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BIOFUELS REFORM IN THE EUROPEAN UNION: Why New ILUC Rules will Reinforce the WTO Inconsistency of EU Biofuels Policy

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EXECUTIVE SUMMARY

- This paper takes stock of the proposals by the European Commission and members of the European Parliament to amend the Renewable Energy Directive (RED) and how the proposed revisions integrate with the obligations of the European Union in the World Trade Organisation (WTO). The European Commission claims that neither RED nor its new proposal violates WTO rules as the sustainability standards and the new reporting requirement apply equally to domestic and foreign biofuels and feedstock. This paper argues that the proposals are not so innocent and that they will err on the wrong side of core WTO rules.

- In order to understand why the proposals are likely to run into opposition from these rules – and why other countries will argue that their trading rights have been violated – the paper goes through the WTO inconsistency of RED and why so many scholars and lawyers have concluded that RED would not stand the test in a WTO proceeding. Indeed, the European Union has already been subject to WTO complaints. The first case was resolved when the targeted Member States changed its implementation of RED. The second case has recently been filed in Geneva.

- If the new direction of EU biofuels policy is endorsed, the EU will introduce a requirement on sellers of biofuels and Member States to report emissions generated by indirect land-use change (ILUC) in the production of biofuel crops. ILUC is a strange concept for regulation: it regulates not the behaviour of a biofuels producer but derivate effects of biofuels production. It effectively demands that one producer should be accountable for farming decisions by others.

- No one knows the actual emissions from indirect land-use change. ILUC is neither observed nor measured: it is estimated on the basis of multi-factor models. A plurality of scientists and scholars that have examined the reliability of the results derived from these models conclude that results are uncertain, show substantial differences, and that small changes in model assumptions have big impacts on the result. Indeed, it has been concluded that the most important factor for estimating ILUC for a particular crop is the choice of model, not the characteristics of the production of that crop. The absence of robust results from modelling exercises is also the reason why the Commission decided not to condition effective market access on the basis of ILUC.

- The new proposal has several effects on the WTO inconsistency of EU biofuels policy. *First*, it accelerates discrimination based on RED sustainability criteria: higher thresholds on greenhouse gas savings will be introduced sooner than decided in RED.

- *Second*, the introduction of a requirement to report a Commission-decided estimate on ILUC emissions changes the legal character of RED. The EU can no longer discriminate on the basis of emission savings estimate based on RED and RED methodology. Its own policy will show that some feedstock that is not discriminated against will lead to lower greenhouse gas savings than those feedstock discriminated against if also ILUC emissions are counted. Consequently, the notion that discrimination of "like" products – a crucial concept in WTO rules – can be defended as legitimate because it promotes environmental ambitions collapses.

- *Third*, the cap on how much conventional biofuels that can be used by Member States in achieving the national targets for renewable sources of transport fuels introduces a new element of discrimination: discrimination between exactly the same type of biofuels, not just "like" biofuels.

- *Fourth*, the introduction of ILUC factors in EU biofuels policy will also lead to direct frictions with WTO rules, especially if EU policy will follow the amendment by the Rapporteur in the European Parliament and condition market access on the basis of ILUC emissions. Such a regulation would most certainly be ruled against lock, stock and barrel.

1. INTRODUCTION

Europe's biofuels policy is yet again in the spotlight as European Union institutions are pressing through a reform of past policies, especially the Renewable Energy Directive (RED), adopted in 2009. It is indicative of profound weaknesses in past policies that they are subject to revisions only a few years after they were adopted. Regardless of ones view on biofuels, Europe's biofuels policy has suffered from a number of substantial flaws that have undermined the economic rationale of biofuels and corrupted the admirable ambition to provide competing alternatives to fossil fuels.

Three problems have been particularly vexing. *First*, the way the EU has designed its biofuels policy has been guided by an ambition to promote domestic feedstock production especially of biodiesel. The policy design reveals strong industrial policy ambitions, often in direct contradiction with the professed green ambitions of biofuels policy. As Mark Halle and Ivetta Gerasimchuk from the *International Institute of Sustainable Development* succinctly put it in a recent article: "while EU support for biofuel is touted as a 'green' policy by governments, the reality is that subsidies are often driven by the interests of powerful agricultural constituencies."1

Second, the EU has designed policies that are inconsistent with its obligations in the World Trade Organisation (WTO) to keep markets open and not discriminate against foreign and "like" products. Even those that espouse an interpretation of WTO rules that is very generous to the domestic EU industry admit that the policy to support and protect production of biofuels feedstock in the EU is stretching the limits of what is allowed under current WTO rules.

Third, many of the measures designed for regulating effective market access in the EU are arcane and non-transparent, making it largely impossible to maintain good regulatory standards that are possible to work with for domestic as well as foreign producers. Introduced as a directive, RED has also led to implementations in EU member states that in the aggregate have presented regulatory chaos. Indeed, regulatory implementation has in some instances generated a fractured single market in Europe.

A successful and sustainable policy for biofuels in Europe has to be market-conducive and based on rational economics. Yet RED and previous EU policy moved policy in the opposite direction and reinforced old market distortions with new ones. Huge subsidies were maintained and on occasion increased. Tariffs were kept – and, as in the case of ethanol, at very high levels. New imaginative standards for the processing and production methods of biofuels were introduced – but in a way that benefited European producers and damaged its main potential competitors from abroad. That is not a good way to construct a policy: it has produced overall policy instability and deterred producers of better-value biofuels from entering the European market. What is remarkable about biofuels in Europe is that such a large part of supply comes from local suppliers and how little Europe trade both in fuels and feedstock. Policy design, in other words, has contradicted the main objective of the policy.

This is the context for the new proposal on reforming biofuels, released by the European Commission last year and recently voted on by committees in the European Parliament. A reform is certainly called for – but what is needed is a reform that reduces market distortions, establish greater stability and transparency in policy, and aligns itself with Europe's obligations in the World Trade Organisation. By that standard, how should the new proposal be judged?

1. Halle & Gerasimchuk (2013).

The Commission has proposed a couple of critical reforms.

- First, it wants to introduce a cap on what share of total fuel consumption in 2020 should be represented by conventional biofuels, i.e. crop-based biofuels. That cap was set for 5 percent – even if committees in the European Parliament have voted to increase that cap up to 6.5 percent.[2] It remains to be seen, however, what the plenary vote in the European Parliament will propose – and what cap, if any, that Member States in the EU will find acceptable.
- Second, it wants to phase out subsidies to conventional biofuels by 2020.
- Third, the Commission introduces a new so-called ILUC factor (ILUC stands for "indirect land-use change") in its legislation and demands that all sellers of biofuels which use land during production should report emissions generated by indirect land-use changes. Furthermore, Member States should also estimate and report emissions generated by indirect land-use change in their targets for 2020.

Behind this proposal is the ambition to incentivise a certain type of biofuels that does not use land and, consequently, does not emit greenhouse gases by affecting how land is used for crop production (sometimes called "advanced biofuels"). It is believed that this will reduce the competition for land and generally have positive consequences for the prices of food. Even if the Commission does not accept the proposition that spikes in food prices in recent years have been caused by increased production of energy crops in Europe (in fact, the Commission has released studies refuting that claim) it certainly uses that argument to support its new biofuels proposal.

