

What you're not told about biofuels

There are a lot of myths and semi-truths spread about biofuels in media and on internet. This folder adds some fact that should be considered in the public discussion.

1.

You're told that the EU target of 10 % biofuels in transport would need 1,8 mio ha cropland.

What you're not told is...

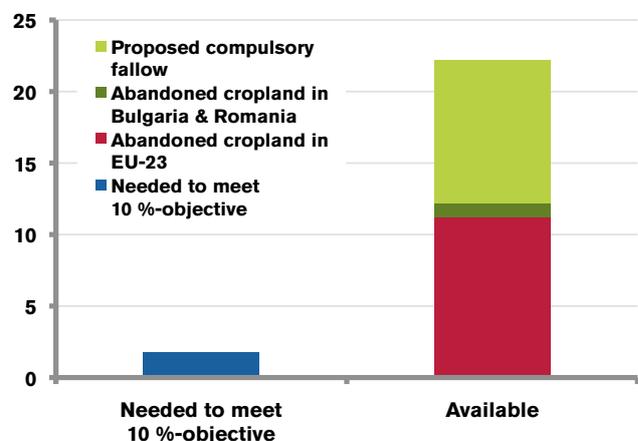
... that in EU alone there is 10 times as much land available.

- » According to Eurostat there are 11,2 million ha cropland abandoned in EU-23.
- » In Romania & Bulgaria there is at least another 1 million ha abandoned cropland (FAOSTAT).
- » The EC wants to force another 10 million ha out of production in the proposal for a new Common Agriculture Policy.

Land abandonment is a one of the largest problem for rural development and biological diversity that EU faces. A stop for biofuels from crops will reduce markets for EU-farmers and lead to even more land abandonment.

Globally there is 445 million ha abandoned and idle land available. (Doornbusch & Seelblink, 2007)

CROPLAND FOR BIOFUELS IN EU (MHA)



2.

You're told that Biodiesel is using up EUs oil production, hence increasing import of unsustainable palmoil – leading to cultivation of carbon-rich land in other parts of the world.

What you're not told is...

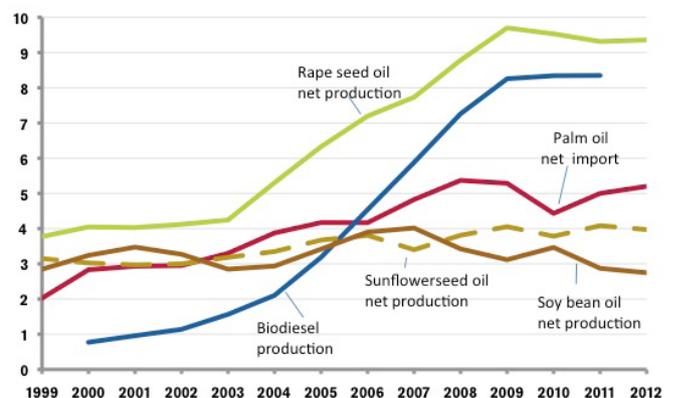
... that palm oil will be used whether we produce biodiesel or not

Rapeseed oil is about 50 % more expensive than palm oil and cannot compete at the food or chemical markets. It can only compete in applications with very high technical and environmental standards – such as the biodiesel market. Taking away the biodiesel market by a 5 % cap on biofuels from crops will have no influence on the palm oil import, as rapeseed is too expensive to substitute palm oil in markets with low environmental standards*. The food and chemical industry will continue to use the cheap palm oil.

A cap will instead make EU-rapeseed farmers turn to other crops – thus further increasing EU's surplus of grain – and in the end increase land abandonment. A cap will together with double counting of biofuels from waste also lead to an increased demand for "used cooking oil". This increased demand will shorten the time palmoil is used for deep frying and also lower the price of palmoil – with an increased use of unsustainable palm oil as the result.

* Biofuels are subject to strict environmental criteria – but food and feed are not.

