Briefing Note
01

When the solution is the problem:
The EU and its policies on agrofuels

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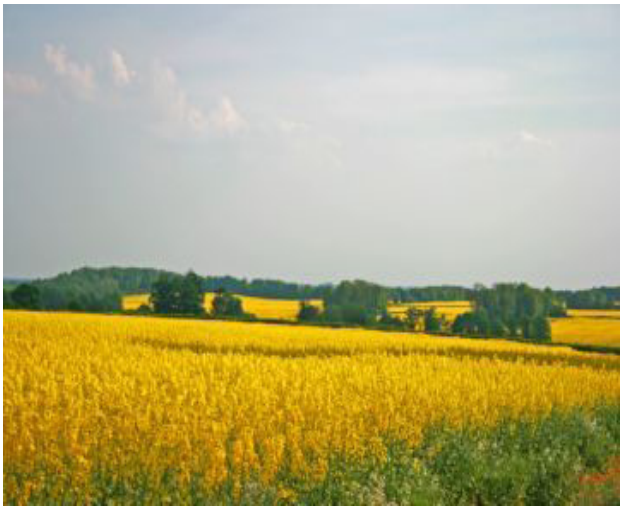

Much land that was set aside under the Common Agricultural Policy is now being used for rapeseed crops, leading to pressure on biodiversity in Europe.
Image: Mark Gregory

Biofuels are a highly contentious issue. While some claim biofuels will play an important role in reducing greenhouse gas (GHG) emissions, improving security of energy supply and creating jobs and opportunities for rural development, others say they will increase GHG emissions, destroy tropical forests, cause conflicts with local communities and undermine food security. The European Union (EU) has been at the forefront of developing biofuel policies. Under its Renewable Energy Directive the EU is currently debating a mandatory target of 10 per cent of transport fuel to be derived from biofuels by 2020.

This briefing paper briefly describes the two sides of the biofuels issue and analyses the present EU debate. It concludes that the present EU policy is misguided and strongly advocates dropping the 10 per cent target figure while stressing the need to develop a truly sustainable transport policy.

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Problems with agrofuels

Agrofuels have taken a central role in the debate on energy security and climate change. Producers promote the product as "*helping world economies address the dire impacts of record oil prices by reducing oil consumption by over a million barrels of oil a day and by lessening global warming emissions.*"[1] Furthermore the production of agrofuels is often projected as socially beneficial. As President Lula da Silva of Brazil says "*Brazil focussed on the enormous potential of biofuels as an instrument of economic and social change in the poorest countries. Biofuels generate income and employment, especially in rural areas. They produce clean and renewable energy. They are an example of sustainability, of balance between environmental, social and economic aspects.*"[2]

However various studies both within and outside the EU voice increasing concern about the negative impacts of agrofuels production. These concerns focus on four main areas:

1. Insufficient agricultural land

There is not enough agricultural land available on the planet to satisfy projected food, fibre and agrofuel production. A study by the International Institute for Applied Systems Analysis (IIASA) shows that by 2030 there could be a shortage of about 250 million hectares of land - if present demand trends continue.[3] According to the study, total available land for the agriculture, energy and forestry sectors is at present approximately 250 to 300 million hectares. By 2030, industrial forestry is projected to use 25 million hectares, food related production 200 million hectares and bio-energy to account for another 290 million hectares. It's clear the figures don't add up.

Because of the lack of suitable agricultural land any increase in the production of agrofuels will have an adverse impact on food and fibre production, thereby increasing food prices and undermining food security. Such a trend - also caused by other factors including high energy prices, rapid economic growth in some developing countries, climate change and speculation - is already evident. As a result Olivier De Schutter, the UN's rapporteur on the Right to Food, has called for a freeze on any new investment in agrofuels which directly competes with food.[4] A recent report by the OECD and the FAO[5] also concluded "*available data suggests that somewhat more than half of the increase in the quantity of demand for grains and vegetable oils between 2005 and 2007 was due to biofuels. While biofuel use of grains and vegetable oils is anticipated to represent a falling share of the overall increase in demand for these food commodities, it is nevertheless a new source of demand which is seen as one of the factors lifting prices to higher average levels in the future*".

