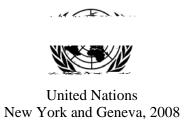
## **United Nations Conference on Trade and Development**

# Making Certification Work for Sustainable Development: The Case of Biofuels



#### Note

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## **Executive summary**

Increasing fossil fuel prices, energy security concerns and environmental consciousness – especially related to climate change stabilization – have motivated countries to explore alternative energy sources. Biofuels, fuels derived from biomass, are among the alternatives which are being considered. Under careful strategies and appropriate regulations, biofuels could be instrumental to slowing down the process of global warming and enhancing energy security, as well as providing countries opportunities to diversify agriculture production, raise rural incomes and enhance access to commercial energy, especially for rural communities.

Global energy and environmental concerns combined with comparative advantage



#### Chapter 1

#### Overview of certification developments and comparison of schemes

A variety of stakeholders have been motivated in recent years to set standards and develop certification schemes with the aim to ensure that biofuels are produced in a sustainable manner. The aim of this chapter is to provide a brief overview of the current initiatives that have been developed or are being explored in relation to sustainable biofuel production. The intention is not to cover the minutiae of all the schemes but to familiarize readers with the actors involved in certification initiatives and to provide with a summaries of the action being taken in this area. (For an overview of the types of criteria proposed by existing sustainability schemes see appendix.)

#### 1.1 Logistical framework for certification

The development of a certification schemes is an involved process. It requires an independent third party to assess quality based on a predetermined set of principles. Principles are usually established as general starting points that describe the objective of certification. These objectives are then translated into measurable requirements by criteria. Testing then utilizes indicators or verifiers which serve as quantitative or qualitative minimum requirements for certification. <sup>4</sup>

#### Box 1. Certification and labelling

Certification is a procedure by which a third party gives written assurance that a product, process or service is in conformity with certain standards. Certification can be seen as a form of communication along the supply chain which provides assurance that a product, process or service is in conformity with certain requirements. The certificate demonstrates to the buyer that the supplier complies with certain standards. A label is a symbol indicating that compliance with standards has been verified. While the certificate is a form of communication between seller and buyer, the label is a form of communication with end consumers.

Source: These definitions are adapted from FAO, The concepts of standards, certification and labelling, found at: http://www.fao.org/docrep/006/y5136e/y5136e07.htm

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The aims of certification schemes are dependent on the interests of the actors who are spearheading their establishment; the formulation of the mission and sustainability definition for certification is usually developed by these actors. However, formulation of sustainability criteria and indicators necessitates analysis of local conditions and the involvement of relevant stakeholders who will be impacted by certification. Ideally, stakeholders are consulted and their input integrated into certification schemes that take into account various local conditions. Once the criteria and indicators have been established, they must be tested to ensure that they are clear, appropriate and effective, as well as adequately understood and accepted by the users or stakeholders. These tests should be evaluated and used for modification and improvement of the scheme before the finalized criteria and indicators are implemented.

#### Box 2. Conformity assessment procedures

Conformity assessment procedures are any procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled. These include, among others, (a) procedures for sampling, testing and inspections; (b) evaluation, verification and assurance of conformity; (c) registration, accreditation and approval as well as their combinations.

Source: Global Facilitation Partnership for Transportation and Trade (GFP), Standards and Conformity Assessment – Definitions, Found at: http://www.gfptt.org/Entities/TopicProfile.aspx?tid=fd7240bd-edf4-4c74-a6d7-1040da175680.

These are the ideal circumstances for the development of a certification scheme yet, as will be discussed later, this situation is not necessarily realized.

#### **Box 3. Steps for developing certification schemes**

**Principle** – General starting points that describe the objective of certification. A principle is usually formulated in an abstract and non-quantifiable way.

**Criteria** – Statements that translate objectives into substantive requirements that have to be complied with. A criterion is much more specific than a general principle.

**Indicator/verifiers** – quantitative or qualitative minimum parameters by which a criterion becomes testable.

Reporting – Information that is requested when testable indicators are not available. In reporting, information is requested, but no minimum requirements are set that have to be met.

Source: These definitions are adapted from van Bueren EL and Blom E (1996). Hierarchical framework for the formulation of sustainable forest management standards. The Tropenbos Foundation. Wageningen, the Netherlands. Found at:

#### 1.2 Key actors in the development of biofuels certification schemes

The development of sustainable biomass certification systems can be described from the point of view of four stakeholder groups: (a) national Governments and regional groupings (the European Union in particular); (b) companies; (c) non-governmental organizations (NGOs); and (d) international organizations and initiatives.<sup>5</sup> The numerous initiatives being undertaken are in various stages of development, ranging from the discussion phase to full implementation.

