universität wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

"**Palm Oil and EU's Renewable Energy Directive II: A Green Trade War?"**
Analyzing the impact on EU-Indonesia's bilateral relations and the future of the palm oil sector in Indonesia

verfasst von / submitted by

Nisasia Ekafitrina

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of

Master of Arts (MA)

Wien, 2022 / Vienna 2022

Studienkennzahl lt. Studienblatt / degree programme code as it appears on the student record sheet:	A 066 589
Studienrichtung lt. Studienblatt / degree programme as it appears on the student record sheet:	Masterstudium Internationale Entwicklung
Betreut von / Supervisor:	Ass.-Prof.Mag. Mag. Dr. Cornelia Staritz, PhD

Acknowledgement

To Prof. Cornelia Staritz, I owe a debt of gratitude. This study would have not been possible without her guidance. I am sure that she is the one to lay the basis for my scientific eagerness.

My deepest appreciation to all interview partners. Without their support and willingness this thesis would have lost its essence.

The thesis has received funding from the University of Vienna through its short-term grants abroad (KWA). To the KWA Committee, I wish to express my sincerest appreciation. This research has profited immensely from the short stay in Jakarta, which would have not been possible without the funding.

I would also like to thank CorLingua for their excellent service in proofreading and fine-tuning this thesis. To Petzi, Larissa, Johanna, Conni, Sihana, and Sabrina, thank you for your support and willingness to lend a second set of eyes in editing this thesis.

Lastly, I dedicate this thesis to Robby who relentlessly supports me to obtain my Master's degree. I hope this achievement will fulfill the dream he envisioned for me. Thank you for putting up with me and remaining strong in my moment of weakness.

Abstract

The launch of the European Union's Renewable Energy Directive II (RED II), which aims to phase out palm oil use as biofuel feedstock by 2030, has caused a strained relationship between Indonesia and the EU. Indonesia initiated proceedings in the World Trade Organization (WTO) suing the EU for its discriminatory measures. The thesis aims to analyze the potential impact of RED II on Indonesia-EU trade relations, and whether this may lead to an escalation of the conflict into a "green trade war". The analysis draws on the global production network perspective and the strategic relational approach to explore power dynamics formed by the interactions between actors in the palm oil sector. Methodologically, the thesis is based on qualitative data which was collected through online interviews and fieldwork in Jakarta, Indonesia involving 24 semi-structured interviews with government representatives, academics, palm oil business associations, NGOs, and smallholder associations. The analysis shows that Indonesia's palm oil production network comprises forms of coordination that are highly influenced by policy changes in the EU. The WTO proceedings on the palm oil issue significantly impact Indonesian power in the free-trade negotiation with the EU. The imbalanced relationship between Indonesia and the EU in terms of trade relations and the power to influence sustainability narratives translates into a significant alteration in Indonesian national policies. With this non-mutual dependency between Indonesia and the EU, the prospect of an actual retaliation from the Indonesian side seems minor.

Die Einführung der Erneuerbare-Energien-Richtlinie II (RED II) der Europäischen Union, die darauf abzielt, die Verwendung von Palmöl als Rohstoff für Biokraftstoffe bis 2030 auslaufen zu lassen, hat zu einer angespannten Beziehung zwischen Indonesien und der EU geführt. Indonesien hat ein Verfahren vor der Welthandelsorganisation (WTO) eingeleitet und die EU wegen ihrer diskriminierenden Maßnahmen verklagt. Ziel dieser Arbeit ist es, die potenziellen Auswirkungen der RED II auf die Handelsbeziehungen zwischen Indonesien und der EU zu analysieren und zu ergründen, ob dies zu einer Eskalation des Konflikts in einen „grünen Handelskrieg" führen könnte. Die Analyse stützt sich auf die Perspektive globaler Produktionsnetzwerke und den strategischen relationalen Ansatz, um die Machtdynamik zu untersuchen, die durch die Interaktionen zwischen den Akteuren im Palmölsektor entsteht. Methodisch basiert die Arbeit auf qualitativen Daten, die durch Online-Interviews und Feldforschung in Jakarta (Indonesien) gesammelt wurden. Hierfür wurden 24 halbstrukturierte Interviews mit Regierungsvertretern, Akademikern, Palmöl-Unternehmensverbänden, NGOs und Kleinbauernverbänden geführt. Die Analyse zeigt, dass das indonesische Palmölproduktionsnetzwerk Formen der Koordination umfasst, die in hohem Maße durch politische Veränderungen in der EU beeinflusst werden. Das WTO-Verfahren zum Thema Palmöl hat signifikante Auswirkungen auf die Macht Indonesiens in den Freihandelsverhandlungen mit der EU. Das unausgewogene Verhältnis zwischen Indonesien und der EU in Bezug auf die Handelsbeziehungen und die Macht zur Beeinflussung von Nachhaltigkeitsnarrativen führt zu einer starken Veränderung der nationalen Politik Indonesiens. Angesichts dieser nicht gegenseitigen Abhängigkeit zwischen Indonesien und der EU scheint die Aussicht auf Vergeltungsmaßnahmen von indonesischer Seite gering.

Table of Contents

List of Figures

List of Tables

1 Introduction

The palm oil sector has been at the centre of serious debates in the past two decades. While the palm oil firms and producing country governments generally glorify the crop's ability to support economic development and poverty reduction, the consumer countries are becoming more concerned with its social and environmental impacts. The issue of deforestation and social problems related to poor working conditions is alarming (Pacheco et al. 2017; Pye and Bhattacharya 2012; Pichler 2013; Brad 2019). The debate recently escalated following the European Union's (EU) measures to achieve its climate ambitions. The bloc launched a set of regulations under the Renewable Energy Directive II (RED II) that aims to phase out the use of palm oil as biofuel by 2030 (Mayr, Hollaus, and Madner 2020; Gerasimchuk and Koh 2013).

This topic is particularly delicate for Indonesia which supplies more than 50% palm oil around the world. The country is conscious of the role of the EU as one of the important markets for palm oil biofuel. A particularly controversial measure introduced by the EU's directive is the "freeze and phase-out" of certain biofuels in the transport sector with a high Indirect Land Use Change (ILUC) risk (Mukherjee 2013). In this regard, palm oil falls under the ILUC criteria and becomes the only agricultural commodity that faces the phase-out risk (Mayr, Hollaus, and Madner 2020). Indonesia and other palm oil producers consider the regulation a discriminatory and protectionist measure intended to support the locally produced vegetable oil in the bloc. Therefore, these groups of countries have initiated proceedings against the EU through the World Trade Organization (WTO) to find a middle ground for palm oil development (ibid.).

These tensions have raised the issue of how power dynamics between the EU and Indonesia play out around palm oil and how this affects the future of palm oil in Indonesia. In this regard, the proponents of palm oil development maintain that the passing of this bill at EU level highlights the power asymmetry within the palm oil production network. Meanwhile, the opponents highlighted that RED II might be an effective measure to systematically reduce deforestation, as the EU is well-known for

influencing sustainability policies around the palm oil industry (Amzul 2010; Drajat 2013; Carlson et al. 2018). These dynamics around palm oil are intriguing because the EU and Indonesia are currently in the process of ratifying a trade agreement called the Indonesia-EU Comprehensive Economic Partnership Agreement (IEU-CEPA) (European Commission 2021; Ministry of Foreign Affairs of the Republic of Indonesia 2020).

The overarching theme guiding the thesis is how different actors are involved in the palm oil production network, how the state plays its role, and how power dynamics are formed in the context of policymaking related to the sector. The research seeks to contribute to a better understanding of the role of different actors in palm oil production networks, how they are directly and indirectly related to palm oil production, and how they are influenced by and influence policy changes. In this regard, it is important to understand the motivation of the European Commission behind the launch of RED II and its impact on the key palm oil-producing country, Indonesia. The research is therefore developed to answer the main question: **To what extent does Indonesia-EU's dispute on palm oil related to RED II lead to a green trade war?**

The following sub-questions are formulated to systematically investigate the above-mentioned issue:

1. What are the motivations behind the establishment of RED II?
2. What are the impacts of the implementation of RED II on Indonesian palm oil production and the Indonesian national policy?
3. To what extent do the RED II and WTO litigation influence Indonesia-EU trade relations in terms of CEPA free-trade negotiations?
4. How do global and local actors, particularly the European Commission, the Indonesian government, NGOs, and smallholders, react to the establishment of RED II?

The Global Production Network (GPN) approach will be the main theoretical framework in this research. It helps to critically analyze governance structures and interactions between production processes and regulations between different actors. Through the GPN approach, various parties in the palm oil GPN can be identified by

their interests. This framework allows the analysis of state regulation and its effects in shaping the strategies and activities of both direct and indirect actors in the production network. Due to the lack of further theorization of states in the GPN approach (Smith 2015; Grumiller 2019; Marslev et al. 2022), the strategic-relational approach to the state will be utilized (Jessop 2008).

The approach understands states not only as a policy-setting body but also as a social relation which reacts to the changing balance in the political forces. It means the states are not a neutral political terrain. They favor some forces, some interests, some identities, and some projects more than others (Jessop 2007.). This approach enables a closer look at the power relations that are not only induced by states but also by interactions between state institutions and actors in the production network. The concepts are necessary to understand the dynamics of the palm oil GPN by bringing state institutions back on the agenda.

While the GPN approach serves as a framework to understand the vertical and horizontal dimensions of globalization, the strategic relational approach will provide an understanding of "the social basis and hegemonic struggles within and beyond the state over the forging of accumulation strategies" (Smith 2015). In the context of palm oil and the potential green trade war between Indonesia and the EU, GPN theories are required to understand the interests and strategies set by governments, smallholders, local and global firms, NGOs, certification providers, and international trade organizations in shaping the palm oil production network. The strategic relational approach will bring more "attention to the configuration of social forces" underpinning Indonesia's and/or the EU's support for "particular policy directions and their effect on capital accumulation" that leads to the palm oil dispute at the WTO (ibid.).

The thesis largely uses qualitative research methods and a combination of an extensive literature review and interviews with actors in the EU and Indonesia. Primary data were gathered through online and in-person interviews conducted during a fieldwork in Jakarta, Indonesia. The interviews involved 24 semi-structured interviews with government representatives, academics, palm oil business associations, NGOs, and smallholder associations. The research is also supplemented with document analyses,

involving government websites, media, and NGO reports. Additionally, the mapping of actors' interests will be conducted to capture the strategic positions of actors in influencing policies around the palm oil sector. Interviews with different actors allow a deeper understanding of interactions between global/EU and local actors in shaping policies in production countries in the Global South and their implications for sector development.

The main finding shows that Indonesia's palm oil production network comprises forms of coordination that are highly influenced by political configuration and policy changes in the EU. From the *strategic-relational* perspective, the effectiveness of both EU and Indonesia's power also reflects a changing balance of political forces located within and beyond the states. This finding can be explained by five points. First, historically the European Comission has helped the creation of a new market for biofuel through the establishment of the first Renewable Energy Directive (RED I) which was welcomed by the European vegetable oil businesses. However, the regulation also adversely creates market access for unsustainably produced commodities such as palm oil. The launch of RED I received backlash from civil society organizations, both local and international, as well as the European Parliament. Reacting to the criticism, the European Commission developed RED II as a regulatory measure to phase out the use of palm oil as a biofuel. This set of regulations, however, is seen as a discriminatory measure by the government of Indonesia.

Second, the government of Indonesia still seeks to move forward with the WTO despite the insignificant decline in the direct import to the EU. Why? Because the government of Indonesia and the local palm oil businesses are well-aware of the EU's power to influence narratives on sustainability and seeks to avoid further damage to its palm oil reputation. Third, on the prospect of the trade relation, the analysis shows that the WTO litigation filed by Indonesia does impact the Indonesian power in CEPA negotiations. The negotiation reached a standstill after 11 rounds of meetings with no indication of a compromise on the sustainability issue, leaving Indonesia with less flexibility. Fourth, an analysis of the actors' interests also shows a significant difference in the political terrain of the two countries. Through the Green Deal, the EU Commission is inclined toward green policies and lobbyists. The government of

Indonesia, on the other hand, aims to secure links to palm oil businesses. Fifth, with the imbalanced power that the European Union and Indonesia have in terms of influencing the sustainability narrative, the prospect of an actual retaliation and an escalation to a "green trade war" seems minor. The EU will have less at stake in the real trade war with Indonesia.

The thesis is organized as follows: In the first three chapters, the author will render an introduction, an explanation of the theoretical framework that guides the analysis process, and the methods used to gather and interpret data. The fourth and fifth chapters will give some background information on the global and Indonesian palm oil sectors to help readers understand the context. The sixth chapter will specifically discuss the significance of RED II in the Indonesian palm oil sector and its impact on Indonesian revenue and national biofuel policies. The chapter will further analyze the possibilities of a green trade war triggered by the implementation of RED II based on the mapping of actors' interests in the production network. The final chapter will conclude the analysis and present the main finding of the whole research.