2. Social conflicts and violations

In most agrofuel producing countries in the South access to and ownership of land creates numerous conflicts between communities and corporations as well as with the state. Production of agrofuels will only increase the scale of existing conflicts - from Malaysia to Brazil to Ghana. Oil palm companies have already taken over 7.3 million hectares of land for plantations in Indonesia, resulting in 513 ongoing conflicts between companies and communities.[6]

Agrofuel plantations are also notorious for their bad working conditions, whether in oil palm areas of Indonesia and Malaysia or sugar cane producing regions in Brazil. It is

Box 1: Terminology

Bio-energy is energy derived from biological material such as crops, forestry residues and organic waste. **Biofuel** essentially refers to liquid or gas fuel derived from biological material, mainly used for transport. Environmental and social NGOs prefer to use the term '**agrofuels**' to describe the large scale monoculture agricultural crops used for the production of liquid fuels from biomass. The term **first generation biofuels** refers to current mainstream fuels made from sugar, starch animal fats or vegetable oils using conventional technology. **Second generation biofuels** are usually made from ligno-cellulosic fibres such as wood and agricultural waste, using advanced technical processes. Biodiesel from algae are **third generation biofuels**.

The expansion of plantations for palm oil in Southeast Asia is leading to the destruction of tropical forests and conflicts between communities and corporations as well as with the state.
Image: Forest Peoples Programme

documented that in Brazil workers live in cabins with no mattresses and sub-standard sanitary conditions and have to rely on the company for their supplies, often at well-over market prices.[7] Cases of slavery and bonded labour have also been reported.[8]

Some promoters of agrofuels, including within the EU, claim the economy in parts of Africa will benefit from the expansion of agrofuel plantations, saying such activities will 'restore' degraded land. This ignores the fact that such land has important functions for local communities and biodiversity.[9] There are reports of farmers in Africa being pushed off their land due to the expansion of agrofuel plantations - often owned by transnational companies. Agrofuel production related activities are likely to have negative long term impacts on many communities in Africa.[10]

3. Bio-diversity destruction

The expansion of palm oil plantations in Southeast Asia is already having a serious impact on the region's tropical forests. This destruction is particularly destructive in terms of the climate due to the prevalence of peat forests. Forests resting on peat swamp in Southeast Asia, of which 80 per cent are in Indonesia, have a carbon storage of more than 42Gt of soil carbon;[11] destruction of such areas is presently equivalent to 10 per cent of global emissions from fossil fuels.[12] Twenty five per cent of oil palm plantations in Indonesia and Malaysia are being established on carbon-rich peatland.[13]

Cultivation of soybeans in Brazil, Argentina, Paraguay and Bolivia often takes place at the expense of natural savannahs and tropical forests.[14] Sugar cane expansion in Brazil has contributed to the almost complete destruction of one of the world's most precious ecosystems, the Atlantic Forest. Sugar cane is currently expanding into savannah areas - the cerrado.[15] Plans for agrofuel production in Africa will put some of Africa's wetlands at risk.[16] Meanwhile in Europe agrofuel production is having a negative impact on biodiversity: much of the land which falls under the Common Agricultural Policy (CAP) set-aside scheme is now being used for maize and rapeseed crops leading to ever greater pressure on habitats of farmland birds and other species.[17]

4. The uncertain relationship between agrofuels and GHG emissions

Although agrofuels are generally assumed to be a positive factor in relation to GHG emissions, closer inspection on the issue raises questions. The GHG balance of agrofuels varies according to type and depends on various factors such as agricultural practices used (e.g. grown with or without fertilizer); the production pathway (e.g. transport and conversion process) as well as the methodology of calculations (e.g. whether or not land use changes caused by agrofuel production were included in calculations).

