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THE EUROPEAN COMMISSION 2008 DIRECTIVE PROPOSAL ON BIOFUELS: A CRITIQUE

Florent Pelsy

COMMENT



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## COMMENT

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## INTRODUCTION

The development of biofuels as a renewable energy has been perceived as a priority by the European Union (hereinafter referred to as 'EU') in order to achieve the broader goals set in the key Lisbon and Gothenburg statements. In 2000 in Lisbon, EU Member States promised to make the European Union 'the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion by 2010'.<sup>1</sup> At the Gothenburg European Council in 2001, the EU leaders agreed on a strategy for sustainable development and added an environmental dimension to the Lisbon process.<sup>2</sup> Indeed, biofuels are approached by the EU as a new 'win win' solution that could both reduce emission of greenhouses gases in the context of climate change, improve energy security while not affecting the European economic growth. The EU also considers biofuels as a great opportunity to foster rural development both in the developed and in the developing world by creating new market opportunities for the agricultural sector.<sup>3</sup>

However, the development of biofuels is triggering negative consequences on the environment and on food security. The scientific community is increasingly pointing out the disastrous impacts of biofuels around the world. The EU, despite those facts, decided to pursue its policy toward the development of biofuels as being an alternative to fossil fuels and a solution to cut greenhouses gas emissions in the transport sector. In March 2007, the European Council in Lisbon reached an

agreement that each Member State shall achieve at least a ten per cent share of biofuels in the transport sector within 2020.<sup>4</sup> In January 2008, despite growing criticism, the European Commission reasserted the ten per cent target of biofuels in transport within 2020.<sup>5</sup> It underlined, however, that biofuels should respect specific environmental criteria in order to be counted in the target.<sup>6</sup>

The ongoing criticism toward the European Commission target on biofuels has raised doubts concerning the sustainability of this measure and its capacity to reduce the negative impact of biofuels on the environment and on food security.

This article argues that the European Council should apply the precautionary principle, contained in Article 174 of the European Commission Treaty<sup>7</sup> in order to revise the European Commission proposal on biofuels on the ground that its implementation could have probable serious negative consequences on the environment and on food security.

# 1

## COMMISSION BIOFUELS PROPOSAL OVERVIEW

### 1.1 The Approach

#### 1.1.1 Definition of Biofuels

Biofuels can be defined as 'solid, liquid, or gas fuel consisting of, or derived from biomass, which is

1 Council of the European Union, Presidency Conclusions of the Lisbon Extraordinary European Council, European Council (Lisbon: Council of the European Union, 23 and 24 March 2000), available at [http://www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressData/en/ec/00100-r1.en0.htm](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/00100-r1.en0.htm).

2 Council of the European Union, Presidency Conclusions (Brussels: Council of the European Union, 2001), available at [http://ec.europa.eu/governance/impact/docs/key\\_docs/goteborg\\_concl\\_en.pdf](http://ec.europa.eu/governance/impact/docs/key_docs/goteborg_concl_en.pdf).

3 Commission of the European Communities, An EU strategy for Biofuels, Communication from the Commission (Brussels: Commission of the European Communities, 2006), available at [http://ec.europa.eu/agriculture/biomass/biofuel/com2006\\_34\\_en.pdf](http://ec.europa.eu/agriculture/biomass/biofuel/com2006_34_en.pdf).

4 Council of the European Union, Presidency Conclusions of the Brussels European Council (Brussels: Council of the European Union, 2007), available at [http://www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressData/en/ec/93135.pdf](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/93135.pdf).

5 Commission of the European Communities, Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources (Brussels: Commission of the European Communities, 2008), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0019:FIN:EN:pdf>.

6 *Id.*

7 Interpretation by the 'Court of First Instance' in 2002.

composed of living and recently dead biological material'. They differ from fossil fuels since they derive from renewable resources such as crop plants. This essay will deal with biofuels used as transportation fuels that are generally in liquid form.

The common forms of biofuels are bioethanol, biodiesel and biogas. Bioethanol is the biofuel substitute for petrol (gasoline). It is derived from cereal based crops – mainly wheat in Europe, and maize, soybeans and sugarcane in the United States and South America. Biodiesel is the biofuel substitute for diesel. It derives from oilseed based crops, mainly oilseed rape (OSR) in Europe, and palm oil in South East Asia. Bioethanol and biodiesel are first generation biofuels that are mainly derived from food crops. Biogas is a second generation fuel. It is a substitute for natural gas. It derives from organic waste material and it is processed by anaerobic digestion.<sup>8</sup>

#### 1.1.2 A 'Win Win' Solution

Biofuels have been perceived as a 'win win' solution that could both help to resolve the EU dependency on fossil fuels, reduce energy security, contribute to the reduction of emission of greenhouses gases, increase rural development in the EU and foster the economies of developing countries.

The world's primary source of energy for the transport sector is oil. The EU is importing the majority of its oil supply.<sup>9</sup> This dependency is viewed as a possible threat for the EU economy because most of the oil imported in EU is coming from areas which are considered politically unstable. For example 45 per cent of EU oil import comes from the Middle East.<sup>10</sup> Biofuels are still expensive compared to fossil fuels but this is bound to change since oil reserves are limited and there is an increasingly high demand on fossil fuels worldwide.

Biofuels are therefore deemed to become a competitive alternative fuel for transport that could contribute to softer the dependency of the EU economy on volatile and expensive fossil fuels and reduce energy insecurity within the EU.

The EU, by ratifying the Kyoto protocol, is currently bound to reduce its greenhouses emissions. Transport is estimated to be responsible in the EU of 21 per cent of the greenhouses gas emissions.<sup>11</sup> One of the main challenges of the EU is to reduce the share of greenhouses gases in the sector of transport. Actions are being taken to reduce the emissions of greenhouse gases in EU transport. For example, vehicle manufacturers are developing new models that are cleaner and more fuel efficient. Efforts are also made to facilitate public transports.

