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ASEAN Prosperity Initiative

Navigating the Palm Oil Debate

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**The views expressed in this report are those of the author(s) and do not necessarily reflect the views and policies of the Asian Development Bank, or its Board of Governors or the governments they represent.*

EXECUTIVE SUMMARY

The ASEAN Prosperity Initiative

The ASEAN Prosperity Initiative (API) is designed to highlight issues and raise questions over the development of ASEAN and its role in supporting the prosperity of its Member States and their citizens. The API will include the production of reports and material which aim to improve understanding about the main developments and challenges relating to prosperity in ASEAN. The API is intended to engage a broader set of stakeholders in the debate on the future of ASEAN, including business, academia and the general public.

The Institute for Democracy and Economic Affairs (IDEAS) is an independent research institute based in Malaysia. We are dedicated to researching and promoting solutions to public policy challenges. We believe that economic freedom – through free markets, open trade and individual liberty – are essential to sustained prosperity and we believe that ASEAN plays an important role in enhancing and protecting the economic freedom of its citizens. We therefore make no secret about the fact that we strongly support an ambitious agenda of economic integration in ASEAN and through the API we hope to support this agenda.

ASEAN and the EU

As part of the API, we consider the strategic economic relationship between ASEAN and the European Union (EU). The comparison is often made between these two regional blocs, which represent the two leading efforts to integrate their respective regions. The EU's economic integration is significantly deeper and supported by a far more developed institutional and legal framework. The EU is in general more economically developed than ASEAN and is also more homogeneous in its level of development across its Member States than is the case across the 10 members of ASEAN. Despite these differences, we believe that ASEAN and the EU share an essential similarity: they are both groupings of countries that recognise the importance of regional integration and the benefits of openness to trade and investment in the context of a rules-based system. We therefore believe that putting the economic relations between the EU and ASEAN on the best possible footing is an important step in ensuring the long-term prosperity of ASEAN.

In our 2018 EU-ASEAN Free Trade Agreement (FTA) Report we discussed the prospects for a FTA between the EU and ASEAN. The report concluded that the prospects for a comprehensive FTA are currently low, due to a range of issues. Among those issues was the ongoing dispute over palm oil, between the EU on the one hand and Indonesia and Malaysia on the other. Therefore, in this report we decided to further investigate this dispute, with objective of setting out the issues clearly for stakeholders on both sides to provide a common basis of understanding.

The report concludes that:



Climate change - and the role that deforestation plays in contributing to it – is a global strategic threat. Countries in South East Asia are highly exposed to the potential impacts of climate change, with large coastal populations. Historically, the unsustainable production of palm oil has contributed significantly to deforestation and the reduction of biodiversity. For these reasons, the EU is justified in taking action to promote sustainability and reduce the risk of deforestation, including through restriction on the use of palm oil.



It is important to note that the action the EU has taken does not constitute a “ban” on palm oil, rather than biodiesel produced using palm oil may no longer count towards renewables targets, rendering it significantly less competitive in the EU market compared to other products, including soya and rapeseed.



However, the approach the EU has taken under the Renewable Energy Directive (RED) II and its Delegated Act is flawed in a number of ways. First, the product-level approach of applying the policy to palm oil as a whole “punishes” sustainable producers as much as unsustainable producers. Indeed, this risks undermining the incentives for producers to adopt sustainable practices. Second, the fact that the EU has acted unilaterally, rather than in co-ordination with other major palm oil importers, increases the risk that palm oil production will simply shift rather than reduce, potentially leading to a net increase in unsustainable production. Third, the methodology adopted by the RED II can be subject criticism, including the use of somewhat arbitrary cliff-edge thresholds.



These problems with EU policy are compounded by a widespread public sentiment and associated consumer movement that palm oil per se is bad, rather the discriminating between sustainable and unsustainable production. At the same time, EU consumers have historically demonstrated an unwillingness to pay a premium for sustainably produced products, undermining incentives to adopt sustainable practices. Malaysian and Indonesian authorities often cite this “toxification” of palm oil as a greater problem than the EU policy.



From the Malaysian and Indonesian perspective, the EU's decision will have a significant impact on the palm oil exports, at a cost to producers. The wider anti-palm oil sentiment will also continue to impact export of palm oil for use in food and other products. As a result, the strong approach by the authorities is understandable.



However, palm oil represents a small minority of the goods and services traded between the EU and Malaysia and Indonesia. The economic gains of liberalising this wider trade relationship through Free Trade Agreements (FTA) significantly outweigh the costs of reduced palm oil exports. Indeed, in the context of an FTA, there is potential to improve market access for palm oil for use in food, to mitigate the stricter conditions for palm oil in biodiesel.



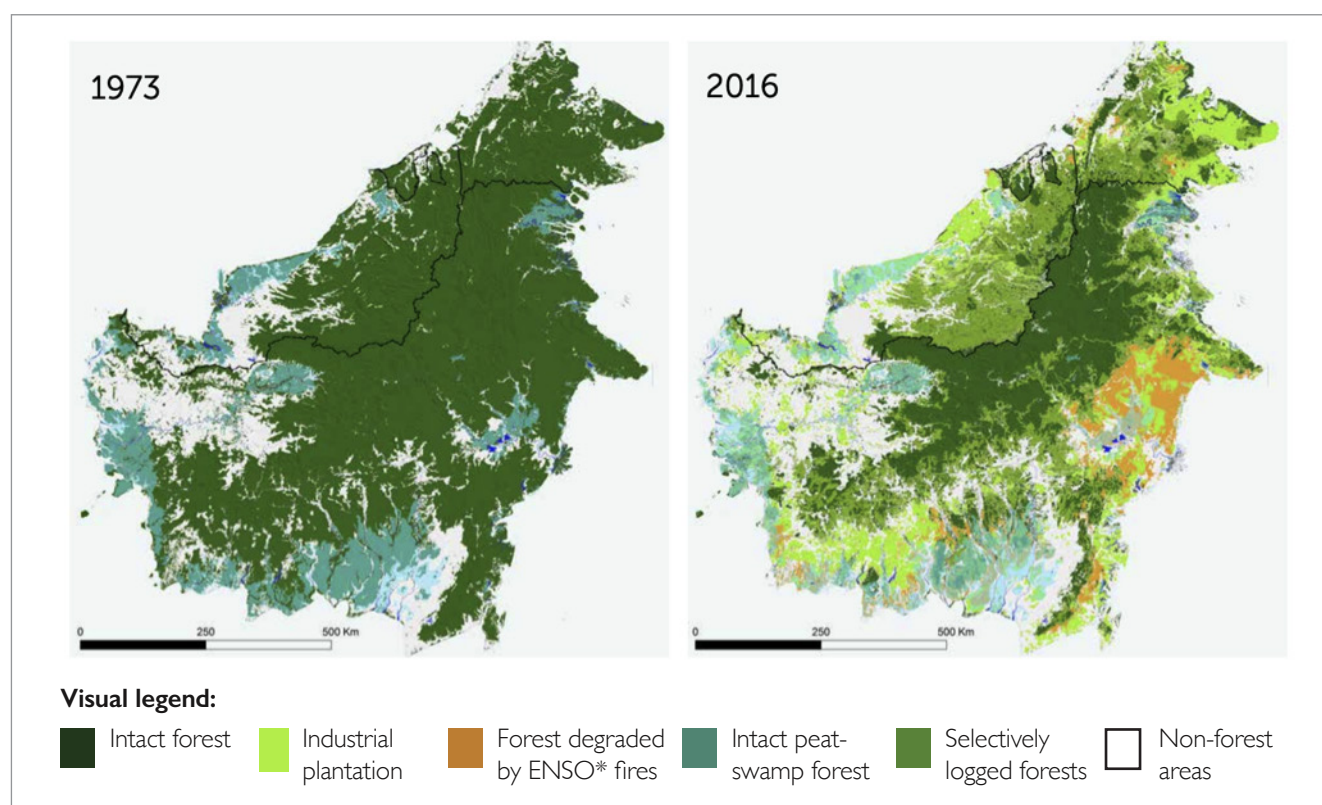
Therefore, whilst it is important for policy makers in Malaysia and Indonesia to continue to raise legitimate concerns with EU policy, these should be placed in the context of the wider relationship and the substantial benefits which would arise from deepening that relationship. Meanwhile, the EU should continue to act as a global champion in the fight against climate change, but do so bearing in mind the unintended consequences of its actions, and, specifically should seek to address the legitimate concerns with RED II when it comes under review in 2021.

Palm Oil, ASEAN and the EU - Background

Over the past several decades, Malaysia and Indonesia have rapidly expanded oil palm production to become dominant global producers, today supplying around 85% of total palm oil. Palm oil production has jumped from around 2 million tonnes in 1970 to 74 million tonnes in 2018/19, with Malaysia alone producing 21 million tonnes and Indonesia producing 41.5 million tonnes (FAOSTAT, USDA).