Ethanol based on sugar cane has a much better GHG balance than other first generation agrofuels such as rapeseed. Furthermore, depending on whether fertilizers are used, and which types, the GHG balance of agrofuels differs considerably. A recent study by Paul Crutzen suggests agrofuel crops grown with high inputs of nitrate fertilizers can have greater overall GHG emissions than equivalent amounts of fossil fuels.[18]

The production of agrofuels also leads in many cases to the destruction of vital ecosystems or the replacement of activities that took place on the land before. If such factors are factored into calculations, the overall impact of agrofuel use is negative. A study from Fargione[19] shows that when rainforests, peatlands, savannahs or grasslands are converted in order to produce agrofuels - in Brazil, Southeast Asia and the United States - between 17 and 423 times more CO2 is released in the process than being saved by replacing fossil fuels with these agrofuels. Even in Europe agrofuel related land use changes could result in releasing more GHG than would be saved through the use of conventional EU agrofuels.[20] Meanwhile in a recent study Searchinger[21] showed that due to indirect land use changes, US corn-ethanol production will in fact result in more, rather than less, overall CO2 emissions.

Second generation biofuels

Some people argue that the concerns listed above only relate to first generation agrofuels. This may be the case in relation to the relative GHG balance of first and second generation agrofuels. However, second generation agrofuels are clearly not free from the draw-backs associated with the first generation, including scarcity of land, increasing social conflict and biodiversity destruction. Agrofuel from trees is likely to mean converting forests which might be under contested ownership, leading to ever greater land conflicts. Furthermore, according to the EU's Joint Research Centre, it is very unlikely that second generation agrofuels will be competitive with first generation by 2020.[22]

Conclusion

It's clear that first generation agrofuels represent more of a problem than a solution in relation to the EU transport issue. There are still many questions about second generation fuels. These problems are acknowledged by various EU research bodies such as the European Environmental Agency and the Joint Research Centre. Despite all this, the European Commission is pressing ahead with its plan for a minimum target of 10 per cent of agrofuel use in the transport sector by 2020. The EU is also giving financial support to agrofuels, as is outlined in the following chapter.

EU policies on bioenergy

Agrofuel promotion in the transport sector

The EU began developing bio-energy policies in the 1990s, though the recent focus has been more on agrofuels (See Box 2). The main reason behind the change in emphasis has been the fact that emissions from the transport sector in the EU rose 26 per cent between 1990 and 2005[23] and continue to rise.[24] Though the EU transport sector is at present almost entirely dependent on oil, in order to meet its GHG emission reduction targets and reduce dependency on fossil fuels, the EU has had to find alternatives to fossil fuels. Agrofuels are perceived as the best choice available.

As it is currently more expensive to produce agrofuels in Europe than other forms of renewable energy, the European Commission decided the agrofuel sector needed support. [25] In 2006, total EU plus Member State support for agrofuels was approximately €3.7 billion.[26] However this amount is probably an underestimate as many subsidies are not fully reported.

The two proposals on the table

At present there are two EU proposals on the table that promote the use of agrofuels. The first concerns the Renewable Energy Directive, which aims to establish a binding target in which 20 per cent of all energy consumption within the EU is derived from renewable sources by 2020. As part of this target figure the Directive stipulates that 10 per cent of all transport fuels comes from renewable sources. The target has to be achieved by each Member State by 2020. Article two of the current proposal reads: "*Each Member State shall ensure that the share of energy from renewable sources in transport in 2020 is at least 10 per cent of final consumption of energy in transport in that Member State*". It is however important to note that in the explanatory memorandum of the Directive, the text is clear that the target is a 10 per cent agrofuels target. Also in a recent announcement the European Commission officially confirmed its support for the 10 per cent agrofuels target "under strict conditions" - those conditions being that agrofuels are sustainably produced and that second generation agrofuels will be commercially available by 2020.[27]

Box 2: An overview of bio-energy policies in the EU

Directive on crude-oil savings through the use of substitute fuel (1985):[28] stresses the role of biofuels in reducing Member States' dependence on oil imports and allows the use of 5 per cent ethanol in petrol.

White Paper on Energy for the Future (1997):[29] sets a target for the EU of doubling the share of renewable energy in the total energy consumption to 12 per cent by 2010. The Paper deals with bio-energy but calls for specific measures in order to help increase the market share for liquid biofuels.

Directive on the Promotion of Electricity produced from Renewables Energy (2001):[30] provides the framework for electricity generated from biomass. It sets a 21 per cent indicative target for producing electricity from renewable energy sources by 2010.