It is pretty obvious that this proposal will have a strong impact on biofuels production in the EU and that it also will affect the global market for biofuels. The EU is one of the largest markets for biofuels and one of the largest producers of biodiesel. Advanced biofuels that do not use energy crops, while growing, still represent a very small share of the market. It is expected by the Commission to represent a marginal fraction of EU biofuels consumption in 2020, unless policy is changed to give particular advantages to a class of unconventional biofuels that remains very expensive compared to other biofuels and fossil fuels. Technological developments help to support the increasing role of advanced biofuels, but such fuels remain far from getting larger positions on the market. More importantly, technological developments have generally generated significant improvements in the quality of biofuels and their greenhouse gas savings, but the biggest market advancements have been based on biofuels that combine non-land raw material with traditional energy crops like rapeseed, soybean and palm oil.

The profile of the investment stock in the EU also reflects the ability to use land crops when producing biofuels. The utilisation ratio remains low – below 50 percent, according to estimates by the European Biodiesel Board[3] – and the industry has been fighting against overcapacity for quite some time. The profile of investments is likely to change, but that change takes time. For now, the only realistic view on the use of biofuels in Europe is that the market structure is premised on land-based biofuels to represent the vast part of increase in biofuels consumption represented in the target set by the RED: by 2020, 10 percent of fuels should

2. The main committee has proposed to enlarge the cap to 5.5 percent.
3. The latest data on utilisation ratio in Europe's biodiesel sector is from 2011 and can be accessed at the website of the European Biodiesel Board: http://www.ebb-eu.org/stats.php

be renewable, non-fossil fuels. If a cap on conventional biofuels is set at 5 percent, which the Commission has proposed, it is almost certain that the 2020 target will not be met. Consequently, a bigger share than expected of total fuel consumption will be represented by fossil fuels in 2020. That is the real consequence of capping the share of conventional biofuels in the national targets to 5 or 5.5 percent. In the European Commission's recent Progress Report on renewable energy, it concludes that the vast majority of member states did not reach its targets for renewable energy in transport in 2010, the latest year for which data exists, even if some countries had a higher share than previously projected.[4]

The purpose of this study is to discuss the new proposal by the Commission, and some of the proposed amendments in the European Parliament, in the context of the rules of the World Trade Organisation. The new proposal introduces new conditions for effective market access in Europe – and these conditions may have the effect to discriminate between like products. ILUC is also a strange measure as far as traditional market regulations are concerned: it is not premised on the idea of regulating the actions of one particular producer of biofuels, or the character of the crop used by a particular producer. ILUC aims to regulate derivative or secondary effects of what a collective of global producers do. The main question is: can discrimination based on such a regulation really be compliant with core trade rules in WTO?

It is surprising how little energy that the European Commission and the European Parliament have spent on analysing the effects of the new proposal, or RED, on trade and international trade agreements. But there are two strong reasons for policymakers to get a much better understanding of these effects before pushing through new legislation in Europe.

First, and quite obvious, the EU is already subject to dispute settlement proceedings in the World Trade Organisation concerning discrimination against non-European biofuels. Since the case in question was initiated by Argentina, in the second quarter of 2013, EU policy officials with little knowledge about the actual case have shrugged it off as basically only retaliation against Spain or EU-initiated cases against Argentina in the WTO. This may very well be true – Argentina's trade policy is fickle and should be the subject of an own report – buts regardless its intentions, it does not lead to the conclusion that there are no good legal arguments against EU biofuels policy. In 2011, Argentina brought another case to the WTO regarding RED, and it did not lead to an adversarial ruling by the WTO for the simple reason that the EU knew it was in the wrong and settled during the initial consultation phase by getting Spain, whose policy that complaint concerned, to change its policy.[5] And Argentina's new case has strong legal merits. Unsurprisingly, other governments have also considered taking legal action in the WTO against RED. It may very well be the case that WTO rulings will force the EU to change its policy in a not-so-distant future. The simple fact that there are uncertainties about the compliance of EU policy with its WTO obligations should prompt

officials to at least get a better understanding of the consequences for trade and international trade agreements that flow from the current, and proposed, biofuels policies.

Second, the EU is currently negotiating Free Trade Agreements with countries that take the view that EU policy on biofuels is protectionist, discriminatory and hurt the trading rights of their producers (this is, for instance, the position of the U.S. government in TTiP negotiations). Consequently, they are asking the EU in these negotiations to change its policy and not

4. European Commission (2013).
5. Spain had introduced the RED directive in a form that basically required blended fuels to be based on a biofuels produced in the EU.

introduce new regulations they believe are discriminatory. There is no obligation for the EU to acquiesce to these demands, but if it maintains its policy and policy direction it increases opportunity costs of this policy. It therefore becomes a question of judgment: how important is the current policy design to achieve the stated objective?

Yet, surprisingly, RED as well as the new proposal (and its accompanying documents) is very quiet on describing how the actual policy design will lead to a stated goal. In fact, it is pretty difficult to pin down exactly what is the stated goal. For instance, is the new policy principally intended to reduce greenhouse gas emissions – a tall order given that the reform will reduce the chances to get a larger share of fossil fuels substituted by 2020 – or is the principal objective to change the preference hierarchy between different types of biofuels, which in the longer run may lead to greater substitution of fossil fuels more than conventional biofuels?

The next chapter starts the discussion on how current EU biofuels policy integrates with its obligations in the World Trade Organisation. In the subsequent chapter, an analysis of the new proposal will be undertaken, including aspects of those same WTO obligations. The conclusion of the paper is drawn from both of these analyses and highlights the areas to which European Union institutions should pay closes attention to avoid unfortunate and unnecessary clashes between EU biofuels policy and the rules of the WTO.

2. RED AND WTO – AN UNEASY RELATIONSHIP

The proposed reform of EU biofuels policy currently under discussion is primarily based on the Renewable Energy Directive, also known as RED.[6] Adopted in 2009, RED established targets for the use of renewable energy, e.g. that 20 percent of all energy used in the EU by 2020 should come from "renewable sources".[7] Likewise, a target of a 10 percent biofuels-share in transport, equal for all countries, was also established. The latter target is now the one that the European Commission has proposed to amend.

In order for biofuels to be accounted for in the national targets for renewable energy obligations and, *nota bene,* to be eligible for financial support for the consumption of biofuels, they must meet a couple of criteria. *First*, the greenhouse gas emission savings from each biofuel feedstock should be at least 35 percent when compared with fossil fuels. This target, said RED, would increase after 2017. From 2017, greenhouse gas reductions should be 50%, and 60% thereafter for refineries beginning operation in 2017 and beyond.

Second, biofuels should <u>not</u> be obtained from land with high biodiversity value, that is:

a. Forest undisturbed by significant human activity.

b. Areas legally designated for nature protection.

c. Highly biodiverse grassland.

6. The proposed reforms also affect the Fuels Quality Directive.
7. European Union (2009).

And, *third*, biofuels should not be obtained by land classed as having had high carbon stock in January 2008 and that no longer has this status, such as:

a. Wetlands.

b. Continuously forested areas.

c. Undrained peatland.