2 Theoretical Framework

2.1 Chain and Network Approach

The global economy has undergone significant changes in the last decades. The present global economy is characterized by a highly fragmented and geographically dispersed production organization. Yet, this dispersion also denotes a much greater integration and functional interdependence of cross-border economic activities (Coe and Yeung 2015). This interconnected world has also brought diverse and complex constellations of production actors and global corporate governance (Neilson, Pritchard, and Yeung, 2014). According to UNCTAD, at least 80 % of international trade is organized through the so-called global value chains/production networks (Coe 2018).

The chain/network theory can be traced back to the work of Hopkins and Wallerstein, Patterns of Development of the Modern World-system, which was published in the late 1970s. The term "commodity chain" was first established in this

research. In this context, Hopkins and Wallerstein envisioned that their research agenda should be oriented toward a world-system program that enables a backward sequencing of a finished commodity (Bair 2005). This theory primarily focuses on how the commodity chain is structured and reproduced in a stratified and hierarchical world system (ibid.).

The year 1994 marked the birth of another chain approach called Global Commodity Chain (GCC) Despite its similarity and traceability to the intellectual lineage of world-system theory, there is a significant disjuncture between the two camps. The GCC (Global Commodity Chain) is more interested in the question of "how and by whom value is created and distributed along a commodity chain" (Appelbaum and Gereffi 1994. In Bair 2005: 157) and how upgrading opportunities can be captured by developing country exporters. In this context, GCC parted ways with the world-system theory that primarily focuses on explaining the historical rise of global capitalism (ibid).

In the early 2000s, Global Value Chains (GVC) superseded the GCC approach. This variant of the chain concept aims to trace the shifting patterns of global production. It focuses more on observing how the chains work and each chain's role in rich and emerging countries. The GVC primarily differs from the GCC paradigm in their respective understanding of governance. Compared to the simple GCC typologies, the GVC approach gives a more comprehensive overview of firm governance within a chain. GVC includes five different governance types; market-based, modular, relational, captive, or hierarchical (Gereffi et al. 2005: 83).

The concept of social and environmental upgrading rendered by the GVC will still guide this thesis to go beyond the economic dimension of the palm oil industry. Following the GVC approach in capturing societal contribution through the notion of "economic upgrading," the same concern was also raised from social and environmental aspects. This includes the possibility for firms to upgrade their economic activity by improving both their social and environmental outcomes. The GVC scholars view the incorporation of the social and environmental dimension in the analysis as an opportunity to understand other elements that happen within and outside firms (Campling and Havice 2019). Social upgrading was defined as "improvement in the

rights and entitlement of workers as social actors, which enhances the quality of their employment" (Barrientos et al. 2011 in Marslev, Staritz, and Raj-Reichert 2022). Meanwhile, environmental upgrading (EnvU) was "defined as the process by which economic actors move towards a production system that avoids or reduces environmental damage from their products, process, or managerial systems" (De Marchi, Di Maria, Micelli 2013). The utilization of these concepts will be clarified in the last subchapter.

GPN (Global Production Network) is another strand that emerged alongside with GVC and GCC. Henderson et al. (2002) were representatives who proposed this analytical framework. It aims to analyze and understand more effectively and prefers the term "network" nstead of "chain" to represent global economic phenomena. This term also denotes a multi-dimensional flow of influences between producers, consumers, and intermediaries and highlights the complexity of the relations within the networks (Henderson et al. 2002).

The GPN seeks to move beyond the analytical limitations of the chain notion by considering all spatial scales' interactions and mutual constitution from the local to the global. The most prominent contribution of the GPN lies in its three conceptual categories: *value, power, and embeddedness* (Henderson et al., 2002; Hess, 2018). This original GPN approach suggests that analysis should emphasize how *value* is created and enhanced and how and by whom value is captured. It also depends on the *power relations* between the multiple actors in GPNs (Hess 2018). As for the concept of power itself, GPN includes three categories of power: *corporate, collective, and institutional* power. Therefore, power should be seen as relational. This means that it can be mobilized through the networks by *corporate actors and institutional* capacities such as those exerted by national or local states and inter-state agencies. *Collective powe*r, such as the one amalgamated in the trade unions and NGOs, is also considered in the GPN analysis. Finally, *embeddedness* emphasizes how firms are socially and spatially embedded into production networks and how the (state or non-state) institutional context impacts their evolution (Coe 2018. In Maile 2020).

There is a growing consensus around developmental studies that the term network is one of the most valuable keys to understanding the complexity of the global economy (Coe, Dicken, and Hess, 2014). Therefore, this research will focus on the concept of GPN. Analyzing the complexity of the global economy demands meticulous consideration. Looking only at the lead firm-supplier relationship, as suggested by the GVC, will not sufficiently explain the dynamics of commodity production. The reasons are twofold. First, the complexity of the palm oil landscape cannot be captured in the vertical analysis as suggested by GVC. Second, this analysis will focus on the state's role in the palm oil dynamics which the GVC framework lacks theorization of. The GPN, with its core principles, offers a broader lens to incorporate actors and policymaking analysis. It understands production dynamics not only from the firms' vantage point but also from the perspective of institutions and civil society organizations.

2.2 The State in the Global Production Network

The original GPN framework (currently known as the GPN 1.0) offered useful devices for mapping the configuration of GPNs (Coe and Yeung, 2019). It underpins the complex firm networks and territorial institutions and focuses on how these are structured both organizationally and geographically (ibid.). Both the GPN and the GVC frameworks started to mature in the 2010s. However, growing attention arises from the lack of theorization about institutions and state roles on both lines. State action and inaction are rarely placed in the foreground and receive less theoretical consideration in the GPN and the GVC research narratives (Neilson, Prichard, Yeung 2014).

Realizing these limitations, Neilson, Prichard, and Yeung (2014) pointed out the importance of bringing the state back to the chain and network analysis. They maintain that GVCs and GPNs are emergent from state action in the context of the global economy. This means that they are always related to the state's presence or absence. They further explain that the state contributes to the conditions shaping firms, regions, and national engagements in the global market and their capacity to upgrade globally. Furthermore, the state's role in enabling arrangements and upgrading is not limited to economic policies such as wages, tariffs, and taxes. Still, it also includes procedures in the realm of infrastructures, education, training, research, and planning (ibid.). Since

lead firms do not operate in an institutional and regulatory vacuum (Gibbon & Ponte, 2005, 84), the state remains relevant in the globalization narratives.

The GPN approach puts special attention to what is referred to as "extra-firm networks" (Coe 2018: 150). These extra-firm networks go beyond firms and consider government agencies, supranational organizations, trade unions, employer associations, NGOs, and consumer groups as agents that help determine the activities of firms involved in the GPN. The GPN introduces the concept of *strategic coupling* to enable an analysis of these subjects. Nilsen (2019) defines strategic coupling as "the processes whereby actors in regions coordinate and facilitate strategic interests between regional agencies and their counterparts in the global economy" to enable the region to profit from its activities in the GPN. For strategic coupling to happen, an active contribution of regional institutional actors is required. However, it is essential to note here that this process is also subject to changes induced by the interactions of local and non-local actors and cooperation of actors within and beyond national borders.

Horner (2017) has also made a substantial contribution to filling this gap. He argues that the state has more roles than merely being a facilitator and regulator, as is commonly found in the GCC/GVC/GPN research. In addition to the facilitator and regulator roles, Horner (2017) proposed two other roles of the state in the GPN: producer and buyer. As the state seeks to accumulate and capture more value from its participation in the production network, it may adopt various combinations of these roles. Horner also maintains that this combination may result from the interactions between the state and other states, national and international firms, business associations, civil society, and supranational institutions (Horner 2017).

The GPN focuses more on "actors" and all their "organizational relationships" in "multiple locations" (Yeung and Coe 2014.). It enables an explicit discussion of their functions in the network. However, this contribution still cannot fully explain why the state acts in the way it acts, and it lacks a theoretical basis to understand the dynamics between state and non-state actors within the network. Notwithstanding its thorough explanation of the actors' constellation in the production system, this framework is still missing a specific tool to look at power relations between players in the network.

Therefore, this thesis incorporates the concept of the strategic relational approach to further analyze the power dynamics and the interplay between state and non-state actors.

2.3 Strategic-Relational Approach to the State

The state can, directly and indirectly, influence the economic processes that include value creation, enhancement, and capture, occurring within and across the borders of its territory (Yeung and Coe, 2015). Therefore, it is vital to first understand what a state is and how it functions. Following Smith (2015), the state is conceptualized through the concept of the *strategic-relational* approach advanced by Poulantzas (1978) and Jessop (1990). The approach offers a profound conceptual basis to explain the dialectical relationship between the state and society (Marslev, Staritz, Raj-Reihelt 2022). This approach is understandable through its two basic configurations. First, the state is considered relational because it is shaped by and emerges from societal fractions such as capital and labor. Second, the state responds strategically and does not behave objectively or neutrally (Jessop 2008). In this respect, the state itself is highly politicized. It might privilege some actors and interests and open a critical arena for struggle (Marslev, Staritz, Raj-Reichelt 2022).

Jessopian concept of state maintains that the state should not be seen as a static or a passive entity. The state involves a wide range of social relations that can create and be created by dynamics and strategic interactions (Jessop 2016). Hence, the state should not be understood as a fixed property that coordinates different social interests neutrally. Instead, the state should be seen as a result and an integral part of interactions between societal actors that cannot function separately from one another. In other words, the state results from processes and societal contestations. Jessop (2016) maintains that the state consists of a continuously changing "institutional ensemble" constituted by different interrelated organizations and institutions such as ministries, military, research findings, and border controls. The interactions and relations between these institutions are then known as "the state." As corroborated by Neilson et al. (2014), ”[t]he state is not a unitary entity, but a constellation of functions and capacities.”

The understanding strategic-relational approach enables a broader perspective on how a state works and how it is affected by different entities internally and externally. In analyzing Indonesia and EU trade relations and their connection to the GPN framework, the strategic-relational approach provides a theoretical basis to explain why a state behaves in a certain way and which societal powers determine its decisions. This approach will also explain the importance of analyzing the role of different actors in shaping policymaking processes.

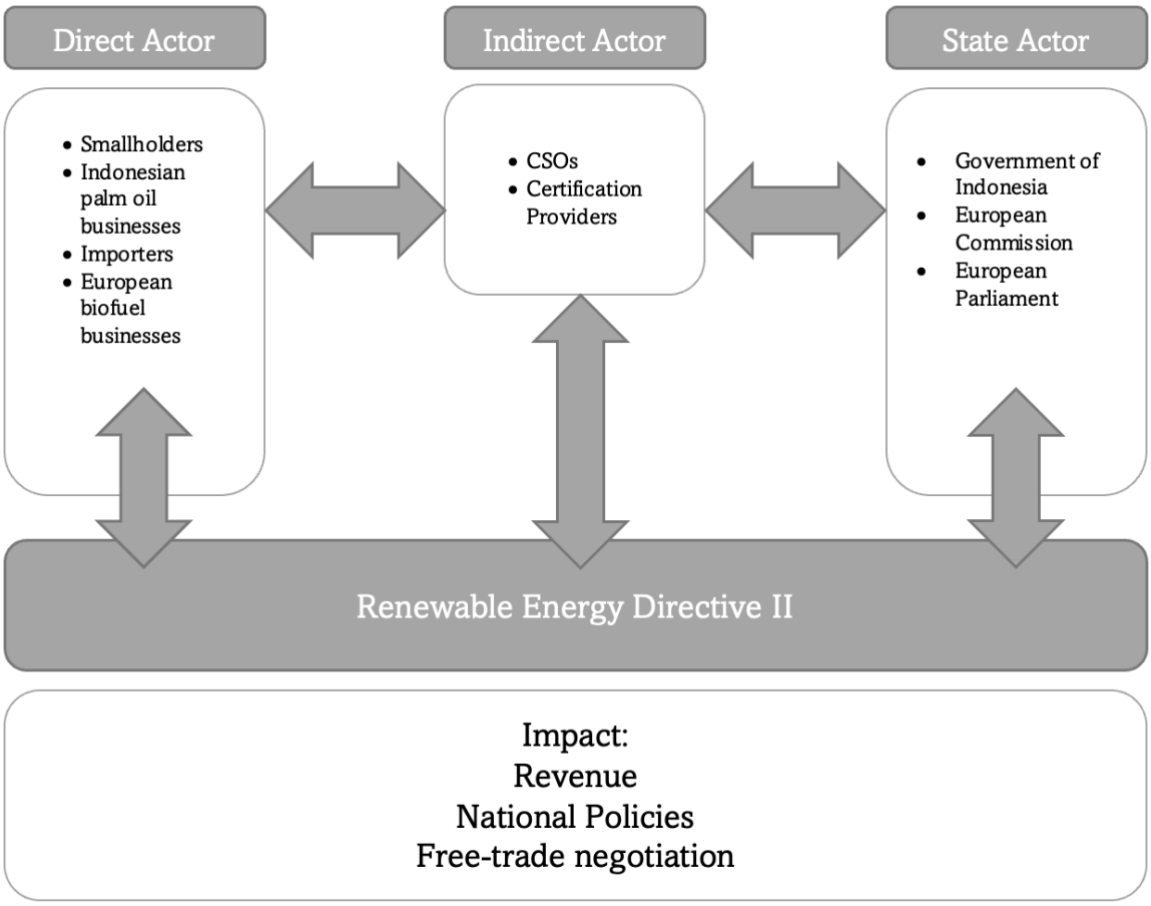
2.4 Implementing the Conceptual Framework in the Analysis

The GPN will primarily serve as an analytical lens in this research. The GPN and its concept of power will be the primary guidance in analyzing the impact of the RED II on the EU-Indonesia bilateral relations and the future of the Indonesian palm oil sectors. The GPN theory enables a broader look at actors involved in the network and moves beyond lead-firm and supplier relations. This theoretical basis is imperative in this analysis as it allows for a wider lens of global palm oil dynamics. States, rather than lead firms, mainly influence the regulatory bodies and policymaking processes. Hence, the main discussion will be regarding how these regulations affect the trade relations between the two trading partners.