Communication on alternative fuels for road transport (2001):[31] considers the increased use of biofuels in the transport sector. It identifies biofuels, natural gas and hydrogen as possible future energy sources for transport.

Biofuels Directive (2003):[32] aims to promote biofuels and sets indicative targets for the use of biofuels for transport. Reference values of a 2 per cent market share for biofuels in 2005 and a 5.75 per cent share in 2010 are included. This Directive was accompanied by the Energy Taxation Directive (October 2003) allowing Member States to exempt or reduce excise duties so as to promote biofuel production and use.[33]

Communication on "The share of renewable energy in the EU" (2004):[34] concludes that if the EU renewable energy target of 12 per cent in 2010 is to be achieved, bio-energy's contribution will need to be more than doubled. It proposes the creation of a dedicated Biomass Action Plan and a coordinated approach to achieve the 2010 Renewable Energy targets.

Biomass Action Plan (2005):[35] describes various measures to encourage the use of biomass for renewable energy production. It explains that the EU will not reach the targets it has adopted in the Biofuels Directive (2003) and proposes "to bring forward a report in 2006 in view of a possible revision of the Biofuels Directive in which setting national targets for the market share of biofuels and using biofuels obligations would be addressed". It also encourages Member States to form national biomass action plans.

Biofuel Strategy (2006):[36] complements the Biomass Action Plan and looks into the role biofuels might play in achieving EU energy policy targets. The strategy is the first step towards a possible revision of the Biofuels Directive (2003)

Renewable Energy Roadmap (January 2007):[37] this roadmap is part of a broader energy climate change package and sets out a long-term vision for renewable energy sources in the EU. It proposes the EU establishes a binding target in which 20 per cent of the EU's energy consumption will come from renewable energy by 2020 and a binding target of 10 per cent for the share of renewable energy in transport fuels. EU Member States endorsed the Roadmap in March 2007, saying the biofuel target was appropriate as long as production was sustainable and that second-generation biofuels would become commercially available.

Proposed amendment of the Fuel Quality Directive (January 2007):[38] The Fuel Quality Directive was adopted in 1998 and sets specifications for petrol and diesel fuels used both on and off the road in order to protect human health and the environment. In January 2007, the Commission proposed revising the Directive in order to help combat climate change by promoting the development of lower carbon fuels, including biofuels. The Directive sets a target of reducing GHG emissions by 1 per cent annually from 2011 onwards, thereby promoting an increase in the use of biofuels. The amendment also permits higher volumes of biofuels in petrol.

Proposal for a Renewable Energy Directive (2008):[39] this proposal aims to implement the roadmap (see above) by establishing an overall binding target of a 20 per cent share of renewable energy sources in energy consumption and a new 10 per cent binding minimum target of biofuels in transport to be achieved by each Member State, as well as binding national targets by 2020 in line with the overall EU target of 20 per cent. The current provisions in the 2003 Biofuels Directive that set indicative targets of 5.75 per cent by 2010 remain in force until the end of 2011.

The second proposal is an amendment to the Fuel Quality Directive. This Directive was adopted in 1998 and sets standards for petrol and diesel fuel which were deemed necessary in order to protect human health and the environment. The amendment will allow fuels with a lower carbon content to be included within the terms of the Directive. This opens the door for a more intense use of agrofuels.

The policies of different Member States

Following a 2003 Biofuels Directive, Member States have embarked on their own policies requiring agrofuel use in the transport sector. The UK's Renewable Transport Fuel Obligation requires fuel sold at the pump to contain a minimum of 2.5 per cent of agrofuel. This figure is set to rise by 5 per cent by 2010.[40] Germany recently increased its agrofuel target to 5 per cent by 2009 and 8 per cent by 2015.[41] France stipulates that agrofuels account for 7 per cent of total fuel consumption by 2010.[42]

Sustainable production of agrofuels

Under the draft Renewable Energy Directive, agrofuels are required to meet a set of sustainability criteria in order to be eligible for financial support. As sustainability criteria are also considered necessary for the Fuel Quality Directive,[43] Member States agreed in February 2008 to set up an ad hoc working group to draw up a set of criteria for both. This group presented its first findings in May 2008. However Member States failed to achieve consensus on the findings and as yet no sustainability criteria have been adopted.