Biofuels are, however, deemed to be the best alternative to reduce the share of greenhouse gas emissions in the transport sector according to the European Commission.<sup>12</sup> Indeed biofuels are supposed to be carbon neutral or to reduce carbon emissions. The carbon that biofuels emit to the atmosphere when burned is supposed to be offset by the carbon that plants absorb from the atmosphere while growing. In other words, there is a kind of virtuous circle from the production to the consumption of biofuels based on the renewability of plants and their capacity to absorb CO<sub>2</sub> by photosynthesis. Therefore, biofuels are deemed to be the right solution to decarbonise the transport sector without reducing its intensity.

The biofuel alternative has also been viewed as a tool to foster both rural development and the agricultural sector within the EU and within developing countries.<sup>13</sup> Nowadays, the EU agricultural sector is largely subsidised by the European Commission within the framework of the Common Agricultural Policy. Biofuels can thus be a stimulant market for the EU agricultural sector that will have to supply a huge amount of biomass for the biofuel industry by producing more crops such as wheat, maize, and oilseed rape. The EU agricultural sector could then

8 Food & Grocery Information, Insight & Best Practice, Transport and Distribution, Biofuels, Published 04/06/2006, available at <http://www.igd.com/cir.asp?menuid=150&cirid=2348>.

9 Alexander's Gas and Oil Connections News and Trends, 'Europe Geopolitics of EU Energy Supply', volume 10, issue #15, 17 August, 2005, available at <http://www.gasandoil.com/goc/news/nte53367.htm>.

10 *Id.*

11 See note 3 above.

12 *Id.*

13 *Id.*

become more competitive and less and less subsidised by the European Union.

Biofuels are also viewed by the European Commission as a great economic opportunity for developing countries. The European Commission in its communication on the EU strategy on biofuels mentions that the cost of production is lower and the biomass productivity is often higher in developing countries. It argues that the Brazilian ethanol is much more efficient than the ethanol produced in Europe because the fossil energy input for producing ethanol from sugar cane in developing countries is lower than for ethanol produced in Europe. The European Commission also mentions in its communication that developing countries such as Malaysia, Indonesia and the Philippines will have the opportunity to develop export potential of biodiesels. The communication concludes that the production of biofuels could provide an opportunity to diversify agricultural activity, reduce dependence on fossil fuels and contribute to economic growth in developing countries if done sustainably.<sup>14</sup>

## 1.2 The Eu Policy Framework on Biofuels

### 1.2.1 An Integrated EU Framework on Climate Change and Energy

In 1991, the European Commission started to be involved in climate change and related initiatives when it launched its first Community strategy to limit CO<sub>2</sub> emissions and improve energy efficiency.<sup>15</sup> These initiatives included a directive to promote electricity from renewable energy, voluntary commitment by car makers to reduce CO<sub>2</sub> emissions by 25 per cent and proposals on the taxation of energy products.<sup>16</sup>

In May 2002, the European Union along with its Member States ratified the Kyoto protocol. It then committed itself to cut its greenhouse gas emission to eight per cent below 1990 levels by 2008-2012.<sup>17</sup>

The European Union has since then decided to take the lead within the international community in terms of climate change issues. The EU has also become aware that it was increasingly relying on few external suppliers of oil and gas and that this circumstance could contribute to energy insecurity within the EU and destabilise the economy of Member States.

Therefore, in March 2006, the Commission published a green paper that laid down the foundations for a secure, competitive and sustainable energy in the European Union.<sup>18</sup> On 10 January 2007, the Commission proposed a package of energy and climate change recommendations and stated that this package would 'set the pace for a new global industrial revolution and increase EU resilience to future oil-price shocks'.<sup>19</sup>

In March 2007, EU Member States accepted the main points of the European Commission's proposal and agreed on a two year scheme to launch a common European energy policy.<sup>20</sup> In that summit, EU leaders acknowledged that energy and climate change policies should go together. They also pointed out the need for 'decisive and immediate action'<sup>21</sup> on climate-change and the 'vital importance of achieving the strategic objective of limiting the global average temperature to not more than two degrees above pre-industrial levels'.<sup>22</sup> In order to achieve this goal, the European Union Council decided to implement strong objectives.

First of all EU leaders agreed to a binding target to cut EU's greenhouse gas emissions by 20 per cent in

<sup>14</sup> *Id.*

<sup>15</sup> See European Climate Change Programme, available at <http://ec.europa.eu/environment/climat/eccp.htm>.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> Commission of the European Communities, Green Paper: a European Strategy for Sustainable, Competitive and Secure Energy (Brussels: Commission of the European Communities, 2006), available at [http://ec.europa.eu/energy/green-paper-energy/doc/2006\\_03\\_08\\_gp\\_document\\_en.pdf](http://ec.europa.eu/energy/green-paper-energy/doc/2006_03_08_gp_document_en.pdf).

<sup>19</sup> Europa Rapid Press Releases, Commission Proposes an Integrated Energy and Climate Change Package to Cut Emissions for the 21<sup>st</sup> Century, Europa Rapid Press Releases IP/07/29, Brussels, 10 January 2007, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/29&format=HTML&aged=1&language=EN&guiLanguage=fr>.

<sup>20</sup> See note 4 above.

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

2020 compared with 1990 levels. They decided that this objective should be pursued ‘unilaterally even if there is no international agreement on reducing greenhouse-gas emissions after 2012 when the Kyoto targets expire’. They also agreed on a commitment to ‘reduce emissions by 30 per cent provided that other industrialised nations, including that the US commit themselves to comparable emission reductions and that advanced developing countries contribute as well in the framework of a post-2012 agreement’.<sup>23</sup>

An action plan was launched to endorse the main objective of the Summit. It has to be implemented between 2007 and 2009. The plan included for example, a binding target to raise the EU’s share of renewable energy to 20 per cent by 2020, a target to save 20 per cent of the EU’s total primary energy consumption by 2020. On the issue of biofuels, which are considered as a renewable energy, the plan included an obligation for each Member States to have ten per cent of biofuels in their transport fuel mix by 2020 while the previous 2003 EU directive required the EU members to comply a two per cent target in 2005 and a 5.75 per cent target in 2010 of consumption of biofuels in transport. The Council attached conditions to this target, by stating that biofuels were ‘subject to production being sustainable, second-generation biofuels becoming commercially available and the Fuel Quality Directive being amended accordingly to allow for adequate levels of blending’.<sup>24</sup>

In late January 2008, the Commission decided to confirm the March 2007 target on biofuels within its proposal for a directive on renewable energies. However, it added several environmental criteria in order to restrict the ecological impact of the production of biofuels to be consumed in the EU.