Finally, the compatibility with the "sustainability standards" will be verified in three different ways:

a. Companies will have to report to EU member states about the sourcing of their biofuels.

b. Bilateral and Multilateral Agreements (the EU aims to conclude bilateral and multilateral agreements with provisions on sustainability criteria with other countries). The use of the directive, however, is not conditioned on a successful conclusion of such agreements.

c. Voluntary national and international certification schemes (the European Commission may decide that those certifications are sufficient to verify compliance with the sustainability criteria and with the requirement of 35% greenhouse gas savings).

The Directive also sets out how calculations should be done. The calculation method must take into account the effect of the direct land change use. In case there are emissions from land use change and if there is no bilateral or multilateral agreement in place, companies need to calculate the greenhouse gas emissions associated with biofuels production. The annexes to the Renewable Energy Directive provide a calculation methodology and also a list of default values for the attribution of greenhouse gas savings to different types of biofuels, on which companies can rely for their calculations. The criteria in the Renewable Energy Directive apply to both EU and imported production. They are, according to the directive, defined in order to avoid any de facto discrimination; definitions have been made on the basis of the international scientific evidence available.

RED has been attacked from many different quarters. Some environmental NGOs have claimed the regulation to be too lax, leading to a use of biofuel crops that also drive up the price of food when countries shift from food crops to energy crops. Others have accused the EU of diluting market-driven standards of higher quality and better value. Several scholars have shown that the methodologies to calculate greenhouse gas savings have been arbitrary, implemented unevenly in Europe, and provided means to manipulate the actual emission values. Foreign producers have complained that RED denies market access for their products, even if they can demonstrate that they meet the criteria and should therefore be qualified for undisrupted market access.

Concerns have been building in recent years over the trade effects of RED – both from scholars and academics, and from elected officials in Europe and around the world. The effect of the Renewable Energy Directive on trade and trading rights are very distinct elements of the directive. If a foreign exporter cannot document that it meets the established criteria, it will not be eligible for the tax exemption and the use of the imported biofuel cannot be

"counted" as part of the national targets to increase the share of renewable energy. This is a clear and drastic cut-off point for *effective* access to the EU market, which has had and will have consequences for foreign producers selling on the EU market. It is clear that RED has introduced, through these rules, direct discrimination of products.

The European Union has argued that this standard is not biased in favour of locally produced biofuels. The same regulation applies to domestic and foreign producers alike; hence, there is no discrimination and no hidden protectionism in the introduction of this standard. However, this is not a convincing proposition. Nor is it an honest account of the intent or the effect of the new technical regulations embedded in the Renewable Energy Directive. And it fails to take account of the fact that besides the trade effects generated by the sustainability standards in RED, the EU also runs a policy for subsidies and traditional trade protection to the domestic biofuels industry that is quite intensive. In fact, the subsidy intensity is so pronounced that a previous study found that it would be far more economical for the EU to simply stop subsidies of biofuels and instead buy carbon offsets on the European Climate Exchange.[8] For every tonne CO2-equivalents avoided by supporting rapeseed biodiesel in Europe, the EU could then have purchased offsets for at least 20 tonnes CO2 equivalents. The starting point, then, for any analysis of the extent to which the EU discriminates between domestic and foreign biofuels would have to consider the full range of measures, not only one specific regulation.

However, even a narrow analysis of RED also reveals that the Directive has empowered systemic discrimination or created conditions for market access that are non-transparent, subject to constant changes, and arbitrarily chosen. For instance, measuring the effect on carbon reductions from switching to a biofuel, or the carbon emissions in the production of biofuels, is not an exact science. In fact, such measurements are inherently unstable and suffer from poor and incomplete data. The simple fact is that no one can say if biofuel X emits more or less greenhouse gases than biofuel Y. It may be possible to estimate (but not record) emission averages for a certain class of biofuels, but the variations within that class are likely to be as big as the variations between the classes. And the variations are likely to be dependent upon so many factors that are not related to the crop itself, but socio-economic factors in the region where the feedstock is produced. Such factors differ substantially between and within different regions.

The fact that the EU has shrugged such concerns off as unimportant for policy design is alarming in itself. If the arbitrariness of RED had been acknowledged and addressed, it would have invited greater trust in the declared intention to run a non-discriminatory policy. Now, throughout the short life of RED, it has been subject to great suspicion. It invites the question that several experts have asked – but that the EU has never satisfactorily answered: has RED really been designed in accordance with the professed environmental ambition – or is it hidden industrial-policy activism? The latter is an increasingly convincing argument, given the support embedded in the Directive is often focused at Europe-produced biofuels.

Second, the planned effects on trade from RED will become increasingly severe if the sustainability standards are applied in the manner proposed in the Directive. Some of the current imports of biofuels may no longer be exempted from tax or be part of the national obligation. More importantly, the import potential of soybean oil, ethanol and to some extent palm oil will be reduced, forcing Europe to move even further in the direction of sourcing domesti-

8. Kutas et al (2009).

cally-produced feedstocks, with major implications for consumer prices, competition and flexibility. Inevitably, the net result is that it will become more expensive to shift from fossil fuels to biofuels. So reduced dependence on foreign imports of biofuels translates into a higher cost for Europe when shifting to renewable energy. Is such an effect just an unintended consequence of RED – or is it possibly one of its intentions?

Third, there are obvious WTO concerns associated with RED that remain covered only in a patchy manner in official EU documents. Why have these concerns not been acknowledged and analysed in greater detail? It has been known from quite some time that trade officials in Brussels and other capitals have raised concerns about RED and that some of them have argued internally that RED is inconsistent with the EU's WTO obligations. Now that the EU has been challenged in the WTO one would expect, at least, that any new biofuels policy that may restrict imports even more would be subject to a discerning legal discussion. Yet it has been mostly quiet on that front – leading to even greater suspicions. If the EU actually believes that it is on the right side of its WTO obligations, why not present the arguments supporting that view?

IS THE RENEWABLE ENERGY DIRECTIVE CONSISTENT WITH WTO LAW?

Declarations from European officials claim that the Renewable Energy Directive is WTO consistent because the regulation itself does not discriminate between domestic and foreign products. If there are concerns, it has been generally been argued that Article XX of the GATT, which gives signatories the right to violate other GATT articles if a measure has demonstrable good consequences for the environment, gives sufficient cover. In the event that RED is covered by the agreement on Technical Barriers to Trade (TBT), it has been suggested that there is a similar provision in that agreement that grants the EU the right to discriminate. Hence, a full WTO ruling on RED would authorise the EU to maintain its policy.

Is this interpretation of WTO rules really correct? Several studies have suggested that it is rather more likely that a full WTO examination would end up invalidating RED, or critical elements of RED, if it is used as basis for discriminating like products.[9] Even those studies that aim to present arguments to defend RED in a WTO dispute conclude that some elements of the policy are probably inconsistent with WTO rules.[10] What are the problems or possible inconsistencies highlighted in these studies?