NGOs have expressed concern about the draft set of criteria,[44] but of greater concern is that no sustainability criteria can properly address the indirect impacts caused by replacement activities. Several organisations have pointed out that certification has clear limitations. The Organisation for Economic Cooperation and Development (OECD)[45] says certification will be unable to address the macroeconomic impacts of agrofuel policies, such as displacement of food production and the resulting rise in the price of staple foods. A report by Friends of the Earth[46] on certification of agrofuels in the Mercosur regional trade area of Latin America clearly illustrates that some of the more pressing environmental and social problems are in fact caused by the expansion of sugar cane and soy plantations: whether agrofuels are produced sustainably thus becomes of secondary importance.

This means that even if the EU were to import only 'sustainable agrofuels', the end result would be that problems associated with change in land use, forest destruction and social disruption would then move to other areas. NGOs such as FERN have therefore argued against certification of agrofuels at this stage, advocating instead an EU wide policy to limit the use of agrofuels, reduce energy consumption and develop a sustainable transport policy. Only within such a wider framework can certification play a useful role. The Commission has committed itself to 'monitoring' the impact of agrofuels on commodity prices, land use change and food security.

Finally, it would be logical that sustainability criteria be made applicable to all bio-energy sources and not just to agrofuels. At present this is not the case. Sustainability criteria for biomass are not anticipated till 2010.

Box 3: Production of agrofuels in Europe

The European Union is encouraging the production of agrofuels to reduce energy imports and create new opportunities for its agricultural sector. In 1993, a Non-Food Set Aside scheme (NFSA) was introduced as part of the Common Agricultural Policy (CAP). Under the CAP farmers were required to set aside 10 per cent of land mainly to counteract agricultural surpluses. The NFSA allowed such set aside to be planted with energy crops, though farmers could still claim the set-aside premium. [47] The CAP Reform of 2003[48] further supported the production of energy crops by adding a further premium of €45 per hectare.[49] The CAP is currently undergoing close scrutiny and it is likely that the energy crops aid measure and the requirement for arable farmers to leave 10 per cent of their land fallow will be cancelled. The EU Rural Development Regulation and the EU Cohesion Policy also include measures designed to promote bio-energy production. National Rural Development Programmes can support the planting of short rotation coppice or fast growing trees for energy purposes. [50]

The EU decision-making process

To date the European Commission has not been willing to drop the 10 per cent target for agrofuel use in the transport sector and does not seem to take the concerns expressed by its own research bodies seriously. Also politically, the tide seems to be turning against the agrofuels 10 per cent target.

The proposed Renewable Energy Directive is currently being discussed in the European Parliament. There are two parliamentary committees dealing with this proposal at the moment - the Industry, Research and Energy Committee (ITRE) and the Environment Committee.

The Environment Committee has already called for a reduction of the target at its meeting on 7 July to 4 per cent by 2015, of which one fifth would consist of energy coming from electricity, hydrogen and second generation agro and biofuels. The Committee proposed to review the policy in 2015 before deciding upon a target of 8-10 per cent by 2020. Up to half of this target would have to come from sources other than first generation agrofuels.

In September this year, the ITRE committee still needs to vote on the directive and the full parliament is expected to take a final decision later this year. After the plenary in the Parliament, the proposal will go to the Member States who, at a meeting of the Energy Council, will either accept or reject the parliamentary amendments. European elections will be held in 2009; there are various groups that want to see this proposal adopted before those elections.

Member States also started backing away from the agrofuels target. In the UK, a government commissioned study that looked into the indirect effects of agrofuels production, called for the 10 per cent agrofuels target to be lowered in recognition of the risk of indirect land use change and absence of adequate control measures. The study shows that the target should not rise beyond 5 - 8 per cent by 2020 unless a number of important conditions are fulfilled.[51] UK Transport Secretary Ruth Kelly now believes it is right to adopt a more cautious approach. After the Energy Council of 5 July 2008, Jochen Homann, the secretary of state at the German Economics Ministry, stated that the "*We have to decide if the quota can be kept. It might be changed*".[52] France, which holds the EU presidence in the second half of 2008, stated that environmental and social criteria for biofuels are more important than meeting the 10 per cent agrofuels target.[53]