As can be seen in Figure 1**,** the combination of the GPN and strategic relational approach will guide the analysis of the power exerted by various actors involved in palm oil production. It shades light on how the state plays its role, and how power dynamics are formed. The interaction between direct actors, indirect actors and the state actors will influence the policies. The state actors are the ones who have the authority to manifest their interests in the form of regulation. In most cases, the policy implementation will induce struggle from other actors who try to advance their respective interests. This condition induces power (collective, corporate, and institutional power) dynamics between all players in the industry. In. the context of RED II, the implementation of this directive has created some political dynamics between Indonesia and the EU, and potentially impact revenue from export, national policies, as well as the ongoing free-trade negotiations between the two states. It also involves lobbying from other actors of interest such as social and environmental CSOs

in the EU, and palm oil business groups in the Indonesian political arena. In running the analysis of these power dynamics, the thesis will further rely on the conceptual basis of the strategic-relational approach to explain the significance of state actors in the production network.

Figure 1: Implementing Conceptual Framework in The Analysis



Source: Author's creation based on theories

Further, the analysis of the impacts is done by observing how the policies implemented by the state actors interact with all actors in the network. As presented in Figure 1, the arrows denote connections between elements and signify their effective relationship. As the state is made up of and amalgamated from social relations and societal power structures between different institutional ensembles, the way in which the state acts and operates also reflects power structures within the state. In this specific case, the dynamic focuses on the trade relation between the EU and Indonesia and the possibility of the conflict to escalate to a "green trade war".

3. Methods

3.1 Data Collection

Data were primarily collected through expert interviews and some existing literature provided by government websites, trade documents, NGO publications, and websites. The use of these multi-methods is known as triangulation. It aims to reduce deficiencies in a one method approach and to strengthen the research design. In this context, other than broadening the range of data collection, triangulation will also allow cross-checking between data sources which might ensure the reliability of the data collection methods (Aurini 2016).

3.1.1 Expert Interview

The interviews will involve parties from different institutions to better understand the dynamics behind Indonesian palm oil as biofuel in the European arena. Qualitative interviews are needed to capture the reality observed by the experts and how they interpret this observation based on their expertise. The goal is to elicit descriptive data on a social phenomenon related to its contextual embeddedness (Dannecker and Vossemer 2014). This process is essential for this research to understand the issue. The expert interview in the form of semi-structured questions is employed to gain access to the knowledge production according to the practical work done by the interview partners (ibid). Despite different views on the definition of the term “expert” in qualitative research put forward by Dannecker and Vossemer (2014), in this project, an expert is defined as a specialist in the field who has academically and professionally produced knowledge related to the palm oil issue in Indonesia. Experts are chosen carefully to consider the social implication of the ascription of this expert status.

The sampling method for the conduction of the interviews is a combination of purposive sampling and the snowball method. While purposive sampling allows confident strategic choices of where, how, and with whom the interviews are conducted (Aurini 2016), the snowball method enables wider reach to potential interview partners through the recommendation obtained from interviewees (Dannecker and Englert

2014). Experts chosen as interview partners are government representatives, researchers, smallholders, labor unions representatives, and NGO representatives directly working with the Indonesian and EU palm oil industries. The following table shows the interviews serving as the primary basis of the analysis:

Table 1 List of Interview Partners

Number	Date	Interview Partner	Mode and Language
Interview 1	14.4.2021	Political scientist at BOKU	Online – German
Interview 2	28.4.2021	Greenpeace Senior Advisor	Online – English
Interview 3	5.5.2021	Political scientist at BOKU	Online – German
Interview 4	11.4.2022	European Palm Oil Association	Online – English
Interview 5	7.6.2022	RSPO – Research Executive	Online – English
Interview 6	11.7.2022	Economic Affairs of the Indonesian Embassy in Vienna	Online – English
Interview 7	19.7 2022	Indonesian Attaché of Trade in Brussel	Online – English
Interview 8	19.7.2022	Economic Affairs of the Indonesian Embassy in Brussel	Online – English
Interview 9	4.8.2022	SPOS-Indonesia	In-Person – Bahasa
Interview 10	5.8.2022	SPKS-Smallholders Association	In- Person – Bahasa
Interview 11	8.8.2022	APKASINDO-Smallholders Association	In-Person – Bahasa
Interview 12	9.8.2022	POPSI-Smallholders Association	In-Person – Bahasa
Interview 13	10.8.2022	CIFOR – Palm oil research center	In-Person – Bahasa
Interview 14	11.8.2022	Researcher and palm oil policymaking expert at Bogor Agriculture University	In-Person – Bahasa
Interview 15	12.8.2022	Kaoem Telapak – Local NGO	In-Person – Bahasa
Interview 16	15.8. 2022	Forest Watch Indonesia –	In-Person – Bahasa

		Local NGO	
Interview 17	16.8. 2022	Indonesian Palm Oil Business Association (GAPKI)	In-Person – Bahasa
Interview 18	17.8.2022	Private palm oil plantation business in Riau and North Sumatera	In-Person – Bahasa
Interview 19	18.8.2022	Palm oil ramp agency in Riau and North Sumatera	In-Person – Bahasa
Interview 20	19.8.2022	Independent palm oil intermediary	In-Person – Bahasa
Interview 21	22.8.2022	Political scientist from Paramadina University	In-Person – English
Interview 22	22.8. 2022	State-owned palm oil company	In-Person – English

List of written interviews:

Number	Date	Interview Partner	Language
Interview 23	8.4.2021	Greenpeace Austria	German
Interview 24	12.4.2022	MVO Netherlands	English

Source: Author's creation (2022)

3.1.2 Documents and Website Analysis

Document analysis is one qualitative research method that allows documents to be interpreted by researchers to give meaning and assessment of the topic. As Bowen (2009) posits in the Document Analysis as a Qualitative Research Method, the analysis is meant to be a systematic procedure to evaluate both printed and electronic documents. Corroboration through document analysis in addition to the empirical study in the form of expert interviews is essential to reduce the potential bias by examining information collected through different strategies (ibid.).

Besides strengthening and evaluating the findings, document analysis is considered an effective way of collecting data. Bowen (2009) maintains that document analysis has its strength in its efficiency, availability, and cost-effectiveness. Given the

limitation caused by the pandemic that hinders fieldwork from taking place, this method will be crucial in conducting this research.

Given the number of press releases, government official documents, and trade documents released on the topic, it is also expected that this research will contribute to the understanding of the complexity of the issue and the political-economical dimension of the palm oil industry. The documents employed as data sources are government websites, press releases, and trade documents from 2018 to 2022. The method has the advantage of limiting the scope of the study. This period is considered the most crucial in the palm oil production trajectory. The year 2018 marked the significance of the palm oil issue following the successful orangutan campaign created by Greenpeace. It has opened more discussion in the field and sparked debates on the use of palm oil in the EU, which is still ongoing today.

3.1.3 Sector and Interest Mapping

Mapping the actors and their respective interests provides a better overview of the palm oil sector. Identifying the network, relevant actors, and institutional linkages is undeniably an intricate task. Exploring previous works that include information can create an overall understanding of the dynamics of globalization within the palm oil sector. This sector and interest mapping will serve as a tool to present power dynamics between actors in the network. This measure is also needed to ensure the traceability and relatedness of each actor and to see the potential impact they might prompt.

Even though the GPN will be the main theoretical framework used in this work, the mapping relies more on the well-established GVC mapping methods, even though not entirely. Based on Gereffi (2019) and Frederic (2019), the analysis starts with secondary literature and previous studies conducted by industries, research institutes, and international organizations. Expert interviews will supplement the findings. Afterward, the findings will be presented along with each actor's interests to analyze power dynamics and policies. The mapping is not done solely at the global level but also at the local level.

3.2 Data Analysis

The data are assessed iteratively following the established technique developed by Mayring (2000). The data will be processed inductively and deductively to preserve the advantages of qualitative content analysis (Mayring 2000). This method will enable a step-by-step material analysis that follows the rules of procedures and divide the material into smaller analytical units.

Interview transcripts and documents will be kept in an electronic database to ensure retrievability. All the details of the existing data are held in a spreadsheet and coded inductively. It follows the recurring themes in the excerpt and press releases to get a structured view of the issue. Codes in this context will provide a means of purposely managing, locating, identifying, shifting, sorting, and querying data (Bazeley 2013). At the early stage, a descriptive open coding method that includes labeling of the passages will be applied. This strategy will subsequently lead to the re-contextualization of the data, enabling a deeper analysis of the text. Document analysis is an additional source to this research project; the code employed for the document will adhere to the codes used in the interview transcript. This method will allow the goal of triangulation to take place by juxtaposing the two data resources.

Based on the fully coded data, an analysis will be made of the repetitions and patterns in the utterances before the interpretations take place. The raw data will be stored in the "cases x categories matrix," as suggested by Kuckartz (2012). The cases denote expert interviews conducted (see Table 2) and documents used as data sources. The categories will be derived from the thematic blocks utilized in this research, namely, the Motivation behind the establishment of RED II, the impact of RED II, mapping the interests of different stakeholders, government strategies in the palm oil sector, and the possible trade war between Indonesia and the EU. The relevant passages, phrases, and sentences are inserted into each case and category. The matrix will help visualize coded data and organize them to enable comparability.

Table 2: Cases x categories matrix

	Topic A: The Motivation of RED II	Topic B: The Impact of RED II	Topic C: The Interests of Actors in the Network	Topic D: Government Strategies in the Palm Oil Industry	Topic E: Green Trade War?
Interview 1	Text excerpt on the topic "motivation."	Text excerpt on the topic "impact."	Text excerpt on the topic "interests."	Text excerpt on the topic "strategies."	Text excerpt on the topic "trade war."
Interview 2	Text excerpt on the topic "motivation."	Text excerpt on the topic "impact."	Text excerpt on the topic "interests."	Text excerpt on the topic "strategies. "	Text excerpt on the topic "trade war."
Interview 3	Text excerpt on the topic "motivation."	Text excerpt on the topic "impact."	Text excerpt on the topic "interests."	Text excerpt on the topic "strategies."	Text excerpt on the topic "trade war."
…					

Source: Author's creation based on Kuckartz (2012) and Maile (2021)

3.3 Reflection and Limitations

The research questions touched upon a broad topic that requires extensive fieldwork to complete the picture. Data obtained in this research are primarily obtained during a short research stay in Jakarta, Indonesia. This fact might have posed several limitations. A short stay of three weeks could not cover the whole actors involved in the network. To fill this gap, the author had to conduct many video interviews that pose drawbacks in themselves. Video interviews can only generate a limited amount of data which is heavily dependent on the research questions. During the short fieldwork, the

author also faced difficulties in finding relevant interview partners and obtaining first-hand data on the negotiation process. Jakarta is the place where all decision-makers are, but the actual palm oil manufacturing processes are scattered on other islands in Indonesia, which are not easily accessible due to the COVID-19 pandemic. Therefore, the interviews were mainly conducted with actors who reside in the capital city.

The fact that the WTO proceedings on palm oil and the CEPA are still ongoing only allows the author to analyze the dynamics to a limited degree. Currently, the WTO proceeding is closer to the final report. However, there might be a chance for the unsatisfied party to escalate the issue to the appellate body. Hence, the dispute may still take years to be solved. The CEPA itself has not reached any conclusion, making it hard to judge if the event will escalate to a trade war.

Further, forging contacts with the Indonesian and the EU's decision-makers was barely successful. It takes months for the email to reach the interviewee, and the interview scheduled was often canceled at very short notice. A considerable part of the data in this research is synthesized from reports and written statements from the corresponding ministries and institutions. These data resources have limited explanatory power. Especially in terms of the CEPA negotiation process, available written data is minimal, and the process is closed to the public.

