



for a living planet

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WWF Position on Biofuels in the EU

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It is now generally accepted by science and supported by the European Union (EU) that in order to avoid dangerous climate change global warming should stay well below a 2° Celsius increase compared to pre-industrial temperatures. To attain this objective greenhouse gas (GHG) emissions globally need to be cut by at least 50 per cent in the coming decades.

This can only be achieved through a variety of ambitious measures and policies on a global scale. These include *inter alia* significant improvements in energy efficiency and reduced consumption of energy across all sectors of society, combined with growth in the production and use of a wide range of renewable energies and reduced deforestation. At the same time a drastic reduction in the use of fossil fuels, such as oil and coal is needed.

For the EU, WWF urges that 25 per cent of all primary energy used in 2020 should come from renewable sources. Half of this, about 200 Mtoe¹, could come from sustainably produced bioenergy. Bioenergy can be exploited for electricity, heat and transport fuels. Amongst bioenergies, liquid biofuels for transport derived from annual crops have a less favourable CO₂ balance and a higher overall environmental impact than solid biomass for electricity and heat generation from woody forestry products (IEA, Bioenergy Task, 2003). Furthermore, as regards carbon and GHG balance, some biofuels are far better than others (Worldwatch Institute, 2006).

Presently, liquid biofuels for transport account for less than 1 per cent of all transport fuels in EU. Yet transport emits an estimated 21 per cent of all of the EU's GHG emissions². Reducing GHG emissions from the transport sector is key if emissions overall are to be reduced in the EU. Achieving this will require more than biofuels. WWF promotes fuel efficiency standards for all vehicles and the development of an alternative, more environmentally sustainable, transport strategy as priorities. Nonetheless, so long as fuel cells and sustainable hydrogen production remain in their infant stages, biofuels appear as the only fuel supply alternative for the transport sector.

The EU aims for biofuels to represent 10 per cent of all road transport fuel consumption by 2020. If delivered in respect of the sustainability conditions outlined below, WWF supports the EU biofuels target.

The development of biofuels should be part of a broader strategy dealing with transport and renewable energy

Member States should develop national and regional strategies on: reducing consumption of fuels for transport, through new transport strategies and increases in energy efficiency; and the expansion and use of

¹ Wuppertal Institut Target 2020: Policies & Measures to reduce GHG emissions in the EU (2005). This target includes ambitious energy efficiency improvements and doesn't include bioenergy imports. The EEA briefing How much biomass can Europe use without harming the environment? (2005) foresees that 210-250 Mtoe biomass would be needed for renewables to reach a share of 20 per cent of total energy.

² EU Commission Biofuels Strategy

renewable energies. The specific role of biofuels needs to be seen within the context of these strategies. Representatives from agriculture, forestry, the environment, bioenergy production and trade, transport and the public sector should be involved.

To achieve the ambitious EU target, biofuels need a significant push

Level playing field for biofuels

To develop, biofuels need an economic level playing field with conventional fuels. WWF calls upon the Member States to use instruments that will help to promote the distribution and consumption of sustainable biofuels (such as renewable fuel obligations, tax exemptions, investment subsidies, public procurement and demonstration projects). Such instruments should in no case take the form of open-ended income transfers, act as means for protecting the EU market or affect the security of global food supplies. WWF believes that in the medium to long term bioenergies must be economically viable without direct subsidies³. It is unlikely that either the EU or its Member States will ever have sufficient funds to support the development, take-up and establishment of biofuels on a par with fossil fuels. It seems thus reasonable to also tackle the problem from the other end, and to stop supporting the fossil fuel industry.

Common Agriculture Policy Energy Crops Payment

Three years from its establishment, the €45/hectare energy crop payment under the Common Agricultural Policy has not provided a sufficient pull for producers. The maximum guaranteed area of 1.5 million hectares has only been one-third filled⁴. Whilst a steady and sufficient supply of feedstocks is a pre-condition for industry's investment and consumer choice in favour of biofuels, a subsidy for traditional European agricultural feedstocks may represent unfair competition vis-à-vis third, in particular developing, countries; may lock feedstock production into traditional patterns rather than supporting investments into new maybe more GHG and energy efficient feedstocks. Finally, it may not be the best use of limited financial resources, as it does not appear to provide a sufficient pull for the whole chain.

Structural funds, rural development & cohesion fund

Structural Funds could provide key funding for bioenergy investments, particularly in the new Member States. However, against the background of significant historic support for conventional fuels, the target budget for renewable energy sources is too timid and should be increased from 12 to at least 30 per cent of the energy sub-programmes.

As well as supporting biofuels infrastructure and distribution, rural and cohesion funds should be used to help the environment adapt to climate change (e.g. by enabling connections between habitats, by promoting forestry and agricultural production, which will increase the adaptability of ecosystems) as well as tackling the problem itself (e.g. reducing energy emissions by promoting the use of locally produced foods and biofuels etc). Rural development can support measures to ensure take-up, research and development of bioenergy. The European Commission and Member States will need to work in partnership to assess how these limited EU funds can be used cost-effectively to make a genuine difference to GHG emissions.

³ Direct subsidies include income transfers to producers, where the payment is linked to the specific product

⁴ Figures provided by DG Agriculture to the Energy Crops Advisory Committee in February 2006 relating to EU25 areas paid in 2004 and areas claimed in 2005



Overall, public subsidies should be targeted at the bottlenecks in distribution and at the consumer level, and must be open to all biofuel suppliers. Subsidies for supply and processing facilities should be for research and pilot projects. Public financing should not be made available only within the EU, but also to third countries, in particular developing countries, with which the EU trades. Subsidies must not discriminate against non-EU biofuel producers.