It is noteworthy that the four categories of stakeholders have varying interests in certification of biofuels and their related feedstock. While they each aim to promote the sustainable production of biofuels, their motivations to develop certification schemes vary. Governments view certification as a policy instrument that will promote sustainable production and consumption, and provide information on which to base policies. International bodies and initiatives have similar interests, but also view certification as providing an opportunity for collaboration. Companies see certification as an instrument for environmental marketing and product differentiation, and as means of ensuring market access as well as product acceptability by consumers. Additionally, certification provides businesses with a tool for controlling the origin and quality of materials, products and or services as well as information to facilitate the optimization of the production process. For NGOs, certification is again viewed as a way of promoting sustainable management but also as a means of acquiring information on the impact of products and whether they meet established standards.<sup>6</sup>

#### 1.2.1 National Governments and regional groupings

Currently, there are a number of countries active in biomass and biofuels certification, including Belgium, the Netherlands, Germany, the United Kingdom, Switzerland, Brazil, Canada and the United States. On the supranational level, the European Commission is active in the development of certifying biofuels and biomass.

#### **European Commission**

At the European Council of March 2007 in Brussels, European Union heads of State and Government reaffirmed the community's commitment to the development of renewable energies beyond 2010. They endorsed the European Commission's proposal for a mandatory target of a 20 per cent share of renewable energies in overall community energy consumption by 2020, and a mandatory 10 per cent minimum target for the share of biofuels in transport petrol and diesel consumption by 2020. Ministers further agreed that the binding character of the biofuel target should be subject to production being sustainable, second-generation biofuels becoming commercially available, and the directive relating to the quality of petrol and diesel fuels being amended to allow for adequate levels of blending.

Considering that the definition of sustainability criteria is likely to remain highly controversial and that a number of member States and MEPs seem reluctant to commit to blending targets before an agreement is reached on sustainability criteria – fearing that quantitative targets alone could encourage investments in biofuels which may not be sustainable – it is unclear when the proposed directive on the promotion of the use of renewable energies will come into force.

In parallel with the efforts carried out by the European Commission, several European Union member States are taking initiatives to develop certification schemes for biofuels. Member countries

In June 2007, the Government announced a package of measures on the sustainability of biofuels supplied under the RTFO. Additionally, Douglas Alexander, then United Kingdom Minister of Transport, simultaneously launched a public consultation on how carbon and sustainability reporting should operate under the RTFO.

Among the sustainability measures announced on 21 June 2007, the Government stated that it aims to reward biofuels under the RTFO in accordance with the carbon savings offered from April 2010 and to only reward biofuels if the feedstocks from which they are produced meet appropriate sustainability standards from April 2011.

Following consultation, the Government has set stretching indicative targets for the level of carbon and sustainability performance expected from all transport fuel suppliers claiming certificates for biofuels in the early years of the RTFO. The targets cover (a) the level of greenhouse gas savings expected from the biofuels used to meet the RTFO (40 per cent in 2008/09 compared to fossil fuels, 45 per cent in 2009/10, and 50 per cent in 2010/11); (b) the proportion of those biofuels expected to come from feedstocks grown to recognized environmental standards (30 per cent in 2008/09, 50 per cent 2009/10, rising to 80 per cent in 2010/11); and (c) the amount of specific information expected to be included in sustainability reports (50 per cent in 2008/09, rising to 70 per cent in 2009/10 and 90 per cent in 2010/11).

The main topics that the consultation covered were the scope and format of monthly and annual reports from biofuel suppliers, as well as carbon and sustainability reporting methodologies and default values. The public consultation closed in September 2007. <sup>19</sup> Current estimates are that the RTFO will save about 0.7–0.8 million tons of carbon a year. <sup>20</sup>

#### Germany

Germany is the world leader in biodiesel production, with a predicted production capacity of approximately 3.7 million tons in 2007.<sup>21</sup>

On 1 January 2007 the Biofuel Quota Act came into force. The act introduces a quota for the minimum addition of biofuels to petrol and diesel in Germany – progressively increasing the biofuels share from 6.25 per cent in 2009 to 8 per cent from 2015 on – and empowers the Government to establish sustainability criteria for biofuels that are eligible to participate in the quota system and benefit from tax relief.