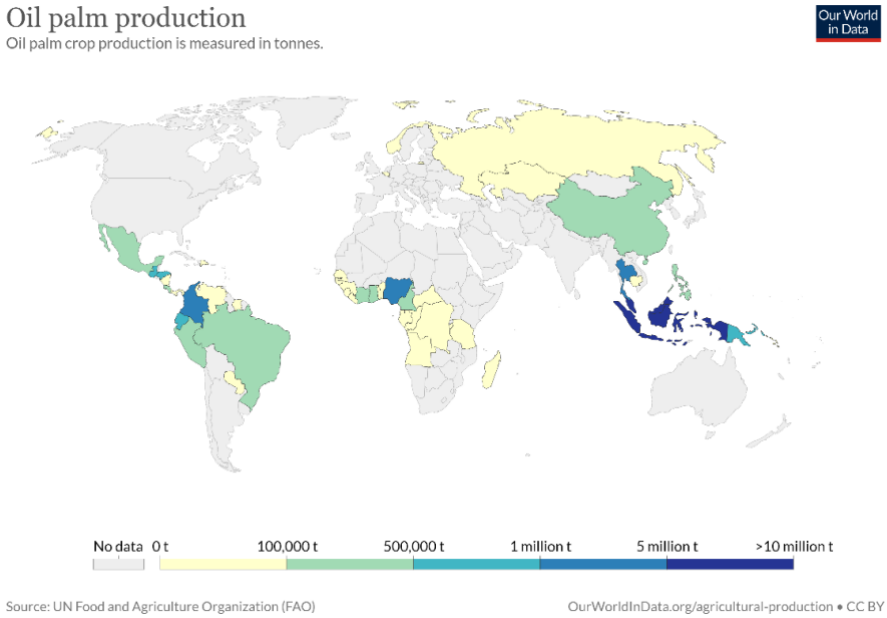
Regarding the knowledge produced in this research, there might be biases arising from the author's background as an Indonesian. Notwithstanding the absence of a language barrier, while conducting interviews with Indonesian interview partners, the "situated" knowledge acquired before the research might have influenced the analysis process. As maintained by Haraway (1988), the interpretation of knowledge is neither neutral nor objective. It is predominantly influenced by social localization and context-specific privileges of the researcher. Hence, acknowledging that author's perspective might contain particular bias is essential in this research.

4 Global Palm Oil Sector

4.1 Brief History of Palm Oil

Palm oil is type of vegetable oil processed from palm trees. The plant belongs to the genus *Elaeis* has two most important species: E. guineensis and E. oleifera (Corley and Tinker 2003). The difference between the two species lies in their yielding capacity that the former is capable of higher production compared to the latter. The oil palm is grown in areas with tropical climates. They are distributed in countries with 25 and 28 degrees Celsius that have evenly distributed yearly rainfall (Corley and Tinker 2003; FAO n. d.). As can be seen in Figure 2, palm oil production is dominated by tropical countries with Indonesia and Malaysia dominating the production. However, the figure also shows that several non-tropical countries might be involved indirectly through the production of palm oil derivatives or plantation ownership.

Figure 2: Palm Oil Production Worldwide



Source: Our World in Data (2022)

The palm could bear fruits in bunches weighing aroud10 to 40 kg consisting of thousands of individual fruits. They are comprised of the outer skin (the exocarp), a pulp (mesocarp), and a layered central nut (endocarp) consisting of a shell, *testa*, and endosperm (kernel). The pulp and seed are both commonly known as oil-producing parts, which are processed and used in different ways from one another (Poku 2002).

Many opinions favor West Africa as the historical departing point of palm oil dispersion around the globe, including the slave trade, European exploration, and the industrial revolution (Corley and Tinker 2016, p. 4). Written sources dating back to the 15th century recorded the use of palm oil as a local food source for Europeans travelling to West Africa. In 1562, especially after the commencement of the transatlantic slave trade, palm oil was merely used as food for enslaved people. The name palm oil only appeared in 1804, with only a tiny amount of the commodity imported to England recorded in the trade data. This fluctuation continued until the 1830s as trade restrictions, lack of engaging traders, lack of access for the Europeans to get into the country's interior, and disease spread in West Africa blocked further development of the commodity distribution (Corley and Tinker 2016).

In the mid-1800s, the development of palm oil plantations was primarily visible in Congo. Extensive land concessions and mills started to take shape, and local farmers were encouraged to plant the crop. These strategies significantly contributed to the steady increase in palm oil and palm kernel oil (PKO) export. Congolese plantations also became an impetus for the global palm oil industry (Corley and Tinker 2016.) as the industrial revolution enabled the good's distribution in Europe.

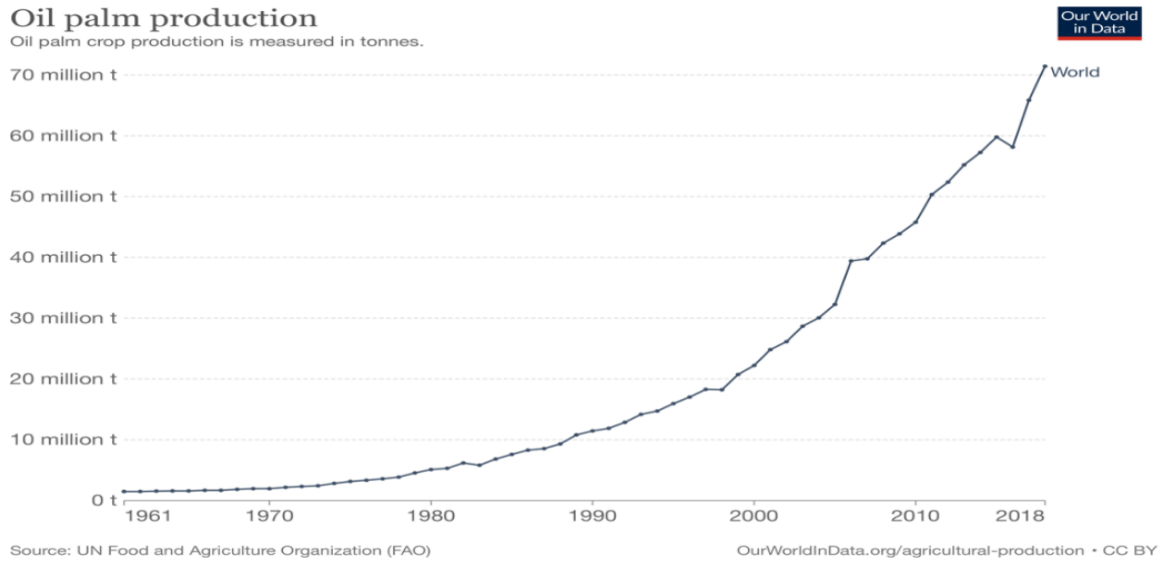
The introduction of palm oil to Southeast Asia was recorded as the planting of four seedlings in Bogor Botanical Garden (Indonesia) in 1848 by Dutch East Indies. However, it was only in 1911 that the first large plantation was established in Sumatra (Indonesia) followed by the one in Kuala Selangor (Malaysia) in 1917. By 1938, the plantation in Southeast Asia was fully established and produced an equal amount of oil as the African continent. (Corley and Tinker 2016 p. 6). Meanwhile, it was only in 1940 that the first commercial plantation was introduced in Latin America (Qaim et al., 2020).

The global palm oil industry also expanded drastically as the world experienced a significant development period in the 1970s. It coincides with the rising global demand for vegetable oil and massive public investments offered to Southeast Asian countries. It is also supported by the fact that the World Bank and other development

organizations considered oil palm as a perfect crop for developing the tropics. It produced much food and promised to be “an endless source of cash” (Robin 2021, p. 361). An extreme surge in the palm oil production has been recorded since the 1980s (see Figure 3) since the crop has gained importance for industrial uses other than food.

Figure 3 shows that palm oil consumption continuously indicates an upward trend. In the last five decades, the global market has experienced an increase in palm oil production of roughly 62 million tons (Our World in Data 2020). The crop's qualities highly drive the boom in palm oil demands. Its high efficiency in terms of land use, productivity rate, and versatility have made it hard for other vegetable oils to compete (see Figure 3). The significant surge in palm oil demand is also encouraged by the large consumption rate in India and China. The high level of domestic consumption in Indonesia and other palm oil producing countries also become the main driving force behind this growth (Obidzinski 2013). Palm oil has unique characteristics, such as maintaining its quality even when it is exposed to high temperatures and the absence of smell when used in food products. Further, its high-yielding characteristic also provides a competitive advantage compared to other vegetable oils.

Figure 3: Palm Oil Production in 1961-2018

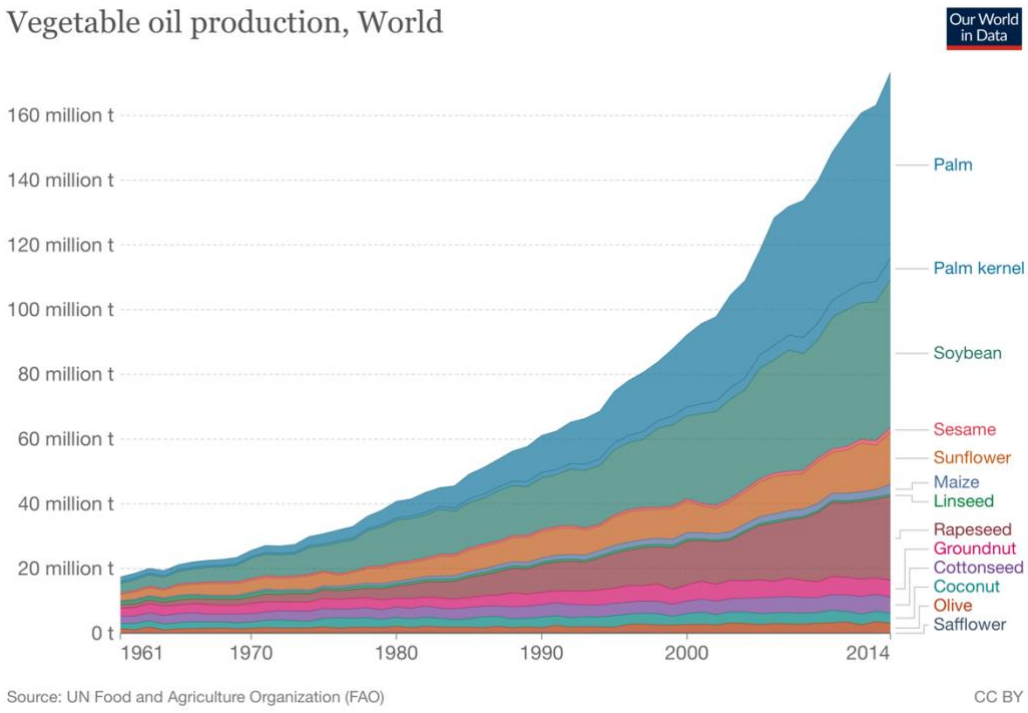


Source: Our World in Data (2020)

Continuous innovations in palm oil production have also resulted in a broader array of utilization. Palm oil can be found in vastly diverse products such as lubricants, flux in tin plates, margarine, and glycerol (a widely used glycerin derived from palm oil). Currently, about 68 % of palm oil utilization can be found in foods and cooking oils; 27 % is used in industrial applications ranging from detergents to cleaning agents, and another **5 % is used as biofuel and energy sources for electricity and heat** (Our World in Data 2020).

Palm oil contributes to the world's demand for sustainable energy resources as the world is experiencing an intensifying concern regarding the use and depletion of fossil fuels as the primary energy resources in the past decades (Sandesh and Ujwal 2021). Finding novel energy resources has become necessary to keep the global economy running, and biofuels have arisen as one of the options. In 2012, about 106 billion liters of biofuels were produced globally, of which 22.5 billion liters were biodiesel (REN 21 2012, In Mukherjee and Shovakool 2014). It is thanks to the Malaysian companies, institutions, and diplomacy that palm oil enters the biofuel stage in the 1990s. The Palm Oil Research Institute Malaysia (PORIM) persuaded manufacturers to switch to palm oil, pointing out its benefit for food products and machinery lubricants (Robin 2021, p. 347–354). In cooperation with the Malaysian Palm Oil Board (MPOB), the PORIM also successfully created new markets in oleochemicals, especially biodiesel.