Much of Southeast Asia's expansion of the oil palm industry came at the expense of tropical ecosystems, with Borneo's old-growth rainforests contracting from 76% to 50% between 1973 and 2016, driven principally by oil palm and pulpwood plantations in Malaysian Borneo and driven partially by these industries in Indonesian Kalimantan (Gaveau, 2017). Since 2004, oil palm and pulpwood have been the principal drivers of deforestation for both countries. The burning method for clearing tropical forest has proven particularly detrimental in terms of air pollution and carbon emissions, helping accelerate the relatively larger Indonesia into amongst the top net global emitters of carbon dioxide. Figure 1 shows a before and after comparison of the Borneo rainforest created by David Gaveau of the Center for International Forestry Research. The map includes lands degraded by El Niño Southern Oscillation forest fires and remaining peatland which is particularly high in carbon storage value.

Figure 1: Comparison of forest cover in Borneo, 1973-2016 (CIFOR)



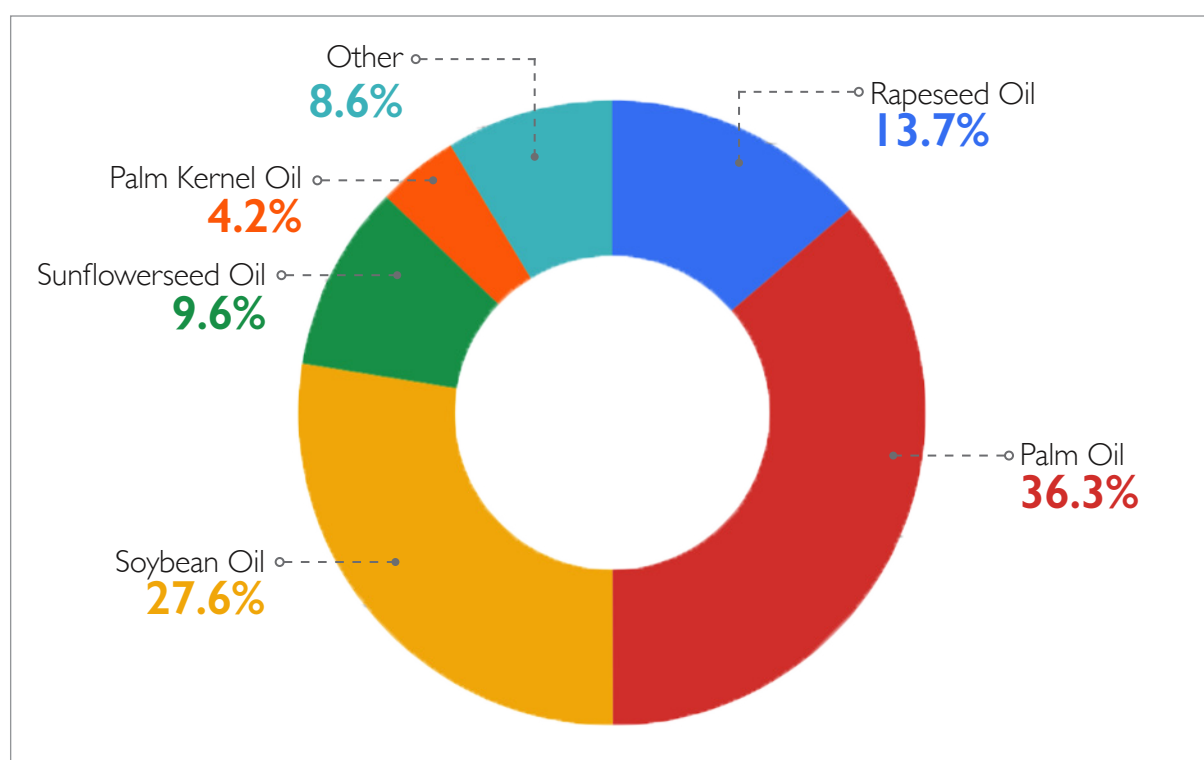
Source: David Gaveau, CIFOR (http://www.cifor.org/publications/pdf_files/factsheet/6552-factsheet.pdf)

Since approximately 2012, oil palm expansion and deforestation have been slowing in both Indonesia and Malaysia under pressure from the international community. Both countries have increasingly emphasized national standards for sustainability, and both have placed a moratorium on granting new concessions for oil palm plantations. Malaysian officials have also promised to cap plantations at 6.5 million hectares with 5.85 already existing (The Edge, Ying 2019). This cap as well as Malaysia's consistently reiterated international promise to maintain 50 percent forest cover fail to be ingrained in any law, owing partially to the jurisdictional challenges of federal versus state control of land.

In 2015, the nations of Denmark, France, Germany, the Netherlands, Norway, and the United Kingdom signed the Amsterdam Declaration, committing to 100 percent sustainable palm oil usage by 2020 (Amsterdam Declaration, 2017). This has helped drive the palm oil industry towards substantiated environmental certifications and has encouraged stricter requirements for the palm oil imported by European countries.

The other oil crops which are the principal competitors with oil palm in the global market include soybean, rapeseed, and sunflowerseed. The global percent share of each oil is shown in Figure 2, with palm oil now representing the single largest contributor to vegetable oil supply.

Figure 2: World Supply of Major Vegetable Oils, 2018/19 (USDA)

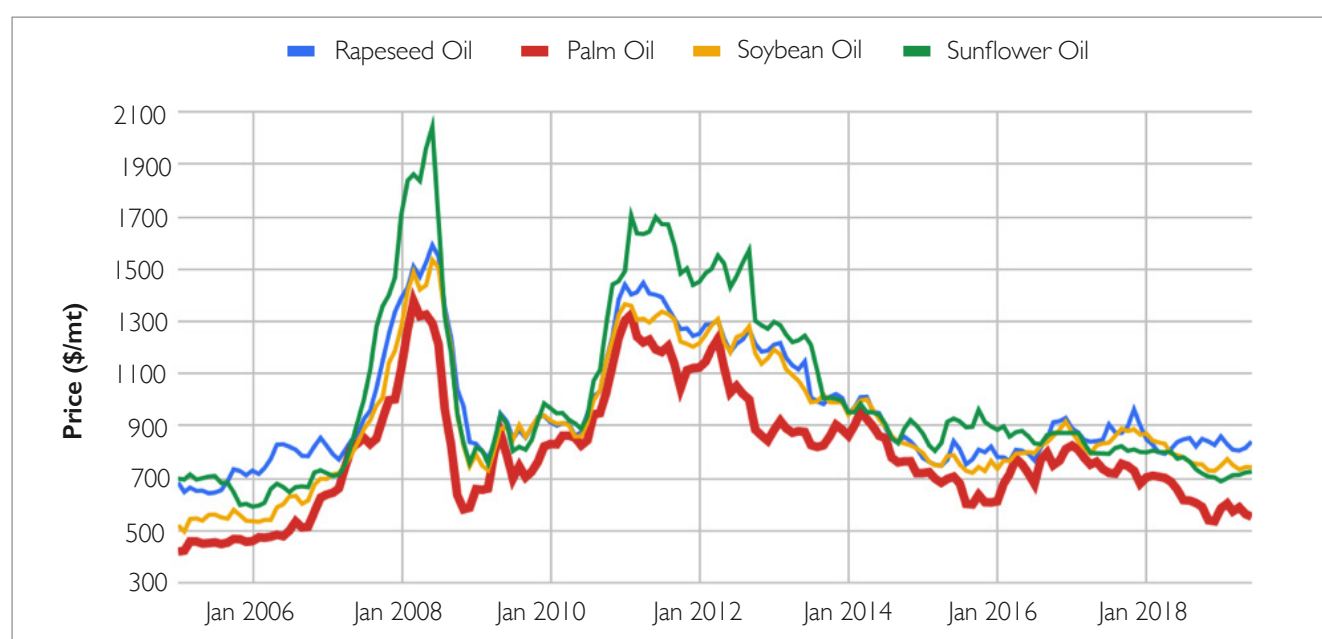


Source: USDA — Foreign Agricultural Service, July 2019 (<https://apps.fas.usda.gov/psdonline/circulars/oilseeds.pdf>)

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Soybean is now primarily produced in Latin America (Brazil and Argentina) and the United States, while rapeseed is largely grown in the European Union and Canada (USDA). Absolute vegetable oil production has increased to about 200 million metric tonnes over the past several years and is expected to rise to between 300 and 500 million metric tonnes by 2050. This increase will primarily occur in developing countries, where per capita consumption of vegetable oil tends to increase as income increases up to a point of saturation (FAOSTAT). Per capita consumption of vegetable oils seems to have already peaked in the U.S. and the EU, though U.S. consumption is significantly higher. Recent growth in the vegetable oil market has been driven primarily by the expansion of palm oil which consistently has the lowest price relative to other vegetable oils (Bailis and Baka, 2011). Figure 3 tracks the average monthly prices of major vegetable oils since 2005 based on commodity data from the World Bank.