On 5 December 2007, the German Government passed the Biomass Sustainability Ordinance (BSO) within the Integrated Climate and Energy Programme. The ordinance contains sustainability criteria which refer to (a) a minimum required level of  $CO_2$  savings from biofuels as compared to fossil fuels through the life cycle of the product (30

## Switzerland

Switzerland is a minor biofuels producer and consumer. Nevertheless, recent government

The UNICA-FERAESP (Union of State of São Paulo Rural Workers) Protocol was signed in February 2006 with the main objectives to enhance rural labour conditions in the sugar cane sector and develop best practices in some key areas, such as transport of rural workers and transparency in the calculation of their salaries.

Pending the completion of the certification programme, the Brazilian Government remains active in regulating the environmental impact of the sugar cane industry. Activities that the Government controls include: (a) sugar cane fields burning; (b) bagasse management; (c) soil quality; (d) herbicides and insecticides storage and usage; (e) liquid waste application for fertilizer, forest preservation, surface and ground water quality; (f) water usage; and (g) noise pollution. <sup>28</sup>

In 2003, the Brazilian Government created the Biodiesel Programme and designed one of its main targets to promote social inclusion and enhance environmental sustainability. The Social Fuel Seal has been developed as part of the National Biodiesel Programme. The seal, awarded by the Ministry of Rural Development, establishes conditions for industrial producers of biofuels to obtain tax benefits and credit. To do so, they must purchase feedstock from family farmers, enter into legally binding agreements with them to ensure specific income levels and guarantee technical assistance and training to the farmers. <sup>29</sup> More specifically, the progressive tax br

programme on environmental issues, resource conservation issues, the growth and use of cultivated, invasive and noxious plants and their impact on the environment and agriculture.<sup>37</sup>

The EPA is directed to promulgate regulations to implement the EISA, including development of accounting protocols and methodologies for determining life cycle GHG emissions. The implementing legislation is expected to be developed throughout 2008 and enter into force in 2009.

A number of critical issues are implicated by the new requirements to account for life cycle emissions and for the kind of land used for biomass production, including the possible need for a traceability and certification process such that renewable fuel purchasers can be assured that the renewable fuel meets the carbon standard as well the requirements related to land use, and the related possible need for third-party verification. In addition, an open question remains about how will life cycle carbon be calculated, i.e., what methodology will be used.

Turning to the specific initiative of the State of California, the California Biomass Collaborative is a state-wide collaboration of Government, industry, environmental groups and educational institutions. The aim of the collaborative is to enhance the sustainable management and development of biomass in California for the production of renewable energy, biofuels and products.<sup>38</sup>

In April 2006, Governor Schwarzenegger issued an executive order that called for actions by the State to meet targets for biofuel and biopower development: producing 20 per cent of its biofuels within California by 2010, increasing to 40 per cent by 2020 and 75 per cent by 2050, and producing 20 per cent of the renewable electricity generated from biomass resources within the State by 2010 and maintaining this level through 2020. This resulted in the California Biomass Collaborative being tasked with preparing a roadmap for biomass research and development. The roadmap published in 2006 includes examination of standards and best practices for sustainable feedstock supply, land use, environmental impacts and resource monitoring.<sup>39</sup>

National Governments and regional groupings play an important role in establishing the policy framework for biomass certification, setting biofuel sustainability criteria, and developing policy measures such as blending targets, taxes relief and support schemes to promote the sustainable production of biofuels.

#### 1.2.2 Companies

carbon dioxide emissions related to the growing, production and transport of palm oil, an issue that has not been covered by RSPO criteria.

It is through collaborations such as the Dutch project group, RSPO and the Roundtable on Sustainable Biofuels that many companies are pursuing certification efforts. Recognizing the certification will require a harmonization of standards and criteria, they have chosen to work in collaboration with other interested parties. However, several companies also continue to pursue sustainability standards on their own.

British Petroleum (BP) has been actively engaged with the United Kingdom Government in the formulation of the RTFO. In addition, through its membership of the Low Carbon Vehicle

biofuels industry will bring. While most have acknowledged that biofuels may play an important role in the energy and climate change strategy of many nations, they have emphasized that policymakers must recognize their impact on food security, biodiversity, water and soil, as well as the fact that greenhouse gases emissions savings should be evaluated in terms of the life cycle of a product.

