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Proposed work programme on Bioenergy and Trade

Introduction

According to the International Energy Agency World Energy Outlook 2006, by 2030 biofuels will account for 7% of the fuel road consumption in the reference scenario, up from 1% today. The percentage will raise to 7% in the policy scenario

In both scenarios, the United States, the European Union and Brazil account for the bulk of the increase and remain the leading producers and consumers of biofuels.
Ethanol is expected to account for most of the increase in biofuels use worldwide, as production costs are expected to fall faster than those of biodiesel – the other main biofuel.
The share of biofuels in transport-fuel use remains far and away the highest in Brazil – the world's lowest-cost producer of ethanol.

Today, most biofuels are produced and consumed on domestic markets, and there is only a small amount of trade in biofuels: Brasil has experimented an exportable surplus in ethanol, and there has only been some limited intra – EU trade of biodiesel.

Reasons behind an expected increase in biofuel trade:

- Energy security. Diversification in fuel imports from countries with unstable regimes;
- Market development for agricultural commodities and potentiality for rural development;
- Environmental reasons linked to the Kyoto Protocol commitment.

The reasons listed above, together with the mandates set up by Governments (EU, USA, Japan, China) point toward the likelihood of more international trade in biofuels.
In fact, developed countries will become constrained by a limited availability of agricultural lands.

On the contrary, developing countries, like Malaysia, Thailand and Indonesia, feel the export of feedstock for biofuel as a major export potential opportunity.
As tropical or sub-tropical countries, they have a comparative advantage in producing biofuel due to their longer or year round growing seasons together with large areas of available arable land.

There are also concerns that increased production of feedstock and biofuels in developing countries might contribute to increased food insecurity and prove environment damages.

Toward this end, and looking at bioenergy as a global and sustainable commodity, an in depth examination could focus on:

1. Classification of bioenergy (agricultural, industrial or environmental goods) in the World Trade Organization and in the World Custom Organization (Harmonised Commodity Description and Coding system – HS) frameworks;
2. Assessment of existing Preferential Trade Arrangements;
3. Analysis of domestic regulations and standards for biofuel development;
4. Evaluation of the role of a stable long term carbon price in the global energy market.

Possible issues to be examined by the Global Bioenergy Partnership (GBEP)

1. **Classification of bioenergy (agricultural, industrial or environmental goods) in the World Trade Organization and in the World Custom Organization (Harmonised Commodity Description and Coding system – HS) frameworks.**

   The issue

   Crucial to the operation of a system of bound tariffs is the classification of products. WTO law says nothing about what the categories should be, it remains the sovereign right of WTO members to determine the way in which they classify products for purposes of binding tariffs. However, the vast majority of WTO Members are also Member of the World Custom Organization and, in that capacity, are bound by treaty to use the system of classification evolved by the WCO, known as the Harmonised Commodity Description and Coding system – HS.

   Consequently, WTO practice is to negotiate tariff based on that system. The requirement to use the HS is limited to those classifications at the so called six digit level: this means that WTO Members are free to introduce more specific sub-classifications that are not part of the HS. However, by virtue of Article II of the GATT, the effect of such sub-classification cannot be to increase the rate of tariff applied to that sub set of goods beyond the bound rate for the more general HS category to which it belongs. As well, any such sub-classification cannot violate the Most Favored Nation (MFN) obligation with respect to the treatment of "like products".

   An example:
   Ethanol is classified on the basis of its chemical composition as undenatured (220710) and denatured (220720) alcohol in the Harmonised system. Therefore these classifications go uniquely to its chemical composition, and there is no classification or sub-classification specific to fuel ethanol as opposed to ethanol used for other purposes.

   Since classifications are the basis for tariff bandings in WTO's Members schedules, the lack of HS classifications **makes it difficult to get precise biofuel trade statistics, but may impede also efforts to liberalise tariffs on biofuels**.

   HS classification also importantly determine whether or not a product is an **agricultural product** under WTO rules. Annex 1 of the WTO Agreement on Agriculture (AoA) states that the provisions of the Agreement apply to HS chapters 1 to 24 as well as to a specified list of products with other HS headings. While ethanol, in HS chapter 22 is considered agricultural good, biodiesel falls under Chapter 38 and is thus considered as industrial good. The AoA has not only separate rules that affect tariff rates but also different rules with regard to subsidies and other domestic policies that affect trade.

   Finally, paragraph 31 (iii) of the Doha Development Agenda calls for "the reduction, or, as appropriate, elimination of tariff and non tariff barriers to **environmental goods and services**" .
   Before the suspension of the Doha negotiations on July 2006, the environmental goods negotiations focused on how to define "environmental goods" and criteria to identify them.

According to some countries, the definition of environmental goods cover, inter alia, renewable energy products, which could include ethanol and biodiesel and related products. Improved market access for products derived from or incorporating clenear technologies, such as flexi fuel engines and vehicles, could also be pursued. Moreover parts and components of biodiesel and bioethanol plants could be classified as environmental goods. Importantly, however, while biodiesel is classified as an **industrial product** under the HS code 382490, ethanol is classified as agricultural product under the HS code 2207.
Some countries argued that that only products subject to Non-Agricultural Market Access (NAMA) negotiations could be included in the Environmental Goods and Services (EGS) negotiations, thus excluding agricultural product.

