one of the main technologies available to achieve the target. The Directives define biofuels as "liquid or gaseous fuel for transport produced from biomass".

Both Directives stipulate that the coherence between the objectives of these Directives and the Community's other environmental legislation towards meeting environmental and climate change objectives have to be ensured. Both Directives contain measures in order to avoid negative side-effects of promotion of biofuel for the European Union market. The approach to sustainability consists of sustainability criteria for biofuels, as well as monitoring and reporting requirements.

The sustainability criteria relate to minimum greenhouse gas savings, land with high biodiversity value, land with high carbon stock and agro-environmental practices. Indeed, it is vital to ensure that the increasing worldwide demand for biofuels and bioliquids and incentives for their use provided for in legislation such as this does not result in the destruction of biodiversity, which is recognised as being of value to all mankind in various international instruments, including the CBD.

The sustainability criteria for biofuels also apply to bioliquids, which are liquid biomass-based fuels used for purposes other than transport. The European Commission presented a Report¹ in 2010 on the question of sustainability requirements for the use of solid and gaseous biomass for energy, and is currently in the process of preparing a new report on this issue.

The sustainability criteria apply to those biofuels and bioliquids used for compliance with the targets laid down in the Directives, and those that benefit from national support schemes.

The Directives stipulate *inter alia* that biofuels and bioliquids shall not be made from raw material obtained from land with high biodiversity value, which is land that in or after January 2008 had the status of:

¹ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0011:FIN:EN:PDF

- (a) primary forest and other wooded land, namely forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed;
- (b) areas designated:
- (i) by law or by the relevant competent authority for nature protection purposes; or
- (ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the second subparagraph of Article 18(4);

unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes;

- (c) highly biodiverse grassland that is:
- (i) natural, namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or
- (ii) non-natural, namely grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status.

Regarding the highly biodiverse nature of certain grasslands, both temperate and tropical, including highly biodiverse savannahs, steppes, scrublands and prairies, biofuels made from raw materials originating in such lands are may not qualify for the incentives provided for by this Directive. The European Commission is currently in the process of establishing the criteria and geographic ranges to determine which grassland shall be covered by point (c) in accordance with the best available scientific evidence and relevant international standards.

The Directive also stipulates that biofuels and bioliquids shall not be made from raw material obtained from land that was converted from "land with high carbon stock", such as for example wetlands or certain types of forest. Many of such areas are also of importance for biodiversity conservation. Raw material for biofuels and bioliquids must not be obtained from land that was peatland, unless evidence is provided that the cultivation and harvesting of that raw material does not involve drainage of previously undrained soil.

EU Member States were required to implement to the Renewable Energy Directive by 5 December 2010 and the Fuel Quality Directive by 31 December 2010, including requiring that economic operators show that the criteria have been fulfilled and that they arrange for an adequate standard of independent auditing of the information submitted. Both Directives also allow the European Commission to approve voluntary certification schemes that comply with the sustainability requirements. On 19 July 2011 the European Commission has recognised the first seven such voluntary schemes (see http://ec.europa.eu/energy/renewables/biofuels/sustainabilityschemes en.htm) and continues to evaluate further submissions.

The Renewable Energy Directive also sets out a number of reporting obligations. The EU Member States shall report to the European Commission every two years and for the first time in 2011 on progress in the promotion and use of energy from renewable sources, including on the estimated impact of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within the Member State. The European Commission shall report to the European Parliament and the Council every two years and for the first time in 2012, in respect of both third countries and Member States that are a significant source of biofuels or of raw material for biofuels

consumed within the EU, on national measures taken to respect the sustainability criteria and for soil, water and air protection.

The report shall *inter alia* also address the relative environmental benefits and costs of different biofuels and the effects of the EU's import policies thereon, the impact of increased demand for biofuel on sustainability in the EU and in third countries, considering economic and environmental impacts, including impacts on biodiversity and the scope for identifying, in a scientifically objective manner, geographical areas of high biodiversity value that are not covered in the sustainability criteria. Finally, the reports should address the impact on social sustainability, in particular on the impact of the Community biofuel policy on the availability of foodstuffs at affordable prices, in particular for people living in developing countries, as well as wider development issues. Reports shall address the respect of land-use rights. They shall state, both for third countries and Member States that are a significant source of raw material for biofuel consumed within the Community, whether the country has ratified and implemented each of the following Conventions of the International Labour Organisation, i.a. on minimum age, child labour, freedom of organization and bargaining collectively, compulsory or forced labour. (article 17(7).

By the end of 2014 the European Commission shall also present a report that inter alia assesses the feasibility of reaching the EU target whilst ensuring the sustainability of biofuels production in the EU and in third countries. This assessment shall consider economic, environmental and social impacts, including indirect effects and impacts on biodiversity, as well as the commercial availability of second-generation biofuels.

Further, the Commission has carried out several studies to better assess the impact of indirect land use change associated with the production of biofuels. As required by the Directive, on-going reflection is focused on greenhouse gas emissions and ways to limit them if necessary.

As to the development of national inventories so as to identify areas of high biodiversity value, critical ecosystems, and areas important to indigenous and local communities the EU would like to highlight its efforts in establishing the Natura 2000 network of protected areas. Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SACs) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) which they designate under the 1979 Birds Directive. However Natura 2000 is not a system of strict nature reserves where all human activities are excluded. There may be situations where the production of raw materials for biofuels is compatible with the conservation objectives of the area.

Information on experiences and results from individual Member States (Belgium, France, Germany, the Netherlands and the United Kingdom) are included.