As a means of promoting the desirable goal of environmentally and socially sustainable production of biofuels, NGOs have often sited th

using the most sustainable methods possible and that "includes GHG verification for the entire life

reviews existing certification systems linked to biomass certification, compiles overviews of certification labels (forestry, bioenergy and palm oil, agricultural and trade labels), details the crop requirements for a number of utilized crops, and ex

## International networks and round tables

Eugene

In June 2007, RSB released its "Draft Global Principles for Sustainable Biofuels Production" for global stakeholder feedback and discussion, namely: (a) legality (biofuel production shall respect all applicable laws of the country in which they occur, and all international treaties and agreements to which the country is a signatory); (b) consultation (biofuel projects shall arise through fully transparent, consultative and participatory processes); (c) climate change and greenhouse gases (biofuels shall contribute to climate stabilization by reducing GHG emissions as compared to fossil fuels through their life cycle); (d) human and labour rights (biofuel production shall not violate human rights or labour rights, and shall ensure decent work and the well-being of workers); (e) socioeconomic development (biofuel production shall not violate land or water rights, and shall contribute to the social and economic development of local,

#### Chapter 2

#### Possible issues of concern in the implementation of certification schemes

The rapid expansion of the biofuels market has led to considerable concern from the international community and civil society that production may have harmful environmental and social effects. Certification offers a significant opportunity to qualify biofuels as a truly sustainable energy source. However, certification comes with its own troubling implications.

In order to fully understand the prospects for future sustainability certification of biofuels, it is necessary to analyze the possible issues of concern so that the implications can be fully understood and barriers to implementation of certification can be recognized and overcome.

#### 2.1 Issues with measurable indicators

As many studies and stakeholders have acknowledged, many of the criteria necessary for certification of biofuels and related feedstocks are already employed in existing certification systems, with the notable exception of criteria which refer to GHG emissions. However, it is important to recognize that, for any biomass certification system to be effective, it will have to employ precise and strong indicators. The indicators should be formulated as specific and quantitative as possible to forestall misunderstanding or varied interpretations. Unfortunately, though many of the necessary criteria for environmentally and socially sustaina

Lewandowski and Faaij provide a number of suggestions for clearly formulating indicators for biomass certification. Specifically, they call for the use of scientifically sound or legislative threshold values where available. <sup>69</sup> Currently, there are threshold values available for the loads ecosystems can bear (e.g. nitrate residues) and for the amounts of inputs, like slurry fertilization in agricultural production, that could be applied to criteria for biomass certification. <sup>70</sup> Additionally, they assert that for some indicators, such as the "acceptable" amount of soil erosion, it is impossible to articulate and apply an applicable threshold level. Therefore, such indicators in a biomass certification scheme will require clear and detailed instructions and management rules.

The Cramer Commission has also recognized that, even when a considerable effort is made, it is not always possible to use a "quantitative indicator as a yard stick" in sustainability certification. As such, the Dutch project group has proposed relying on reporting in regards to certain criteria in order for sustainability to be judged. For example, under their proposed system, the effect of large-scale production of biomass on local prosperity would be difficult to quantify. Therefore, they require reporting on the issue that will serve as a measure of sustainability with regard to that particular theme.

Perhaps most significantly, Lewandowski and Faaij highlight the fact that no functioning certification system currently employs measurablereporF

in which no specific values are documented. The Dutch project group developed a method for the calculation of GHG reduction by the use of biomass instead of fossil fuels in the entire chain of production up to and inclusive of the end use of biomass. France and the United Kingdom are equally working on methodologies for calculating biofuels related GHG emissions. The European Union Directive aims at including in the GHG calculations only those related to direct land use changes. Conversely, the United States Energy Independence and Security Act directs the Government, by December 2008, to develop a life cycle analysis for biofuels that must include GHG "emissions related to direct and indirect land use

FAO analysis also highlights that there may be some incoherence between the biofuel blending requirements put in place by countries that are not efficient biofuel producers and the trade barriers erected by those same countries against biofuel imports. By impeding imports of more efficiently produced biofuels from abroad, those countries may divert more land from food production than would have been necessary to meet the blending requirements, with negative repercussions on food security.<sup>82</sup>

In conclusion, biofuel production can impact on food security in different ways, namely via food availability, food prices, energy prices, farm incomes, rural incomes and international trade. These developments will impact people in different ways.