Figure 4: Vegetable Oil Production in the World



Source: Our World in Data (2020)

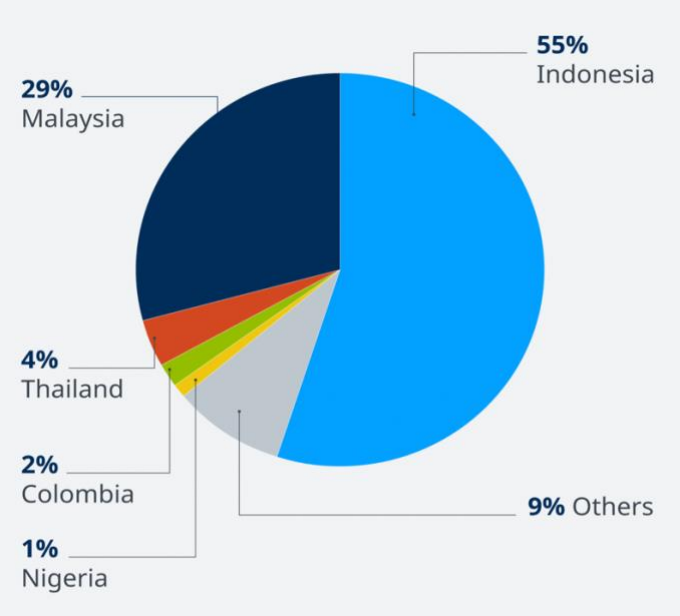
4.2 Palm Oil Production Processes and Key Players

The production of palm oil starts from the harvest of the fruit. A fully grown palm oil tree bears Fresh Fruit Bunches (FFB) that will be harvested after three years. The oil comes from the extraction of FFB, which results in two main products: Crude Palm Oil (CPO) and PKO (Fang 2013). The refinery of CPO will be processed into edible oil (cooking oil, cream, and margarine), oleochemicals (used in detergent and lubricants), biodiesel, and lauric acid (used in cosmetics and soaps). PKO, which results from deshelling, refining, and crushing the kernels, is generally used in making food products such as non-dairy creams. The process of deshelling per se will also produce a by-product of Palm Kernel Expellers (PKE) used to make animal feeds. On the other hand, the shells taken away from the kernels will be sold as an additional biofuel raw material (ibid.).

Hence, the palm oil production network comprises a wide range of stakeholders that include producers of various scopes (large and small), processors, traders, Consumer Good Manufacturers (CGM), and retailers who are scattered globally (Canossa et al. 2020). It is important to note that only a few companies run the refining, processing, and trading stages. Processors and traders are primarily located in the Global North and are the ones who supply the product to diversified end-users.

About 84 % of palm oil is produced in Indonesia and Malaysia (see Figure 5), with nearly four million and around 700,000 people employed in the countries respectively (Pacheco et al.2018). This means that other producing countries such as Columbia, Brazil, Thailand, and Ecuador can only partially fill the gap. This lucrative business could attract countries in Africa and Latin America to contribute to global supply. However, high labor costs (e.g., in Brazil), uncertain social and political situations, and the lack of price incentives are blocking the potential of these new producing countries (ibid.).

Figure 5: Major Palm Oil Producing Countries

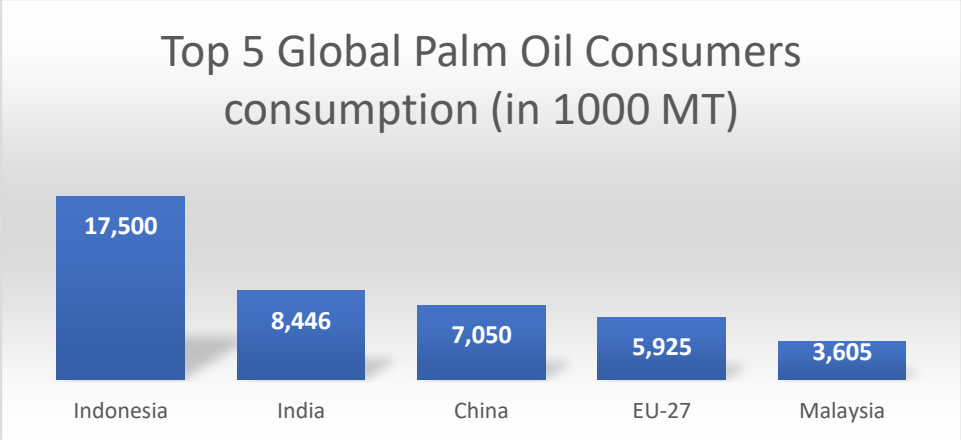


Source: Deutsche Welle, 2018. *Palm oil: Too much of a good thing?*

The Indonesian domestic market, India, China, and the EU dominate the global palm oil (Figure 6). While palm oil is predominantly used for cooking oil and food

ingredients in India and China, it is used more for manufacturing products and as biofuel raw material in the EU. Demand for palm oil for food is mainly driven by urbanization and the dietary shift toward processed foods. At the same time, renewable energy policies specifically prompt the need for non-food purposes (Canossa et al. 2020). It is important to note here that India, China, and the Netherlands are not only importers of CPO, but also the hub of palm oil distribution worldwide. Most of these importing countries also act as exporters of palm oil derivatives and help the spread of palm oil in their respective regions. More than half of the palm oil Used Cooking Oil (UCO) used for biodiesel in Europe in 2019 was imported from China (34 %) and only about 20 % comes from Malaysia and Indonesia. (Euractive 2020).

Figure 6: Top 5 Palm Oil Consumers Consumption (in 1000 MT)



Source: Index Mundi 2022. *Palm Oil Domestic Consumption by Country*

4.3 Economical, Environmental, and Social Dimension of the Palm Oil Sector

The rapid expansion of palm oil has considerably contributed to economic improvement for the producing countries. The Research and Markets (2021) estimated that the global market for Palm Oil will be worth USD 42.8 billion in the year 2020, and it is projected to reach a revised size of USD 57.2 billion by 2026. An estimated 75 % of palm oil production was exported in 2016, with an export value of more than USD 30 billion. The palm oil sector also contributes to the creation of almost 3 million downstream jobs in 2013/2014 (Voora et al. 2019).

Despite the glorified economic growth in Indonesia and Malaysia, industrial palm oil plantation has come at a significant environmental expense (Canossa et al. 2020). The crop has undergone one of the highest expansion rates, resulting in myriad sustainability issues. Several studies argue that palm oil expansion has led to forest conversion, which further impacts biodiversity, ecosystem services, and climate change (Voora et al., 2020). The most significant impact happens when palm oil plantation stretches out to undisturbed forest lands. This expansion will lead to a higher carbon emission rate, biodiversity loss, and declining water quality. Multiple efforts to support the shift to more sustainable palm oil have emerged as a response to the growing palm oil value chain (Canossa et al., 2020). According to the UNDP (United Nations Development Program) report (2020), the traditional local practice that includes clearing land by slash and burn techniques remains one of the challenges for sustainability.

Palm oil has taken over several land uses, including undisturbed and disturbed primary forests, secondary forests, agroforestry systems, degraded lands, and peatlands (Pacheco et al., 2017). From a climate perspective, the major concern is the expansion of undisturbed primary forests, the draining of peat forests, and the swamp forests common to Southeast Asia. Deforestation leads to increased carbon emission that is released as the trees are cut down, while the draining of peatlands forests often leads to fires in the dry seasons as they become flammable. Once the forests ignite, they release a vast amount of carbon dioxide and can cause wildfire (Greenpeace 2020). On the other hand, Greenpeace also reported that 100,000 people died prematurely from respiratory diseases caused by the haze triggered by slash-and-burn practices (cited in Canossa et al. 2020).

On the social side, palm oil has been linked to human rights abuse through land grabbing, land use, land ownership, and tenure (Teoh 2010). These issues have been well documented in Southeast Asia (Marti 2008; McCarthy and Cramb 2008) and in most cases they result in conflicts and loss of income (Teoh 2010). It significantly impacts the livelihood of locals and create dependencies on palm oil plantation. Palm oil companies are also being scrutinized and criticized for their unfair treatment of workers (Hicks 2021). Land conflict in Indonesia and Malaysia primarily derived from inconsistencies in land ownership law. In contrast, land conflicts in palm oil plantations

in Latin America, particularly in Brazil, involve numerous incidents of land invasions by the landless group (Teoh 2010).

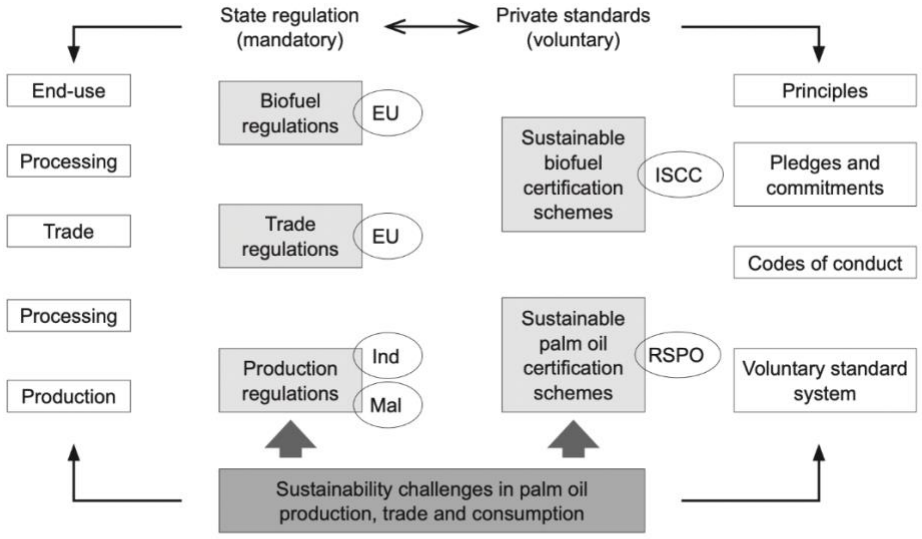
4.4 Certifications in the Palm Oil Sector

The rapid land expansion for palm oil plantation attracted international attention. It also prompted the creation of initiatives and campaigns pioneered by international organizations, governments, intergovernmental institutions, and NGOs. Therefore, different interactions are emerging, involving public and private (non-state) actors across these sustainability initiatives (Luttrell et al. 2018). Various regulations, treaties, and campaigns continuously develop to tackle many socioenvironmental, economic, and political issues surrounding the industry (Ivancic and Koh 2016). Certification is an integral part of the palm oil sustainability effort. Initiatives and certifications described in this subchapter will focus on the activities directly addressing the palm oil sector and do not include general initiatives focusing on deforestation or climate mitigation. The research will discuss some certification schemes separately to give a clear overview of their specific mandate.

As the EU's internal policies highly drive the palm oil biofuel market, so is its sustainability standard. The EU required robust sustainability criteria for palm oil imports intended for biofuel. Hence, the EU formally recognized 13 certification schemes to ensure compliance with the requirements stipulated by the directives. Currently, most biofuel feedstock is certified through the German-led International Sustainability and Carbon Certification Standard (ISCC) (Pichler 2013; Ponte 2014; Oosterveer 2020).

In this subchapter, only three of these certification schemes will be discussed. The RSPO, ISCC, and ISPO appear strongly related to the general palm oil issues presented in this thesis and therefore deserve a specific explanation. There are specific distinctions between these three schemes. While RSPO acts as the most notable certification provider for palm oil for food purposes, ISCC explicitly certifies using palm oil as an energy application material (Interview 5; Interview 13). ISPO, on the other hand, is an Indonesian government-led mandatory sustainable initiative.

Figure 7: Palm Oil Certification Schemes



Note: Mal - Malaysia.
Ind - Indonesia.
EU - European Union.
ISCC - Initiative for Sustainable Palm Oil.
RSPO - Roundtable on Sustainable Palm Oil.

Source: Oosterveer 2020

Distinguishing the three paths is vital because their governance and dynamics are different in the global arena (Oosterveer 2020). Figure 7 roughly summarizes the landscape of palm oil governance and the differences between the use of palm oil for biofuel and for food purposes (Pye 2018). This issue is important to clarify here as the RSPO and ISCC have different arrangements. Hence, it affects the configuration of the landscape and the regulations supporting the two private governances. Sustainability challenges in palm oil are addressed both by public and private standards. As production and processing fall under national responsibilities, the operation should comply with a national standard such as ISPO. The EU strictly regulates further steps along the chain through biofuel and trade regulations.

RSPO

The Roundtable on Sustainable Palm Oil (RSPO) is an initiative invoked by WWF to gather different stakeholders in the palm oil industry (RSPO n. d.). The RSPO presents itself as an industry watchdog for the palm oil sector in response to the growing concerns addressed by environmental and social NGOs about the destructive practices behind the palm oil production. In its action, the RSPO uses the concept of soft-form market correction to minimize pesticide and fertilizer use and to ban the clearing of primary forests, where there is high biodiversity and habitats for endangered species (Laurence et al. 2010). However, the RSPO is highly criticized for its dishonesty in assessing palm oil companies leading to hidden breaches of sustainability standards. In 2015, the Environmental Investigation Agency (EIA) wrote a report on the lack of credibility of the RSPO in running its audit, pinpointing the RSPO as greenwashing palm oil industries as well as the weak implementation of its standards (Ivancic and Koh 2016).