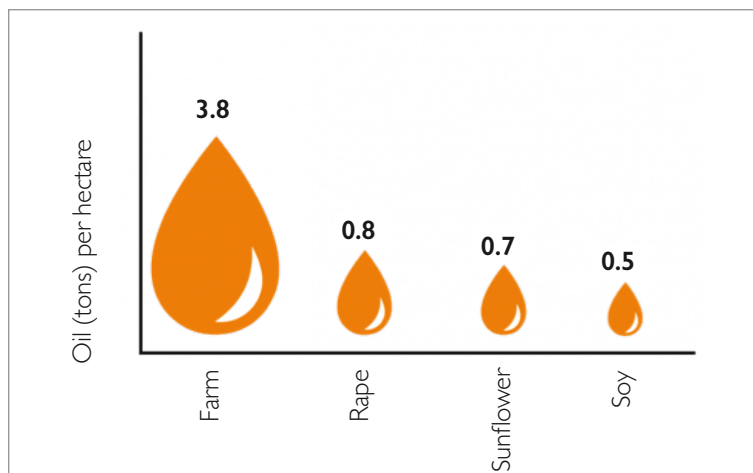
Figure 3: Comparison of monthly vegetable oil prices, Jan. 2005 - June 2019 (World Bank)



Source: World Bank (<https://www.worldbank.org/en/research/commodity-markets>)

In addition, palm oil has remained profitable by virtue of the fact that it is the most productive of the oil crops. On average in 2016, oil palm yielded 3.8 tonnes per hectare with the next best being rapeseed at 0.8 tonnes per hectare (Oil World, 2016). Average oil palm yields are expected to continue increasing with the advancement of technology and agricultural methods in the coming years, with predictions that oil palm could produce 2-4 times more oil per hectare. For comparison, based on existing yield figures, soybean requires over 7 times more land compared to oil palm to produce the equivalent amount of vegetable oil. To replace the EU's 2018 palm oil imports with soy oil would require an additional 12.3 million hectares for oil crop agriculture — more than a third of the amount of land currently cultivated with soy in Brazil (ISAAA, 2017). This direct comparison is complicated by the fact that soy has useful byproducts such as soy meal which can be used for animal feed, meaning the uses and productivity of different oil crops are not perfectly interchangeable or comparable.

Figure 4: Productivity of various oil crops (Oil World, 2016)



Source: Oil World, retrieved from European Palm Oil Alliance (<https://palmoilalliance.eu/facts-on-palm-oil/>)

Amongst the largest consumers of palm oil are Indonesia, India, the European Union, China, Malaysia, and Pakistan. In 2018, approximately 22% of Indonesia's exported palm oil went to India, followed by 14% to the EU and 13% to China (Gapki, 2019). For Malaysia in 2018, approximately 15% of palm oil exports went to India, 12% to the EU, and 11% to China (MPOB).

In addition, it is estimated that half of the world's population now uses palm oil in food, and that half of supermarket processed food or hygiene products contain palm oil (IUCN, 2018).

RED II — Background

In June of 2018, the European Commission passed the recast Renewable Energy Directive (RED II) which raised the target for renewable energy usage in the EU from 27 to 32 percent to be achieved by 2030 (EC, 2019). The RED II defined new sustainability criteria for bioliquid crops such as oil palm and soya, assessing them on the basis of “indirect land use change” (ILUC) risk.

In March of 2019, the EC released and eventually adopted a Delegated Act of the RED II which established a high ILUC-risk level and assessed various oil crops based on existing academic studies. Barring certain exceptions for smallholders, the EU plans to reduce the allowable contribution of these oils for renewable biofuel targets to zero percent by 2030. The EC determined that only palm oil meets this risk threshold and thus will be phased out more rapidly and completely than alternative conventional biofuels — a decision which has spurred intense criticism from Southeast Asian producers.

Malaysia and Indonesia have labeled the EU's decision as a discriminatory and unfair ban on palm oil, while European officials have responded that the RED II does not constitute a ban but instead imposes more stringent criteria for the region's renewable energy targets. Further, only the palm oil which is imported to the EU for use in biofuels will be subject to the ban, though the distribution of EU palm oil usage is contested. Biofuels are estimated to constitute between 35 and 65 percent of the EU's overall palm oil usage (T&E, June 2019).

One of the primary criticisms posed by palm oil producing countries, environmentalists, academics and others is that the EU has failed to distinguish sustainably-produced palm oil from the general stock, instead imposing blanket regulations on the commodity. The Delegated Act states that “the most appropriate, objective and even-handed methodology at this stage of the regulatory process is considered to be one based on the overall worldwide position with respect to each particular feedstock, rather than an approach that would discriminate between particular countries” (EC, Delegated Regulation, 2019). Because of this, the Southeast Asian growers who have sought to meet European sustainability standards will face the same market exclusion as those producing via deforestation.

Both Malaysia and Indonesia have promised retaliation against what Malaysia's Primary Industries Minister Teresa Kok described as an act based on “the politics of protectionism,” disrupting an industry that Southeast Asian officials say is key to counteracting regional poverty (CNBC, Tan 2019). The two countries have threatened to sanction European goods or cancel manufacturing contracts, proposing to purchase defence equipment and aircraft from alternative sources. Producing countries are also considering filing a suit under fair trade rules of the World Trade Organization (Bloomberg, Listiyorini 2019). Palm oil has become a focal point in free trade negotiations with the EU, influencing the development of the economic partnership between these two regions for more than a decade.

In 2009, efforts to achieve a comprehensive EU-ASEAN free trade agreement went on hold, and the EU has since focused on securing bilateral agreements with Southeast Asian nations. Although palm oil was a factor in the regional partnership's failure to materialize, the EU also cited ASEAN's lack of consensus, political will, and negotiating capacity. To date, the EU has concluded FTAs with Singapore and Vietnam in 2014 and 2015, respectively.

Malaysia-EU FTA negotiations halted in 2012, and Malaysia announced plans to continue suspending discussions until the palm oil issue is resolved (NST, Yusof 2019). That being said, Malaysia has demonstrated reluctance to conclude various multinational agreements based on sovereignty concerns and long-standing policy to promote the economic development of the ethnic Malay population. Palm oil has become a particular focus in that it is the most public point of contention and provides Malaysia with a degree of economic and political leverage. Indonesia and the EU concluded the eighth round of negotiations for a Comprehensive Economic Partnership Agreement (CEPA) in June of 2019, but Indonesian officials have also stated that palm oil could stagnate or disrupt these discussions (Reuters, 2019).

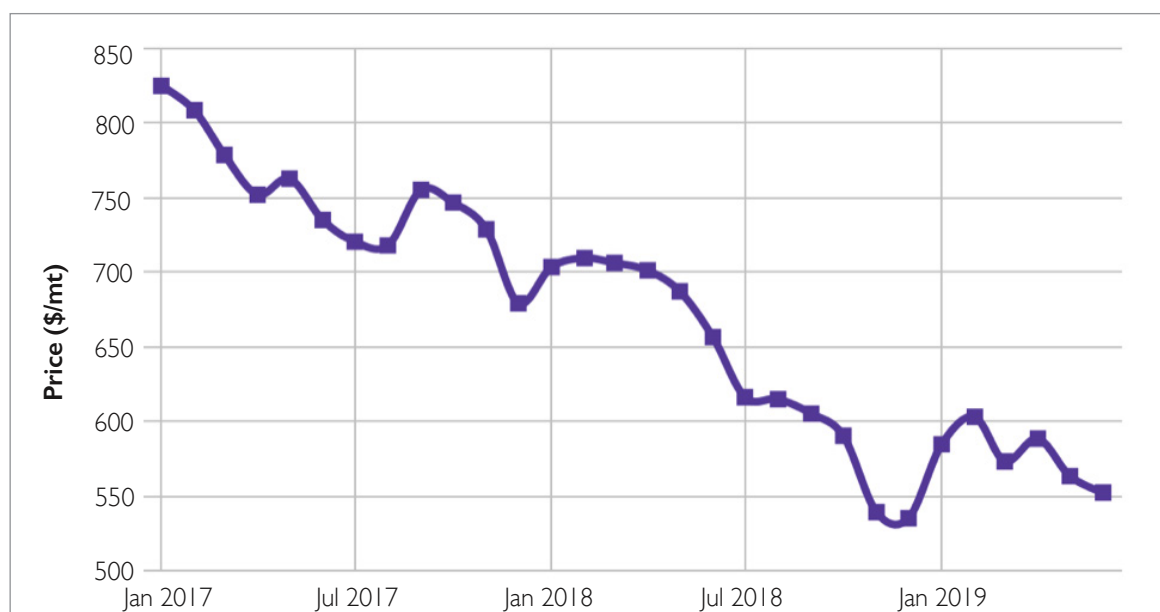
Palm oil is a high profile issue in both Europe and Southeast Asia, becoming the focus of intense public opinion campaigns and political discussions. Following the adoption of the RED II, it has become apparent that the trade relationships between the EU and Malaysia/Indonesia cannot be separated from the question of palm oil and must be thoroughly contextualized within this debate.

Trade Profiles and Economic Impacts of Palm Oil in EU-Malaysia and EU-Indonesia Relationships

Both Indonesia and Malaysia have developed into important trading partners for the EU over the last several years. In 2018, Malaysia represented the EU's 16th largest source of imports while Indonesia ranked 27th. Malaysia is the EU's second most significant ASEAN import source following Vietnam, and the EU spent over 25.6 billion Euros on Malaysian goods in 2018 (EC, 2019). The EU spent 16.5 billion Euros on Indonesian goods over the same period.

In calculating the precise economic implications of the RED II for Malaysia and Indonesia, it is important to note that the price and production levels of palm oil have fluctuated fairly significantly over the past several years, making it challenging to predict the future of the palm oil market. According to the World Bank, the average monthly price for palm oil fell from USD 825 per tonne in January of 2017 to a three year low of USD 535 per tonne in December of 2018 (World Bank, 2019). In both Malaysia and Indonesia, palm oil stockpiles reached record highs in this period (Reuters, Chow 2018).