On top of this, research institutes such as the European Environmental Agency have spoken out against the 10 per cent target: "*to suspend the overambitious 10 per cent agrofuel target as it is an experiment, whose unintended effects are difficult to predict and difficult to control and to carry out a new, comprehensive scientific study on the environmental risks and benefits of agrofuels; and setting a new and more moderate long-term target, if sustainability cannot be guaranteed.*"[54] Also the EU's Joint Research Centre has stated "*the decision to specifically target greenhouse gas reductions in the transport sector reduces the benefits which could be achieved in other ways with the same EU resources.*"[55]

Despite these interventions, the European Commission still claims that binding targets are needed to improve on the current generation of agrofuels and that without targets there would be no progress in combating climate change.[56]

The way forward

The Commission's current proposal for the Renewable Energy Directive has opened the door for the import and use of agrofuels. The aim is to replace 10 per cent of fossil fuel in the transport sector with agrofuels. The overwhelming evidence from the EU's own research bodies and other reputable sources such as the OECD and various UN bodies that achieving this target will have many negative social and environmental impacts is now getting more political support.

It is also clear that sustainability criteria governing the import and use of agrofuels will only have limited impact and will not address the real issue at the centre of agrofuels policy - the lack of available land.

To meet its obligations under the Kyoto Protocol and to honor its position as laid down in the Communication on the Precautionary Principle[57] FERN believes the EU should:

- Develop a sustainable transport policy;
- Develop an action plan to reduce consumption of fossil fuels across different Member States;
- Develop a vision on the sustainable use of bio-energy and specifically biomass in Europe for electricity production and heating;
- Drop the 10 per cent target;
- Call for a moratorium on incentives (such as tax breaks and subsidies) for agrofuels from large-scale monoculture;
- Call for a moratorium on imports of agrofuels from large scale monoculture.

Endnotes

1. "World biofuel leaders react to food summit resolution". www.marketwire.com/mw/release.do?id=865461
2. Speech President Lula da Silva, 30th FAO Regional Conference for Latin America and the Caribbean. 16 april 2008.
3. Nilsson, S. (2008). Globalisation/competitiveness of the forest sector. Presentation at FTP Conference Kranjska Gora, Slovenia, 20 May 2008.
4. UN Food Summit, Rome, 3 – 5 June 2008.
5. OECD/FAO (2008). Agricultural Outlook 2008 – 2017.
6. Friends of the Earth, Lifemosaic and Sawit Watch (2008). Losing Ground. The human rights impacts of oil palm plantation expansion in Indonesia.
7. Noronha, S.; Ortiz, L.; Schlesinger, S. (2006). Agribusiness and biofuels: an explosive mixture – impacts of monoculture expansion on bio-energy production in Brazil.
8. Friends of the Earth Europe (2008). Sustainability as a smokescreen. The inadequacy of certifying fuels and feeds.
9. Copesco (2008). Position on the use of agrofuels in Africa.
10. ABN (2007). Agrofuels in Africa. The impacts on land, food and forests.
11. Hooijer, A.; Silvius, M.; Wösten, H.; Page, S. (2006). Peat-CO2, Assessment of CO2 emissions from drained peatlands in SE Asia. Delft Hydraulics report Q3943 (2006).
12. http://www.wetlands.org/news.aspx?id=140165ee-bda1-46b6-852c-ec5ba4f81fcb
13. Wetlands International (2007). Palm Oil and tropical peatland. Factsheet.
14. Friends of the Earth Europe (2008). Sustainability as a smokescreen. The inadequacy of certifying fuels and feeds.
15. Noronha, S.; Ortiz, L.; Schlesinger, S. (2006). Agribusiness and biofuels: an explosive mixture – impacts of monoculture expansion on bio-energy production in Brazil.
16. Wetlands International (2008). Biofuels in Africa. An assessment of risks and benefits for African wetlands.
17. Birdlife International (2008). Fuelling the ecological crisis. Six examples of habitat destruction driven by biofuels.
18. Crutzen, P.J.; Mosier, A.R. ; Smith, K.A.; Winiwarter, W. (2008). N2O release from agro-biofuel production negates global warming reduction by replacing fossil fuels. Atmos. Chem. Phys, 8, 389-395.
19. Fargione, J.; Hill, J.; Tilman, D.; Polasky, S.; Hawthorne, P. (2007). Land Clearing and the Biofuel Carbon Debt. Science 319, 1235-1238.
20. JRC (2008). Biofuels in the European context : Facts and uncertainties.
21. Searchinger, T.; Heimlich, R.; Houghton, R.A.; Dong, F.; Elobeid, A.; Fabiosa, J.; Tokgoz, S.; Hayes, D.; Yu, T. (2008). Use of US croplands for biofuels increases greenhouse gases through emissions from land use change. Science, 319, 1238-1240
22. JRC (2008). Biofuels in the European context : facts and uncertainties.
23. EEA (2008). Climate for a transport change. TERM 2007: indicators tracking transport and environment in the European Union.
24. It is estimated that 21 per cent from all GHG emissions in the EU comes from the transport sector
25. Proposal for a Directive on the promotion of the use of energy from renewable sources. COM(2008)
26. GSI (2007). Biofuels – at what cost ? Government support for ethanol and biodiesel in the European Union.
27. Press release IP/08/763. "Commission outlines European response to mitigate effects of rising global food prices". 20 May 2008.
28. Directive 85/536/EEC
29. COM(1997)599
30. Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal market.
31. COM(2001)547
32. Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport.
33. COM (2006) 34 2003/96/EG
34. COM (2006)848 Communication on the share of renewable energy in the EU. COM (2004) 366.
35. Biomass Action Plan. Communication from the Commission. COM (2005) 628.
36. An EU strategy for Biofuels. Communication from the Commission.
37. COM(2006)848
38. Proposal for a directive of the European Parliament and of the Council amending directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and the introduction of a mechanism and reduce greenhouse gas emissions from the use of road transport fuels and amengind Council Directive 1999/32/EC as regards the specification of fuel used by inland waterways vessels and repealing Directive 93/12/EEC. COM (2007)18
39. Proposal for a Directive on the promotion of the use of energy from renewable sources. COM(2008)
40. The Guardian, "Biofuels, a blueprint for the future" 14 April 2008
41. "German government drives down bioethanol ratio." www.biofuels-news.com/news/german_drive.html

