Public consultation launched in April 2007 by the European Commission on "biofuel issues in the new legislation on the promotion of renewable energy"

Response from Legambiente - Environmental NGO - Italy

Abstract

The market deployment of renewable energy sources, including biofuels, is of fundamental importance to reach the environmental policy goals of the European Union. At present the biomass energy sector is of particular concern, since related legislation and market scenarios are evolving rapidly, and since effective development opportunities depend on the definition of a transparent regulatory framework for the sector, and on a realistic assessment of the biomass production potentials of the territory in European countries. Furthermore any action must be implemented in compliance with the general frame of the EU agricultural policy, aiming to re-orient agricultural activities in Europe towards biomass energy production based on local supply chains, which however need to be certified in terms of environmental friendliness, sustainability, effectively renewable and thereby positive net energy balance.

Legambiente supports the idea that biomass energy will play an important role in cutting greenhouse gas emissions and combating climate change and will contribute significantly in the development of renewable energy.

However to make this happen in an environmentally sustainable way, biodiversity needs to be preserved, since there is a risk that the public support and incentive mechanisms granted in economically strong Countries in favour of biomass energy end-up to increase the antropogenic pressure on fragile ecosystems located in the poorer areas of the world. , At the same time these same incentive mechanisms, since favouring also biomass imports from overseas, damage the European local high quality food-agriculture, on which strong expectations from environmentalist groups are focussed as a viable and environmentally benign development model for agriculture worldwide.

For these reasons Legambiente proposes to develop a European Regulatory framework on Biomass energy intended to become the basis for the implementation of related incentive and public support schemes, to be regulated by means of a certification mechanism addressing specifically the following issues, which reflect the 4 fundamental questions raised by the public consultation of EC.

Question 1) How should a biofuel sustainability system be designed?

1. any subsidy or incentive measure should be granted exclusively only for biomass energy products (raw materials, intermediate or final energy carrier or products) which are certified sustainable. As already is being done with electricity produced from renewable sources, if a biomass energy product does not have the sustainability certificate referring to the whole upstream supply chain, it should not be entitled to benefit from any incentive or public support mechanism.
2. accompanying incentive policies need to address specifically also agricultural and forest enterprises, aiming to develop specific incentive measures allowing to favour and to guide the conversion of enterprises operating in agricultural production and forestry towards the cultivation of non-food energy crops, ensuring thereby economically sustainable and stable market conditions and development.

3. the net energy balance of the entire upstream biomass supply chain should be at least positive, thus valorising the short supply chain, which means that related energy crop cultivations should be located at a distance within 50 km from the transformation plant exploiting the biomass for energy production
4. It is herewith made very clear that environmentalists DO NOT AGREE to grant public economic support in favour of any energy (or energy-carrier) produced from biomass imported from outside the European Union. From climatic, environmental, technical and socio-economic point of view, it is much more convenient and effective to process and to transform biomass into biofuels in the countries of origin, and to transport then the final energy products (the biofuels) to consumer countries, rather than transport the biomass raw material and then process it in the country of destination, simply because it receives public economic support in the destination country.
5. the supply chains that envisage fair collaboration between the agricultural and industrial sector should be favoured in order to promote a synergic approach and create the basis for cooperation and not competition between the agricultural sector and the renewable energy production sector.

Question 2) How should overall effects on land use be monitored?

6. The safeguard and environmental protection of the territory where biomass for energy purposes is produced, should always be assessed and verified. The development model we intend to promote is based on agro-energy districts created by local public administrations, by putting in place the appropriate regulatory framework for the development of networks between biomass producers and biomass processing enterprises, diversified by type of energy product (carrier) being produced and not necessarily defined only in geographical terms. These Districts should be able to satisfy territorial energy needs through distributed energy generation aimed to valorise as much as possible the multifunctionality of agricultural and forest enterprises in their different production aspects (environment, energy, food and non-food production, local economic development and employment). These agro-energy districts should not create constraints to the development of enterprises, but instead allow them to choose freely which crop to plant depending on convenience and market conditions.
7. We hold it unwise to promote biomass energy in any case, always and everywhere. Instead we support biomass energy only where related biomass processing is done nearby the territory of biomass production, and where it is able to satisfy local energy needs and to support local economic development and employment, valorising thereby the territory and its environmental sustainability. Furthermore we deem it fundamental that the entire upstream supply chain is subject to sustainability certification with respect to net energy balance, effectively avoided CO2 emissions, and environmentally benign Good Practices in Agriculture. The environmental benefits generated by agricultural enterprises must arise not only from the production of bio-fuels or generally biomass for renewable energy production, but also from appropriate and sustainable land management practices, since land is increasingly becoming a scarce and precious resource. Also the landscape needs to be protected, and the vocational destination of the territory (whether it be agricultural, tourism, residential or other) as well as the safeguard of local biodiversity need to be considered.
8. another fundamental aspect for the safeguard of the territory is the assessment of sustainable water exploitation with view on the long term protection of available water resources, the vocational destination of the territory and agricultural best practices.