Figure 5: Monthly price of palm oil, Jan. 2017 - June 2019 (World Bank)



Source: World Bank (<https://www.worldbank.org/en/research/commodity-markets>)

Compared to 2017, Malaysia produced 2 percent less palm oil in 2018, though the export value of palm oil dropped over 16 percent (MPOB, MA Trade). For Indonesia, palm oil production rose nearly 8 percent in 2018 while total export value dropped by 1 percent (GAPKI, 2019). Although it might be expected that the EU would pay higher prices for palm oil required to meet certain sustainability standards, a study found no significant unit price difference between crude palm oil purchased in the EU and in emerging markets such as China and India up through 2015 (Kadarusman and Herabadi, 2018). Globally, European uptake of sustainable palm oil is the quickest, and while sustainably certified palm oil sells for a premium of 5 to 30 USD compared to non-certified stock, average prices remain similar across regions (The Star, Corley 2018). Notably, this does not account for the EU's import of refined palm oil or foreignmade biofuel, and EU prices could also increase if demand for certified palm oil continues to rise. Figure 6 shows the unit price of Indonesian crude palm oil in major markets over the past two decades.

Figure 6: Average Unit Price (\$/kg) of Indonesian crude palm oil (Kadarusman, 2018)

	2000	2005	2010	2015
India	0.27	0.35	0.82	0.56
EU	0.25	0.35	0.8	0.58
China	0.28	0.36	0.86	0.56
Pakistan	0.27	0.38	0.9	0.57
Bangladesh	0.28	0.37	0.81	0.59
World Average	0.26	0.35	0.83	0.58

Source: Sustainable Development: Improving Sustainable Development with Indonesian Palm Oil (<https://onlinelibrary.wiley.com/doi/abs/10.1002/sd.1715>)

The recent decrease in demand and prices seems to have been largely driven by the decision of India to raise import taxes on crude palm oil from 30 to 44 percent and on refined palm oil from 40 to 54 percent in March of 2018. These taxes were lowered slightly at the beginning of 2019, combining with depressed prices to refuel demand in India (The Star, January 2019). Anti-palm oil campaigns in Europe also likely played a role in the volatility of the palm oil market from 2018 to present. The price of palm oil is subject both to political pressures and to the relative strength of alternative oil crops such as soy which will be explored later in this report, meaning the effects of the RED II could extend beyond the relatively small portion of palm oil regulated by the EU. That being said, the precise palm oil market implicated by the RED II will be analyzed to contextualize palm oil within the broader trade relationships of the EU and Malaysia/Indonesia.

Between Malaysia and the EU, over 90 percent of trade in either direction is composed of industrial goods. The EU primarily imports machinery and appliances, while Malaysia imports electrical equipment and machinery from the EU (EC, July 2019). Palm oil accounted for roughly 2.4 percent of Malaysia's total trade with the EU in 2018, around half of which could be subject to phasing out under the RED II. This translates to a maximum of USD 700 million (based on the author's calculations from MA Trade and EC stats and assuming fixed price for palm oil across countries). In other words, the loss of the EU's biofuel market would not significantly hinder the Malaysian economy in terms of direct financial impact.

For Indonesia, total palm oil and derivative exports amounted to over USD 20 billion in 2018 (GAPKI, 2019). Although the levels of imports of Indonesian palm oil by the EU and other buyers have fluctuated slightly with price variations in the past two years, in 2018 the EU purchased slightly less of Indonesia's palm oil, down from 15.6 percent in 2017 to 13.8 percent. Using this figure, palm oil constitutes 9.8 percent of total trade between Indonesia and the EU. Only a portion of this could be subject to the RED II, implicating at most USD 1.85 billion in export value. The effects of the EU's phasing out of palm oil in biofuels would have a greater absolute impact and would more significantly disrupt Indonesian trade and palm oil production compared to Malaysia. Still, overall relative impact on the economy would be similar for both countries. The economic implications of palm oil trade between the EU and Indonesia/Malaysia are summarized in Figure 7, though it should be noted that calculations are estimated based on a constant average price of palm oil in 2018 and that different sources provide slightly different values for palm oil exports and values.

Figure 7: Economic Impacts of Palm Oil Trade and the RED II, 2018

	2018 Palm oil exports to EU (million metric tonnes)	2018 Palm oil exports to EU as a percent of national palm oil exports	2018 Palm oil as a percent of bilateral trade with EU	2018 Palm oil exports to EU as a percent of total global exports	Estimated annual value of palm oil impacted by RED II (million USD)	Estimated impact of RED II as a percent of GDP
Malaysia	1.91	11.56%	2.40%	0.45%	\$380 - \$707	0.11% - 0.20%
Indonesia	4.78	13.78%	9.79%	1.58%	\$996 - \$1850	0.09% - 0.18%

Source: Data retrieved from GAPKI, MA Trade, European Commission — based on the calculations of the author

FTAs: Potential Benefits and Challenges

At the moment, the EU imposes zero tariffs on the import of crude palm oil from both Malaysia and Indonesia “for technical or industrial uses other than the manufacture of foodstuffs for human consumption.” The EU maintains 3.8 percent tariffs on the import of crude palm oil for use in foodstuffs, and up to 12.8 percent tariffs on imports of various types of refined palm oil (EC Taric Measure Information, 2019). Import duties on palm oil were imposed by the EU as part of a larger effort to regulate “forest-risk commodities” including products such as beef and soya, and the tariffs on crude palm oil remain relatively low for this category of goods (Fern, 2015).

Since neither Indonesia nor Malaysia have concluded negotiations for an FTA with the EU, both trade relationships are subject to the rules of the World Trade Organization (WTO). However, unlike Indonesia, Malaysia no longer enjoys privileges under the EU's Generalised Scheme of Preferences (GSP), providing preferential trading terms for developing countries. According to IDEAS' earlier analysis, both Malaysia and Indonesia stand to gain significantly from FTAs with the EU even beyond GSP privileges. Based on a study from 2009, an extended FTA between Indonesia and the EU could increase Indonesia's GDP by 0.99 percent in the short run and 3.39 percent in the long run. For Malaysia, GDP could increase by 1.17 percent in the short run and 6.85 percent in the long run (IIDE, 2009). The potential gains from FTAs as calculated by the Institute for International and Development Economics (IIDE) are given for ASEAN members and the EU in Figure 8.

Figure 8: Highlights of expected gains from an extended FTA in IIDE's middle scenario (IIDE, 2009)

	EU-27	IN	MY	PH	SG	TH	VN	Other ASEAN
Extended FTA (short run)								
GDP % Change	0.05	0.99	1.17	0.6	3.55	0.39	3.48	0.29
Extended FTA (long run)								
GDP % Change	0.2	3.39	6.85	4.12	12.32	4.81	14.02	3.71

Source: IIDE (2009), retrieved from IDEAS' API Report No 02 (<https://ideas.repec.org/p/lnz/wpaper/20090801.html>)

The potential gains from extended FTAs can be compared to the loss of palm oil exports for European biofuel, representing at most 0.2 percent of Malaysia's GDP and 0.18 percent of Indonesia's GDP in 2018. It is also important to note that the use of palm oil in European biofuel is set to be phased out gradually until 2030 during which time Malaysia and Indonesia can likely redistribute exports and build alternative markets. In this sense, the 0.2 and 0.18 percent blow to Southeast Asian economies are high estimates based on sudden and total market exclusion. While it is also possible that the EU policy could lower palm oil prices in the global market, this impact will be minimized by the EU's gradual and predictable reduction in demand.

In addition, FTAs with the EU could result in elimination of the tariffs imposed on refined palm oil and palm oil used for foodstuffs, potentially offsetting some of the losses from the EU biofuel market and improving the competitiveness of palm oil in these European industries. In the EU, there are programs such as ecolabelling and green public procurement which could bolster the demand for sustainable palm oil and provide a more significant price premium for selling to European markets. The EU already has a "green lane" system for timber imported from Indonesia, requiring wood-based products to hold an Indonesian license which then exempts importers from additional sustainability requirements (FAO, 2016). A similar program could perhaps be applied to palm oil.

From the EU perspective, achieving FTAs with Indonesia and Malaysia could significantly lower tariffs on European goods and further economic integration in the ASEAN region. Particularly as Chinese FDI is expanding in Southeast Asia under the Belt and Road Initiative, there is an incentive for the EU to prioritize trade liberalization with two of the region's major economies.

Based on a purely economic analysis, it is therefore cost-effective for Malaysia, Indonesia, and the EU to negotiate FTAs in spite of the palm oil dispute, meaning the current palm oil debate rests significantly on ulterior questions of politics and ideology. Both Malaysia and Indonesia have been clear that the issue with the RED II is the perceived discrimination and manipulation of public perception, although developing FTAs could have broad and mutual economic benefits. While palm oil plays a major role in the economies of Malaysia and Indonesia and the sustainability of the industry is essential for averting global environmental catastrophe, palm oil is often misconstrued as the single most significant product defining the trade relationship between Malaysia/Indonesia and the EU.