### 1.2.2 *The Proposed Directive on Renewable Energies*

Since the 2007 March Summit in Lisbon, the Commission has launched two major legislative packages in respect of the 2007 action plan. One on the liberalisation of the EU’s energy market in

September 2007, and another in January 2008 called the ‘climate and energy package’. Within the energy and climate package, there is a proposed directive on renewable energies that takes into consideration the EU target on biofuels. In its Article 3, the proposal of the Directive reiterates the target of the action plan. It provides that ‘Each Member State shall ensure that the share of energy from renewable sources in transport in 2020 is at least ten per cent of final consumption of energy in transport in that Member State’.<sup>25</sup>

The proposed directive on renewable energy sets various environmental criteria for biofuels and other bioliquids in order to ensure that biofuels consumed in the EU will have a positive impact on climate change and will not have a negative impact on the biodiversity. Article 15 states that biofuels that fail to meet the criteria would not count towards national biofuel targets and would not be eligible for tax reductions and similar types of financial support. The environmental criteria are the following ones:

- The greenhouse gas emission saving from the use of biofuels and other biofuels shall be at least 35 per cent.
- Biofuels and other bioliquids shall not be made from raw material obtained from land with recognised high biodiversity value, for example such as forest undisturbed by significant human activity where there has been no known significant human intervention or the last significant human intervention was sufficiently long ago to have allowed the natural species composition and processes to have become re-established, or areas designated for nature protection purposes unless evidence is provided that the production of that raw material did not interfere with those purposes, areas of highly biodiverse grassland, species-rich, not fertilised and not degraded.
- Biofuels shall also not be made from raw material obtained from land with high

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<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

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<sup>25</sup> See note 6 above.



carbon stock, such as wetlands which are land that are covered with or saturated by water permanently or for a significant part of the year, including pristine peatland; and continuously forested areas, meaning land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30 per cent, or trees able to reach these thresholds in situ.<sup>26</sup>

However, the confirmation of the 2007 target has raised a wave of protest in the NGO community and also within the EU Commission itself. For example, just a few days before the release of the proposed directive on renewable energy, the EU's Joint Research Council, the European Commission's in-house scientific body stated, in a 'leaked' document, that the, 'uncertainty is too great to say whether the EU ten per cent target will save [greenhouse gas emissions] or not'. The report also underlined that the greenhouse effect of using nitrogen fertilisers is 'significantly higher' than previous estimates and that land use changes (e.g. deforestation, draining of peatlands or ploughing grasslands) 'could potentially release enough greenhouse gas to negate the savings from EU biofuels'.<sup>27</sup> The report also argued that the EU should invest in extra storing capacity to create a strategic oil reserve to buffer short term supply shocks rather than invest (much higher sums) in biofuels which would give a limited solution to the problem of insecurity of supply. It finally underlined that potential job creation risks to be low in the biofuels sector because they are likely to be offset by job destruction in other sectors affected by the biofuels target.<sup>28</sup>

The internal conflict within the EU Commission and the several negative consequences of biofuels on the environment and on food security, not only in Europe but also in the developing world, and the doubts on the efficiency of the environmental criteria, put into question the sustainability of the EU's target as it will be demonstrated below.

<sup>26</sup> *Id.*

<sup>27</sup> Friends of the Earth, press release, EU Policy Left in Tatters, January 2008, available at, [http://www.foeeurope.org/press/2008/Jan18\\_Biofuels\\_policy\\_tatters.html](http://www.foeeurope.org/press/2008/Jan18_Biofuels_policy_tatters.html).

<sup>28</sup> *Id.*

## 2 COMMENTS ON THE COMMISSION PROPOSAL ON BIOFUELS

### 2.1 FRAMEWORK FOR ANALYSIS

The followings comments on the Commission Proposal on biofuels require first the understanding of two notions that are sustainability, and the European Union approach of the precautionary principle.

#### 2.1.1 Sustainability

The word sustainability derives from the sustainable development concept. This notion was first defined by the Bruntland Commission Report 'Our Common Future' in 1987 as 'development that meets the needs of the present without compromising the ability of future generation to meet their own needs'.<sup>29</sup> The concept of sustainable development has developed and evolved. According to Daniel Barstow Magraw and Lisa Hawke it mainly consists of the obligation to take into account the needs of the present and future generations (inter-generational equity principle), the needs of the world's poor (intra-generation equity), the preservation of the environment, and the integration of economic, social and environmental policies.<sup>30</sup>

Thus, the concept of sustainable development has a broader perspective than the protection of the environment. It can be viewed as a meta-principle that tries to address solutions from a holistic approach by reconciling human rights, environmental concerns and economic development that are more and more considered as interlinked issues.<sup>31</sup> Following that approach, the Johannesburg declaration on sustainable development clarifies that sustainable development is based on three pillars, economic development, social development and

<sup>29</sup> Daniel Bodansky, Jutta Brunnée and Ellen Hey eds, *The Oxford Handbook of International Environmental Law*, 619 (Oxford: Oxford University Press 2007).

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

environmental protection that have been applied in an integrated manner at the local, national, regional, and global level.<sup>32</sup>

### 2.1.2 Precautionary Principle:

Precaution is understood as a strategy for addressing risk.<sup>33</sup> According to Jonathan Wiener, the essence of precaution encompasses thinking ahead and taking anticipatory action to avoid uncertain future risks. The precautionary principle is an attempt to codify the concept of precaution in law.<sup>34</sup>

According to the European Commission, the Court of Justice of the European Communities and the WTO, this principle does not only apply to the environment but also to other fields such as health, food, and consumer safety risks.<sup>35</sup> The precautionary principle applies to uncertain risks whereas the principle of prevention applies to 'known' risks. Known risks would then be risks that have well understood cause and effect relationships.<sup>36</sup>

The Convention on the protection of the marine environment in the North East Atlantic provides a clear definition of the precautionary principle in its sphere of competence, it mentions that this is a principle 'by virtue of which preventive measures are taken when there are reasonable grounds for concern that substances or energy introduced directly or indirectly into the environment may bring about damage to human health, harm living resources [...] even where there is no conclusive evidence of a causal relationship between the inputs and effects'.<sup>37</sup>