This organization also provides a voluntary certification scheme to ensure the compliance of its member with the sustainability standard and criteria. This standard works on a voluntary basis. It is called "voluntary" because companies decide for themselves whether or not to join the program (Interview 1, 2021). Certification is then used as an incentive for companies to protect themselves from being "named" by civil society organizations and losing their market share. To claim compliance with the P&C and achieve RSPO certification, applicants should be evaluated by RSPO in quinquennial basis (Interview 2; Interview 5; McInnes 2017).

ISCC

ISCC is a biomass standard formerly managed by the German Federal Ministry of Food, Agriculture, and Consumer Protection (Ponte 2013; McInnes 2017;). In 2012, ISCC formed its independent body and became the EU's principal partner in certifying biomass and bioenergy industries. It is oriented toward reducing greenhouse gas emissions and general sustainability focus related to land use and nature protection (UNDP n. d.). ISCC EU was the first certification standard recognized by the EU to

assess the compliance on Renewable Energy Directive (RED). ISCC is responsible for certifying more than 300 palm-related operations (ibid.).

Like with other sustainability standards, under ISCC, the feedstock is assessed based on "avoidance of biomass produced on land with high biodiversity value or high carbon stock; environmentally responsible production; safe working conditions; no violations of human rights, labor rights, or land rights; compliance with all applicable regional and national laws and relevant international treaties; and 'good management practices" (Ponte 2018).

ISPO

The proliferation and influence of global sustainability standards are considered a challenge to legitimacy and authority by the Government of Indonesia, the largest palm oil producing country. Discontent with the private governance managed by RSPO, the Indonesian government, led by the Ministry of Agriculture, established its own standards in 2011 (Choiruzzad, Tyson, Varkkey 2020). The ISPO is a legally binding scheme that takes the form of a mandatory state governance. Under ISPO, all producers must bring operations into compliance, and failure to do so will result in fines and sanctions. Hence, by design, the ISPO could fill the gap created by private governance, such as RSPO, which has no right to force compliance due to its voluntary commitments (McInnes 2017).

As a state-led certification scheme, ISPO can rely on the internal legal system and regulatory standards. However, ISPO is criticized for its ambiguity which results in weak implementation. Forest People Program (McInnes 2017) reported that ISPO is the weakest among other schemes. ISPO only adheres to Indonesian laws, which appear too general and lack practical guidance to be implemented in the field. Further, ISPO does not become effective in protecting the rights of indigenous laborers, women, children, and smallholders in the palm oil sector (Kusumaningtyas 2018).

5 The Indonesian Palm Oil Sector

5.1 The Role of Palm Oil in Economic Development and the Rise of Indonesia as the Largest Palm Oil Producer

Palm oil has become a dominant crop in Indonesia by the end of the twentieth century and plays a pivotal role in the country's economy (Watts and Irawan 2018; Obidzinski 2013). 84 % of the global palm oil supply comes from Indonesia and Malaysia, where 7.8 million people rely on the industry for their living throughout the value chains (Our World in Data, 2018; PASPI, 2018). CPO and PKO are Indonesia's second-biggest export earners after coal, contributing USD 16.53 billion in 2018: 9.2 % of its total exports and 1.6 % of the GDP (FERN 2019; Reily and Ekarina, 2018; PASPI, 2018 in Purnomo et al. 2020). In 2011, oil palm plantations covered 7.8 million hectares (ha) in Indonesia, of which 6.1 million ha were productive plantations under harvest (Obidzinski 2013). The state plans to expand its oil palm plantation portfolio by another 4 million ha (Obidzinski 2013).

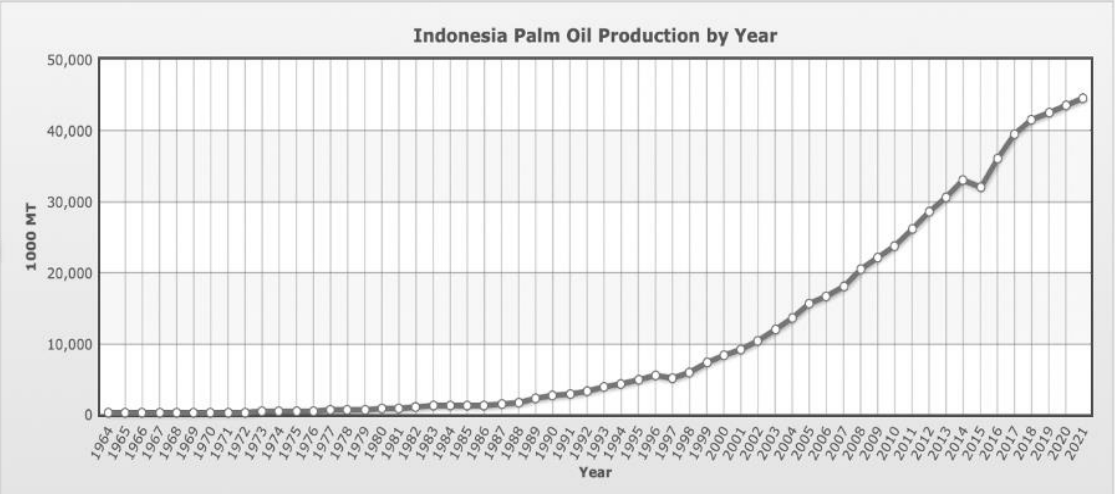
The history of the palm oil industry in the region can be traced back to the colonial era when the policy landscape of the palm oil industry started to take shape (Jiwan 2018; Brad 2013). The doctrinal legacy that the state has ultimate power over land rights has been the key historical factor that promotes crop expansion (ibid.). The massive plantation of palm oil and the sustained effort on palm oil promotion only began under Suharto's presidency in the late 1970s (Budidarsono, Susanti, and Zoomers 2013). Due to a decrease in rubber prices, the Indonesian primary commodity at that time, palm oil is perceived as an alternative for the state's revenue booster. During this time, state-owned plantation companies (PTPN) managed most of the palm oil business (Giacomin 2018). Further, production in Indonesia lagged until the late 1980s due to post-independence political uncertainties.

Following Indonesia's commitment to structural reforms and liberalization in 1998 stipulated by the International Monetary Fund (IMF) (Varkkey, Tyson and Choiruzzad 2018), the government led by President Suharto created more access to foreign investors, offering attractive incentives for investing in the palm oil sector. As a

result, the industry also experienced great strides (Brad 2013; Corley and Tinker 2016). Indonesia's palm oil harvested area increased dramatically from around 70,000 ha in the 1960s to 2.01 million ha by 1998 (Varkkey, Tyson, and Choiruzzad 2018). From 2008 onwards, Indonesia managed to replace Malaysia's position as the largest palm oil producer and cemented its position as the largest vegetable oil producer (Bakhtiar et al., 2019).

The Indonesian production in the past 30 years is remarkable, as presented in Figure 8. The liberalization has proven to stimulate more palm oil production, and it has increased production from 5.8 million tons in 1998 to 44.5 million tons in 2021 (Index Mundi 2021). Palm oil has become a strategic commodity and the most significant contributor to Indonesia's foreign exchange (Bakhtiar et al., 2019). The Indonesian Statistical Agency (2016) recorded that from the 32 million tons of palm oil produced in 2016, Indonesia managed to export 24.3 million tons with an economic value of USD 16,2 billion (BPS 2016). On the employment side, the Coordinating Ministry for Economic Affairs maintains that the palm oil industry can provide 17 million direct and indirect jobs for the entire nation (Bakhtiar et al., 2019). Worldgrowth (2011) recorded that the industry has also provided six million employments for the poor population and contributed to the development of the rural economy. Some 3.6 million workers are estimated to be employed in the palm oil-based biofuel industry alone (Obidzinski et al., 2012).

Figure 8: Indonesian Palm Oil Production



Source: GAPKI 2022

The development of the Indonesian palm oil sector is legally planned according to the government's economic goals. In turn, it has also contributed to the ever-growing global demand for vegetable oil (Watts and Irawan, 2018). There were three phases of government policies that encouraged the development of this agriculture as an Indonesian major export commodity): (1) the New Order state developmental era (the late 1970s to 1994); (2) the transitional period towards private initiative through the KKPA (*Koperasi Kredit Primer Untuk Anggota*; Primary Cooperative Credit for Members) model (1994–98); and (3) the *Reformasi* era 1998 (see Raziah and Shahrin 2006; Baudoin 2017; McCarthy 2010).

The New Order state era marked the Indonesian development in agribusiness. In this era, the Indonesian economic agenda focused on providing political and macroeconomic stability through financing infrastructure and providing subsidies derived from oil revenues (McCarthy 2010). Along with this agenda, the Indonesian government also exerts direct agricultural interventions through state agencies to manage the agricultural business. The policy developed in the agricultural area also oversaw increased returns to land and capital by supporting the "upgrading" of the plantation sector toward oil (Humphrey and Schmitz 2000).

The KKPA model is attributed to the transition period toward private-community initiatives (McCarthy 2010). The government's agenda is inclined to enhance foreign direct investment. This policy is prompted by the World Bank's criticism of state intervention in the smallholder scheme (ibid.). It maintained that the government should leave palm oil development to the market and discontinue its subsidizing role. KKPA has therefore enabled a more direct involvement of private communities and farmers in a partnership model. As foreign direct investment surged in this period, more local communities were attracted to the palm oil plantations. This development also triggered the emergence of independent smallholders in the palm oil arena (McCarthy2010).

The *Reformasi* era (from 1998 onwards), also known as the laissez-faire era, is associated with the shift of the state's policy toward decentralization, public-private

partnerships between market actors and the government, and social-private partnerships between market actors and communities (Budidarsono, Susanti, and Zoomers 2013). This reformation is marked by the establishment of various partnership models such as community plantations (*perkebunan rakyat*). This development has enabled estates to partner with capital-intensive companies willing to invest in labor-intensive palm oil plantations (ibid.). Farmers slowly saw an increase in income as more access to palm oil technology was made available in this scheme. It also marked farmers' access to investment capital through land certificates obtained after paying off their credit. This system also enables farmers to use the certificates as collateral for local banks if they wish to expand their business (ibid.).

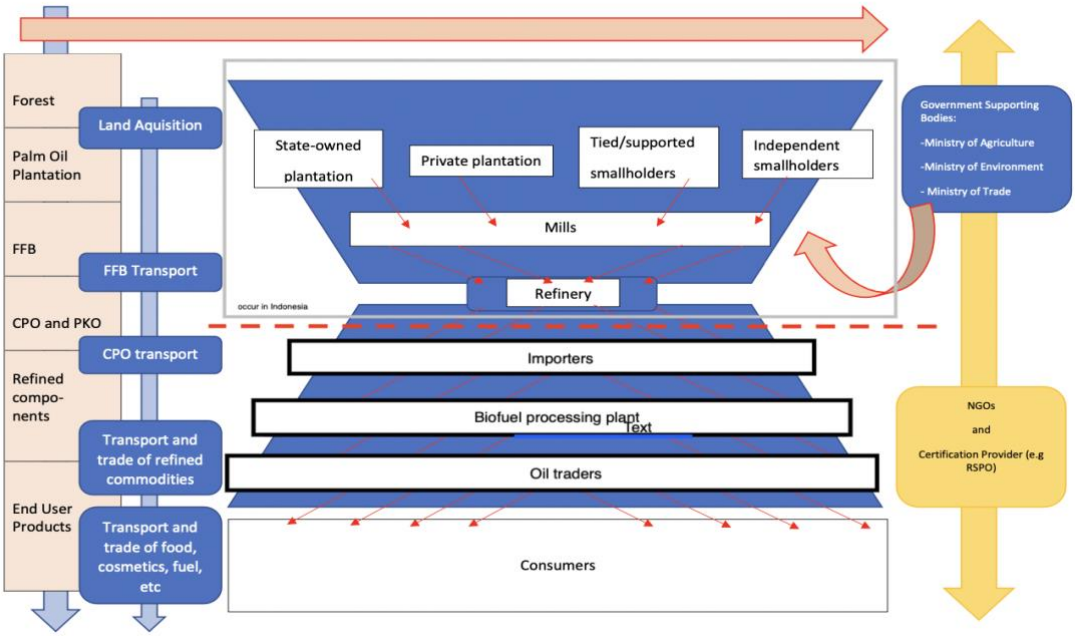
The modern palm oil plantation in Indonesia is continuously transforming and expanding. In the context of the Southeast Asian crisis in 1998, many plantations went into bankruptcy and were sold by the state restructuring body following the deregulation agenda. The government created the Plantation Act to enable full foreign ownership in domestic and foreign investment. This act also marked the arrival of Malaysian, Singaporean, and US investors in the Indonesian palm oil industry (Jiwan 2018; Hai 2018; Varkkey, Tyson, and Choiruzzad 2018; Casson 2000). India, China, and the EU are continuously growing as the top three destinations for palm oil export, bringing USD 22 billion in foreign exchange revenue into the country annually (BPS 2022).

