

Submission to european consultation on "Biofuels issues in the new legislation on the promotion of renewable energy".

1.1 Do you think the possible way forward described above is feasible?

First, this and all questions regarding sustainability of production of biomass for vehicles should be completely resolved prior to any mandatory targets for biofuel. Mandatory targets only serve to focus attention on and create incentives to achieve the target goal itself rather than the underlying intention of the goal (to reduce green house gas emissions). In addition, mandatory biofuel targets are a mistake when efforts to reduce consumption and improve efficiency have not been fully exhausted first. If any targets are to be mandated, these should be for the most benign energy sources, (wind, solar etc.) and efficiency measures (automobile, heating and appliance) first! Fundamentally, large scale agriculture is extremely costly in terms of land use, impacting people and biodiversity, depleting soils and water supplies, and poisoning the environment with high nitrogen burdens and agrochemicals. Mandatory targets encourage industrial agriculture, which is one of the major causes of the climate crisis and therefore cannot work as a solution!

Second: The feasibility of developing sustainability criteria for biofuels that serve to effectively mitigate climate change is virtually nil. Similar efforts, to make soy production (RTRS) and palm oil production (RTPO) "sustainable", have not succeeded and are soundly rejected as ineffective by people in producing countries. Such endeavors result in a purely cosmetic treatment of the problem. There are a number of reasons why these certification schemes fail. Any major alteration in land use will create an uncontrollable domino effect on other areas ("leakage"). If more land is used for biofuel production, then food crop production, livestock grazing, pulp and timber production and other activities will be displaced onto other land, including biodiverse forest frontier lands. Unless the certification scheme is designed to assess all land uses simultaneously, these impacts are not detected. The same indirect impacts can occur as a result of changes in market price. For example, as corn price has risen in the U.S. as a result of demand for ethanol production, fewer farmers are growing soy. This has driven up the price of soy on the world market, and caused expansion of monoculture soy production in SA. There is a direct correlation between the rate of deforestation and the price of soya. Such indirect impacts are difficult to predict or monitor and doing so only after the fact is unacceptable.

Third: Any calculation of GHG emission savings must take into account all aspects, direct and indirect of production, transport, use, byproducts AND indirect effects (including some that cannot readily be anticipated and measured!). These EROEI calculations are problematic given that many different feedstocks are used and grown in many different situations, in different countries, and in different ecological settings. Many variables are needed to make a true assessment and this differs for virtually every situation. The labor and investment to do this properly would be monumental. (And, the time and energy involved in doing the assessments must also be included.)

1.2: What do you think the administrative burden of an approach like the "possible way forward" would be?

As stated above, agricultural practices and their impacts vary on a case by case basis. Indirect impacts also vary on a case by case and change over time. This means administrative costs would be very high since broad sweeping standards would not effectively ensure sustainability. A common problem with sustainability criteria is that they are set in place with no resources provided to enforce them, rendering the criteria worthless. Effective implementation of the sort of case by case monitoring that would be needed to make biofuel sustainability criteria work would demand high levels of financial investment and labor. Further, if these costs are to be absorbed by producers, only very large scale producers are likely to be able to afford certification, making biofuels production even less likely to benefit smallholders.

1.3 General comments on the "possible way forward"...does it give an adequate level of assurance that biofuels will be sustainably produced?

The way forward does not even approach adequate assurance! One glaring omission is that it completely fails to mention how impacts on people living in production areas will be assessed for sustainability. Already many people have been forced off of their lands, for example, in Brazil, Paraguay, Ecuador, Columbia, Indonesia and Malaysia and other countries. This happens when big corporate entities have laid claim to large tracts of land to produce cane, soya and oilpalm. People who formerly lived on these lands do not benefit financially or in any other way. They are simply kicked off their land and many migrate to urban centers where they live in dire poverty or they may remain and work for the grower, often virtually as slaves in miserable conditions. Are we to ignore these concerns and certify that biofuels grown on these lands are “sustainable.” Even where people have chosen to remain on a small holding of land, they are often surrounded by large scale industrial monoculture, deprived of clean water, forest products, etc., and exposed to repeated spraying of agrichemicals. Many eventually leave to avoid repeated poisoning. Are biofuels from these lands to be certified?

Also: in many countries, Columbia and Ecuador and Indonesia, for example, the rule of law is weak. Given the difficulties of enforcing even basic protections, how are we to expect that biofuels production standards will be upheld? Illegal logging concessions are common in many countries. Will those countries now enforce our biofuel production standards? Under “Possible Types of Evidence To Show That Environmental Sustainability Criteria Are Respected, It is suggested that voluntary agreements (item2) and the existence of bi or multilateral agreements (item 3) would serve as evidence...We already have vast experience with the failure of such mechanisms to control illegal and unsustainable logging practices (FSC and Smartwood certification schemes).

Should the problem be tackled in a different way? Yes. First and foremost, the mandatory target should be withdrawn for now, then the entire “scheme” of biofuel use should be reconsidered in light of other measures for protecting the climate (efficiency, reduced consumption and more benign energy production methods). If biofuels still appear necessary and desirable, then a good starting point would be to ask the opinions of people who live in countries where feedstock crops are being produced. Ask them how biofuel production is impacting them and the lands on which they live, and how to make feedstock production sustainable. Corporate and government leaders with tremendous conflicts of interest, and living in distant countries are not likely to develop viable sustainability criteria. The best measure of sustainability will come from those whose continued livelihoods are a measure of that sustainability!

1.4 Carbon stock differences between land uses would be taken into account under criteria 2. Should they also be taken into account for criteria 1? If so, what method should be used to determine how the land in question would have been used if it had not been used to produce raw materials for biofuels?