The most important criticism is the interpretation of GATT Article XX as a general exemption clause that can authorise any discrimination as long as it is associated with environmental ambitions. This view is based on a selective reading of previous GATT disputes incorporating Article XX and makes the mistake of claiming that the *professed* environmental intention is sufficient to authorise discrimination under that clause. And the same mistake has been made by many scholars discussing RED: just because the declared *intention* or *objective* is legitimate on environmental grounds does not mean that the *policy design* is connected to the objective, or that it guided only by the declared objective. Yet that sort of true-believerism has been a hallmark of much of the discussion among those scholars and advocates that have searched for ways to clear discrimination under WTO rules. And it neglects a very important characteristic fact about Europe's biofuels policy: its origin lies in

9. See for instance Erixon (2012), Vergano & Laurenza (2012), Mitchell & Tran (2009), Switzer & McMahon (2010), and Swinbank (2009).
10. Lendle & Schaus (2010).

agricultural policy, not in environmental or climate change policy.[11] Anyone who has watched the torments of the European Commission, often publicly aired, in negotiating RED and new proposal internally will know that this origin remains present in at least the way the European Commission has approached these proposals.

An exemption based on Article XX is not a free pass for any environmental policy that has implications for trade. Apart from the Article itself, there is also a fairly significant body of case law that has set precedents on the application of the so-called General Exception Article (Article XX). Examining the consistency of the EU standard with this jurisprudence is a test that the EU should have properly conducted before it adopted the Directive. But it is a test that will be cumbersome for the EU as it will be difficult to prove indisputably positive environmental consequences of the Directive and clear connections between the intention and the design of policy[12], that the measures used to define which products that are, and are not, sustainable are accurate for a particular entity crossing the European border, and that there are no alternative ways to reach the environmental ambition that are less trade restrictive.

Let us consider in greater detail the relevant Articles in the GATT that the Renewable Energy Directive is at risk of violating. There are three core GATT articles of relevance: Articles I, III and XI.

GATT Article I. GATT Article I concerns treatment of *like products*, a crucial concept in WTO jurisprudence. It sets out one of the core principles of the GATT/WTO system: like products should be treated equally. In the words of the Article:

> "With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, *any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties*." [emphasis added]

"Likeness" is not defined in this GATT article or in GATT Article III, which establishes the principle of likeness in national treatment. Case law, however, offers interpretations. Two unadopted Panel reports have ruled that products are not unlike just because there are differences in *production methods* (which is the presumption in RED) when these differences do not affect the physical characteristics of the final product.[13] Even if these reports were unadopted, they can, as later cases have shown, be "useful guidance"[14] for how a WTO would consider a case against denied market access based on RED.

In rulings from the Appellate Body (AB), four criteria have consistently been used to define likeness. These criteria derive from the GATT Working Party in 1970:[15]

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11. Erixon (2009).
12. The alternative to consuming biofuels with GHG savings in the lower range is often not to consume biofuels with GHG savings in the higher range but fossil fuels, which the directive considers to be more polluting than the biofuels classified and categorised in the directive.
13. GPR, US-Tuna (Mexico); GPR, *US-Tuna* (EEC)
14. ABR, *Japan-Alcoholic Beverages*
15. GATT (1970).

- The properties, nature and quality of the products; that is, the extent to which they have similar physical characteristics.
- The end-use of the products; that is, the extent to which they are substitutes in their function.
- The tariff classification of the products; that is, whether they are treated as similar for customs purposes.
- The tastes and habits of consumers; that is, the extent to which consumers use the products as substitutes – determined by the magnitude of their cross elasticity of demand.

None of these criteria provide legal cover for the EU to grant or deny access to its market for biofuels on the basis that these products are unlike. If these standards are used to define likeness in a case involving RED, it is difficult to see how RED could be compliant with GATT Article I and Article III if it concerns denial of an advantage for a product that are like other products that have been granted an advantage. And given Europe's dependence of biodiesel – where a product often have the same physical characteristics, the same end-use, the same tariff classification, and can show high cross-elasticity even if different feedstock have been used in the production of the fuel – it is not difficult to see why we may be presented with a problem of widespread, systemic discrimination of like products.

The argument provided by the EU to endorse different treatment of like products is that some biofuels will not have been produced in a way that is not as favourable as others to the ambition of reducing greenhouse gas emissions by substituting fossil fuels. But this is where the argument faults: as long as it cannot be shown that the unacceptable production method affects the test of likeness described above it is difficult to see how that argument would receive a receptive audience in a dispute proceeding. The EU could of course argue that other standards should be used for defining likeness, but it requires a lot of ideological belief to suggest that the Appellate Body would accept the principle that a production method should take primacy when likeness is defined. That is tantamount to a revolution in trade jurisprudence.

It has been suggested that a recent case provides the legal ground for distinguishing products on the basis of the environmental impact of production methods.[16] The Appellate Body ruled in a case that consumer perceptions are relevant when considering "likeness". But they ruled on a particular basis, namely the evidence that the use of chemical components in the production process affected the physical characteristic of the final good – and hence established a link between the production process and physical properties of the end product. This link is not likely to hold for the Renewable Energy Directive as long as there is no evidence suggesting that the biofuels discriminated against are physically different from the favoured biofuels. Even if that argument were to hold up, it only concerns one of the criteria in RED.

Paragraph 4 of GATT Article III states that "the products of the territory of any Member imported into the territory of any other Member shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use." The article, like its application, is straightforward and espouses the

16. ABR, *EC-Asbestos*

core principle of national treatment. Clearly, the Renewable Energy Directive fails the test of consistency as it clearly will affect sales of foreign producers who will be denied market access on the same conditions a those domestic producers who would qualify for the advantages. The discriminatory aspect of likeness discussed under GATT Article I applies equally to GATT Article III.

One can, however, discuss the applicability of Article III in the case of the Directive. There are good reasons to suggest the directive to be covered by Article III. Hesitations, however, can be raised on the basis that the Directive itself does not concern a product but rather a production process. As Article III refers to products, a strict interpretation of the Article may, according to one group of scholars, suggest that the Directive is of a different nature.[17]

Yet if GATT Article III is not applicable, GATT Article XI will cover relevant aspects of Article III. And GATT Article XI sets out a clear limit on the use of trade-restrictive measures when it states that "no prohibitions and restrictions other than duties, taxes, or other charges ... shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party". As RED de facto restricts imports by means other than duties, taxes and charges, it is likely that it will not be considered consistent with Article XI. Article XI, invoked in several cases concerning trade and environmental regulation, is not based upon like treatment and hence offers a stronger defence for those who believe their trading rights have been violated by means of regulations.

It is clear that the Directive runs counter to some of the core GATT articles. This conclusion is also accepted by several defenders of RED. Arguably, the simple fact alone that an EU Directive violates core GATT rules should be cause for concern. Yet the Directive may still hold up in a dispute proceeding. There is the possibility that the Directive could be consistent with the GATT if it can be established that the directive qualifies to be treated under the General Exception – Article XX. This article justifies exceptions if it can be established that an otherwise GATT-inconsistent regulation is necessary to – in this case – "protect human, animal or plant life and health" or if it relates to "the conservation of exhaustible natural resources". This article, however, is not providing an open-ended excuse to adopt any sort of discriminatory or trade-restrictive measure.