5.2 The Indonesian Palm Oil Production Network

Strategic actors in the palm oil industry can be classified into primary and secondary players. The primary group comprises actors directly and actively involved in palm oil production and helps shape the industry through their decision-making power. Farmers, business associations, manufacturers, and financial institutions, as well as state actors (both at national and regional levels) fall in this category. The actors in the secondary group interact with the primary one and influence their decision-making. This group comprises certification providers, CSOs, social movements, international consumers, researchers, and media (Brad 2013).

Figure 9 summarizes the Indonesian palm oil production processes and key players in the production network. The industry has a distinct hourglass shape, with upstream suppliers dominated by only a handful of conglomerates responsible for production, processing, and trade (Pacheco et al. 2017). Geographically, all the processes outlined in the top half of the hourglass shape take place in the country of production (Table 3). In Indonesia, the process includes planting, harvesting, milling, and refining. The specific requirement to obtain license for operation has stimulated the growth of independent mills located closer to plantation areas (Pacheco et.al 2017). In recent years, the growing number of mills and refineries has contributed to greater integration of this sector in Indonesia and improved efficiency accordingly (Pacheco et al.2017; Ekadinata 2013).

Figure 9: Palm Oil Production Network (An Overview)



Source: Author's creation based on Pacheco et al 2017 and Purwanto et.al 2020

Table 3 (additional to the Figure 10): Geographical Dispersion of the Palm Oil Processing

Occurring in Indonesia	Occurring in the Importing Countries (India, China, the EU)	Occurring in Malaysia and Singapore
Planting	Trading	Trading
Harvesting	Processing into Food, Cosmetics, or Biofuel	Banking
Milling	Marketing	
Refining (CPO processing)	Retail businesses	
Top half of the Figure 9	Lower half of the Figure 9	Additional

Source: Author's creation based on Figure 9

The resulting CPO from milling is then transported to the refineries. Refinery indirectly acts as a hub between supply and demand in the palm oil value chain. Refineries process CPO into products used in manufacturing, transport, and industries. Refineries are also primarily dominated by big firms that have the financial capacity to invest in their production facility. It gives them greater market control and direct access to downstream buyers. As most of the exported palm oil in CPO form is produced by integrated companies, several instances show the same exporting and importing actors (Pacheco et al., 2018)

The bottom half of the hourglass denotes all palm oil processes that occur in importing countries such as India, China, and the EU (Figure 10). In this value creation process, the range of the players in this area is immense as it involves almost all actors that use vegetable oil in their products. It may include big companies such as Nestlé and Mondelez, supermarket chains, caterers, cosmetic producers, public organizations, and hospitals (ibid). Unilever, with the uptake of around 1.5 million tons per year, or slightly less than 3 % of the world's supply of palm oil, has become one of the most prominent manufacturers that includes palm oil in their business (Greenpeace n. d.). In the case of

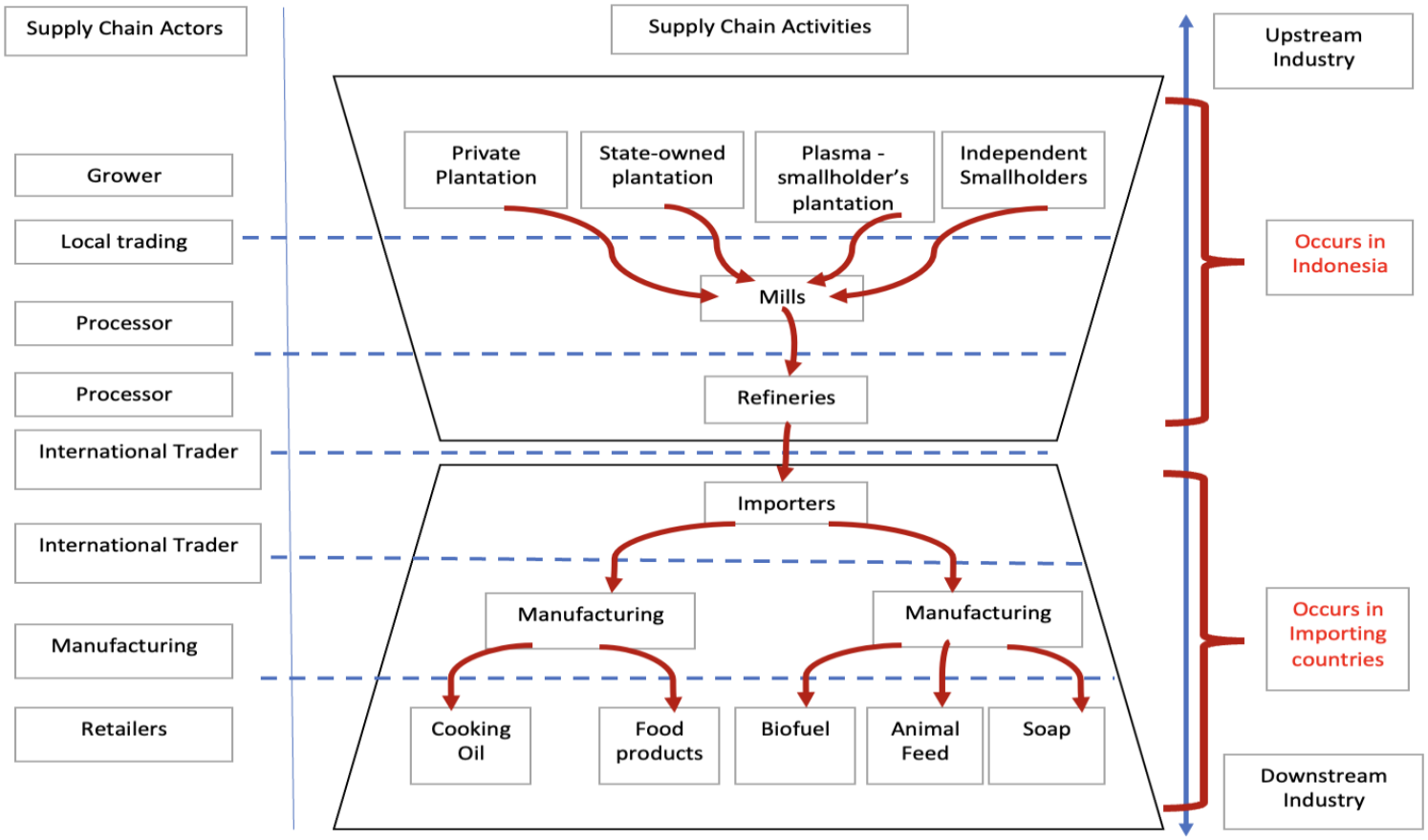
palm oil used as biofuel, the refined CPO is transported to the importing countries where the biofuel processing occurs. In contrast to palm oil used as food products, buyers of palm oil feedstock are directly linked to the EU's national energy companies such as ENI, OMV, and Neste Oil.

NGOs and certification providers in the palm oil industry play a significant, albeit indirect, role in bridging social and environmental interests and linking the government and other actors in the production network. While the government's access concentrates on the upper body of the hourglass, national and transnational NGOs can mobilize people's opinions and shape industry dynamics from the lower part of the hourglass (Brad 2013; Purwanto et al. 2020;). Their inclusion in the network shapes a whole new dynamic in the palm oil sector

While Indonesian companies concentrate on the upstream industry, their Malaysian and Singaporean counterparts play significant roles in the downstream business (Jiwan 2018). The Malaysian transnational expansion is characterized by the creation of giant palm oil-based corporations, namely Sime Darby Berhad and Wilmar International Limited (see Table 3). Currently, the company owns roughly 531,229 ha of planted palm oil area in Indonesia, which equals 98 % of its total plantation ownership. Wilmar International Limited is another palm oil company that became a powerful agribusiness corporation in Asia, operating in twenty countries, with primary areas in China, Indonesia, and Malaysia (ibid.).

According to Jiwan (2018), the interaction between Indonesia's and Malaysia's palm oil sectors is prompted by the fact that Malaysia has a limited amount of land for plantations. It encourages the country to seek an offshore expansion opportunity around its neighborhood. More than 50 Malaysian companies are currently operating in Indonesian palm oil plantations (Hai 2018), making the Malaysian capital the most important source for Indonesia (Varkkey, Tyson, and Choiruzzad 2018) (see next subchapter).

Figure 10: Palm Oil Production Network (Simplified Version)



Source: Author's creation based on various sources

Singapore plays a significant role as a funding provider for the industry. It channels financial investment through various international banks such as Rabobank. Several plantation-based companies also turned to Singapore to raise financial capital through listing on the Singapore Exchange (Hai 2018). The most important one is Wilmar International Limited, which is one of the largest companies listed on the Singapore Exchange Securities Trading in terms of market capitalization. After the completion of its listing in both Singapore and Malaysia, the company doubled its planted palm oil area, making it one of the most prominent upstream players in the industry (ibid.).

Table 4: List of Major Palm Oil Firms Operating in Indonesia

Firms with **Indonesian** Ultimate Ownership

Group Name	Plantation Are (in ha)
PTPN I-XIII	770,000
Raja Garuda Mas	543,000
Sinar Mas	433,200
Napan Risjadson	340,000
Tirtamas and Maharani	270,000
Salim Group/Indofood	230,000
First Resources	207,900
Incasi Raya and Metro	200,000
Benua Indah	180,000
Lyman	160,000
Surya Dumai& Ciliandra Perkasa	154,133
Sampoerna Agro	109,363
Bakrie	80,000
Duta Palma & Darmex Agro	65,800
Sungai Budi	62,015

Firms with **Malaysian** Ultimate Ownership

Group Name	Plantation Area (in ha)
Sime Darby	530,987
Ganteng Plantation	186,000
Kuala Lumpur Kepong	170,000
Johor	140,000
Oriental	43,900
Anglo-Eastern	33,692

Firms with Ultimate Ownership of **Other Countries**

Group Name	Country of Ultimate Ownership	Plantation Area (in ha)
Wilmar	Singapore	573,000
Astra	Hong Kong	290,621
REA Holdings	UK	125,000
Carson Cumberbatch	Sri Lanka	80,000
SIPEF	Belgium	65,000
Bollore	France	37,467
Rowe Evans	UK	35,304
Cargill	US	27,000

Source: Adapted from Jiwan 2018

More than thirty big groups (as outlined above) are dominating the Indonesian palm oil industry. The groups also control more than 60 % of plantations and 1,000 subsidiary palm oil companies, and indirectly control supplies elicited by outgrowers

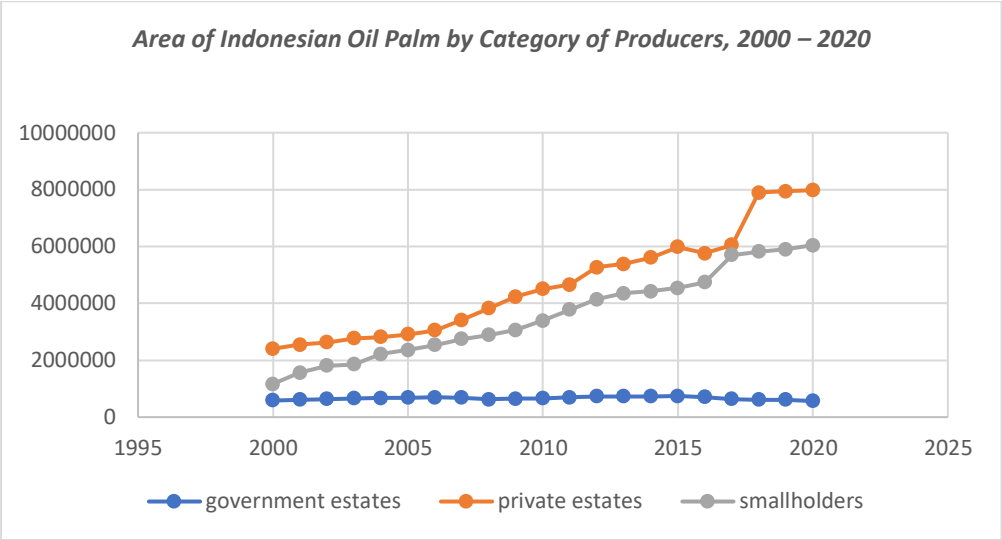
and small local oil palm estates. Wilmar, Musim Mas, GAR, Cargill, and Asian Agri are among the most notable suppliers for the European market (Purwanto et al. 2020). Most groups are members of the Indonesian Oil Palm Growers Association (GAPKI), a powerful organization with more than 200 individual palm oil plantation companies that is closely tied to the government (Jiwan 2018).

5.3 The Indonesian Palm Oil Business Model

The palm oil value chain has become more complex with a wide range of suppliers integrated into the production over time. From a sustainable development point of view, this condition has posed another challenge: it creates difficulties in allocating negative externalities (UNDP 2019). To understand this issue, it is essential to first understand the palm oil business model in Indonesia.