The precautionary principle was inserted into Article 174(2) of the EC Treaty in 1993. However,

Article 174(2) does not define the precautionary principle as it only states that:

Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken.<sup>38</sup>

The European Commission, however, adopted in 2000 a communication on the precautionary principle that sets non-binding guidelines for Member States and European Institutions on how and when to implement the precautionary principle.<sup>39</sup> The Commission in its 2000 communication states that 'the precautionary principle is particularly relevant to the management of risk' and mentions that in applying the precautionary principle, 'decision-makers are called to balance the freedom and rights of individuals, industry and organisations with the need to reduce the risk of adverse effects to the environment, human, animal or plant health'. According to the communication the 'recourse to the precautionary principle presupposes that potentially dangerous effects deriving from a phenomenon, product or process have been identified and that scientific evaluation does not allow the risk to be determined with sufficient certainty'.<sup>40</sup>

The Commission also recommends that the measure applying the precautionary principle should be proportional to the chosen level of protection, non-discriminatory in their application, consistent with similar measures already taken, based on an examination of the potential benefits and costs of action or lack of action, subject to review, in the

32 Point 5 of United Nations Declaration on Sustainable Development, Johannesburg, World Summit on Sustainable Development, 2002, A/CONF.199/20.

33 See J. B. Wiener, 'Precaution', in Bodansky, Brunnée and Hey eds, note 29 above.

34 *Id.*

35 See Wiener, note 33 above.

36 *Id.*

37 Article 2 Paragraph 2 (a) of the Convention for the Protection of the Marine Environment of the North-East Atlantic, Paris, (1992), EmuT, 992:71.

38 See European Union, Consolidated Versions of the Treaty on European Union and of the Treaty Establishing the European Community (2006), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:321E:0001:0331:EN:PDF>.

39 Commission of the European Communities, Communication from the Commission on the Precautionary Principle (Brussels: Commission of the European Communities, 2000), available at [http://ec.europa.eu/dgs/health\\_consumer/library/pub/pub07\\_en.pdf](http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf).

40 *Id.*

light of new scientific data, and capable of assigning responsibility for producing the scientific evidence necessary for a more comprehensive risk assessment.<sup>41</sup>

In September 2002 the Court of First instance in the Pfizer/ Alpharma<sup>42</sup> case sketched out a systematisation of the precautionary principle by clearly defining the conditions triggering its application. The case was dealing with a Council Regulation adopted on 17 December 1998 that banned the use of four antibiotics as additives in animal feeding stuffs.

The court provided that:

Preventive measure cannot properly be based on a purely hypothetical approach to the risk, founded on mere conjecture which has not been scientifically verified [...] Rather, it follows from the Community Courts' interpretation of the precautionary principle that a preventive measure may be taken only if the risk, although the reality and extent thereof have not been 'fully' demonstrated by conclusive scientific evidence, appears nevertheless to be adequately backed up by the scientific data available at the time when the measure was taken.<sup>43</sup>

In other words, the precautionary principle's invocation requires a prior objective evaluation of the existing scientific relevance. As Alberto Alemanno argues, 'it is not a joker or wild card that can be played at any moment as a pretext for unjustified measures'.<sup>44</sup>

## 2.2 Impacts of Biofuels

Contrary to the 'win win' approach proposed by the European Commission, the large-scale

production of biofuels is triggering numerous unexpected negative consequences that may overcome all its benefits.

Firstly, biofuels are not always carbon neutral and may on the contrary have a negative impact on climate change. Secondly, the increase of fuel crops is leading directly or indirectly to the transformation of non-cultivated areas with highly valuable biodiversity such as forests, grasslands, savannas, in monoculture land fields thereafter destroying natural ecosystems and pushing away communities that rely on these areas for their livelihood. Thirdly, the production of certain biofuels is intensive and causes several pressures on the environment. It requires a lot of fertilizers and water that could in a long term lead to serious pollution such as nitrogen run off and to the overuse of water resources. Finally, the biofuel production, by competing with food crops production, is probably leading to food insecurity and high prices of food which could seriously affect the world's poor.

### 2.2.1 The Carbon Circle of Biofuels: Its Negative Impact on Climate Change

Scientists are now realising that the carbon offset of biofuels is a complex equation. It has to take into account all release of greenhouses gases throughout the supply chain of biofuels, from the clearing of land for their cultivation to their consumption, instead of only assessing the CO<sub>2</sub> absorbed by the fuels crops and the CO<sub>2</sub> released by the burning of biofuels within engines.<sup>45</sup> For example, it has been demonstrated that the use of fertilizers, the harvesting, the conversion and the transportation process are activities that release greenhouses gases such as methane, carbon dioxide and nitrous oxide.<sup>46</sup>

By taking into account all the carbon circle of biofuels, Pimentel and Tad W. Patzek showed that, in terms of energy output compared with energy input for ethanol production, corn requires 29 per cent more fossil energy than the fuel produced;

<sup>41</sup> *Id.*

<sup>42</sup> Judgments of the Court of First Instance in Cases T-13/99 and T-70/99 Pfizer - Alpharma 11 September 2002.

<sup>43</sup> *Id.*

<sup>44</sup> Alberto Alemanno 'The Shaping of the Precautionary Principle by European Courts, from Scientific Uncertainty to Legal Certainty', *Cahiers Européens, Halley*, (2007), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1007404](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1007404).

<sup>45</sup> The Royal Society, *Sustainable Biofuels: Prospects and Challenges* (London: The Royal Society, Policy Document 01/08, January 2008), available at <http://royalsociety.org/displaypagedoc.asp?id=28914>.