Potential Palm Oil Dispute in the WTO

In response to the Delegated Act of the RED II, Malaysia and Indonesia have raised the possibility of filing a suit within the WTO. While it is currently unclear whether palm oil producers will act on this threat, it is important to consider the WTO rules which could apply to the palm oil dispute and the judicial body which regulates WTO trade.

Background: the WTO and Environmental Regulation

The World Trade Organization was preceded by the General Agreement on Tariffs and Trade (GATT), created in 1947 to foster international economic integration in the wake of World War II. The GATT treaty became the basis for the WTO, created in 1995 and now maintaining and governing trade rules between 164 member countries (WTO). GATT's Article XXIII served as the basis for the contemporary WTO's Dispute Settlement Understanding, consisting of the Dispute Settlement Body (DSB), appointed panels of representatives not from the states involved in a particular dispute, and an appellate body. To date, 586 cases have been brought before the dispute settlement understanding of the WTO (WTO).

Although the WTO's dispute system was not explicitly designed to address international environmentalism, the goal of "sustainable development" was included in the WTO preamble and climate change has been a central feature of several previously litigated WTO cases. Still, there is no precise precedent for how the DSB will address resources which are distinguished on the basis of sustainability and how the DSB will operate under the encroachment of multinational environmental agreements. Such issues could arise in a dispute over palm oil and potentially shape the future regulation of free trade in response to a changing planet.

The GATT requires that non-discriminatory, most favoured nation treatment be applied across all trading members, though Article XX is composed of general allowable exceptions for the limiting of imports or exports beyond duties or taxes. Two exceptions are pertinent for environmental litigation:

- XX(b) allows for trade limitations "necessary to protect human, animal, or plant life or health"
- XX(g) allows for trade limitations "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption" (WTO, GATT)

Precedent and Provisions Impacting a Palm Oil Dispute

Considering that the EU is regulating palm oil on the basis of deforestation and production, XX(g) could be invoked in the sense that Southeast Asian rainforests encompass vital and rapidly deteriorating natural resources. However, the EU's delegated act imposes restrictions on the use of oil crops based on the concern that ILUC "can lead to the release of GHG emissions," implying an application of XX(b) in order to protect human and environmental health (EC, Delegated Regulation, 2019). This distinction is significant in that the DSB has interpreted the "necessary" wording of XX(b) more stringently than the "relating to" wording in XX(g).

In a WTO case from 2005 regarding Brazil's banning of retreaded vehicle tires from Europe based on environmental and health concerns, the DSB articulated application of the XX(b) exception. The Appellate Body determined that actions under XX(b) are "necessary" only when "there is no less trade-restrictive alternative reasonably available" (Watson, page 205, 2013). Under this definition in a palm oil dispute, the EU would be burdened with demonstrating that the more rapid phasing out of palm oil in biofuels is the least trade-restrictive way to diminish greenhouse gas emissions from land use change. The EU may also have to justify the differential treatment of palm oil, complicated by the fact that GHG emissions are a diffuse and multi-faceted issue.

Another significant aspect of WTO regulations is the Technical Barriers to Trade (TBT) agreement, allowing countries to adopt individual standards for products. According to the WTO, the TBT can be invoked for "human, animal or plant life or health... the protection of the environment or to meet other consumer interests," but states that "life can be simpler if governments apply international standards, and the agreement encourages them to do so" (WTO). The TBT allows Malaysia to maintain standards for halal certification on imported goods and for the EU to require sustainable palm oil, for example. However, palm oil producing countries argue that the EU is now imposing discriminatory barriers on palm oil relative to other vegetable oils. The EU argues that there is a sound scientific basis for this distinction.

Perhaps the most important GATT provision for a dispute over palm oil is thus the chapeau — or introduction — of Article XX. This states that the invocation of exceptions are "subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade." The chapeau has proven decisive in various environmentally-motivated cases, and officials from Malaysia and Indonesia seem to have been strategic in describing the EU's delegated act with similar language to the chapeau. The GATT is clear that imported products can be afforded treatment "no less favorable" than "like" domestic or foreign products, but the question is whether different levels of sustainability are enough to constitute a divergence of products (WTO, GATT).

In a 1998 case, France was disputed on its justification for banning the import of asbestos and products containing asbestos — a barrier imposed to address precautionary health concerns at the time. In this dispute, the WTO made an important clarification about determining the likeness of products. The Appellate Body based the comparison on whether two products are in a competitive relationship and are functionally indistinguishable to consumers, meaning they can be like "even if they differ in exactly the dimension that gives rise to the regulatory concern" (Trachtman, page 278, 2017).

Likeness could prove decisive in the palm oil case and seems to serve as the foundation of the argument from producing countries. In a list of complaints from Malaysia to the WTO, Malaysia stated that "we urge the European Union to provide equitable treatment across all oil crops biofuels... in line with the principle of non-discrimination which stipulates that a member shall not discriminate between 'like' products from different trading partners" (WTO: Statement by Malaysia). Certainly, there are several competitive biofuel substitutes for palm oil receiving differential treatment from the EU. It could be argued that public opinion in Europe has been effectively mobilized to the point that some consumers distinguish between various vegetable oils, but it is unclear whether this would constitute a sufficient distinction between products. For goods such as biofuels,

the EU separates alternatives on the basis of what the WTO calls “processes or production methods” (PPMs), which in this case is the degree to which an oil crop causes indirect land use change. The WTO has stated that differences in PPMs “do not per se render these products ‘unlike,’” making it unclear how the DSB should interpret this issue (WTO).

As to the complaint that the EU’s treatment of palm oil is indiscriminate and fails to differentiate palm oil from sustainably-producing countries, WTO rules perhaps partially motivated the EU’s adoption of this approach. In the 2005 case disputing Brazil’s exclusion of retreaded tires, Brazil lost on the grounds that Mercosur countries were selectively exempted from the ban, constituting discrimination in violation of the Article XX chapeau. (WTO: DS332). By imposing product-level trade restrictions, the EU avoids this complication and the targeting of any particular countries.

Still, although the EU describes the choice between a unilateral approach and a country-by-country approach in assessing palm oil, the EU could perhaps distinguish palm oil sources based on particular sustainability criteria in a way compliant with WTO rules. In a 1997 WTO case referred to as Shrimp-Turtle, the U.S. was allowed to ban the import of shrimp caught with technology that inadvertently harmed the endangered sea turtle. The U.S. ultimately lost the case because it required the use of a particular tool in catching shrimp and thus unjustifiably sought to coerce foreign policy, but preventing a particular environmental harm was accepted by the DSB as a justified grounds for restriction. As applied to the palm oil case, this means that the EU likely could not require the use of a specific certification standard to identify sustainable palm oil, but could require rules and criteria for palm oil or alternative crops to meet. Theoretically, the DSB in the Shrimp-Turtle case opened the path for such an approach to environmentalism in international trade.

A palm oil dispute in the WTO could extend over several years and delay progress on free trade negotiations between Southeast Asian palm oil producers and the EU. The outcome of a palm oil dispute depends on the willingness of the DSB to accept the EU’s scientific standards, to distinguish traded goods on the basis of sustainability, and to interpret broad environmental hazards as justification for targeted trade restrictions. As encouraged by the WTO, the EU and palm oil producing countries should aim to resolve issues internally, turning to the DSB only as a last resort.

The RED II: intended vs. actual impact

The EU's recast renewable energy directive was created with the intention of accelerating environmental progress and ensuring sustainability standards for the energy sector were strong enough to counteract climate change. As part of this effort, the EU has begun to back away from destructive conventional biofuels in light of progressing academic consensus on the problems associated with the use of food crops for energy needs. With global population set to rise to 9.7 billion by 2050 and food demand expected to increase by more than 50 percent, the efficient use of agricultural land will become increasingly essential. In this sense, the RED II targets a significant issue for the future of global development, but it is not clear that the RED II takes the appropriate approach. Although purportedly based purely on environmental considerations, certain provisions of the RED II may be politically motivated and environmentally counterproductive.

The Development of Sustainable Thought in the Biofuel Market

To assess the sustainability of various oil crops for the RED II, the EU employed the measure of “indirect land use change” — a relatively newer way of quantifying ecological impact. ILUC occurs when crops which would otherwise contribute to food and feed demand are instead diverted to use in biofuels, meaning agricultural land must be expanded to satisfy both markets. The push for an updated GHG emission measurement has been intensifying over the past several years, including a 2011 letter from over 200 scientists asking the European Commission to account for ILUC. This was in reference to the EU's first Renewable Energy Directive (RED) adopted in 2009 (UCSUSA, 2011).

Historically, biofuels have been presented as an environmentally neutral energy alternative in that existing crops could displace fossil fuels with minimal technological disruption and without net greenhouse gas emissions. Based on this zero-carbon analysis, western nations such as those in the EU set biofuel targets and subsidized the use of vegetable oils for vehicles and electricity. Although many academics and others were aware of the shortcomings of biofuels from the earliest days of renewable energy legislation, the neutral biofuel message has dominated — and in some places continues to define — the political narrative surrounding clean energy.