Nonetheless, competition with food and other local applications of biomass is a real concern that certification schemes aim to address. At this time, there is no established system for tracking the effects of biofuel production on food security and accessing them for sustainability. One of the principles developed by the Cramer Commission is that "the production of biomass for energy must not endanger the food supply and local biomass applications (energy supply, medicines and building materials)". The Dutch project group has developed two criteria that track changes in land use and changes in the prices of food and land in the area of biomass production. However, they have not been able to develop testable indicators for these criteria and therefore propose reporting requirements at the request of the Dutch Government. Additionally, the project group has acknowledged that monitoring will necessarily need to take place at macro level and be the responsibility of the Government. The monitoring and evaluation of food security for the purposes of certification may prove to be extraordinarily complex and costly.

Competition with food and other local applications of biomass and leakage effects are two interrelated macro level concerns. In fact, the replacement of local food production by energy crop production which threatens local food security is simply a sub-type of displacement effect

In conclusion, evaluating the "macro effects" of biofuels production is inevitably an involved process. While considering such effects may greatly contribute to getting a precise picture of the overall impact of biofuels, a balance should be struck between comprehensiveness and technical and administrative feasibility. For macro effects to be included in certification schemes, it would be necessary to develop assessment methods that are as accurate as possible, as well as cost effective and practical, to ensure they can reasonably be implemented for certification purposes. Still, the question remains of who will be responsible for tracking such macro effects (Governments, certification bodies, etc.) and how accountability will be assured.

Table 3. Select examples of monitoring needed to evaluate macro level effects of biomass production as proposed by the Cramer Commission

Effect	Data	Information to be reported
Land prices	Price information on land at the national and regional level.	Prices for basic year (for the planting of biomass) and after the development. The use of public statistics (national).
Food prices	Price information about food, with a distinction between autonomous trends (e.g. in the world market) and more local effects deviating from this trend. Price effects caused by biomass production must be considered in relation with (autonomous) exchange rate developments and the prices of raw materials.	Prices of food products for producers (farmers) and for consumers. The use of public statistics (national, FAO).

<sup>82</sup> Food Security and Bioenergy, op. cit.

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Effect	Data	Information to be reported
Availability of food	The mapping of food security, or the availability of food for the local population versus prices. Changes (especially decrease) of food products from the region. Make a distinction between autonomous trends and effects of the planting of crops for the production of energy.	Import/export and local balance for the major food products for consumers in relevant area.  By regional authorities and
	production of energy.	national Government.  Satellite data for the
Deforestation and loss of nature	loss of nature  Monitoring of wooded acreage and nature	
reserves in relation to the supply of food, construction material, fertilizers, medicines, etc.	reserves and effects on availability of food, construction material, fertilizers, medicines, etc.	By national Government and independent authority for higher scale levels and relevant regional
		organizations.

## Chapter 3

## Implications for developing country producers

Certifying feedstocks and biofuels bears implications especially for producers in developing countries.

of management practices to comply with the certification requirements. The certification costs usually vary with the size of forest tracts, existing forest conditions and management practices, certification systems and geographical locations. The direct costs are generally between \$0.5 and \$1.0/ha. The cost of monitoring the chain of custody varies from 0.6 per cent to 1.0 per cent of the product value. This cost may be reduced for mandatory certification schemes. In general, the indirect costs constitute the major component of total certification costs. Despite the cost variations among regions, some general trends have surfaced. On average, as a result of certification, the total costs of forest management are expected to rise from 5 per cent to 25 per cent.

Gan also makes simulations on regional differences in certification costs. Both direct and

Since such complications have been noted in past certification schemes and, as mentioned above, have been an issue with forest certification in particular, several proposed biofuels schemes

scrutinized under the General Agreement on Tariffs and Trade (GATT), in particular under articles I, III, XI and XX. This would, however, lead to the result that measures based on npr PPMs, despite their potential negative effects on international trade, would fall under a "general" agreement – GATT – while measures based on PPMs which are reflected in the final characteristics of the product would fall under a "specific" and stricter agreement – TBT. This is despite the fact that the former requirements are potentially more trade restrictive than the latter. Hence, this interpretation, which excludes npr PPMs from the TBT coverage, does not seem logical.

