

Palm oil, the new red devil?

The first to ban the use of palm oil-based biofuels in 2020 was Norway, followed by France. Last March, the European Commission excluded palm biodiesel from the list of sustainable biofuels. Thus, its use will be gradually reduced from 2023 onwards to be completely banned in 2030.

What are the consequences for the biofuels industry?

Palm oil, used in the food chain, in cosmetics, but also in biofuels, has a very negative image in Europe.

Accused of causing massive deforestation in producer countries such as Indonesia and Malaysia, palm oil has become Europe's pet peeve, under pressure from NGOs and public opinion.

The EU's ban has triggered anger among producer countries: Indonesia has threatened to break out of the Paris agreement and Malaysia to boycott European products.

The EU countries import 6.9 million tonnes of palm oil (crude or refined). 2 millions are used to produce traditional biodiesel (Methyl Ester). Nearly 2 million tonnes are being used in the recent HVO (co-processing/pure) biofuel production industry.

The remaining 2.9 million tonnes are used by other industries, which are not under any kind of ban.

The moderate contribution of palm oil to the production of traditional biofuels

In Europe, the demand for palm biodiesel (SMEs) is estimated at around 3.25 million tonnes, representing about 23% of the overall demand for biodiesel in Europe.

In total, Europe imported 3 320 000 tonnes of biodiesel in 2018 (palm, soya and other), including 1 250 000 tonnes of palm biodiesel (PME).

Palm biodiesel (PME) is the most competitive on price, but its quality does not match European standards. For example, palm biodiesel must be used in combination with rapeseed biodiesel. The latter is well above the quality standards, but its price is very high.

The palm/rapeseed blend makes it possible to obtain biodiesel that satisfies European standards at a competitive price.

Exclude palm oil from biofuels: and then?

The main argument for excluding palm oil from biofuels is its negative environmental impact.

Yet, even NGOs agree that a dry ban will lead to a transfer of the problem to other crops.

According to the International Union for Conservation of Nature (IUCN) report on palm oil and biodiversity, vegetable oils that could theoretically replace palm oil would be much more harmful to the environment, as they would need more land.

Other oilseed crops require 9 times more land than palm trees to produce the same amount of oil.

Of course, palm oil has its drawbacks, but soya is the main one missing in this ecological debate. No deforestation for soya then?

If the environmental argument were strictly applied, why not ban palm and soybean oil in all industries and not just in biofuels...?

This would surely provoke an outcry from the food and cosmetics industries.

The truth is that European industries and consumers are not ready to accept the consequences.

What are the consequences for HVO production?

The ban on palm oil in biofuel production raises questions in the development process of the production of hydrotreated vegetable oil (HVO) diesel.

In France, the subject is raised with the installation of the La Mède plant.

Indeed, this technology allows the production of an excellent quality biofuel, which would be compatible with the policy of reducing CO₂ emissions from 2025 in the aviation sector (CORSIA programme).

Today, pure-HVO – i. e. non-co-processing HVO production capacity in Europe is 2,5 million tonnes. Recent investments in the sector are very important in Europe and worldwide. **By 2021, production capacity is expected to exceed 5 million tonnes in Europe only.**

However, in a situation of strong interest in waste-based biodiesel and optimal rapeseed production in Europe, how can HVO plants be supplied?

If the national interest prevails and the price of biofuel is not so important, then why not develop the cultivation of rapeseed, a third of whose production is located in Europe?

However, given the offensive against intensive agriculture and the agricultural constraints of this crop, it is unlikely that rape will be used.

So, what can be done?

The idea of animal fats is put forward: but this product is not a waste and its demand is historically strong, driven by the human and animal food and animal feed markets or the oleochemical market.

Should we expect an interconnected system effect? If palm oil is banned for biofuels production, animal fats will be diverted to biofuels at the expense of oleochemistry and the animal feed sector, which will then buy more palm oil... (?)

Impact of the exclusion of palm oil from biofuels

If palm oil is excluded from biodiesel production, this will have several impacts.

1. The price of biodiesel will increase sharply: forecasts are in the order of +15/20% for Europe.
2. Biodiesel production plants will be in distress and will then have to modify their supply with rapeseed or soybeans, reduce their production or shut down all activities.
3. The increase in demand for rapeseed or soybean oil will therefore lead to a rise in the price of these raw materials.
4. The tension caused on the markets for residual raw materials will have a negative impact (sharp rise in prices, an overheated market, aggressive competition in sourcing, up to the increase in fraud which could lead to the sale of residual oil which would not be waste...).
5. An unlikely impact on production in a country like Indonesia where the palm oil economy is crucial and represents 10% of

exports. There will be no doubt about finding alternatives, such as local consumption of B30 biodiesel or new markets.

Banning the use of palm oil in biodiesel is not a problem in itself. The real question is what to replace it with.

Don't get me wrong. The purpose of this article is not to decry the ban on palm oil.

At GREENEA we have specialized for 13 years in biofuels made from residual raw materials and we only process waste oils (used cooking oil, animal fat, acid oils...). This ban would therefore certainly have a positive impact on our business.

But an individually driven approach has never been constructive for any industry and we are especially aware that resources are limited.

However, France and Europe are making a complex choice. Should it not be better to support palm oil-producing countries in the ecological transition and in the

decarbonisation of their transport and in the production of their energy?

It would probably be more appropriate to increase agricultural requirements, regulate burning of plantations and deforestation and, above all, to ask consumer countries such as India and China to join the debates, rather than adopt a ban that has more of an announcement effect than a beneficial impact on the environment.

Looking at it from a macroeconomic perspective, by 2035 Asia's population will increase by 400 million; almost 80% of the EU population. Whereas Europe is concerned about environmental issues, Asia is concerned first and foremost with food safety.

Prohibiting a product only relocates or postpones the problem

Today, palm oil or any other raw material (crop-based or waste based) is imported for the production of biofuels to satisfy European demand for biodiesel. This demand, which comes from European

directives, is higher than the raw material resource available locally.

Likewise, if HVO production is developing, it is also because of contradictory regulations on biofuels: European standards require 10% incorporation, or even more in the future, while it is technically prohibited to incorporate more than 7% of biofuels into diesel fuel. HVO is an exception, because its quality is close to that of a conventional diesel. One answer that is not being addressed today would simply be to reduce biofuel incorporation mandates.

In the current context, finding alternatives to fossil fuels is a real challenge. This challenge requires dealing with the often contradictory regulations, technical requirements, ecological awareness and consumerist behaviors of today's world.

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