The EU thus faced considerable and mounting pressure to reconsider biofuels in the RED II based on a scientific understanding which has persisted for years. This is the idea that the baseline for calculating the environmental impact of feed crops used in fuels should not be already cultivated land, but should instead be forest or land which would otherwise regenerate into forest. Considering that global food demand is increasing, it is misleading to present biofuel production as costless. Definitionally, incorporating ILUC is thus a reasonable and necessary means of ensuring that any benefits of reducing fossil fuel usage are not offset by the GHG emissions of deforestation. However, at a practical level, ILUC is diffuse and difficult to quantify. Essentially, ILUC attempts to determine if and to what extent the production of a crop for biofuels caused deforestation locally or in another part of the world, meaning it depends on predictive modeling or on selected criteria within retrospective analysis. Unlike a fairly indisputable measure such as the average yield of a crop or the amount of cultivated land, ILUC is manipulable and thus controversial.

The ILUC analysis and environmental drawbacks of biofuels are not universally accepted, including in Malaysia and Indonesia. In February of 2019, Malaysia announced plans to transition from a B10 to B20 biodiesel program in transport and industrial sectors by 2020 (Nikkei Asian Review, 2019). B20 means that the diesel blend will be 20 percent palm oil and 80 percent fossil fuel, up from a 10 and 90 percent balance. Malaysia follows the example of Indonesia, which introduced a B20 target to the transport sector in 2016. Malaysia expects the program to increase the uptake of crude palm oil for biodiesel by 1.3 million tonnes annually,

though some have questioned Malaysia's actual progress on biodiesel usage beyond plans and promises. In a statement to the WTO, Malaysia called the EC's calculations of ILUC emissions "questionable" (WTO: Statement by Malaysia).

ILUC in the RED II

In the RED II and Delegated Act, the EU recognized that all biofuels, bioliquids, and biomass produced from food or feed crops carried inherent ILUC risk and thus limited the allowable contribution of all of these crops for renewable energy targets. For typical feed crops, the EU set the limit as "1 percentage point higher than the 2020 national share of these fuels in final consumption of energy in rail and road transport in each Member state," with a maximum at 7 percent (EC: Sustainability Criteria). On top of that, the EU also implemented the high ILUC-risk measure, limiting the use of especially risky feed crops in renewable biofuels to 2019 levels until 2023 and reducing them to zero by 2030. As palm oil was the only crop determined by the EU to be high-risk, palm oil was technically singled out in this category. The EU also created the possibility for low ILUC-risk fuels which mitigate ILUC because they are either "the result of productivity increases or because they come from crops grown on abandoned or severely degraded land" (EC). For example, there could be a low ILUC-risk batch of palm oil if proven that the stock meets sustainability criteria and was produced on degraded land, and low-ILUC crops will be exempted from limitations.

Although less impactful for the palm oil debate, the RED II also sets mandatory targets for "advanced biofuels," otherwise known as second-generation biofuels, reaching 3.5 percent of the 14 percent renewable energy target for transport by 2030. Advanced biofuel feedstocks include certain algae, biomass from municipal waste, husks, palm oil mill effluent and empty palm fruit bunches (RED II). With this, the EU aims to promote energy production from waste products which may otherwise go unused and which are produced as a result of some other process or product.

To summarize, the RED II breaks down biofuel, bioliquid, and biomass feedstock caps and limits according to the following broad categories:

- Food and feed crops: for each EU member, limited to 1 percent higher than 2020 share in road and rail fuel, capped at 7 percent
- High-ILUC risk feedstocks: further limited to 0 percent of renewable energy targets by 2030; phaseout starting by 2023
- Low-ILUC risk feedstocks: no limitation
- Advanced biofuels: for each EU member, a minimum of 3.5 percent of transport energy by 2030

The controversial provision around which the palm oil dispute focuses is the high ILUC-risk characterization. Although the limitations for high risk crops were stipulated in the RED II, the EC only laid out criteria for high risk feedstocks and established which oils meet the threshold in a delegated act. Advanced biofuels were not given the same treatment, instead being listed in an annex of the original RED II. The draft of the delegated act followed the RED II by only two months, inciting criticism by some that it was a political maneuver to avoid including palm oil limitations in the vote for renewable energy legislation. Although a brief feedback period was allowed on the delegated act, Malaysia felt that extensive comments were not given adequate consideration and that the European Parliament sought to push through the legislation before a change in government.

The delegated act set two provisions for determining a feedstock to be high ILUC-risk:

- “The global area of the feedstock has increased annually by more than 1% and 100,000 hectares after 2008”
- “More than 10% of such expansion has taken place on land with high carbon stock” (EC: Sustainability Criteria)

The EC determined that rapeseed, palm oil, and soybean all had an annual expansion of at least 1 percent, but only palm oil met the second criteria. According to the EC, 45 percent of palm oil expansion since 2008 has occurred at the expense of high carbon stock land, with the second closest being soybean at 8 percent. Some have argued that the 10 percent threshold set by the EC is arbitrary, intended only to protect the soy oil market. An additional complaint comes from Malaysia’s statement to the WTO, explaining that palm oil can only be planted on particular types of tropical soil which have a higher greenhouse gas content and thus that palm oil was specifically targeted by the EC. Highlights from the European Commission’s findings are given in Figure 9.

Figure 9: Selected findings from the Annex to the Delegated Act of the RED II (European Commission)

	Average annual expansion of production area since 2008 (kha)	Average annual expansion of production area since 2008 (%)	Share of expansion into land with high-carbon stock, defined in RED II
Rapeseed	301.9	1.00%	1%
Palm Oil	702.5	4.00%	45%
Soybean	3183.5	3.00%	8%
Sunflower	127.3	0.50%	1%

Source: EC — Annex to the Commission Delegated Regulation supplementing Directive (EU) 2018/2001 (https://ec.europa.eu/energy/sites/ener/files/documents/1_en_annexe_acte_autonome_part1_v6.pdf)

Environmental Criticisms of the RED II

A number of significant concerns have been raised regarding the potential efficacy of the RED II in achieving its environmental aims: to promote renewable energy in a way that avoids deforestation and minimizes emissions. Those concerns will be outlined and explained from both the European, demand-side perspective and the perspective of producing countries.

RED II's capacity to reduce land converted to crops for biofuel:

One of the core stipulations of the RED II is that EU Member states can continue counting food and feed crops for a certain percentage of renewable energy targets, capped at 7 percent, or half of total required renewable energy in road and rail transport. However, since palm oil is set to be gradually phased out of this target, EU states are incentivized to fill the demand with alternative biofuels, mainly soy and rapeseed. Environmentally, this is problematic in that alternative oil crops have far lower yields than oil palm and thus require significantly more land to produce the same amount of energy. Overall European biofuel demand could stay fairly constant, but biofuel inputs will be required to shift to more land-intensive sources. This criticism is promoted by palm oil producing countries but also by many academics and NGOs, concerned that the EU could inadvertently incentivize accelerated land conversion for oil crop production. In particular, many have questioned the EU's decision to protect soy oil based on the 10 percent high carbon stock threshold, especially as soybean agriculture expands increasingly into ecologically significant land in Brazil and Argentina.

From the perspective of the European Commission, the high-risk RED II category addresses and mitigates the expansion of environmentally degrading crops for nonessential fuel uses, while alternative biofuel sources are preferable in terms of GHG emissions. The EC also aims to support low ILUC-risk and advanced biofuels over food crops, but food crops are price competitive and politically important. The EC's view is misguided in that the RED II is unlikely to diminish global palm oil demand. As articulated earlier, the amount of Malaysian and Indonesian palm oil actually diverted to the EU's biofuel market is relatively small at approximately 7.5 percent and 9 percent, respectively. The EU seems to lack significant enough stake in the palm oil market necessary to considerably alter the trajectory of the commodity, meaning the loss of the European biofuel market could not cripple the industry. In other words, the RED II could both fail to avert deforestation for oil palm agriculture and promote expanded production of other oil crops for European biofuel.

To have the intended impact of preventing land conversion for biofuel production, the EC would likely have to impose a phasing out of all food crops in biofuels or would have to instead focus on more stringent sustainability criteria for the crops used in fuel. Even if singling out a particular crop as with palm oil is scientifically and environmentally justified, the environmental byproducts of crop-specific regulation likely outweigh the benefits.

Impact on sustainable development of the palm oil industry:

Over the past two decades, Malaysia and Indonesia have increasingly emphasized the importance of “sustainability” in the palm oil industry, though what defines sustainable palm oil is contentious. The push for environmental consideration has come more from Europe than from any other market, and many palm oil growers have risen to meet the standards of the EU. One of the first major sustainability efforts was the Roundtable on Sustainable Palm Oil (RSPO), created in 2004 and now certifying 19 percent of global palm oil from over 4,300 members (RSPO, 2019). In 2011, Indonesia created its own sustainability certification (ISPO) followed by Malaysia in 2013 (MSPO). Malaysia and Indonesia have both promised to achieve complete and mandatory compliance with their respective national standards, though many NGOs and academics view RSPO as a stronger and legitimate benchmark for sustainability. MSPO and ISPO are often described as important starting points, and producers have made significant progress in improving agricultural practices. The EU also has its own certification schemes, including the International Sustainability & Carbon Certification (ISCC).