9. the same concept to be adopted for the assessment of the net energy balance should apply also for the certification of avoided Greenhouse Gas emissions. The beneficiary effects on climate change arising from CO2 emissions avoided by using biofuels and biomass energy must be determined by subtracting the CO2 emissions related to all (direct and indirect, energy and non energy) inputs consumed during the entire upstream supply chain. The avoided CO2 net ratio is also fundamental since it creates an effective incentive and encourages research in the development of improved technologies for the production of second generation biofuels.
10. it is fundamental to encourage small size distributed energy plants using locally produced biomass raw materials. Since this approach brings generation close to consumption is also produces the beneficiary effect of reducing transmission and distribution losses and the frequency of black-outs. Furthermore it also helps to persuade local populations to accept the plants.
11. we believe it important to apply substantial tax reductions or exemptions on biofuels favouring the whole transport sector, including specific regulations liberalising self-consumption by farmers and remote mountain communities of biofuels produced by themselves.
12. the European Union should recommend incentive policies for the use of locally produced biofuels specific for heating of public buildings and agricultural enterprises.
13. Legambiente believes that, by no means should there be public support in favour of biomass produced in areas where there is competition with other fundamental needs of local populations namely:
    a. the local population suffers from:
        i. food scarcity
        ii. lack of locally produced bio-pharmaceuticals
        iii. biomass energy deficit (deforestation)
        iv. scarcity of building materials of biological origin

       competing with the envisaged biomass energy use.
    b. non-food crop cultivation provokes degradation in social welfare.
    c. The civil rights of local population and of plantation workers are not guaranteed

Question 3) How should the use of second-generation biofuels be encouraged?

We agree that biofuels should be used as alternative fuels in transport, together with liquid natural gas, compressed natural gas, liquefied petroleum gas (LPG), hydrogen. Nevertheless, public support in favour of presently available biofuels might be viewed as a transitory measure allowing to reduce greenhouse gas emissions, to diversify the energy sources used in the transport sector, and also to give time to the European economy to prepare for other energy supply solutions which presently have not yet reached market maturity. The European Union should support, exploit and export the know-how and experience available in European countries, and should invest in research in order to maintain its leading position in the forefront of technological development in low-carbon technologies. By adopting this kind of strategy the European Union will favour the reduction of biomass energy production costs.

We also agree that second generation biofuels are particularly promising. Accordingly we recommend the Commission to effectively and significantly support their development. At the same time the environmental benefits and impacts of all new processes need to be appropriately monitored and assessed.

Furthermore we believe that the information and data coming from scientific research and applied experimentation should be disseminated and made available to the public..

Question 4) What further action is needed to make it possible to achieve a 10% biofuel share?

In several EU Member States there is sufficient land surface available and conditions are favourable for the production of biofuels and biomass energy, whereas there are other EU countries where the available land surface is not sufficient to allow for the production of biofuel quantities as required by recently defined EU binding targets. There is general consensus that Italy does not have sufficient agricultural land surface to allow for the production of biofuel quantities as required by the recently agreed EU binding targets. Since therefore our country will be obliged to import biofuels from other countries, Italy may become a leading actor in the seed sectors for new crop species. We therefore suggest a European community strategy to diversify roles and tasks between different EU Member countries within the framework of the common EU policy aiming to reach by year 2020 the 10% target for the share of biofuels in the transport sector.