<sup>46</sup> *Id.*

switch grass requires 45 per cent more fossil energy than the fuel produced; and wood biomass requires 57 per cent more fossil energy than the fuel produced. In terms of energy output compared with the energy input for biodiesel production, the study found that soybean plants require 27 per cent more fossil energy than the fuel produced, and sunflower plants require 118 per cent more fossil energy than the fuel produced.<sup>47</sup>

Contrary to fossil fuels, biofuels cannot be transported by pipelines. They thus have to be transported by trucks or by ships, which are activities that release greenhouse gases.<sup>48</sup>

Furthermore, forests and grasslands are huge sinks of CO<sub>2</sub>. Therefore, if forest lands and grasslands are cut down, burnt and converted to fuel crops they will release a huge amount of CO<sub>2</sub> stocked in their trees and in their soil. Thereafter, biofuels that come from converted grasslands and forest lands are far from being carbon neutral and can have on the contrary a negative impact on climate change. According to Righelato's theory, the carbon sequestered by restoring forests is greater than the emissions avoided by the use of liquid biofuels.<sup>49</sup>

### 2.2.2 The Consequences of Biofuels in the Developing World

The increasing consumption of biofuels worldwide is likely to have a huge impact on the biodiversity of tropical areas in Africa, South America, Asia and on communities that are dependent on these ecosystems. Tropical fuel crops such as sugar cane,

cassava and palm oil produce much more energy efficient biofuels than fuel crops in Europe or North America. Therefore, countries in Europe and in North America are likely to import biofuels from tropical countries.

This new market is contributing to the development of huge monoculture plantations most of the time driven by multinational corporations. Those plantations are likely to replace lands with high valued biodiversity such as rainforests savannas and grasslands that sustain directly and indirectly the daily livelihood of a huge number of communities through the developing world. For example, the government of Indonesia is planning to develop 1.8 millions of hectares of palm oil plantations for the production of biofuels in Borneo, within the ancient rainforest that hosts the orang-utan in Kalimantan, leading to the destruction of high valuable endemic biodiversity and affecting the livelihood and cultural identity of many communities that depend on the forest.<sup>50</sup>

In Africa, the impact of fuel crops on biodiversity and on communities has been already observed.<sup>51</sup> For example, in Uganda, thousands of hectares of rainforest close to the Lake Victoria have already been cut down to make way for palm oil plantations. In Tanzania, thousands of Tanzanian farmers are already being evicted from fertile areas of land with good access to water, for agrofuel sugar cane and jatropha plantations on newly privatised land. In Ethiopia, some foreign companies have already been allocated land for fuel crops. For example, the Ethiopian government has granted 13,000 hectares in Oromia State, 87 per cent of which is part of the Babile Elephant sanctuary that hosts rare and endangered elephants.<sup>52</sup> In Brazil, the development of biofuels crops such as sugar canes and soybeans are threatening directly or indirectly several highly

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47 Susan S. Lang, 'Cornell Ecologist's Study Finds that Producing Ethanol and Biodiesel from Corn and other Crops is not Worth the Energy', Cornell University News Service, 5 July 2005, available at <http://www.news.cornell.edu/stories/July05/ethanol.toocostly.ssl.html>.

48 Mark Anslow, Biofuels - Facts and Fiction: The Claims for Biofuels Make it Seem Truly a Wonder Crop. Mark Anslow Separates the Wheat from the Chaff, *The Ecologist*, 20 February 2007, available at [http://www.theecologist.org/archive\\_detail.asp?content\\_id=755](http://www.theecologist.org/archive_detail.asp?content_id=755).

49 R. Righelato and D.V. Spracklen, 'Carbon Mitigation by Biofuels or by Saving and Restoring Forests?' 317/5840 *Science* (2007).

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50 Rhett A. Butler, Why is Oil Palm Replacing Tropical Rainforests? Why are Biofuels Fueling Deforestation?, 25 April 2006, available at [http://news.mongabay.com/2006/0425-oil\\_palm.html](http://news.mongabay.com/2006/0425-oil_palm.html).

51 Gaia Foundation, An African Call for a Moratorium on Agrofuel Developments, November 2007, available at <http://www.gaiafoundation.org/documents/Africaagrofuelmoratorium.pdf>.

52 *Id.*

biodiverse ecosystems such as the Amazon, the Cerrado and the Pantanal.<sup>53</sup>

### **2.2.3 Other Environmental Impacts of Biofuels**

Large-scale and monoculture plantations of fuel crops like corn and soybeans contribute to several environmental degradations such as soil erosion and water pollution. They also require large amount of fertilizers and pesticides that can cause disastrous nitrogen run off. For example, the overuse of fertilizers in corn plantations in the Middle West of America has contributed to the so called 'dead zone' in the Gulf of Mexico that represents an area the size of New Jersey with so little oxygen that it can barely support life.<sup>54</sup>

A major increase in production of biofuels will directly lead to very intensive monoculture crops such as corn and soybeans and thereafter will increase the risk of water overexploitations and run off of nitrogen which would probably cause disastrous impacts on the environment.

### **2.2.4 Biofuels and Food Insecurity**

The increasing production of biofuels is likely to have tremendous impacts on food systems all over the world and especially in developing countries. The biofuels crops are competing with food crops leading to the raising of food prices. For example, in March 2007, in the United States, the price of corn has reached its highest price for ten years. In late 2006, the flour of tortilla doubled in price because of the rise of American corn leading to real food insecurity in the Mexican urban poor.<sup>55</sup>

As a direct effect, high prices of cereals lead to high prices of meat, eggs and dairy. In March 2007, the

U.S. Department of Agriculture forecast that demand for ethanol would push the prices of poultry, pork, and beef higher. Michael Swanson noted that biofuels are one of the main causes for the increased rate of food inflation in the United States.<sup>56</sup>

The International Food Policy Research Institute has projected that given continued high oil prices, the rapid increase in global biofuel production will push global corn prices up by 20 per cent by 2010 and 41 per cent by 2020. The prices of oilseeds, including soybeans, rapeseeds, and sunflower seeds, are projected to rise by 26 per cent by 2010 and 76 per cent by 2020, and wheat prices by 11 per cent by 2010 and 30 per cent by 2020. In the poorest parts of sub-Saharan Africa, Asia, and Latin America, where cassava is a staple, its price is expected to increase by 33 per cent by 2010 and 135 per cent by 2020.<sup>57</sup>

Cassava is a very energy efficient biofuel thanks to its high-starch content. Countries in the developing world such as Nigeria and Thailand are studying the possibility to grow cassava for ethanol purpose. A cassava based ethanol production may cause food insecurity in the world's poor because cassava provides one-third of the caloric needs of the population in Sub-Saharan Africa and is the primary staple for over 200 million of Africa's poorest people. Furthermore, peasant's farmers in developing countries may not enjoy this new market. The main beneficiaries will probably be large mechanised producers. An increase in cassava-based ethanol production is therefore likely to increase the difficulty of poor people to feed themselves.<sup>58</sup>

Even if there is already an acknowledgement that biofuels can have negative impacts on the environment and food security, the EU has nevertheless decided to take the risk of a potential increase of the share of biofuels in transport if the biofuels are certified to be produced and processed according to certain environmental criteria.