VEGETABLE OILS AND BIODIESEL PRODUCTION IN EU-27 (MTON/YR)



As seen from the figure, the increase in biodiesel production corresponds to a similar increase in rapeseed oil production and biodiesel use is hence not driving the import of palm oil. The increase in palm oil import corresponds instead very closely with the decrease of soybean oil in food and chemical industry.
Source: Index mundi/USDA

3.

You're told that biofuels drive deforestation in other parts of the world.

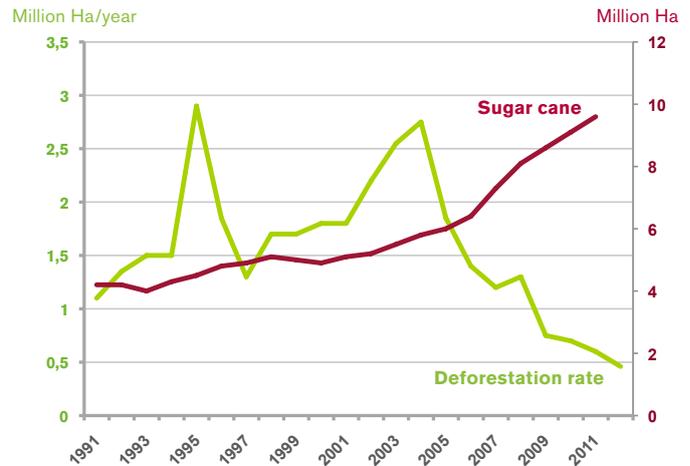
What you're not told is...

... that biofuels reduce the need for soy meal import, hence relieves the pressure on tropic lands.

The EU-biofuel production supports EU with one third of its feed demand, thus reducing the need for soy meal import.

Driving forces for deforestation are plentiful and complex. However, the only method that has shown efficient to stop deforestation is strict environmental criteria and efficient reinforcement. Eg. has Brazilian deforestation decreased with 76 % through strict legislation and satellite monitoring. Capping biofuels in Europe will not influence the deforestation rate.

AMAZON DEFORESTATION RATE



Deforestation rate has drastically decreased since the introduction of a strict conservation policy in 2004, combined with modern satellite monitoring. At the same time the area for sugar cane has more than doubled.

Source: INPE (www.obt.inpe.br)

4.

You're told that biofuels raise the food prices and increase hunger.

What you're not told is...

... that there is no scarcity of food.

... that biofuels has almost no influence on food production.

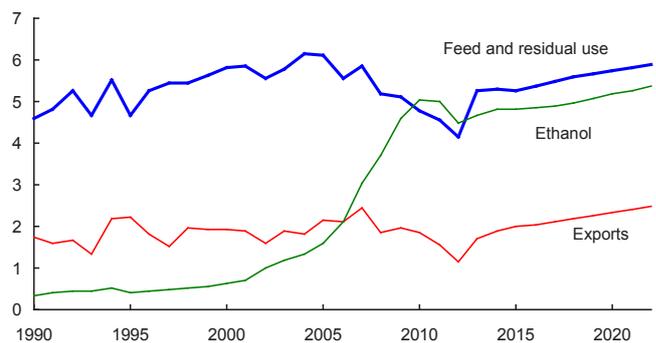
... that food prices must raise to eradicate hunger.

» According to FAO (World Food Uutlook) the current food production is enough to feed 14 billion people with 2,000 kcal/day.

» Production of biofuels has very little influence on food market. The main reason for this is that the by-products are as useful for feed as the original feedstock. An example is the graph from US which shows that the grain export is hardly affected at all by the increase in ethanol production. The EC Renewable energy progress report shows that biofuels maximum have influenced the food prices 4 %. In fact, countries like Brazil has doubled their biofuel production, doubled their food export, curbed the deforestation with 76 % and introduced an ambitious poverty reduction program at the same time.

» Lower food prices would relieve the situation for poor people in cities. However, the majority of the world's poor are dependent on agriculture for their outcome and lower food prices would mean that a lot of these will lose their job, have to abandon their land and move into the cities for their living. Market mechanisms will then again raise prices - but now there will be many more poor and hungry people. Hunger can only be eradicated through poverty-reduction. Biofuels can provide a new income source and reduce the need for using expensive oil, thus reducing poverty.