Yes, carbon stock differences should absolutely be taken into account in criterion 1. Criteria 1 refers to GHG emissions during production. Land use changes are obviously a part of that production equation. The goal of reducing GHG emissions would not be met if resultant land use changes cause more GHG emissions. The manner in which emissions are measured is critical and must be all-inclusive to be meaningful.

Industrial agriculture has played a major role in creating the climate crisis we are now trying to mitigate. We need to reduce, not increase the amount of land under cultivation, even though we have a vastly larger human population to feed, which must be our first priority. Land should only be made available for biofuel feedstock if it is first determined to be 1) already under cultivation (not native habitat), 2) not being used for food production, and 3) not used more effectively to regenerate native ecosystem. Permitting land to regenerate to native ecosystem must be encouraged as a viable point of comparison when evaluating land use options. The carbon storage potential of native forest is much higher than monoculture plantations, and should be factored into the viability of biofuels production schemes. Decision making bodies like the UNFF and others define monoculture tree plantations as “planted forest”, despite the differences in carbon storage potential (and many other very critical differences) between tree plantations and forests. This problem of definition is misleading and must be changed in order to make accurate land use determinations.

1.5 As described in “the possible way forward”, criterion 3 focuses on land uses with exceptional

biodiversity. Should the criterion be extended to apply to land that is adjacent to land uses associated with exceptional biodiversity? If so, why? How could this land be defined?

The destruction of habitat has already progressed to a dangerous level, with a large proportion of the biodiverse island of Borneo, the Atlantic Forest in Brazil, and other important ecosystems under extreme pressure. Estimates are that the orangutan will be extinct within the next 10 years and all of the other great apes, our closest relatives on the planet are in dire stress along with many, many other organisms. Extinction rates are skyrocketing. Should we protect land adjacent to biodiverse areas? The answer is emphatically yes! If we can create more habitat in which biodiversity can thrive, then absolutely, we **must** do so. Tiny pockets are not sufficient to maintain healthy populations, and this is likely to become more true as climate change impacts habitats.

1.6 How could the term “exceptional biodiversity” (in criterion 3) be defined in a way that is scientifically based, transparent and nondiscriminatory?

The fact that this question must be asked and the difficulty with defining “exceptional biodiversity” only points to the fact that what is “exceptional” depends on the context in which the question is asked. “Exceptional biodiversity” can refer to the sheer number of species present, to the critical nature of the habitat for a specific species, or to the presence of species of particular importance to humanity. Given the current rate of extinctions, growing biofuel feedstocks up to and surrounding islands of habitat would not be prudent. At the very least, large buffer zones are essential. For migratory species, the problem requires a global perspective and argues against expanding large scale agriculture for biofuels altogether.

2.1 Indirect effects:

Monitoring indirect effects is not sufficient. For one thing, this provides information about damage only after it has been done. Presumably this will help to avoid further damage, but this leaves a tremendous amount of room for interpretation and error at a point in time when we simply cannot afford it! We have enough experience with large scale industrial agriculture and logging, for example, to know that these indirect effects are inevitable. Once the financial investments and infrastructure for large scale biofuel production is in place, it becomes much more difficult to change course.

2.2 Do you think it is possible to link indirect effects to individual consignments of biofuel?

Clearly a track and trace approach would be more effective at achieving this goal than a “book and claim” system. Once again, however, the goal should be to avoid indirect effects in the first place.

3.1: How should second generation biofuels be defined?

There is a strong push to encourage development of second generation biofuels, based on the idea that 1) they will utilize feedstocks that can and will (presumably) be grown on lands not considered suitable for food crops. (This rationale is faulty because it assumes all land can be considered useful for one or the other of two uses, which eliminates consideration for regenerating native ecosystems, and devalues so called “marginal” habitats, which are in fact critical to some species and highly subjectively defined). 2) They will deliver a much larger net GHG emission savings. Many recognise the current “first generation” as inherently limited and faulty (particularly corn ethanol), but worthy of pursuing as a precursor to what they hope will be vastly improved technology. This is a dangerous course of action, given that cellulosic technologies are still so tentative. Can we afford to walk down a clearly faulty path in hopes it will lead to a better one in the future? If the intent is to decrease land use conflict and increase GHG savings, then these are the criteria that should be used to define second generation, above and beyond the particular technology used.

Any discussion of sustainability for second generation biofuels should incorporate the issue of GE feedstocks, and especially large scale monoculture plantations of genetically engineered trees (reduced lignin, fast growing eucalyptus, poplar, willow etc.). Because of the inherent risk of GE contamination of native forests, this cannot be considered a viable or “sustainable” alternative under any circumstances.

3.2: NA

3.3: Should second generation agrofuels only be able to benefit from these advantages if they also achieve a defined level of GHG savings?

Yes, as above

4.1 NA

4.2: Should legislation include measures to encourage high blends of ethanol and diesel?

These questions raise yet another example of how poorly the entire development of biofuels has been considered. It makes no sense to mandate a 10% target prior to ensuring that the automobile fleet and distribution systems are capable of adapting, and in a very timely fashion. It will be many years before the current generation of automobiles is retired and new technologies permitting higher blends are widely in use. Any disconnect between production, distribution and useability will further erode the purported benefits of developing agrofuels in the first place.

Also, any toxic emissions associated with the various fuel blends considered must be ascertained and incorporated into these decisions.

4.5 If the blending options cannot achieve the 10% target, what action should the Commission take?

There are several reasons why a mandatory target is not wise, this is yet another. If the automobile fleet cannot accommodate, the target clearly should be abandoned.