The main question that arises from the proposed directive on renewable energy is whether the criteria

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53 Chris MC Gowan, Biofuels Could Eat Brazil's Savannas and Deforest the Amazon, The Huffington Post, 14 September 2007, available at [http://www.huffingtonpost.com/chris-mcgowan/biofuel-could-eat-brazil\\_b\\_64466.html](http://www.huffingtonpost.com/chris-mcgowan/biofuel-could-eat-brazil_b_64466.html).

54 C. Ford Runge and Benjamin Senauer, 'How Biofuels Could Starve the Poor?' *Foreign Affairs*, May/June 2007, available at <http://www.foreignaffairs.org/20070501faessay86305/c-ford-runge-benjamin-senauer/how-biofuels-could-starve-the-poor.html>.

55 *Id.*

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56 *Id.*

57 *Id.*

58 *Id.*

issued by the European Commission will be able to avoid the social and environmental probable impacts that may cause the EU's target on biofuels?

### 2.3 Environmental Criteria For Biofuels: A Critique

The Commission announces in its 2008 proposal that biofuels that do not comply with the criteria set by the European Commission on climate change and on biodiversity will not be counted within the EU's renewable target. These criteria raise several issues. First of all, they do not take into account all the aspects of sustainability. Secondly, they will probably rely on certification schemes that may not be able to assess the complex life cycle of biofuels and all the side impacts of biofuels. Finally, these criteria will probably trigger some conflict at the WTO. Indeed, producer countries of biofuels in the South would probably interpret these criteria as a form of eco-imperialism from developed countries.

#### 2.3.1 Restrictive Approach of Sustainability

The criteria set in the 2008 proposed directive on renewable energy do not take into account the Lisbon Council statement in March 2007 that announces that biofuels are subject to production 'being sustainable'. Indeed the criteria set by the Commission do not encompass all the different aspect of sustainability as defined above. The criteria only deal with two environmental issues: the impact of biofuels on climate change and the protection of biodiversity. It does not take into account the possible impacts of biofuels on social development, human rights, food security and other environmental issues such as soil erosion, water overexploitation, and overuse of fertilizers. For example, the proposed directive does not establish the respect of basic principles of labour laws. It does no mention that the production of biofuels should not be done in the detriment of the rights of farmers and indigenous communities and that development of fuels crops on their customary land should be subject to their consent.

The EU has, however, been intensively involved in the propagation of the concept of sustainable development. It has been one of the main actors of the negotiations of the World Summit in

Johannesburg on sustainable development. It committed itself to respect those principles.<sup>59</sup> Moreover, the EU also launched in 2006 the EU's Sustainable Development Strategy that aimed at promoting a high level of environmental protection, social equity and cohesion, economic prosperity and active promotion of sustainable development.<sup>60</sup> The restrictive criteria set by the European Commission illustrate that, in the case of biofuels, it seems to disregard its commitment toward the implementation of the principles of sustainable development.

Some argue that the criteria did not include high sustainable standard because it was predicted that if the standards were too high, there would not have enough feedstock to fulfil the ten per cent target<sup>61</sup> since the majority of producers of biofuels are not able to comply with high sustainable standards in a relatively short term. This situation has led to a conflict of objectives between on the one hand the high biofuel targets set in the EU and on the other hand the condition that biofuels need to be sustainable.<sup>62</sup>

The European Commission should have been inspired by the several works or drafts that tried to take into consideration all the different negative consequences of the production of biofuels. For example, a group commissioned by the government of the Netherlands in 2006 submitted a proposal that set sustainable criteria for biomass including also biofuels. This proposal takes into consideration all the various environmental, social and economical aspects of sustainability in the production of biofuels.

59 Margot Wallström, Responsible for Environment: From Words to Deeds The Results of the Sustainability Summit in Johannesburg (Brussels: Speech delivered at the Centre for European Policy Studies, 11 September 2002).

60 Council of the European Union, Renewed EU Sustainable Development Strategy (Brussels: Council of the European Union, 2006), available at <http://register.consilium.europa.eu/pdf/en/06/st10/st10117.en06.pdf>.

61 Stephanie Schlegel and Timo Kaphengst, 'Explorations in Biofuels Economics, Policy, and History European Union Policy on Bioenergy and the Role of Sustainability Criteria and Certification Systems', 5/2 *Journal of Agricultural & Food Industrial Organization*, Article 7 (2007).

62 *Id.*

For instance, biofuels will be qualified sustainable if they satisfy several criteria and numerous sub-criteria, such as, the balance of greenhouse gas emissions in the production chain and application of biomass needs to be positive, biomass production should not come at the cost of important carbon reservoir in the vegetation and in the soil, biomass production for energy may not endanger the supply of food and local biomass applications (energy supply; medicines; building materials), biomass will not harm protected or vulnerable biodiversity and wherever possible will enhance biodiversity. Other criteria dealing with the quality of the soil and water and their non exhaustion are also taken into consideration. Finally, certain welfare and employment conditions must also be fulfilled.<sup>63</sup>

### *2.3.2 Private Certification Scheme Loopholes*

Article 16.2 of the proposed directive on biofuels states that:

The Commission may decide that voluntary national or international schemes setting standards for the production of biomass products contain accurate data for the purposes of Article 15(2) or demonstrate that consignments of biofuel comply with the environmental sustainability criteria [...].<sup>64</sup>

In other words, the European Commission would probably apply a system of meta-standards in order to control the application of the different criteria on biofuels. Stephanie Schlegel and Timo Kaphengst define a system of meta-standard as 'a benchmark standard that relies on different existing standards and certification schemes'.<sup>65</sup> For example, in the case of biofuels, the existing international or voluntary standard covering biomass products would, through a comitology process (an evaluation by different committee according to Article 202 of the EC Treaty), be approved as qualifying standards of the 'meta standard' for biofuels. The European

Commission initiated this system in the 1980's in order to expand regional trade.<sup>66</sup>

This approach is on the one hand very efficient because it relies on existing standards and therefore the sourcing of 'sustainable feedstock' would be easier and quicker, but on the other hand it also raises several issues on the efficiency of the private certification schemes and on their capacity to ensure that criteria have been respected along the chain of custody from the land clearing to the production of biofuels.<sup>67</sup>

The main rationale of sustainable certification of a process or a product is to avoid a race to the bottom in environment and social matters by countries that are willing to relax their environmental and social laws in order to attract new markets or new investors. They were mainly promoted by the NGO community and coincide with the rise of the global civil society.<sup>68</sup> These certification systems, however, might not be the most effective tool to enforce sustainable production of biofuels in developing countries with poor governance.