Another question in TBT coverage of labelling and certification initiatives concerns the case of standards developed by private bodies which have not accepted the Code of Good Practice (according to para. B, the code is open to acceptance by any standardization body, including non-governmental, but adherence to the code is voluntary), or which may not have the legal power to enforce the standards they have set up (according to para. 8 of annex 1 on terms and definitions, a "non-governmental body" is one which has legal power to enforce a technical regulation. The "legal power to enforce a technical regulation" is not defined by the code. It could possibly refer to the authority to grant or withdraw a label or to file complains for violation of national legislation on consumer protection in case of misuse of a label). Moreover, there is the case of "hybrid" entities – such as the Round Table on Sustainable Biofuels – composed of representatives of public and private entities, international organizations and NGOs. It is unclear whether such entities could be regarded as international standardization bodies of conformity with the TBT Agreement.

On the other hand, if those initiatives are regarded as private schemes which fall outside the scope of the TBT Agreement, they inean2h8(@857)187.2(ml)-0515c4ie))]-5515c4ie)]-5515c4ie)

transparency rules set by the Code of Good Practice, which are not very stringent. Moreover, as mentioned above, the acceptance of the code by standardization bodies is optional. WTO members reached the agreement to make efforts on a voluntary and non-binding basis to maximize the use of the Code of Good Practice for eco-labelling programmes and to apply the notification obligations meant for mandatory measures to voluntary measures, including those developed by non-governmental bodies. A similar solution could apply to certification schemes of biofuel/feedstock, especially voluntary programmes developed by non-governmental bodies. The main benefit of such a solution is that producers and exporters would be informed in advance of the development of certification and labelling programmes and would have opportunity to provide comments on proposals as well a time to adjust to the new requirements before their implementation.

## 4.3 "Like" products and the general exceptions of article XX of GATT 1994

Defining "like" products

Multilateral trade rules apply to certain aspects of regulatory policies and impose some limits to the freedom of Governments in this field. Central to these rules is the concept of "like" products: in principle, regulations should not discriminate between products that compete with each other in a given market. However, some exceptions may be invoked to justify discriminatory treatments, including for environmental protection.

While the most favoured nation (MFN) principle incorporated into GATT article I requires equal treatment among different countries, the national treatment obligation incorporated into GATT article III requires the treatment of imported goods, once they have entered the country and cleared customs, to be no worse than for domestically-produced "like" goods, especially in regard of internal taxes and regulations. The purpose of the rule is to prevent domestic tax and regulatory policies from being used as protectionist measures and nullify the benefits of tariff concessions. The national treatment obligation is one of the most important and also one of the most contentious provisions of the WTO trading system. Consequently, it has been the subject of a large number of cases in the GATT/WTO dispute resolution system.<sup>93</sup>

Article 2:1 and annex 3, para. D of the TBT Agreement restate the principle of non-discrimination (i.e. MFN plus national treatment) set forth in article I:1 and article III:4 of GATT 1994.

The criteria being developed to single out sustainably-produced biofuels and related feedstocks and distinguish them from biofuels and feedstocks which lack these characteristics raise a fundamental question over whether such a distinction between products which share the same physical characteristics and final uses is consistent with multilaterally-agreed trade rules. In other words, the question is whether certified biofuels and non-certified biofuels may or may not be regarded as "like" products.

It is noteworthy that, despite being central to GATT article III and its note, the term "like products" is neither defined in GATT, nor has it been authoritatively interpreted by the WTO member countries. Its meaning has been clarified and has evolved through the practice of the panels and of the appellate body.

The working party report on border tax adjustments<sup>94</sup>identified three general criteria that would be relevant for analyzing the "likeness" of particular products on a case-by-case basis: (a) the products' properties, nature and quality; (b) the products' end-uses in a given market; and (c) consumers' tastes and habits, which change from country to country. Later jurisprudence added tariff classification as a supplementary consideration in this respect.<sup>95</sup> The appellate body in the *Japan* 

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Taxes on Alcoholic Beverages case described the working party report on border tax adjustments as setting out "the basic approach for interpreting 'like or similar products', generally, in the various provisions of the GATT 1947". <sup>96</sup> In a subsequent case, EC-Asbestos, the appellate body confirmed that the mentioned general criteria provided a framework for analysing "likeness", but reiterated as well that they were "...simply tools to assist in the task of sorting and examining the relevant evidence. They are neither a treaty-mandated nor a closed list of criteria that will determine the legal characterization of products. More important, the adoption of a particular framework to aid in the examination of evidence does not dissolve the duty or the need to examine, in each case, all of the pertinent evidence." An overall determination of whether the products at issue could be characterized as "like" requires, thus, that the evidence relating to each of those four criteria, along with any other

to domestic production. Only if a "less favourable treatment" is detected – meaning a certain asymmetry between the group of imports as opposed to the group of domestics - the measure can be considered to be in violation of article III:4. "The term 'less favourable treatment' expresses the general principle, in article III:1, that internal regulations 'should not be applied...so as to afford protection to domestic production'....However, a member may draw distinctions between products which have been found to be 'like', without, for this reason alone, according to the group of 'like' imported products 'less favourable treatment' than that accorded to the group of 'like' domestic products'. <sup>107</sup>