The problem is that it is difficult for the EU to justify violations of GATT articles on the basis of effectiveness of the measures. The scientific evidence in support of each aspect of RED is not conclusive, even under the assumption that records of actual emissions from the production of a specific entity of biofuels would be fully accurate, or that the inexact land-based criteria could be consistently applied when it is judged whether or not land used for energy crops is compliant with the land categorisation used by the EU. The linkage between policy objective and policy design also presents difficulties. While it is undisputable that GATT Article XX allows for conditional departure from other GATT rules if, for instance, a regulatory measure helps to conserve exhaustible resources – what about discrimination of products *that also have the same effect*?

Importantly, this is the case with RED: it states essentially that all relevant biofuels lead to greenhouse gas savings when they substitute fossil fuels. In fact, they would lead to even greater greenhouse gas savings if the emissions in the production of fossil fuels were also fully accounted. It also states that some biofuels lead to greater greenhouse gas savings than

17. Mitchell & Tran (2009), p.7.

other biofuels, but the simple fact that discrimination may lead to a greater use of fossil fuels than if a biofuels had not been discriminated against, shows that there is a conflict right at the heart of RED between achieving an environmental goal (reducing emission of greenhouse gases) and changing the preference hierarchy on the demand side between different types of biofuels.[18]

Yet the most difficult part will be to square the Renewable Energy Directive with the *chapeau* requirements of Article XX. The chapeau of Article XX disciplines the potential misuse or abuse of the Article – the use of the Article for other purposes than those stated in the particular paragraphs. More precisely, the chapeau aims to ensure that measures are not causing arbitrary or unjustifiable discrimination, and that the least trade restrictive measures are chosen if it can be proven that trade restrictions are necessary to achieve the legitimate goal.

To that end, the Appellate Body has clarified in rulings, e.g. *Brazil – Re-treaded Tyres*, that there must be a *rational connection* between the measure and the environmental goal in order to avoid 'arbitrary and unjustifiable discrimination'. Panel reports have opined that the way to test this is to examine whether "the design, architecture and revealing structures" indicate an intention to "conceal the pursuit of trade-restrictive objectives".[19]

This will be a difficult test for the Renewable Energy Directive given its design, implementation – and the obvious intention to promote locally produced rapeseed biodiesel.[20] The Directive is fairly straightforward in its intention to pursue trade-restrictive measures based on sustainability criteria that are arbitrarily chosen (meaning that scientific evidence or consensus does not lead immediately to the exact design in RED), subject to profound measurement problems, and could be used to deny access of biofuels that is in fact consistent with the stated environmental ambition of reducing greenhouse gas emissions by substituting fossil fuels with biofuels. Again, it is one thing to discriminate against a product that is in direct contradiction or opposition to the environmental objective – it is quite another thing to discriminate against products that de facto promote the stated ambition.

The Agreement on Technical Barriers to Trade (TBT) might also present difficulties for the EU in the event that RED is taken to the WTO for dispute settlement. In the absence of an international agreement, members are asked to show restraint when imposing standards and technical regulations. WTO members are, in different ways, encouraged to seek cooperative methods rather than going the unilateral route. The WTO has agreed on a set of guidelines, a Code of Good Practice, for the use of regulations. Overall, they are not posing great obstacles to a country that wishes to impose a standard or technical regulation. What sometimes can make the ethos behind these rather weak disciplines important is when countries have unilaterally imposed regulations with clear trade-restrictive consequences without having sought cooperative solutions with other countries first. It is a difficult case for the EU to make that it consistently has actively proposed cooperative solutions. They can make a case that the Commission has offered bilateral agreements with other countries, but the problem is that many (but not all) EU member states have implemented RED in a fashion that

18. And to introduce another complication, prompted by the proposed amendments of RED by the European Commission, already in this chapter of the paper: The implicit message behind the introduction of ILUC reporting requirements is that all biofuels may not lead to a reduction of greenhouse gas emissions but as the Commission's proposal rules out using ILUC emissions in the RED sustainability criteria, the EU may end up giving higher preference to biofuel/feedstock that should have been given a lower preference, if ILUC factors had been disaggregated and accounted for in the criteria.
19. PR, EC-Asbestos; PR, *US-Shrimp*; PR, *Brazil-Retreaded Tyres*.
20. See Erixon (2009).

reinforced past barriers to trade in biofuels and did not involve much consultation at all. There is one area where WTO recommendations are stronger, however, and where there are legal precedents: the use of process and production method standards (PPM).

Most existing standards do not concern how a specific good has been produced. They concern the properties and the functional capacity of a good. But there has been a shift towards PPM standards in the past decade. This shift is highly controversial as it ventures into areas that are difficult to discipline. There is plenty of room for manoeuvre and flexibility in the use of PPMs. And where there is room for flexibility, there is also room for manipulation and abuse.

As noted above, PPMs also present difficulties for protecting the integrity of one of the basic principles of the WTO: "like product". The criteria for determining what constitute like products do not easily integrate with PPMs. Hence, PPMs remain an "unregulated" phenomenon. Some case law has clearly established that countries can introduce PPMs if they do so in an orderly fashion and can scientifically demonstrate the merits of the standard. Some case law – and some case rulings that have not been adopted – points to the boundaries of the use of PPMs. But these boundaries remain unclear.

One can discuss the applicability of the TBT agreement in the case of the Renewable Energy Directive. The principal area for dispute concerns the coverage of PPMs in this agreement. There is no proper case law to draw on in the principal matter; cases of relevance have not dealt explicitly with a PPM that has not been associated with other technical regulations, such as a labelling requirement. Some have suggested that only PPMs that affect the physical characteristics of a good should be covered by the TBT agreement. However, there are also references in the annex of the TBT agreement that specifies that processes and production methods are of relevance in articles referring to technical regulation. Annex I:1 says:

> "Document which lays down product characteristics *or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory*. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method." [Emphasis added]

The Appellate Body has established that the TBT Agreement covers technical regulations that cover an identifiable group of products with some specific product characteristics and are mandatory. A good case can be made also on these grounds for why the TBT Agreement should cover RED. Consistency with the TBT agreement is likely to pose difficulties for RED. It will again be difficult to get away from a definition of likeness that allows *unlikeness in the production process* to take primacy over other, more established principles for defining likeness. While the TBT agreement may be more receptive to allowing some departure from non-discrimination principles if there exist a clear and legitimate environmental objective, it does not have a general exemption clause identical to GATT Article XX (Article 2.2. is the relevant TBT article). It often becomes an issue of judging whether the size of the departure is proportionate to the objectives of the departure. In that process, it has been demonstrated in several cases that there is resistance to allowing regulation that alters the competitive relations between products that are directly substitutable and in head-to-head competition. In more general terms, this also presents an overall challenge to RED: it has such a direct impact on the competitive relations between like and substitutable products that anyone who examines the policy will probably give attention to questions regarding the necessity of a particular form of regulation to achieve a stated goal. For instance, from a legal or scientific

point of view, the 35 percent GHG savings threshold in RED is chosen arbitrarily. There is no specific scientific consensus saying it should be 35 percent rather than 30 or 40 percent. The 35 percent threshold, however, ensured that domestic rapeseed oil will qualify, with a small margin, but that the default greenhouse gas saving of the main foreign competitors to domestic rapeseed biodiesel will not.