42. Reuters, “France says food should take priority over biofuels”. 14 April 2008 Sustainability criteria are also considered necessary for the Fuel Quality Directive, and therefore the criteria will also apply to this directive.
43. Press Release ‘New EU sustainability criteria a fig leaf for failed biofuel policy, say campaigners’. 07/05/2008. http://www.biofuelwatch.org.uk/files/pressrelease070508.pdf
44. OECD (2007). Biofuels : is the cure worse than the disease ?
45. Friends of the Earth Europe (2008). Sustainability as a smokescreen. The inadequacy of certifying fuels and feeds
46. Schnepf, R (2006). European Union Biofuels Policy and Agriculture : An overview. CRS Report for Congress.
47. i.e. the Council Regulation (EC) No. 1782/2003,
48. Press release IP/06/1243 “Renewable energy : Commission proposes to extend energy crop aid scheme to all Member States”. 22 september 2006. http://europa.eu/rapid/pressReleasesAction.do?reference=IP/06/1243.
49. Summa, H. (2006). Energy crops and the Common Agricultural Policy
50. Gallagher, E. (2008). The Gallagher Review of the indirect effects of biofuels production.
51. International Herald Tribune. “EU moves to cut back target on biofuel use”, 7 July 2008
52. Financial times, “Target vote delivers blow to biofuel expansion”, 9 July 2008.
53. http://www.eea.europa.eu/highlights/suspend-10-percent-biofuels-target-says-eeas-scientific-advisory-body
54. JRC (2008). Biofuels in the European context : Facts and uncertainties.
55. International Herald Tribune, “EU moves to cut back target on biofuel use”, 7 July 2008.
56. http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf

Oil palm being harvested in Indonesia. Surges in oil prices have led to increased speculation in land for growing crops for fuel. There is grave concern that the EU’s target for 10 per cent of transport fuel coming from agrofuels will lead to further land conversion.
Image: Forest Peoples Programme

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