Assuming that certified and uncertified biofuels are found to be "like" products, there is a second element that must be established before a measure can be held to be inconsistent with article III:4: imported biofuels are accorded less favourable treatment than domestic biofuels.

In the *EC-Biotech* case, <sup>108</sup> the panel reached an interesting conclusion in this regard. It stated that, to hold a violation of article III, the "less favourable treatment" of imported products should be explained by their foreign origin, rather than by other reasons, such as a perceived difference between products in terms of their safety or other characteristics. More specifically, the panel held that the fact that biotech products and non-biotech products were treated differently in the EC market was not the central issue; what was more relevant was that the different sets of rules which applied to them were not linked to their origin. Indeed, imported and domestic biotech products were treated equally, as were imported and domestic non-biotech products. Though different rules applied to these two categories of products, they were not justified by the origin of the products. It is noteworthy that the panel decided to analyse the "no less favourable treatment" obligation before the "like products" element. Having reached the conclusion that the complaining country – Argentina – had not been able to prove its products had been treated "less favourably" than domestic EC products, it did not need to address the issue of likeness between biotech and non-biotech products.

It is unclear whether the approach taken by the panel in the *Biotech* case will be upheld by future WTO jurisprudence, especially by the Appellate Body. Should this be the case, it would

## The general exceptions of article XX of GATT 1994

If a measure is found to violate GATT article III, it requires justification under one of the specific subparagraphs of GATT article XX and under its chapeau. Article XX gives countries the legal means to balance their trade obligations with important non-trade objectives – such as health protection, the preservation of the environment or the protection of natural resources – which form part of their overall national policies.

Analysis will now turn to the possible application of article XX (b) and (g) to biofuels certification schemes, in particular as far as those schemes prioritize the accounting of GHG emissions and their reduction. Biodiversity preservation and more generally environmental protection are also among the goals that several certification initiatives pursue, however, they quite naturally fall within the range of policies covered by article XX (b) and (g).

To meet the requirements of article XX (b) – which refers to measures necessary to protect human, animal or plant life or health – the provision at stake should (a) fall within the range of policies designed to protect human, animal or plant life or he

Conversely, measures that made only marginal or insignificant contributions to the achievement of their objectives could not be regarded as necessary. However, the demonstration that a measure is apt to produce a material contribution to the achievement of its objectives "could consist of quantitative projections in the future or qualitative reasoning based on a set of hypotheses that are tested and supported by sufficient evidence". Interestingly, the Appellate Body added, "Moreover, the results obtained from certain actions – for instance measures adopted in order to attenuate global warming and climate change – can only be evaluated with the benefit of time."

Applying these considerations to biofuels certification, we could draw some conclusions: (a) nobody can argue against the fact that climate change stabilization is at present a very important common interest; (b) in order to deal with climate change, countries may need to put in place a comprehensive policy and use several interacting measures whose effect may be appreciated only after a substantial period of time has elapsed. Therefore, certification aimed at encouraging GHG emissions reduction may in principle pass the "necessity" test. Moreover, labelling and certification are usually regarded as "soft" policy instruments, as opposed for instance to import restrictions and bans, therefore they should also pass the "least trade restrictiveness" test.

The additional criterion for a provision to meet one of the specific exceptions of article XX, including paragraphs (b) and (g), is that it fulfils the requirements of the chapeau of article XX. In the *United States – Shrimp* 

In the *Shrimp* case, however, the Appellate Body seems to have relaxed the "primarily aimed at" test, by allowing as well measures which are "directly connected" with the conservation policy to pass the test of paragraph (g). <sup>120</sup> Again, biofuels certification may pass this test, since certifying biofuels and encouraging producers to engage in sustainable production which is conducive to GHG emissions reductions seem sufficiently connected to the conservation of clean air. It seems, however, that the test would be more easily passed if biofuel certification were one of the several policy instruments put in place by a country to deal with climate change, and not the only one.