3. ILUC: "A RIDDLE WRAPPED IN A MYSTERY INSIDE AN ENIGMA"

The previous chapter discussed the Renewable Energy Directive. It discussed at length various trade-law aspects of RED because it is important to understand RED and how it currently relates to WTO rules in order to understand the consequences for trade and international trade rules presented by the proposed revisions of RED. The new proposal changes some characteristics of RED and, arguably, reinforces some of the inconsistencies in RED. The new proposals cannot be judged without the particular RED context.

What are the key components from the viewpoint of WTO consistency in the reform proposal?

First, the new proposal introduces a cap on the share of crop-based biofuels that can be used by member states to meet their targets for 2020. Conventional biofuels above the 5 percent target may still be sold on the EU market, but there is an implicit division created between crop-based biofuels that can be used to comply with the national targets and crop-based biofuels that cannot. In other words, governments will have to treat biofuels differently *even if they have exactly the same effects on greenhouse gas savings*.

Second, the thresholds for greenhouse gas savings for biofuels will be increased ahead of the time schedule that was originally laid down in RED. By January 2014, new biofuels installations need to meet a 60 percent reduction target for greenhouse gas in order to qualify for inclusion in the national target.

Third, the new proposal introduces a requirement on those that place biofuels on the EU market to report emissions from indirect land-use change (ILUC). A seller and a Member State are not obliged to collect information themselves about carbon stock changes from ILUC, but should use mandated estimates provided by the European Commission. The Commission's proposal does not suggest that market access should be conditioned on the ILUC factor. In fact, the Commission has rejected such a policy options because of the unreliability of measurements of ILUC emissions. Despite the open acknowledgement from the European Commission – as well as a plurality of scientists and academics – that ILUC simply is too unreliable to form the base for such policymaking, the Rapporteur in the European Parliament, MEP Corinne Lepage, has proposed such a condition: ILUC should be part of the sustainability criteria used to determine whether a biofuel could be accounted for in the national target and be given tax-based consumption incentives.

Is the concept of ILUC and the design of ILUC in the proposed revision based on proper science – and can the current proposal be squared with WTO rules? This chapter will argue that ILUC is an impossible concept that should not be introduced in regulations. ILUC is, to quote Winston Churchill, "a riddle wrapped in a mystery inside an enigma". The chapter will also consider the WTO compatibility of ILUC and other components in the new proposal.

ILUC – AN IMPOSSIBLE CONCEPT

Indirect land-use change is an inviting concept. Yet the concept as well as the science behind it is so unreliable that it frankly is alarming that the EU now is en route to introducing it in a commercial regulation. ILUC is concerned with derivative effects of biofuels production, not the direct effect that is within the means of control by a producer of biofuels. Its constitutional principle is that a producer should be held accountable for the choices and decisions by other producers (sometimes by other than biofuels producers) – not the choices and decision taken by producer.

The legal philosophy behind this concept follows the logic of the police in the movie Casablanca: round up the usual suspects! In this case, you affect the market conditions for those you can control or are within reach, not those that are responsible for an action that you want to police. ILUC aims to control and regulate the expansion of farm land generated by an overall increase in the production of energy crops. So if a farmer in country X expands its production of a food crop because a farmer in country Y has shifted from that food crop to an energy crop, the carbon stock changes based on the action of farmer X should be internalised by the output of the farmer in country Y.

These constitutional objections should in normal circumstances be enough to bin an idea like this. The legal philosophies that underpin the proposal would hardly be accepted in any other area: governments do not introduce penalties on actors that are not responsible for a particular event or outcome. Yet the objection to ILUC is not only based on such abstract principles. There are also very practical arguments against ILUC – and the most important one is that no one knows and no one can reliably estimate the scale of carbon emissions generated by indirect land-use change.

First, there is no complete repository of actual data records from indirect land-use change. A good part of the data that exist is based on estimates generated by different models.

Second, no one can reliably tell what agriculture expansion that happens because of an increase of biofuels production and what expansion that has been prompted by completely different developments like population increases, increasing affluence, biophysical changes, or a regulation by a government.

Third, the models used to derive estimates on ILUC emissions are based on so many different assumptions about the real world that a change in one assumption can have great impacts on the actual results of the modelling work. In other words, the robustness of these models is weak. Many of the assumptions also require constant change for the simple reason that there are constantly changes in the conditions that define developments for production and on the market.

None of these objections are novel. In fact, they have been used by the European Commission to reject the idea of conditioning market access for biofuels on ILUC emissions. The Commission says in its own proposal that it cannot base its policy on existing models, but that it takes action anyway because of the precautionary principle. It states in the explanatory text of the amending directive that "...the Commission identified a number of uncertainties and limitations associated with the available numerical models used to quantify indirect land-use change, whilst acknowledging that indirect land-use change can reduce the greenhouse gas emissions savings associated with biofuels and bioliquids, and as such, recommended

that this issue was to be addressed under a precautionary approach".21 In fact, such is the degree of uncertainty that the European Commission cannot say for sure that ILUC leads to significant emissions or point to exactly what crops that are associated with high or low levels of ILUC emissions.

And the European Commission is in good company. The profound degree of uncertainties have been highlighted in a good number of studies attempting to estimate ILUC emissions or separate some ILUC emissions from, for instance, emissions due to direct and provable land-use change. In a large comparative study by the EU's Joint Research Centre, the authors show how profoundly different results on ILUC emission that different models are generating.[22] In one of its scenarios, examining how models estimate ILUC changes on the basis of marginal changes in biodiesel consumption, the JRC study found that "total ILUC ranges from 242 to 1928 kHa per Mtoe"[23] when different models are estimating the same scenario. Another study for the Commission found that the differences in the results were vexingly significant.

Many other studies have come to the same conclusion, that there is a great variety in the results from different models and that these models cannot even determine if the ILUC values for specific crops are positive or negative. Some studies suggest ILUC values to be positive while other that they are negative. And no one can say with any degree of certainty which models that actually are nearest the real ILUC factors: we simply do not know because ILUC *is not and cannot be observed or measured*. It can only be estimated.

A report from Copenhagen Economics, for instance, found in a review of existing models the results from different "good" models can differ by up to a factor of 11.[24] Table 1 below reports its findings from reviews of existing studies. There are huge differences within and between what existing studies would suggest as ILUC emission factors for individual crops. For sugar cane, the emission factors range from -1 to 195 CO2 equivalents per MJ biofuel. For rapeseed the results range from -33 to 800. A similar exercise by the Netherlands Environmental Assessment Agency observed broadly the same patterns in existing model estimate of ILUC emission factors.[25]

Table 1: ILUC emission factors from different models

Type of biofuel	**ILUC factor*** Min values	**ILUC factor*** Max values	**Median** (min)	**Median** (max)
Sugar cane	-1 – 48	19 – 95	14	86
Palm oil	-55 – 45	34 – 214	14	160
Sugar beet	13 – 33	65 – 181	16	151
Wheat	-79 – 79	-8 – 329	21	142
Maize	5 – 104	44 – 358	25	79
Soybean	0 – 92	63 – 293	27	100
Rapeseed	-33 – 800	52 – 800	30	157

*g CO2 eq/MJ biofuel
Source: Copenhagen Economics (2011)

21. European Commission (2012), p. 2
22. Edwards et al (2010).
23. Ibid.
24. Copenhagen Economics (2011).
25. Ros et al (2010).

