

OAS/DSD statement on the development of biofuels

This policy statement sets out the role that the General Secretariat of the Organization of American States will play, and the stance it will adopt through its Department of Sustainable Development, in supporting the efforts of OAS Member States at exploring the development and use of biofuels as part of their energy mix. This policy is intended to serve as a guide to member states and development partners alike in helping to ensure that interventions in the biofuels sector take account of all the relevant social, economic and environmental parameters at the national, regional and hemispheric levels and are sustainable in all important respects.

Background

Global interest in the development and use of biofuels, such as ethanol and bio-diesel, and biomass for electricity generation has been spurred by several factors associated with the use of traditional fossil fuels such as the rapid rise in petroleum prices, growing concerns over energy security, and the acknowledged link between fossil fuels consumption and global climate change.

The use of biomass for energy, such as the use of ethanol as a transportation fuel dates back over 100 years. Its current development has its roots in the Brazilian sugarcane-to-ethanol program beginning in the 1970s. During the past five years, there has been a dramatic increase in biofuels research, development, and use, throughout much of Latin America and the Caribbean but particularly in the United States and Brazil who are the principal players in the international biofuels market. The use of sugarcane as the primary feedstock, the articulation of subsidies and incentives programs, and Brazil's long experience in agro-energy make the country one of the world's top two producers as well as being the most competitive in terms of production costs; estimated to be approximately US\$ 0.83/gallon in 2005 (Elobeid and Tokgoz, 2006).

In the United States, the production of biofuels (at commercial scale) started during the 1990s supported by subsidies and tax incentives in response to increasing international petroleum prices and in an effort to support the agricultural economy. Corn constitutes the main feedstock for ethanol production in USA, accounting for 93 percent of the current total production. In comparison to sugarcane, corn appears as a less efficient raw material and has a higher production cost for ethanol; estimated to be approximately US\$ 1.09 per gallon in 2005 (Elobeid and Tokgoz, 2006).

The experiences from the United States and Brazil suggested that, at differentiated levels, the countries of the Western Hemisphere may develop the potential for expanding biofuels production. Several OAS member countries therefore are also investigating the potential for their own development and use of biofuels.

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The relatively rapid growth of the biofuels industry in Brazil and the USA suggests that it can play an important role in a country's energy mix, especially for electricity generation and transportation. However, the OAS recognizes that:



- Bio-fuels development is a highly complex and complicated endeavor;
- Not all of its associated impacts are positive and their production and use must be assessed carefully and in a holistic manner with detailed attention be given to the following:
 - Sustained advancements in biotechnology and industrial and agricultural processes;
 - o Adequate research and testing facilities;
 - Training and professional development for the sector's labour pool;
 - Sustained coordination between governments, private sector, NGOs, Universities and research institutions;
 - Sustained investments in all aspects of the industry;
 - o A comprehensive regulatory and legal framework to lay the groundwork for future investments;
 - o Policies and programs to mitigate the negative economic, social and environmental impacts of bio-fuels production.

Against this background, the Organization of American States (OAS) remains committed to supporting its Member States in the area of sustainable energy development and use. The following mandate was clearly articulated in the resolution from the 37th OAS General Assembly in Panama, which states that:

"... the region must endeavor to reduce its vulnerability to fluctuations in the price and supply of energy and seek to increase its energy independence through measures such as, the diversification of the energy matrix, favoring an increase in the sustainable use of renewable and cleaner energy or other modalities, as appropriate, in accordance with each country's legislation, improving energy efficiency in general in all sectors of the economy, and increasing their coverage of energy services for social development purposes." (Panama Declaration, #5).

Consistent with its sustainable energy commitments, and in response to the growing interest and uncertainty that surrounds biofuels in the Americas, the OAS Department of Sustainable Development (DSD) will support member states to evaluate the benefits and consequences of various energy alternatives to ensure that the selected options produce environmental benefits while fostering poverty alleviation and socio-economic growth.

In the particular case of biofuels, the OAS/DSD acknowledges there is no single solution to the energy challenges facing Member States and that any assessment of biofuels use and development in the Americas needs to be analyzed on a case by case basis, taking account of the potential economic, social, and environmental impacts on land, air and water caused by the use of available natural resources in a particular country's scenario.

¹ Similarly, the Panama Declaration recognizes the potential of biofuels for diversifying the energy matrix of the Hemisphere. In this regards, the Member States, "will join efforts to share experiences gained in the region, with a view to achieving maximum efficiency in the sustainable use of those sources to promote social, technological, agricultural, and productive development" (Panama Declaration, #6).



In this regard, assessments of biofuels use and development will address the following issues:

- The ideal social, economic and environmental conditions under which sustainable biofuels can flourish;
- The ideal policy framework that will support the development of a sustainable industry;
- The anticipated positive and negative economic, social and environmental impacts of bio-fuels development;
- The levels of financial investments that will be required in the short medium and long term and how such investment can effectively be mobilized without diverting resources from the development of other sectors;
- The production and distribution arrangements that are required and how these arrangements can be best established;
- The various cost-effective measures that can be applied to mitigate any negative impacts of bio-fuels development;
- The human resource requirements for bio-fuels development in the short, medium and long term and how these requirements can be met in a costeffective and sustained manner;
- The incentives regime, if any, that is required to support the development of the bio-fuels industry.

The OAS will pay particular attention to the impact of any biofuels program on the available agricultural land and its quality in relation to, among others, crops, water consumption, air pollution, and soil degradation. Such evaluations will address issues such as potential displacement of other yields (including food crops) or alternative land development options. Conservation practices shall be considered so as to ensure the best scenarios to prevent environmental and socio-economic disruptions and net loss of environmental services.

The OAS/DSD will encourage Member States to consider bioenergy production as a multi-product outcome process that must facilitate the efficient use of natural resources and energy inputs, especially considering their best use for fostering environmental protection and poverty alleviation. Only in cases where it is confirmed that biofuels may be produced cost-effectively and in an environmentally sustainable manner, will the DSD provide assistance to support their development.

The OAS/DSD recognizes that research and development related to next generation of biofuels technology may allow for the use of a wider variety of feedstocks which may lead to shifts in the production potential of biofuels. Such a development may thus necessitate a reassessment of the potential sustainability of biofuels as the technologies improve. Consequently the OAS/DSD recognizes the need for: (a) continuous updates on technological and market developments that will allow it to respond to each country's agricultural sector demands; and (b) case by case technical and socio-economic assessments that should include the analysis of issues such as policy and legal



frameworks, natural barriers for bioenergy production, financial challenges and opportunities, environmental impacts, among others.

Conclusion

In summary, the OAS/DSD will assist the efforts of Member States to evaluate the positive benefits as well as the potential negative consequences associated with the development and use of biofuels. This approach acknowledges that there may be instances, given the availability of land, biofuel feedstocks, and other inputs, where biofuels offer a significant opportunity to improve energy market conditions in a given country. On the other hand, there are likely to be instances where the economic, social and/or environmental impacts of biofuels program development may not offer a positive contribution and should be avoided.

Biofuels have the potential to contribute to energy diversification, reductions in national energy expenditures, the creation of rural jobs, and reductions in energy impacts on the environment. However, biofuels must be approached in the context of an energy portfolio that draws upon a diverse mix of energy sources and which emphasizes energy efficiency. There is no "silver bullet" wherein a single technology or resource will solve all energy challenges. However, biofuels may offer an important contribution in the pursuit of sustainable energy development.

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