The EC’s decision to reject palm oil outright has a number of important implications and potential consequences for producers. First, that no palm oil, even the palm oil certified according to European standards, can be viewed as sufficiently sustainable. Second, that Malaysia and Indonesia are unable to comply with global environmental standards. Third, that major palm oil-producing nations should focus on alternative, price-sensitive markets.

According to Malaysia and Indonesia, the progression towards sustainable palm oil is now too ingrained to be disrupted or regressed by the RED II, but there is a legitimate concern that the relatively less significant European palm oil market will provide less incentive for sustainability. As discussed earlier, although palm oil producers must meet higher standards to export to the EU, on average the EU does not pay a significant price premium for crude palm oil.

Although Malaysia and Indonesia have provided subsidies to help growers become sustainably certified — particularly to smallholders, which constitute approximately 40 percent of oil palm agriculture — there is not financial assistance to make the price of sustainable palm oil competitive for buyers. Only about half of the palm oil which is produced according to sustainability standards is actually sold as sustainable oil due to insufficient demand (Bloomberg, Raghu 2019). This means that although there is a cost for producers to adhere to certification criteria, the only substantial benefit is European market access. While the EU is only phasing out the use of palm oil in biofuels, some growers may decide that the strictness of the European market does not pay off, particularly with a demonstrated European willingness to disrupt palm oil trade. Because the EU has treated palm oil unilaterally, the RED II will have the greatest impact on those producers who adhere to sustainability standards purely for the European market. In this sense, the RED II may encourage some oil palm growers to backtrack on sustainability and focus on demand outside of the EU.

Arguably, the EU can have more influence over the sustainable development of palm oil by maintaining its position and influence in the market. Palm oil is highly productive and inexpensive, and it is unlikely that global palm oil demand will decrease in the coming years. As argued by the IUCN, ISCC, producing countries, researchers and others, the stated environmental goals of the EU would be better served by heightening the sustainability, deforestation-free requirements for palm oil. Although studies have found that RSPO-certified concessions do not perform significantly better on ecological measurements such as orangutan preservation and fire prevention, certification serves as an important basis and already has the infrastructure and acceptance to alter production methods (Morgans et al., 2018). At the same time, the EU has made reasonable requests for the increased transparency of producing countries and the need to place data and facts behind sustainability promises. The EU demand for stronger environmental criteria is only impactful if the EU purchases palm oil, with the somewhat perverse implication that the EU can most effectively address the issues of palm oil by maintaining palm oil trade.

Impact on alternative palm oil markets, emissions leakage:

For Malaysia and Indonesia, one of the most pressing impacts of the RED II is the need to find alternative buyers for what has traditionally been European palm oil. Some of the other largest markets — China, India, and Indonesia, for example — are much more sensitive to price than to a commodity's impact on the climate. Related to the two previous environmental criticisms is the concern that the RED II will not diminish the production of palm oil but will only divert it to emerging markets. Malaysia, for example, has recently negotiated with China to import an additional 400,000 tonnes of palm oil and is increasingly exporting palm oil for inexpensive processed food in developing countries (The Star, Adnan 2019).

From the opposite perspective, it can be argued that the EU can only influence palm oil demand within the EU, but with the contraction of the European market, producers are pushed to invest more in fostering new trade flows. A concern is that the RED II creates emissions leakage whereby one country increases emissions as a result of another imposing a stricter climate policy to reduce emissions. For example, if European palm oil demand gradually decreases, global palm oil prices could be consistently depressed, encouraging other countries to buy more. Further, growing international palm oil consumption may encourage the development of oil palm agriculture in other tropical countries, creating the potential for more deforestation and a limited European market to promote sustainability.

The RED II as environmental legislation

With the RED II, the EC has sought to incorporate the significant indirect consequences of biofuel production and has set an important precedent for reassessing the environmental impacts of oil crops as a renewable energy source. The continued deforestation related to oil palm is a contributor to climate change and food crop-based biofuels are not a sustainable solution long-term. Malaysia and Indonesia still require significant improvements in the production of oil palm including the production of internationally accepted research, transparent progress on the ground, and engagement with NGOs and consumers.

That being said, the RED II's blanket methods for measuring ILUC and applications into policy raise legitimate concerns about the legislation's efficacy in addressing climate change and mitigating emissions. In essence, the RED II and Delegated Act hurt the wrong people, impacting the most sustainable growers and creating an incentive for the industry to regress towards minimizing costs. In addition, the RED II likely fails to reduce deforestation as a result of oil palm agriculture while potentially increasing land conversion to meet the EU's biofuel demand with other crops. While the EC raises reasonable concerns about the sustainability of the palm oil industry, it does not necessarily push producers in the right direction. Recognizing that the RED II has various counterproductive environmental implications, it is important to consider the political and ideological debate underpinning the palm oil dispute as well as the alternative motivating factors behind the EU's renewable energy policy.

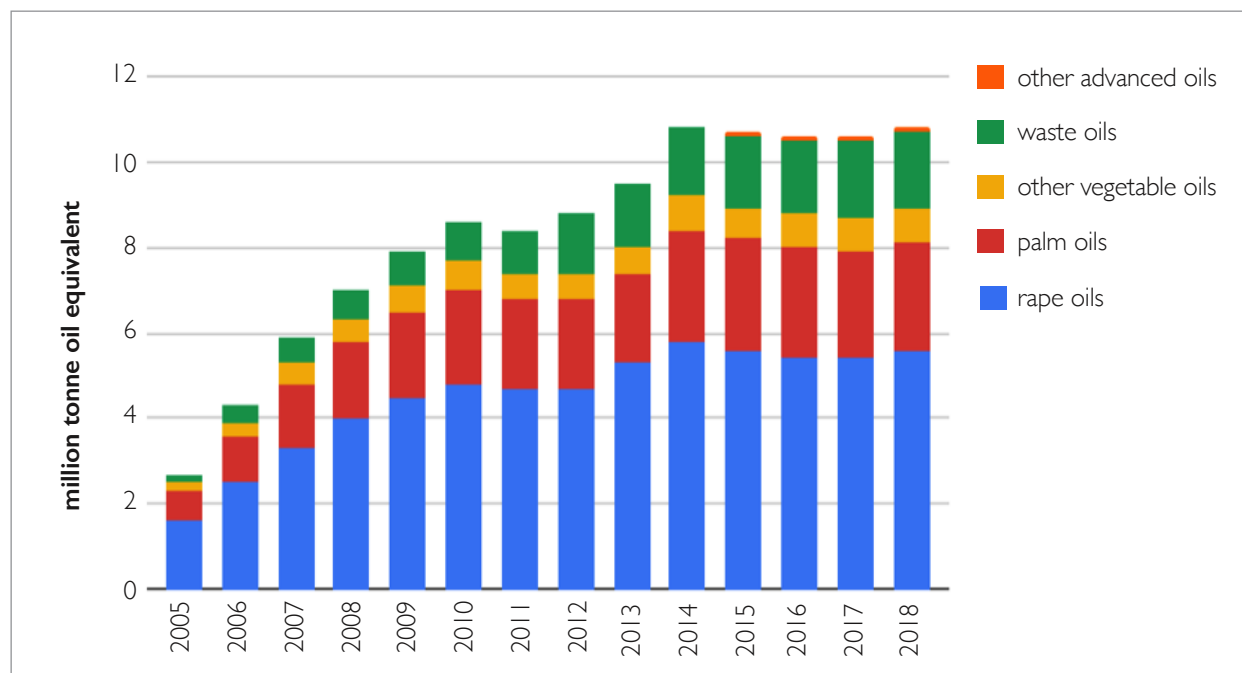
The Politicization of Palm Oil and Motivating Factors for the RED II

Over the past several decades, palm oil's rapid and competitive expansion into the global vegetable oil market has been accompanied by political and economic friction, a growth in public awareness, and an associated debate about cultural and ideological values. Based on the earlier analysis, it is clear that neither economic value nor environmental considerations are sufficient to explain the RED II and the intensity of backlash from Malaysia and Indonesia. Palm oil has become enmeshed in and representative of broader disputes between the EU and Southeast Asian nations, important both for understanding the complexity of the debate and the challenges involved in resolving palm oil tensions.

Vegetable Oil Market in the EU

In 2003, the European Commission adopted a directive to support the use of biofuels and other renewable energy in transport. As part of this program, the EU provided significant support to the vegetable oil market, with the International Institute for Sustainable Development estimating that the EU spent between 9.3 and 10.7 billion Euros on biofuel subsidies in 2011 (IISD, 2013). The majority of the EU's biofuel subsidies have gone to biodiesel with the EU's 2003 policy aiming to substitute 20 percent of conventional fuels in the road sector with alternative fuels by 2020. Although the coming years could see a change in this trajectory, from 2005 to 2018, the EU's biodiesel consumption increased from 2.4 million tonnes to 12.2 million tonnes (EC: Agricultural Outlook, 2018). Biodiesel now represents about three-fourths of the EU's total biofuel consumption. As demonstrated in Figure 10, the majority of the growth in European-produced biodiesel has come from rapeseed and oil palm, and the EU also imports some already-refined palm oil biodiesel not included in this chart.