In another dispassionate review study of results from scientific modelling, the author draws the conclusion that there is no scientific consensus on ILUC or crop-based ILUC factors.[26] Furthermore, a policy based on existing models would get ILUC targets or values that are exactly wrong. This is an important point – and it is one that appears to have gone missing in the campaign-infested rhetoric that has surrounded the debate in Brussels about ILUC. You will not find any scientist that claims that the science of ILUC to be in consensus about the factors determining ILUC emissions and what aggregate results are for specific crops. Current models, as the aforementioned study concluded, provide data but no information. In fact, the most important variable in current attempts to estimate ILUC emission *is the model and model assumptions chosen to generate an estimate, not the crop it examines and the production of it*.

So if the EU mandates sellers of biofuels to report ILUC emissions generated by data models, in the spirit of getting consumers to make informed choices of the total GHG emission effect of a biofuel and direct them to biofuels with lower emissions from land-use change, the only thing we can know for sure is that consumers will be misinformed. It is like asking citizens to accept weather forecasts that cannot be tested if they are accurate or not. ILUC emission factors are close to being "a riddle wrapped in a mystery inside an enigma", to use that quote from Winston Churchill again. And this is not only because there is no reliable model to estimate ILUC emissions. Even if such a model existed, we could not know that it is reliable because ILUC emissions, again, is not and cannot be observed or measured. Reliability can effectively only be tested against historical data that needs a good amount of modelling and assumptions to generate data on historical ILUC emissions.

Yet that is not the only flaw in the current concept and policy design. Two other problems – also with profound consequences for policy – deserve attention. *First, a policy that only puts ILUC values on one particular agricultural or energy output like biofuels abuses the concept of ILUC and may give incentives that contradict the overall objective. For the concept to ILUC to work in theory, policy needs to incorporate other produce as well.*[27] You have either "ILUC for all" or "ILUC for none": if it is applied, it must cover a wide set of crops and produce. Awarding a value to only one output runs the risk of incentivising alternative uses of land that may have bigger consequences for the carbon stock. Or it may have no effect at all on the production of the displacing crop because the direct land use changes that occur as a consequence of that action is accounted as indirect land use change of the displaced crop.

Second, there is an inherent confusion in the concept of ILUC that may take policy in the wrong direction. An interesting and indicative example was given in a recent review study of ILUC:

> "If for climate mitigation purposes forest is regrown on agricultural land, the iLUC concept assumes that then somewhere else forest is transformed into agricultural land. This would be treated as being the 'fault' of the conservation measure. As a consequence, it would have to carry the burden as iLUC factor and lead to basically no GHG reduction. As a consequence, the iLUC concept implies that conservation or afforestation measures make no sense as they may save CO2 directly, but emit it indirectly."[28]

26. Finkbeiner (2013).
27. Laborde (2011).
28. Finkbeiner (2013).

Third, the ILUC concept assumes linearity in the sense that an increase in production of crops that have been awarded a low ILUC-emission value (a small emitter) will have the same ILUC and total land-use change emissions when production is scaled up to meet the windfall demand caused by other crops receiving a high ILUC-emission value. Yet that is not likely how it works given all the factors that determine ILUC emissions: it is safe to assume a non-linear pattern. This is the problematic, even if not obviously stated, conclusion in a study by the Commission's Joint Research Committee: models cannot accurately predict what will happen to ILUC and total land-use change emission factors for a specific crop if the production scales up, e.g. because other crops are disqualified because of their ILUC emission factors. It is not difficult to consider scenarios where both land-use change factors are altered to such a degree that the objective of reducing greenhouse gas emission would be better served by using a biofuels that has been awarded a high ILUC-emission value.

THE NEW PROPOSAL AND WTO RULES

The proposal to amend RED comes without any analysis of its consequences for trade and its compatibility with international trade rules. The Commission, in an accompanying document, says that there is no discrimination between domestic and foreign producers as the new regulations apply equally to all producers. And in one way this statement is more correct now than when it was used to motivate RED for the simple reason that the new amendments have not been designed to promote domestic production at the expense of foreign production. In fact, one can make the argument that the introduction of ILUC emission factors has a greater impact on the conventional rapeseed biodiesel in Europe than on its competitors. Furthermore, the cap on 5 percent for conventional biofuels would have a direct impact on an industry that has made investments on the premise that conventional biodiesel could be fully used in meeting the national targets for Member States. It is not difficult to understand why the domestic biodiesel lobby in Europe has reacted strongly to this proposal.

Yet one should not jump to the conclusion that the new proposals are compliant with WTO rules simply because the Commission says so and that the domestic industry is up in arms against the proposal. There are four aspects of the current reform proposals that are of importance from the perspective of WTO rules.

First, and most straightforward, the new proposal accelerates discrimination based on RED sustainability criteria. Thresholds planned for later years are now moved to 2014, and the higher the thresholds the more it is likely that some biofuels will be denied effective market access in Europe, that is: biofuels below the threshold will not be subject to the same advantages as biofuels above the threshold. In the likely scenario that some foreign biofuels will be denied those advantages while some "like" biofuels in Europe will be granted them, there is clearly discrimination between like products.

Furthermore, the measures conflict with GATT Article XI, which states that "no prohibitions and restrictions other than duties, taxes, or other charges..." should be used against imports from other WTO members. RED sustainability criteria are clearly not manifested in duties, taxes or other charges. Given the default values stated by the European Commission, it appears safe to say that the intention of accelerating the pace of upgrading the greenhouse gas threshold values is to deny effective market access for some biofuels – and that the consequence of fast-forwarding the threshold increase is effecting such a change.

Finally, and importantly, the revision of RED changes the character of RED to such a degree that it makes it even more difficult to qualify RED-based discrimination under GATT Article XX. Under the original version of RED, feedstock that cannot effect a greenhouse gas saving that is high enough should not qualify for any advantages like being counted as part of a national target. It is highly likely that the increase in the greenhouse gas savings target will, in the next five years, lead to a significant amount of discrimination against foreign producers that use feedstock with too small savings while producers using domestically sourced rapeseed will still be qualified.

In the scenario that the WTO would authorise such discrimination under GATT Article XX, the new ILUC emission estimates for each feedstock complicate that argument. The complication arises because domestic feedstock in the EU is in many scientific studies associated with high ILUC emissions while the feedstock used by foreign producers discriminated against (e.g. soybean oil) is associated with lower ILUC emissions. The estimates used by the EU in its proposal present different results, but they are surprisingly different from what a plurality of scientific studies suggest. That will not be difficult to show in a WTO complaint.

Yet the simple fact that ILUC emission factors will be acknowledged in the new biofuels regulation, provided that the European Commission's proposal is endorsed, changes the legal character of RED insofar as it is no longer possible to claim authority to discriminate on the basis of the original RED alone. The EU cannot defend discrimination between like products on just one piece of its biofuels legislation if other pieces of the same legislation invalidate the basis for that discrimination. This other piece of legislation, on estimates on ILUC emissions, will basically say that values used to discriminate in RED is not a good reflection of the full emissions from changes in the carbon stock because of biofuels production. The EU would probably claim that the ILUC estimates they use confirms the hierarchy of crops in RED, but that is a weak defence considering the other estimates on ILUC emissions. In fact, it will be quite easy for a country defending, say, its soybean export to claim that if "better" estimates are used , it should domestically produced rapeseed that should be denied full market access because it is generally associated with higher ILUC emissions.

