

Increase Biofuel Use and Sustainability

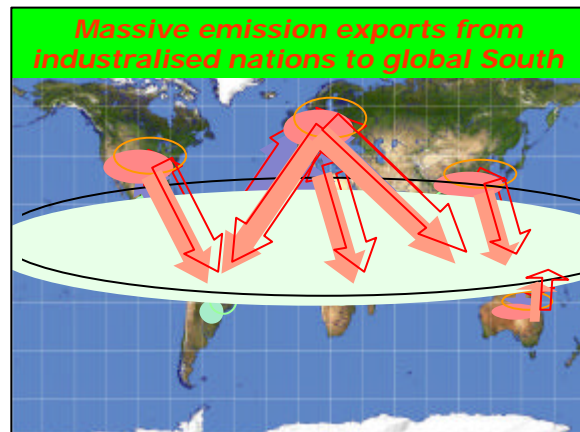
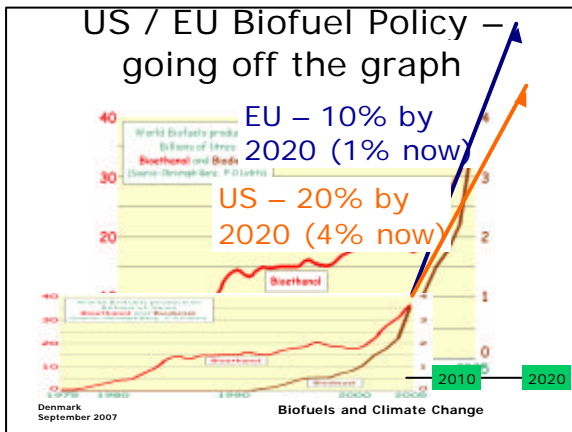
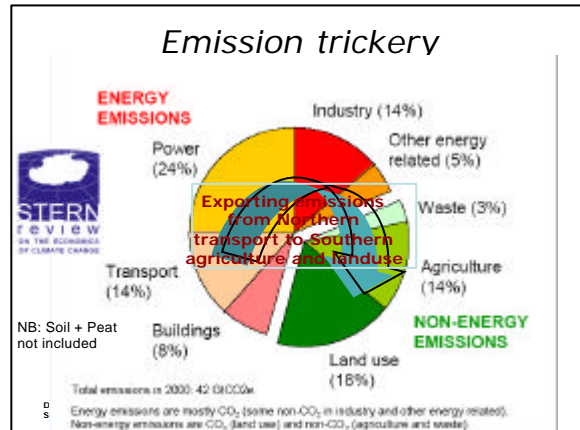
By Sergio Oceransky

Sustainable Energy Policy Seminar,
 October 1-5, 2007,
 Samsø, Denmark

http://www.inforse.org/europe/seminar07_samsø.htm


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Certification context

Governments' response to lack of serious public policy debate is to develop 'certification schemes' or 'sustainability criteria'



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Sustainability criteria

- Driven by interests of industry and government
- Displacement / leakage *not handled*
 - Existing agriculture displaced by agrofuels moves into new areas
- Macro impacts through commodity price shifts *not handled*
 - Amazon deforestation ?? soy price
 - US Corn for ethanol displaces US soy => soy price↑
 - EU oilseed rape use causes palm oil prices↑ causes palm oil expansion

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Do Agrofuels save emissions?

- *Agrofuel infrastructure is built on Fossil Fuel infrastructure*
 - Intensive agriculture – fossil fuel based
 - fertilisers, farm equipment, Nitrous oxide emissions (300* CO₂), soil carbon emissions
 - Feedstock transport, shipping, ports
 - Refining (coal, gas fired plants!) ; process chemicals

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N2O needs further study

- microbes convert N fertiliser to N₂O
 - NEW STUDY by Nobel prizewinner Paul Crutzen, August 2007 : 3 to 5 per cent = twice the widely accepted figure of 2 per cent used by the International Panel on Climate Change (IPCC).
- oilseed rape biodiesel, for example, is up to 70% worse for the climate than fossil fuel diesel (also corn ethanol)
- **UK and EU Biofuels policy and certification schemes in scientific doubt**
- N₂O emissions – chemical fertilizer impact greater in tropics
- Both EU home grown biofuels and tropical imports

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Massive destruction beyond N₂O - Agrofuels are accelerating climate change



Fires to clear land for palm oil, Kalimantan
 Photo by Nordin, Save our Borneo



Deforestation for oil palms, Colombia

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Peat drainage and destruction

Drainage

- Dry peat - oxidises and, over time, emits all its carbon as CO₂. 42-50 billion tonnes of carbon stored in those SE Asian peatlands.