U.S CORN: FEED AND RESIDUAL USE, ETHANOL AND EXPORTS (BILLION BUSHELS)



Source: USDA Agricultural Projections to 2022, Long-term Projections Report OCE-2013-1, February 2013

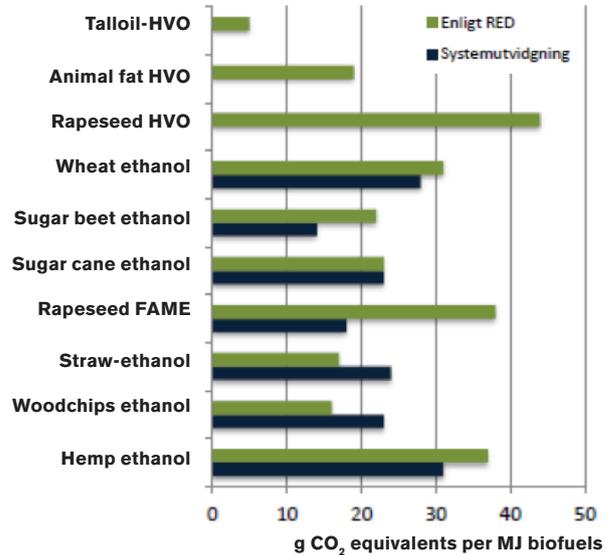
5. You're told that the second generation biofuels save more greenhouse gas than crop-based feedstock.

What you're not told is...

... that there is little connection between feedstock or technology and GHG savings.

- » As seen from the graph, there is no clear connection between feedstock or technology and GHG-emissions.
- » Crop-based fuels can be as good as cellulosic-based fuels. The important issue is the use of byproducts.

GHG EMISSIONS FROM 1ST AND 2ND GENERATION BIOFUELS



GHG-emissions for different biofuel productions systems, calculated according to Renewable Energy, and ISO-standard.

Source: Börjesson.P. et al. 2013, Produktion av dagens och framtidens hållbara biodrivmedel.

6. You're told that a cap on first generation biofuels will promote the second generation biofuels.

What you're not told is...

... that a cap on first generation biofuels will instead increase the use of unconventional fossil fuels.

- » Changed rules for the first generation only three years after the introduction leads to doubts on how stable the market will be in the future and this uncertainty keep investors away. A cap on first generation biofuels will instead lead to large increase in use of shale gas and tar sand oil – thus doubling the climate gas emissions.

- » The double counting will not lead to development of the 2nd generation of biofuels, instead it will just reduce the market by 50 % - thus further reducing the incentive for investments.

WHAT IS NEEDED TO REDUCE CARBON IN THE TRANSPORT SECTOR?

The transport sector is the most complicated sector to make carbon free as there are so few alternatives and the stakeholders are so many. It will need a combination of:

- ✔ **efficient mobility solutions**
- ✔ **improved energy-efficiency in vehicles**
- ✔ **renewable fuels – including renewable electricity**

As seen in point 5, there are efficient solutions among both first and second generation biofuels but all of them need a solid and foreseeable market to develop. Fossil fuel will remain cheaper than these fuels for the foreseeable future as long as the climate impact is not included in the oil price. A solid market hence need a clear political decision.

We propose:

that the EU sets a target of being fossil free by 2050 and to reduce GHG with 50 % in the transport sector by 2030.

- This would lead to CO₂-emissions being expensive and making renewable fuels competitive with fossil fuels.
- This would also mean that biofuels with high CO₂-reduction (i.e. more sustainable) would get a competitive advantage and the market will pick the most favourable biofuel technologies, rather than letting bureaucratic officers pick their favourites.

WHO ARE WE?

We are producers, distributors and users of biofuels – both first and second generation, both from crops and from non-crop feedstock, from waste and from residuals. We are convinced that sustainable biofuels will be an important – but not the only – part of a future sustainable transport system. We offer a great part of the solution.

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