Second, the new proposal effectively introduces a new dimension of discrimination: discrimination between exactly the same type of products (not just 'like' products) depending on whether the product can be accounted for in the national targets or if it is part of the consumption that exceeds the 5 percent cap for conventional biofuels. It is not clear how this cap will work in practice, but if one entity of a biofuel will be granted an advantage, like admission to meet the target in a national action plan, while an identical entity of biofuel will not be granted the advantage, there is a new dimension of discrimination. The type of discrimination discussed above, and in the previous chapter on RED, is discrimination between different types of biofuels that, even if they are like products, emit different amounts of greenhouse gases in the production process. The proof of the pudding is in the eating, and the exact operative form that this new discrimination will take depends upon how the new component is integrated in the standards, certification schemes, and reporting mechanisms in individual member states.

Third, this new dimension of discrimination is likely to change the original character of RED discrimination. The defence of RED discrimination under GATT Article XX is based on its rational connection to the stated environmental objective. It is, the defending party would say in a dispute proceeding, a measure that is necessary to achieve the stated goal. As the previous chapter discussed, there is already a good amount that is arbitrary in the design of

RED sustainability criteria, and it is difficult to make the argument that discrimination of one class of biofuels is necessary to achieve the goal of reducing climate change when the Directive itself clearly states that the discriminated class of biofuels will also promote the goal. What it does not do, however, is to reduce greenhouse gas emissions at an equal degree as other biofuels might do. But that is a different proposition. And it certainly does not provide strong rational connections between the act of discrimination and its stated purpose.

What is of interest now is that the new proposal introduces a new type of discrimination that has no rational connection at all between the act of discrimination and the stated intention: it authorises discrimination between biofuels that achieve exactly the same levels of greenhouse gas savings. This reinforces the arbitrariness of RED-based discrimination. For a Panel or the Appellate Body in the WTO will be interested in "the revealing architecture" of RED and acts of RED-based discrimination. They will consider the "totality of facts and circumstances" in order to ensure that discrimination based on Article XX is not arbitrary. The chapeau requirements of Article XX are designed to defend against actions of arbitrary and unjustifiable discrimination. As a number of past cases have shown, WTO bodies take these requirements very seriously and rule against discriminatory and restrictive measures when such arbitrariness are part and parcel of the measure.

Fourth, and importantly, new ILUC requirements will likely present new difficulties for the EU. The scale of difficulties depends upon how the ILUC emission factor will be implemented.

It is perfectly obvious that an ILUC emission factor that would be used to deny effective market access, as proposed by the Rapporteur in the European Parliament, would be ruled against lock, stock and barrel in a WTO dispute. The idea that the WTO would accept a definition of likeness based on unlikeness caused by the production process of a completely different product simply will not wash. And the proposition that the WTO would accept such a measure under GATT or TBT exemption rules because of the stated objective to reduce greenhouse gas savings will not stand: the scientific insecurity in specifying a cut off point for when discrimination is allowed, and the arbitrariness in choosing that cut off point, would be too much to stomach.

It is quite different if the EU does not use ILUC emission factors to deny effective market access, that is: it is not used to confer any advantage or disadvantage to specific producers. This implies that ILUC emission factors cannot play any role what so ever for the sustainability criteria in RED or when countries determine what conventional biofuels that are part of the achieving the national target and what conventional biofuels that are not.

If this is the design of policy it seems legitimate to ask: what is then the point of having an ILUC emission factor at all reported, especially when there are good reasons to believe that the factors awarded to specific crops are wrong? The Commission does not give an answer beyond pointing to the precautionary principle. But why it is better from the viewpoint of this principle to halt the substitution of fossil fuels?

Would such an application of ILUC be incompliant with WTO rules? There are two schools of thought. One, associated with the Commission, is that reporting requirements do not lead to any discrimination and hence are not subject to WTO consistency. Another school of thought, however, argues that the Commission has introduced a technical regulation for certain groups of products that is mandatory and that has the intention to favour certain groups of products even if other government policies than the regulation are not used to effect it.

In other words, the reporting requirement is likely to be covered by the TBT agreement and if the requirement will lead to changes in consumption patterns that hurt certain groups of biofuels, it can be argued that the technical regulation itself has effected a discrimination that cannot be defended.

Both schools of thought are incomplete. The potential incompatibility of ILUC with the TBT agreement depends in large part upon the actual factual circumstances of a case. It seems unlikely that a dispute would occur only because of the ILUC reporting requirement. However, it is easier to envision disputes that involve the reporting requirement, where the complaining party would argue that the reporting requirement has reinforced discrimination based on the original RED sustainability criteria. This is, to some extent, the logic behind WTO rulings in some recent cases, e.g. the second dispute between the U.S. and Mexico over U.S. labelling requirements for tuna fish. In the case of the reporting requirement, the likely scenario would involve the use of a technical regulation in RED to discriminate between different biofuels and an escalation of that discrimination because of a labelling requirement on ILUC emission factors. Reporting or labelling requirements are never inconsequential. Nor are they intended to be inconsequential.

4. CONCLUDING REMARKS

This paper argues that the new proposal to reform the Renewable Energy Directive introduces new components that accelerate the conflict between WTO rules and RED sustainability criteria and generally reinforces the arbitrariness in how criteria are designed and applied. Furthermore, the new proposal changes the legal character of RED because it introduces a new measure – ILUC – that changes the RED-based hierarchy between different feedstocks in how much greenhouse gas savings they could achieve by substituting fossil fuels.

The paper also argues that the proposal to introduce ILUC emission factors is a bad idea for the simple reason the concept of ILUC is confused and that no one can say with even a slight degree of certainty what actual ILUC emission rates really are. Depending on how ILUC emission factors will be used by Member States, they can lead to a serious conflict with trade rules. In an alternative scenario, where ILUC emission factors are not used in other government policy to confer advantages or disadvantages to certain classes of biofuels, an ILUC reporting requirement can still have the effect of reinforcing discrimination based on the existing RED sustainability criteria.

Trade rules do not contradict the right of WTO members to regulate with the purpose of achieving an environmental goal like reducing greenhouse gases. Plenty of environmental regulations coexist with trade rules intended to limit protectionism and discrimination. Conflicts occur when environmental rules are designed arbitrarily, represent disguised restrictions on trade, are severely trade restrictive, alter the competitive relation between competing and substitutable products, and/or have weak links to the declared environmental goal.

And this pretty much sums up some defining characters of the Renewable Energy Directive and indicates what is wrong with the idea to introduce new ILUC emission factors in the regulatory armoury. The problem is not that trade rules block legitimate policies to reduce greenhouse gas emissions through the use of biofuels, the problem is that this policy has so many design flaws that acts of discrimination have, at best, weak connections to the legitimate goal. If the EU does not alter the direction of its biofuels regulations, it will soon hit the buffer of legal and political reality.

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