Figure 10: Sources of Biodiesel Produced in the EU, 2005-2018 (European Commission)



Source: EC — EU Agricultural outlook for markets and income 2018-2030 (https://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook_en)

European countries — most notably France and Germany — are the only major biodiesel consumers which use rapeseed as a majority feedstock. Countries such as the U.S. and Brazil depend heavily on soy oil for biodiesel, while Southeast Asian nations use almost exclusively palm oil (Rulli et al., 2016). Unsurprisingly, some of the largest consumers of biodiesel are the countries which produce and export oil crops, and the respective feedstock tends to be whichever crop is domestically grown.

With the 2003 biofuel subsidy program, the EU likely intended to support local growers and the rapeseed agricultural lobby, expanding the market for rape oil and lowering the price for European consumers. However, the competitive price and high yield of palm oil meant that it has enjoyed similar benefits from the subsidization. Based on data from the vegetable oil reference Oil World, the EU's consumption of palm oil for use in food has been declining in recent years — down 11% from 2017 to 2018 — probably in response to consumer demands. Over the same period, the EU's consumption of palm oil for biodiesel grew by 3% and for energy (heating and electricity) by 18% (T&E, June 2019). Overall, that means 53% of palm oil consumed in the EU in 2018 was used for biodiesel, 12% for energy, and 35% for food, feed, and industry. This data varies slightly compared to data from the U.S. Department of Agriculture.

Internationally, the EU has been the largest market for diesel vehicles since the 1980s, though in 2018, sales of diesel cars declined sharply in Europe (Reuters, Bousso 2018). The UK plans to ban the sale of new petrol or diesel vehicles by 2040, while Germany, Ireland, India and the Netherlands have set deadlines of 2030 (The Guardian, Neslen 2018). In this sense, it is likely that the EU will see a decline in overall diesel and biodiesel consumption in the coming years, and EU officials argue that the biodiesel market is disappearing regardless of whether or not palm oil is excluded. Currently, though, the upward trend in biodiesel consumption continues to persist. Although the EU has been able to indiscriminately subsidize and promote “green fuel” biodiesel over the past two decades, it did not control which oils were most attractive to European buyers. More recently, however, countries such as France have decided to stop counting palm oil as a biofuel entirely, ending

green tax advantages which will effectively price palm oil out of the market. France's policy will take effect on January 1, 2020, meaning the phase out of palm oil for energy will be accelerated compared to the EU's RED II policy (Euractiv, Barbière 2019).

For this reason, some have argued that the RED II is motivated — at least in part — by domestic political pressure to make rapeseed oil more competitive. When Malaysia's Primary Industries Minister described the RED II as the “politics of protectionism,” she was likely referencing this same concern. Under WTO rules, the EU cannot create policy which shows favoritism to domestic products without a scientific or health-related justification, and the RED II creates this rationale with ILUC analysis. This is not to say that the RED II lacks merit in its efforts to address climate change and greenhouse gas emissions, but domestic markets and the political will of European agriculturalists likely contributed to how the EU translated ILUC measurements into policy.

Public Awareness and Controlling the Palm Oil Narrative

Particularly in Europe, palm oil has proven highly contentious and is a topic of intense public scrutiny. In the early days of global palm oil expansion, the debate primarily focused on potential health concerns about the level of saturated fat or disease risks associated with the oil. According to Malaysian officials, it took 25 years and extensive academic research to address these concerns. Malaysia even created the Malaysian Palm Oil Board (MPOB) in 2000 as well as the Malaysian Palm Oil Council (MPOC). MPOC now has the explicit mandate of “enhancing the image of palm oil and creating better acceptance of palm oil through awareness of various technological and economic advantages... and environmental sustainability” (MPOC). Beyond the net economic benefit that Malaysia and Indonesia accrue from exporting palm oil internationally, significant resources are also invested into preserving the image of palm oil and responding to negative messaging.

More recently, the debate over palm oil has focused almost exclusively in Europe and has transitioned to concerns over environmental sustainability. According to Malaysia and Indonesia, this campaign to “vilify” palm oil rests on emotion over fact and is much harder to address than questions of palm oil's nutrition. One of the early campaigns which propelled palm oil into the public eye was a 2010 video criticizing Nestle's use of unsustainably sourced palm oil in products such as Kit Kats (Financial Times, Lonescu-Somers 2012). In response to consumer outrage, Nestle drastically altered its policy, joining the Roundtable on Sustainable Palm Oil and committing to transparency. Many other large industrial consumers of palm oil have followed a similar track, promising deforestation-free palm oil primarily to acquiesce vocal European consumers. In response to environmentalists, France imposed a “nutella tax” of 300 Euros per tonne on palm oil in 2012, only slashing it as the price of popular products rose and Malaysia and Indonesia pressured the French government to alter its policy (The Straits Times, 2018).

Shortly before the adoption of the RED II in late 2018, palm oil again exploded in European media when the grocery chain Iceland was barred from showing a Greenpeace-produced television advertisement in the UK (The Guardian, Butler 2018). Iceland had pledged to remove palm oil from all of its self-produced products, and the ad depicted an animated orangutan having lost its home to deforestation for oil palm agriculture. The advertisement was deemed in violation of the UK's political rules, though it likely garnered more attention after being excluded from public television, attracting over 65 million online views.

The concern over palm oil's implications for biodiversity are genuine, with various studies describing the endangerment of species such as the orangutan, gibbon, and tiger. The IUCN finds that because oil palm is

suitable for tropical climates, global expansion could endanger 54 percent of the world's threatened mammals and 64 percent of the world's threatened birds (IUCN report, 2018). That being said, many environmental NGOs advocate for deforestation free palm oil and no food crops in biofuel — not an elimination of palm oil from food and grocery products. In Europe, the orangutan advertisement and similar messaging has translated into emotionally-charged consumer sentiment and demands for stronger action from European parliamentarians. The hostility towards palm oil is sometimes based on an oversimplification of environmental tradeoffs, and southeast Asian officials suggest that the vast expanse of negative publicity is nearly impossible to overcome.

The Association of Palm Oil and Development, National Identity

In some ways, palm oil has been similarly linked to emotion and identity on the opposite side of the debate. In January 2019, Malaysia launched a year-long Love MY Palm Oil Campaign, intended to “instil pride and greater appreciation of the contributions and benefits of Malaysian Palm Oil to the country and the world” (Impo, 2019). The pillars of the campaign include “Love My People” and “Love My Country,” explicitly tying the product to Malaysia's citizens and development as an industrial power. Some have criticized Malaysia for simplifying the message, for unconditionally defending palm oil as a symbol of national pride as opposed to publicly acknowledging and addressing some legitimate environmental concerns.

Both Malaysia and Indonesia have also emphatically associated palm oil with economic growth. In response to the RED II, Indonesian officials said that the EU would hinder the country's fight against poverty (Bloomberg, Krukowska 2019). Palm oil has been an undeniably important industry in propelling Southeast Asian producers into the international economy and supporting many small farmers as well as industrial agricultural businesses. That being said, oil palm promotes certain socioeconomic inequalities, including and beyond publicly criticized working conditions which sustainability certifications aim to mitigate. A study on the Riau province of Indonesia found a disconnect between “the national narrative of palm oil as a force for good and the conspicuous underinvestment in public services and infrastructure, which undermines the legitimacy of some palm oil industry claims” (Varkkey and Choiruzzad, 2018).

Although experiencing a gradual trend towards poverty reduction, workers in the oil palm industry may face political patronage, the risks of a volatile market, loan schemes, and a degraded environment. Palm oil is also subject to shocks in the international system, for example the impact of the U.S.-China Trade War on soy oil prices. As with deforestation, these issues could be better addressed by a more nuanced and communicative approach to palm oil, from both producers and consumers.

Conclusions

In four decades, palm oil has become an integral aspect of the global economy. For Malaysia and Indonesia, the product transformed the ecological landscape and the financial market, altered positions on the international stage, and accelerated the countries into a fiercely competitive industry. Now, palm oil has become a turning point in relationships between Southeast Asian producers and the EU, and in some ways between ASEAN and the EU.

While the European Commission's RED II makes important strides in terms of addressing and measuring climate change, it faces a number of drawbacks which could prove environmentally counter productive. Some of the potential consequences of the RED II are as follows:

- EU biofuel demand will increasingly be met by lower yielding oil crops, resulting in more land clearing
- Palm oil demand will not diminish as the gap is filled by emerging markets
- Malaysia and Indonesia will have less incentive to prioritize sustainability, instead focusing on price-sensitive markets
- Oil palm growers with the most sustainable practices will be most impacted by the phasing out of palm oil biofuels

On the production side, Malaysia and Indonesia could shift the policy approach towards palm oil to be more reflective of the economic significance of the trade and understanding of environmental dangers. While the two countries have made strides towards sustainable oil palm agriculture, deforestation persists and tropical ecosystems around the world are at risk. Malaysia and Indonesia could benefit significantly from free trade agreements with the EU, and both regions can aim to cooperate towards a sustainable path forward for the inevitable and expanding palm oil industry.

The data employed by the European Commission's Delegated Act will be subject to review in June of 2021, at which point the analysis of the environmental impact of oil palm and soybean could change. WTO litigation will also likely be pending for years before achieving a conclusive outcome. In the intervening period, economic integration between the EU and palm oil-producing nations should continue progressing. These negotiations can focus on the substantial trade relationships distinct from palm oil, tariff reductions on palm oil products, and a deescalation of the palm oil debate from both sides.

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