Fires

- Many set by plantation companies, greatly accelerate the loss of carbon.
- Of the 27.1 million hectares of peatland in South-east Asia, 12 million hectares are deforested and mostly drained.

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Agrofuels as a new driver of peatland destruction

Indonesia plans 20 million hectares new oil palm plantations to meet biodiesel demand.

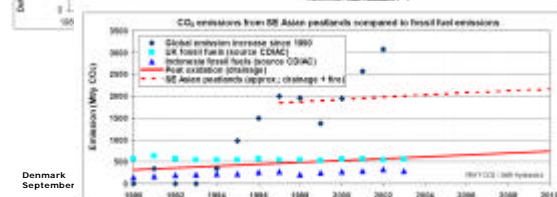
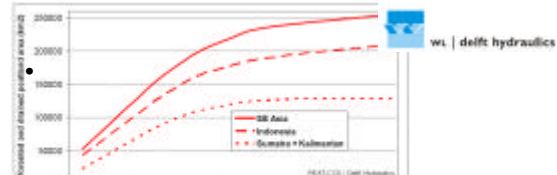
\$17.4 billion investment deals in Indonesian palm oil agreed this year.

According to 2006 FAO report, growth in European rapeseed oil biodiesel has significantly pushed up global palm oil prices.

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Peat Destruction 2



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Deforestation

- “with partial deforestation the entire landscape could become drier and a domino effect could occur producing a ‘tipping point’ affecting the whole forest”.

Conclusion of recent scientific conference

- Amazon drying out – die-back threat increasing - 120 billion tonnes of carbon dioxide

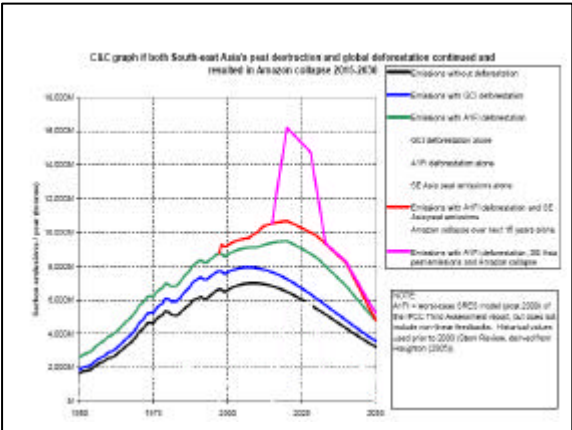
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Amazon Deforestation and Drought




Deforestation in Novo Progresso, Brazil ; Alberto Cesar/Greenpeace/AP Amazon drought 2005, Lake Rei

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Bio-agrofuels are nonsense at the system level

- THE DILUTION FACTOR - 1% biofuels today
 - Assume 10% C emissions savings litre for litre
 - Total saving = 0.1% saving globally
- Most optimistic 2020 : 5% BFs – 0.5% savings
- Same savings can be made by:
 - Each driver driving 0.5% less (ie 50 miles for UK driver)
 - OR Each driver goes 2 mph slower
 - OR Tyres inflated properly
- 20% - 50% **DEMAND REDUCTION** transport sector savings could be achieved in 10-20 years
 - Sustainable transport, modal shift, social planning - work-home relocation etc

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Mega-scale Agrofuel drivers

- Government and corporate subsidy and promotion
- Fits “Business as usual” policies and paradigms
 - Year-on-year economic growth
 - Avoid unpopular “demand reduction” politics
- Short term “energy security” fix
 - Less pressure on Oil hotspots – Mid-East/Iraq
 - Stabilising Oil price?
 - EU / US “Oil independence”
- New global mega-industry and infrastructure
 - agribusiness, biotech, and chemical sectors
 - refining, tankage and shipping sectors
 - commodity markets (eg Palm Oil, sugar, corn)

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The Climate Context

- 1st generation biofuels
 - Scientific doubt on N2O for all fuel supply chains including EU oilseed rape
 - Already a climate disaster
 - Eg Indonesian peat lands
 - Deforestation tropics

We are currently in ‘first generation’ world – there is a gap to any viable second generation – ‘first generation’ problems must be addressed

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Proposals

- **Immediate Moratorium** on EU incentives for agrofuels, EU imports of agrofuels and EU agroenergy monocultures.
- Change 10% Biofuel target for **10% sustainable transportation** target
- Active **lobby** (on EU and national institutions) and **mobilisation** (together with action groups) during discussion on 10% target.
- **European day of action** next year?
- Seminar on **alternatives – sustainable transportation**.
- Sign up to the biofuelwatch yahoo group - email biofuelwatch-subscribe@yahoogroups.com

<http://www.folkecenter.net>

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