Support for developing countries

The EU should support the development of renewable energy supply strategies in developing countries. Such strategies must address technical standards, sustainable infrastructure and other economic, social and environmental aspects. WWF strongly supports promoting regional markets alongside trade for developing countries. The EU Energy Initiative and its Energy Facility should play a lead role in ensuring bioenergies bring social and environmental benefits to developing countries.

WWF will only support biofuels that are environmentally and socially sustainable, hence:

Biofuels must deliver greenhouse gas (GHG) and carbon life-cycle benefits over conventional fuels

Energy crops to be used as biofuels must be selected on the basis of the most efficient carbon (soil and air) and energy balance, from production through to processing, transport and use. Energy-intensive fertiliser input increases nitrous oxide (N₂O) emissions, a highly potent GHG, and intensive cropping may contribute to release soil bound CO₂, especially on peat lands. Some conventional crops can provide these benefits if sustainably produced and processed, and are available for use as biofuel already now. Investments and research should help improving the performances of the most promising crops, but should also and most importantly be oriented towards ligno-cellulosic crops, or other crops that offer better options to reduce CO₂ emissions as well as a reduced impact on the environment.

Biofuels must ensure positive natural resource use and careful land-use planning in producing countries

Permanent grasslands, natural forests, natural floodplains, wet & peat lands, important habitats for threatened species and other high conservation value areas must not be converted into intensive forest or farmland, even if to produce a potential environmental good, such as a biofuel crop. Up to 33 per cent of land in Europe is estimated should be safeguarded for environmental goods by 2030⁵. Furthermore, as with all other production, environmental standards complying with the Water Framework Directive, soil protection and the Habitats and Birds Directives as well as other relevant national legislation should be ensured, as a minimum, for European feedstocks.

Environmental and social assurance

From an environmental perspective, there can be no justification for biofuels that do not provide positive gains in GHG and carbon life-cycle emissions over conventional fuels AND that are not produced sustainably.

WWF promotes the adoption of a mandatory GHG certification scheme for all biofuels, whether produced in the EU or imported. Biofuels should not be accounted for as 100% carbon-free in national GHG inventories⁶.

⁵ EEA ibid

⁶ Signatory parties to the UNFCCC are required to submit regularly an inventory of their GHG emissions. The IPCC has provided guidance on how to estimate and report on anthropogenic GHG emissions and removals, using a standardized tabular reporting format

Carbon life cycle and GHG emissions should be accounted for through a mandatory accounting system. Such a scheme would help to identify, document and eventually reduce GHG leakage in biofuel-related processes, such as fertilising, converting carbon-rich lands etc. in particular from importing countries. Over time such a scheme may help direct governments to only account for the real carbon benefit of biofuels and thus decrease their incentives for GHG-intensive biofuels.

The sustainability of the following issues should be addressed in the development and use of biofuels:

- *Where biofuel feedstocks are produced:* ensuring the integrity of high conservation value forests, floodplains, natural and semi-natural grasslands as habitats and the needs of the biodiversity they harbour with particular emphasis on threatened species including corridors and effective management of buffer zones;
- *How biofuel feedstocks are produced:* using agricultural and forestry management techniques that can guarantee the integrity and/or improvement of soil and water resources;
- *Food, land and water displacements:* an issue of particular concern in the third countries with which the EU will trade in biofuels. All of the currently used biofuel commodities are also food and feed crops. The interest in biofuels has already led to price increases for many of these crops, which can challenge the capacity of poor farming communities to continue buying them for their own needs. But also of concern are EU Member States affected by water shortages where some biofuel crops are already widely produced and their expansion would provide a further unsustainable stress on water resources if simply added to current agricultural land use;

The EU must work towards such a sustainability assurance system, without using certification as a means to prevent imports from 3rd, and in particular developing, countries.

WWF believes that the Commission can:

- Make an un-equivocal commitment on the need for environmental and social assurance for biofuels;
- State that this system will include mandatory assurance for GHG emissions and reporting obligations for environmental and social sustainability issues with a view to improve performance over time;
- State that this system will build upon existing credible certification schemes for forest and agricultural
- State that this will apply to Member States and to all fuel operators, for production in the EU and elsewhere;
- Commit to developing the mechanisms for the mandatory assurance of GHG emissions, and the reporting obligations for environmental and social sustainability issues within one year from the adoption of the new Biofuels directive;
- Commit to developing these through best practice in stakeholder consultation.

for six major sectors: energy; industrial processes; solvents and other product use; agriculture; land-use change and forestry; and waste.



WWF believes that the above issues are of concern whether in biofuels for transport or biomass / biogas for heat and power generation. Thus, a single approach to environmental assurance for all forms of bioenergy should be developed, applicable whether to biofuels or biomass / biogas for heat and power.

Research is key

Significant support should be given to European and national bioenergy research programmes. This research should shed light on the consequences of an expansion of the biofuel market both inside and outside the EU, and how to manage or reduce negative impacts. Priority should go to comparing the different biofuels and renewables, in terms of their agronomic and environmental impacts, as well as GHG emission benefits, and development of appropriate environmental safeguards at a landscape level.

WWF will:

- Champion the need for reduction in the demand for transportation fuels
- Promote sustainable biofuels as part of the solution to reducing GHG emissions.
- Co-operate with the European Commission to develop (adapt) environmental assurance schemes based on the already existing experience with agricultural and forest commodities.
- Work with the transportation sector, biomass industry, the fuel and power sectors, to promote biofuels as a sustainable replacement for unsustainable energy production and use.
- Work with agriculture and forestry sectors to promote sustainable supplies of biofuels through appropriate landscape and water basin level planning that protects biodiversity, and the development and adoption of Better Management Practices.
- Work with authorities, intergovernmental organisations and other NGOs to develop biofuel strategies and incentives to stimulate biofuels supply.