Possible analysis by GBEP to address the classification problem:

a) **Amendment of Harmonised System** introducing distinctive HS headings for biofuels based both on the chemical and biological composition of the substance and on its use as fuel. HS classification of biodiesel provides an obvious precedent.

b) **Negotiated Agreement in the WTO**. It would be possible to imagine an Agreement on Biofuels where WTO Members agreed to limit tariffs on biofuels or allow them entry tariff free regardless of the existing HS classification and existing domestic nomenclature.

c) **Unilateral Options**. Neither WTO or WCO obligations would prevent a WTO Member from applying a lower rate of tariff, due to its own energy and environmental policy, than that bound for a six digit or higher HS classification to some sub-set of goods within that classification, as long as it provides MFN treatment to "like products".

2. Assessment of existing Preferential Trade Arrangements

Analysis of biofuel international trade under main Preferential Trade Arrangements:

- Generalised System of Preference (and the new GSP plus incentive scheme), including Everything but Arms (EBA);
- The Cotonou Agreement with African, Caribbean and Pacific Countries;
- Caribbean Basin Initiative (CBI);
- Euro Mediterranean Agreement.

Have the trade biofuel flows been increased thanks to the Preferential Trade Agreements? Which are the obstacles to be removed or clarification to improve their performances? The Enabling Clause, no discrimination between different countries.

3. Analysis of domestic regulations and standards for biofuel development

Review of different mandatory or indicative target and fiscal incentives on bioenergy production and use, set up by Governments, like the European Directive on biofuels, the US Energy Policy Act, the Brasilian National Alcohol and the Biodiesel Programme, the Renewable Energy Law of the People's republic of China, the White Paper on Renewable Energy of South Africa. Best and worth cases.
What is the consistency of domestic regulations and standards with WTO rules on international regulations and technical barriers to trade?

4. Evaluation of the role of a stable long term carbon price in the global energy market

While we are seeing the present signs of climate change, the divergence between the current trend of the global energy related emissions and the protection of the global climate security is dramatic.

In this perspective, Kyoto Protocol is a preliminary step: industrialised countries will probably meet the short term Kyoto targets, improving the available technologies both in national measures and in CDM and JI projects.
Nevertheless, the "Kyoto System" and the available technologies, in 2008-2012 and beyond 2012, are not enough to drive the global extraordinary effort towards stabilizing CO2.
According to the IEA "Alternative Scenario", based on the mandatory policies, regulations, market instruments and voluntary agreements, already adopted or considered by the industrialised countries to improve energy efficiency and to reduce emissions, in 2030 the OECD emissions will be reduced by 16%, resulting in a reduction of 5% of the global emissions.

Stabilizing CO2 request a long term strategy to develop and disseminate radical changes in the energy technologies and in the global energy system. A much broader strategy, and much more global measures are needed

- ✓ research & innovation, and energy policies, to reduce the "carbon intensity" of the economy through the development and dissemination of the new renewable and energy efficiency technologies, hydrogen and carbon sequestration, such as a new generation of nuclear power;
- ✓ making the new clean and safe energy sources and technologies available and cost effective in the emerging economies and in developing world, to address both energy security and emissions reduction.

To be effective in approaching CO2 stabilization, the long term global strategy and measures should be designed and should start immediately.

The challenge is to combine the short term measures to meet Kyoto targets with the long term strategy to develop radical changes in the global energy system, in order to avoid a "conflict of interests" between the short term investments for meeting the "administrative" obligations under Kyoto and the investments for the long-term emissions reduction.
The trade-off between the current and the future measures is a key issue in the complicate game of the post Kyoto regime.

Considering the lifetime of power plants and industrial process (15 to 30 years), and taking into account the IEA estimated dimension of the investments in the global energy system in the next 20-30 years (17 trillion $), the governments parties in the Climate Change Convention and in the World Trade Organization should consider the introduction of rules in the global energy market, starting from now and based on a long time scale, for the application of

- ✓ progressive more stringent "carbon intensity standard" for the energy technologies;
- ✓ progressive "carbon price" to be applied to fuels and technologies.

and for the recognition of

- ✓ carbon credits in present Clean Development Mechanism and Joint Implementation Kyoto Mechanisms , corresponding to future (post 2012) emissions reduction from the use of new technologies.

This could be the framework for credible incentives for long term investments in new low carbon technologies, as well as for creating a post 2012 global emission trading system able to drive the innovation in the global energy system.

Bioenergy, first and second generation, could benefit from a stable long term carbon price for further development also in the CDM and JI context.

References

Parts of this proposed programme of work have benefited from the analysis made in the following papers, drawing in some cases similar pre-conclusions.

1. WTO Discipline and Biofuels, IPC and REIL, October 2006
2. The Emerging Biofuel market: Regulatory, Trade and Development Implications UNCTAD, December 2006
3. EU Strategy on Biofuels, Communication of the European Commission, COM (2006) 34 def., Bruxelles 8.2.2006
4. World Energy Outlook 2006, IEA