Turning to the condition that the contested measure shall be "made effective in conjunction with restrictions on domestic production or consumption", para. (g) clearly requires a link between the measure at stake and restrictions on domestic production or consumption, though it does not require identical treatment for imported and domestic products. Hence, we go back to the situation analyzed above where what is of relevance is whether the same set of rules applies to domestic and imported "sustainable" biofuels, and to domestic and imported "non-sustainable" biofuels.

Conformity with the chapeau of article XX has already been analyzed.

In conclusion, if distinguishing biofuels on the basis of their sustainability and applying different sets of rules to sustainable as opposed to non-sustainable biofuels is regarded to be in violation of article III, those measures may, however, find justifica

## **Chapter 5**

Making certification work for sustainable development: the way ahead

- agencies and donor countries could facilitate the implementation of such projects, especially in developing countries;
- (c) Analytical work could facilitate the decision-making process and ease the convergence toward a single set of principles and criteria. For example, the scientific assessment provided by the Intergovernmental Panel on Climate Change (IPCC) under the Kyoto Protocol represents an objective source of information that policymakers use as the basis for their policy decisions. The same may hold true for biofuels and feedstocks sustainability. For example, once it becomes scientifically certain the amount of emissions reductions that could be gained by using specific biofuels, produced with specific crops, using specific processes, it would be easier to set relevant requirements. Harmonizing the methodologies to calculate GHG

## Conclusions

Present and predicted high oil prices, increasing

prospects of all countries and may then deserve a bolder behaviour and new attitudes, including more flexibility within the international trade system.

The magnitude of the climate change challenge, however, is not a guarantee against possible protectionist abuses by countries and companies. The role that farmer lobbies are playing in several developed countries to secure a high level of subsidies for domestic biofuel producers confirms it. While trade measures may help supporting genuine climate change efforts, they may also be abused for protectionist purposes.

Yet, there is another dimension to consider. Would trade measures genuinely taken to address climate change challenges and developed in full conformity with multilaterally-agreed trade rules be effective in achieving the expected results? Coming back to the specific theme of this study, would the co-existence of several ambitious and far-reaching biofuels certification schemes be instrumental to ensure that climate change stabilization, energy security and rural development goals are achieved, while the potential negative side effects of biofuel production and use are minimized?

While it would be difficult to provide a conclusive answer to this question, it seems that certification schemes may play a positive role towards sustainability goals without having a disruptive impact on international trade, when they (a) are developed through a participatory process where producers from different countries and regions are effectively involved; (b) are based on scientific evidence; (c) are accompanied by support measures to encourage engagement in sustainable production and facilitate compliance, especially by smallholders in developing countries; (d) do not entail unnecessary costs and delays in international trade; (e) include criteria and indicators that can be evaluated in a quantitative fashion; (f) avoid reference

Appendix – Overview of criteria with relevance for sustainable biomass production as proposed by existing sustainability schemes

Areas of concern	Criteria		
Social criteria			
	Freedom of Association and collective bargaining Prohibition of forced labour Prohibition of discrimination and equal pay for equal work		
Labour conditions	Least minimum wages No illegal overtime Equal pay for equal work Regulations are in place to protect the rights of pregnant women and breastfeeding mothers		

Protection and promotion of human health

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Protection of human safety and health

Areas of concern	Criteria
Yields	Sustainable rate of harvesting – forest should only be harvested at the rate that they regrow Agricultural yields should be maintained on an economic viable and stable level A management plan that describes the operational details of production is in place A comprehensive development and research programme for new technologies and production processes is in place
No blocking of other desirable developments	The activity should not block other desirable developments
	Ecological criteria
	Reduction and minimization of greenhouse gas emissions

Efficient use of energy

Use of renewable resources

Protection of the atmosphere Low nitrogLow7m.6.9(.1(2f r)9.6)4.0 To twarcLow7mgergy

Areas of concern	Criteria
Landscape view	Increase and improvement of the variation of the landscape Conservation of typical landscape elements
Conservation of non- renewable resources	Efficiency in the use of natural resources, including energy Positive energy balance Minimization of the use of raw material, resources and land Focus on increased efficiency by increasing filling rates, decreasing fuel consumption and by using transport modes that release less greenhouse gases Minimization of phosphorus extraction from non-renewable deposits
•	Minimization of wastes

Waste management