For example, forest certification schemes illustrate the different loopholes of such private mechanisms. They represent a small part of the market of timber. Moreover, their success is largely limited to temperate and boreal forest in industrialised countries with a high level of environmental law enforcement and where deforestation is not a major issue. In developing countries certification scheme account for a small part of the market because unsustainable production of timber is much more lucrative due to weak forest laws and their weak enforcement.<sup>69</sup> Furthermore, Richard Doornbosch and Ronald Steenblik demonstrate that within the certification scheme it is difficult to develop an effective chain of custody control that checks wood

63 Richard Doornbosch and Ronald Steenblik, *Biofuels: Is the Cure Worse than the Disease?* (Paper prepared for the OECD Round Table for Sustainable Development, OECD, Paris, 11-12 September 2007), available at <http://www.oecd.org/dataoecd/15/46/39348696.pdf>.

64 See note 6 above.

65 See Schlegel and Kaphengst, note 61 above.

66 See Bodansky, Brunnée and Hey, note 29 above.

67 See Schlegel and Kaphengst, note 61 above.

68 Johannes Ebeling, *The Effectiveness of Market-Based Conservation: Can Forest Certification Compensate for Poor Environmental Regulation in the Tropics?* (Paper Prepared for the 2005 Berlin Conference on the Human Dimensions of Global Environmental Change 'International Organisations and Global Environmental Governance', Berlin, Germany, 2-3 December 2005).

69 *Id.*

products from the forest through the finished product.<sup>70</sup> They point out that wood can be processed into many different products and sourced from many different wood species, origins and owners and that shipping documents are easily falsified. They also stress that the effectiveness of certification has been undermined by the segmentation of the market. Wood products from sustainable sources are supplying the small higher price market segment, whereas non-sustainable products are going to the rest of the market.<sup>71</sup> They finally argue that the profusion of different certification schemes have undermined the potential for increase transparency in the market and the costs facing sustainable producers.<sup>72</sup>

All the critics addressed toward the voluntary sustainable forest certification schemes could probably apply to the certification of biofuels. Certification schemes of biofuels could well suffer more loopholes than forest certification schemes since the production of biofuels is much more complex to assess.

The two criteria set by the European Commission, even though they do not take into account all the different aspects of sustainability, are still very difficult to assess and control within a certification scheme. For example the greenhouse gas emissions must be counted from the clearance of the land to the consumption of the biofuels.

According to the Royal Society, greenhouse gases, such as methane, carbon dioxide and nitrous oxide are emitted along the entire supply chain, greenhouse gas emission from converting land types must also be evaluated.<sup>73</sup> Therefore life cycle assessments of biofuels must be able to reflect the real changes in greenhouse gas emissions that occur when biofuels are produced and used to replace conventional transport fuels. This needs a lot of know-how, time and procedure and may end up as a very expensive process that will certainly have a negative impact on the expansion of the market of sustainable biofuels. Finally it has also been argued that certification

will only deal with the direct environmental and social impacts of biofuels, and would not have the capacity to address spillover effects through the displacement of non-biofuels agriculture.<sup>74</sup>

### 2.3.3 *Eco-imperialism and the Extra Jurisdictional Activity Doctrine*

The doctrine of extra jurisdictional activity allows governments to impose regulations that have effect outside their own jurisdiction, in order to preserve natural resources that are presumed to form part of the global commons. This doctrine therefore prevents a 'race to the bottom' in environmental standards as countries compete to host industries that are attracted by poor environmental standards.<sup>75</sup>

It has been argued that this doctrine was interfering with the domestic policies and laws of foreign countries and could therefore affect their sovereignty.<sup>76</sup> It has often been viewed in developing countries as a form of eco-imperialism. The criteria of the European Commission on biofuels could well be interpreted as part of the extrajurisdictional activity doctrine and challenged by developing countries at the World Trade Organisation (referred as WTO).

The WTO agreement that could potentially apply to the EU environmental biofuels criteria is the GATT. The TBT (Technical Barriers to Trade) agreement may not apply to EU environmental criteria since it seems to be only applicable to measures that regulate product characteristics or their related processes and production method.<sup>77</sup>

70 See Doornbosch and Steenblick note 63 above.

71 *Id.*

72 *Id.*

73 See The Royal Society, note 45 above.

74 See Doornbosch and Steenblick, note 63 above.

75 Fiona MacMillan, *The WTO and the Environment* 10 (London: Sweet and Maxwell, 2001).

76 International Food & Agricultural Trade Policy Council, WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace (Washington, DC: International Food & Agricultural Trade Policy Council, IPC discussion paper, 2006), available at [http://www.agritrade.org/Publications/DiscussionPapers/WTO\\_Disciplines\\_Biofuels.pdf](http://www.agritrade.org/Publications/DiscussionPapers/WTO_Disciplines_Biofuels.pdf).

77 Aimee T. Gonzales, Quick Guide on Some of the More Important WTO Principles and Measures Relevant to Promoting Certification and Labelling in Bioenergy, (Paper Prepared by the Trade and Investment Unit, WWF International), available at <http://cgse.epfl.ch/webdav/site/cgse/shared/Biofuels/Further%20Reading/WWF-Bioenergy%20Assurance%20Schemes%20and%20WTO%20Rules.pdf>.



The environmental criteria set by the European Commission are not product-related measures. They do not guarantee the quality, safety and functionality of the product itself. They are not measure that aim to protect the environment or the consumer from potential damage caused by the product itself or by a substance incorporated in the product. They are on the contrary non product related production measures that aim to avoid or minimise harm caused by the way in which a product is manufactured or harvested.<sup>78</sup>

Under the GATT, all WTO Member States must treat all other Member States on a most favour nation basis with respect to any border restrictions (Article I). Secondly, the Member States, according to the principle of national treatment, must treat like products of other Member States as favourably within their domestic market as they treat domestic products (Article III). Finally, Article XI prohibits the use of quantitative restrictions, including 'prohibition or restrictions other than duties, taxes or other charges on the importation and exportation of products from or into other Member Countries'.<sup>79</sup>

These principles are subject to several exceptions. In the environmental context, the important exceptions are located in Article XX, paragraph (b) and (g). While the exceptions in these paragraphs appear to contain a reasonable scope for the imposition of environmental measures that would otherwise be discriminatory, their scope are limited by the chapeau to Article XX.<sup>80</sup>

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<sup>78</sup> *Id.*

<sup>79</sup> The Text of the General Agreement on Tariffs and Trade, Geneva, July 1986, available at [http://www.wto.org/english/docs\\_e/legal\\_e/gatt47\\_e.pdf](http://www.wto.org/english/docs_e/legal_e/gatt47_e.pdf)

<sup>80</sup> Article XX of the GATT reads as follow 'subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevails, or a disguised restriction on international trade, nothing in this agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

b) Necessary to protect human, animal or plant life or health;  
g) Relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption'.pdf.

Producer countries of biofuels could consider that the criteria set by the European Commission infringe Article XI of the GATT since they restrict their export of biofuels in Europe to biofuels that are only produced in a certain manner.

The EU could, however, use the exception of Article XX (g) in regard to the 1998 US-Shrimp Turtle new jurisprudence.<sup>81</sup> In 1991 the Tuna/Dolphin case excluded from the scope of Article XX most types of measures with extraterritorial effect, thereby excluding non-product-related production measures.<sup>82</sup> Seven years later, the US-Shrimp Turtle case reversed in some points the 1991 Tuna/Dolphin case. In the US-Shrimp/Turtle case the Appellate body implicitly found that non product related production measures-similar to the environmental criteria of the Commission- could fall within the scope of Article XX (g). The Appellate body, however, prescribed a series of requirements necessary for measures to fulfil the chapeau obligation, including an obligation to conduct serious efforts to negotiate a Treaty with affected countries before adopting trade measures.<sup>83</sup>

Therefore, the Commission, if it does not want its environmental criteria to be challenged at the WTO will have to enter into negotiations with producer countries of biofuels in order to find an international consensus on the different criteria to take into account in the production of sustainable biofuels. However, the achievement of an international agreement on the production of sustainable biofuels would probably lead to a real dissolution and weakening of the current environmental criteria in order to satisfy producer countries in the South that are not willing to respect high and costly standard throughout the different processes of production of biofuels.

Hence, the criteria set by the European Commission are not likely to be the adequate response to tackle

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<sup>81</sup> The 'Tuna-Dolphin' WTO Case, Ruling not Adopted, Circulated on 3 September 1991. Case brought by Mexico.

<sup>82</sup> US-Shrimp Turtle *WTO Case Nos. 58 (and 61). Ruling adopted on 6 November 1998.*

<sup>83</sup> Nathalie Bernasconi-Osterwalder, et al., *Environment and Trade: A Guide to WTO Jurisprudence* (London: Earthscan, 2005).

the negative consequences of a large-scale production of biofuels. They have a partial approach of the concept of sustainability. They also rely on certification schemes that have proved to have several loopholes in the case of forests and will thus probably not be able to assess all the negative impacts of biofuels such as their spillover effects through the displacement of non-biofuels agriculture. Finally, these criteria could be viewed as an eco-imperialist measure that could trigger new North-South conflicts at the WTO.

Thus, with regard to all the negative impacts of biofuels pointed out by the scientific community and the relative inefficiency of environmental criteria introduced by the proposal directive, the EU - by confirming the ten per cent target of biofuels in its 2008 directive proposal - is not following a precautionary approach as prescribed under the EC Treaty and defined within the Pfizer -Alpharma case, as outlined above. Indeed the probable negative consequences of the ten per cent target of biofuels within 2020, stressed by the scientific community, are not based on a purely hypothetical approach to the risk, founded on mere conjecture which has not been scientifically verified. On the contrary, those consequences, even though not fully demonstrated by conclusive scientific evidence, due to the complexity to assess the probable worldwide impacts of the ten per cent target- are backed up by enough scientific data that should be considered sufficient to use the precautionary principle.

## **CONCLUSION**

The ten per cent target of biofuels within 2020 in EU transport would, according to a great majority of the scientific community, probably trigger negative impacts on the environment and on food security. Even inside the Commission, the EU's Joint Research Council stated, in a leaked document, that the 'uncertainty is too great to say whether the EU ten per cent target will save [greenhouse gas emissions] or not'.<sup>84</sup> Furthermore, as it has been mentioned within this article, the environmental

criteria set by the European Commission will not be able to avoid those negative impacts since they do not take into consideration all the several aspects of sustainability, they rely on certification schemes that are not efficient and lack the capacity to address all the spillover effects of biofuels. Finally these criteria would probably be interpreted by the developing world as a form of eco-imperialism that could trigger several North South conflicts at the WTO.

The European Council should therefore revise the ten per cent target of biofuels in European transport within 2020, even though some environmental criteria have been attached to that target, on the basis of the precautionary principle. There should be a moratorium on biofuels in order to question their sustainability and their inclusion as a renewable energy in the renewable energy package proposed by the European Commission.

This 2008 proposal illustrates the contradiction that exists within the European Commission. On the one hand it wants to be a leader in environmental policies but on the other hand it is still favouring economic development to the detriment of the environment.

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<sup>84</sup> Friends of the Earth, Press Release, EU Policy Left in Tatters, January 2008, available at [http://www.foeeurope.org/press/2008/Jan18\\_Biofuels\\_policy\\_tatters.html](http://www.foeeurope.org/press/2008/Jan18_Biofuels_policy_tatters.html).

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