There are three groups operating in the palm oil industry: private companies, smallholders, and state-owned companies (Interview 24; Obidzinski et al. 2012; Van der Elst 2018). It is important to note here that most part of the plantations in Indonesia are run as mono-crop estates that integrate smallholders differently (ibid.). Specific to the Indonesian case, smallholders can be divided into two groups, namely independent smallholders and plasma smallholders (or NES) (Jelsma et al. 2017; Van der Elst 2018). According to Statistik Indonesia (2022), the total area of palm oil plantations has reached the number of 14,5 million ha (Figure 11). Based on the category of producers, state-owned manufacturers play a relatively moderate role with a relatively stagnant number of plantations over the years. Big private enterprises are responsible for more than half of the production, followed by smallholder farmers that account for 40 % of the total Indonesian production.

Figure 11: Area of the Indonesian Palm Oil Plantations based on the Category of Producers



Source: Statistik Indonesia (2022)

5.4 Social and Environmental Issues of the Palm Oil Sector in Indonesia

As the development of palm oil became synonymous with Indonesia, palm oil and the state's role in sustainability issues became the center of international green NGOs' campaigns (Drajat 2013). The haze from slash-and-burn practices in land clearing became an issue (Wardhani, 2008). It encouraged WWF Netherlands to conduct a comprehensive study to identify the root problem (Rowell and Moore 2000).

What started as campaigns on the danger of haze and pollution has developed into concerns over deforestation, biodiversity loss, land, and social conflicts. Sawit Watch (a local Indonesian NGO), in cooperation with Forest People Programs (FPP), pioneered the campaigns over the social impact of palm oil expansion on indigenous and local people (Sawit Watch n. d.). Further, in 2008, Greenpeace championed the campaign against biodiversity loss by positioning the orangutan habitat as the focal point (Hai 2020). As the demand for biofuel increases due to the risk of the climate crisis, the attention also shifts to the possible impact of production on CO_2 emissions and global warming (ibid).

Further, Sawit Watch recorded and monitored 570 conflicts in Indonesian oil palm plantations, many of which can be dated back to the Suharto era when

communities' land rights were not duly recognized (Jiwan, 2009). The Consortium on Agrarian Reform showed in 2001 that plantation-related conflicts in Indonesia accounted for 32 % or 261 cases of the total cases documented (Colchester *et al.*, 2007). This problem is deeply rooted in the historical conception of land ownership first created in the colonial era. In the Indonesian case, the Agrarian Law of Colonial Dutch, maintains that: *"land which was not under clear ownership was considered State Land; communities' rights to land based on customary laws were not recognized as ownership by Dutch law"* (Marti, 2008). It has caused inconsistencies with the *post-independence* laws and has become an underlying cause of land conflicts with indigenous people (Teoh 2010).

Unregistered lands and the lack of available data and information regarding palm oil plantations in the forest zone continue to be the stumbling blocks to achieving sustainable palm oil in Indonesia. It spills over to the legal status of the plantation and disables traceability which is vital for the certification process. Therefore, Indonesia often faces difficulties convincing international buyers about the legality of its product (Bakhtiar et al., 2019). This condition also holds in diplomatic relations. Indonesia often fails to create a solid counterargument on the palm oil sustainability issue as the government has no reliable data at its disposal (ibid.)

The problems also arise from the discrepancies between the established boundaries of forest zone and regional spatial planning (Bakhtiar et al., 2019). This is evident in the case of Riau and Central Kalimantan. For example, the Ministry of Environment registers some plantations as a concession located in the forest zone. However, the regional government says otherwise and hides that the concession is illegal. This reflects the complexity of the Indonesian policy and institutional landscape (Brad 2013), which is separated into three levels of authority (national, regional, and local) (see Chapter 5.4). This partially decentralized character of the political system becomes a breeding ground for more social interests and conflicts (ibid.).

As one of the tools to control the location of palm oil plantations, a concession permit also remains ineffective. The cause of this issue is twofold. First, licensing procedure lacks a special-based licensing and planning mechanism that enables control

over palm oil businesses. Second, the ineffectiveness of cross-agency coordination in the palm oil licensing mechanism also caused overlapping permits for lands with various purposes (Bakhtiar et al., 2019). In line with this situation, the Indonesian Anti-Corruption Agency (KPK) found that the licensing system for palm oil is still far from being accountable (KPK 2016).

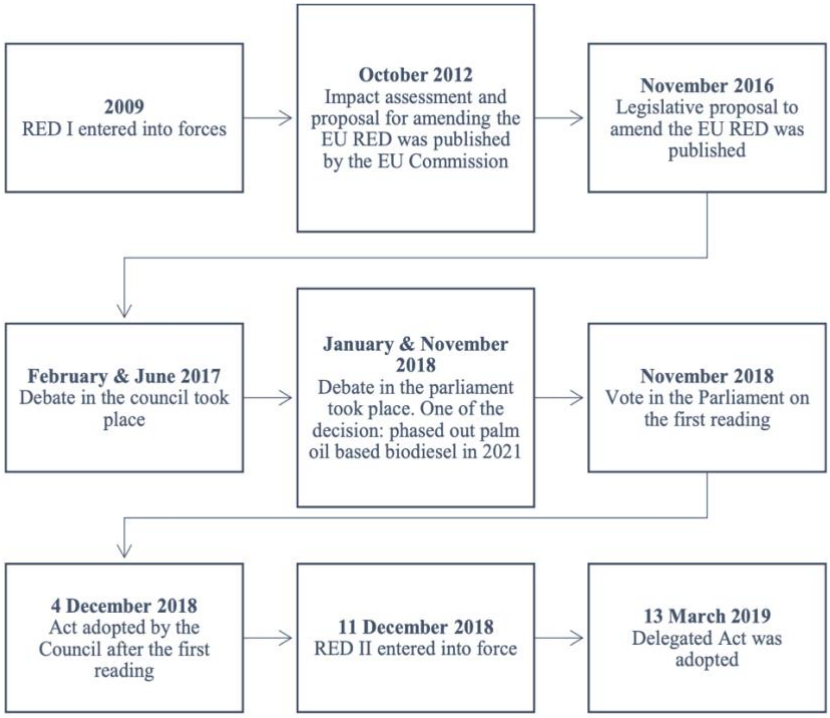
6 From Renewable Energy Directive to a Green Trade War. Is that a Possibility?

This chapter will discuss specifically the significance of RED II in the bilateral relations between the EU and Indonesia. The chapter is organized as follows: Subchapter 6.1 will discuss the motivation behind the establishment of RED II and will provide a brief explanation of how the directive evolved over time. Subchapter 6.2 will present the analysis result on the impacts of RED II both on the Indonesian revenue and on the national policy. Subchapter 6.3 discusses the WTO litigation on RED II and its impact on the ongoing free trade negotiation between the EU and Indonesia. Subchapter 6.4 will sum up the interests of all actors involved in the palm oil production network based on their geographical location. This subchapter will cover actors on both the Indonesian and the EU sides. Finally, Subchapter 6.5 will conclude the chapter by presenting the analysis result on the possibility of *a green trade war* based on the previous subchapters.

6.1 Motivation Behind the Establishment of the RED II

Since the EU ratified the Kyoto Protocol in May 2002, climate policies gain in momentum (Wurzel and Connelly 2011). The European Commission started developing a legal basis to promote the use of "greener transportation" to demonstrate its climate ambition. The Biofuel Directive is one of its legal products. The directive calls for member states to set indicative targets. A minimum proportion of biofuel should be put on the market: 2 % by the end of 2005 and 5.75 % by the end of 2010 (EC 2003; IEA 2019; Interview 5). It also enables member states to apply financial incentive for developing their biofuel industry (IEA 2019; Fischer and Meyer 2020).

Figure 12: Outflow of the establishment of the Renewable Energy Directive 2009-2019



Source: Author's creation based on European Commission 2022

The adoption of the first Renewable Energy Directive (RED I) in April 2009 brought more attention to the EU's goal of reducing its greenhouse gas emissions (RED 2009 Preamble Paragraph 1). Besides, the directive also includes non-environmental considerations such as "[*t]he opportunities for establishing economic growth through innovation and a sustainable competitive energy*" (RED 2009 Preamble Paragraph 3). This original directive stipulated a mandatory 20 % share of EU energy consumption from renewable energy sources by 2020 (European Commission 2022).

As part of the trending renewable energy resources topic, biofuels received the most attention and benefit from these policies. Demand for biofuel soared due to the EU's endorsement of biofuel use outlined in RED I (Interview 4; Al-Riffai, Dimaranan, and Laborde 2010; Fischer and Meyer 2020; Globium-ILUC n. d). This development sparked debates as many CSOs and experts revealed its drawbacks and adverse impact caused by the directive (Fargione 2008; Al Riffai, Dimaranan, and Laborde 2010). These measures stimulate imports of biofuels from other regions of the world, which are derived from other commodities such as palm oil, soya beans, and sugar cane as an

unintended side effect (Globium-ILUC n. d; Interview 4; Interview 24). Consequently, developing countries increased land use for agricultural-based energy products (Transport and Environment 2019; Fischer and Meyer 2020; Fargione 2008).

The excitement about biofuel as a "clean energy resource" soon subsided (Obidzinski et al., 2012). Many experts pointed out some overseen impacts of using biofuel as energy resources for the transportation sector (Interview 5). Searchinger et al. (2008), for example, proposed an approach to calculate an unintended release of greenhouse gas emissions caused by global land expansions and clearing for biofuel production (Searchinger et al. 2008; Finkbeiner 2013). Since the establishment of the RED I, "*biofuel is worse than fossil fuel*" headlines have become media sensations (Finkbeiner 2013; Interview 16). The European Parliament started to pressure the European Commission to act on the impact that the RED I policy has caused. This development has led to the assignment of Ecofys, IIASA, and E4tech by the European Commission to conduct a comprehensive study on conventional and advanced biofuel consumed in the EU based on the ILUC approach (EU 2019; Globium 2016; Interview 4). The ILUC approach demonstrates that the conversion of land to produce biofuel can lead to a higher rate of greenhouse gas emission, particularly in the case of expansions to forest areas, peat land, and wetlands where the high carbon stock can be found. Hence, the GHG emissions caused by this conversion and expansion can negate all the "clean" impact expected from a feedstock (EU 2019; Interview 2; Interview 16).

When the European Commission proposed the "Clean Energy for all Europeans" initiative in 2016, the commission also agreed to discuss the proposal on recasting the Renewable Energy Directive as pushed by the Parliament and CSOs, which became known as the RED II. Compared to the first Directive, the 2018 RED ends the mandate for food-based biofuels (Transport and Environment 2019). However, the recast allows member states to count food-based biofuels towards their renewable energy target (ibid.). Based on the previous concerns regarding the indirect greenhouse gas emissions caused by land expansions, the RED II was developed and featured some improvements in the recast (Transport and Environment 2019). Notable in this recast is the inclusion of ILUC as a biofuel sustainability criterion. The ILUC delegated act sets limits on land-based biofuel feedstock that have high expansion rate in high carbon

stock lands (Kabir and Khan 2021). When calculating the overall national share of renewables and the share of renewables in transport, the Member States cannot include bioenergy that fell under high-ILUC risk (European Commission 2022).

A particularly controversial measure introduced by this delegated act is the "freeze and phase-out" of certain biofuels in the transport sector (Mayr, Hollaus, and Madner 2020). The maximum share of these biofuels considered "high ILUC risk" will be frozen until 2023, based on their 2019 levels. Biofuel will be progressively phased out of the renewable targets, and ends their eligibility to be counted in the renewable targets in 2030 (Interview 9; Interview 16; Transport and Environment 2019). The high ILUC risk will apply to feedstock *"for which a significant expansion of the production area into land with high carbon stock is observed* as outlined in Article 26 Point 2 of the Renewable Energy Directive 2018/2001/EU*"*. The studies conducted by Globium in 2016 became the justification for the European Commission to determine feedstocks with high-ILUC risk. Based on this study, palm oil has the highest ILUC impact, followed by soy oil and rapeseed.

The establishment of the RED II cannot be separated from the EU's political landscape and the pressure put on by both the European Parliament and CSOs (Interview 4; Interview 5; Interview 7). With climate change as a pressing issue and its direct ecological impact, the EU pushes itself to play a leadership role in global climate politics (Wurzel et al., 2017). The appointment of Ursula von der Leyen and the introduction of a massive framework of new policies called the "European Green Deal (EGD)" (the main framework of the RED II) marked the importance of climate politics in the current administration. Under this framework, many policies are systematically evaluated and updated according to the most recent scientific reflection and technological possibilities (Interview 4; Jordan and Gravey, 2021).

When discussing the EU's environmental policymaking, it is essential to also look at the contribution of CSOs in passing the bill. BirdLife International, WWF, Transport and Environment, Fern, Mighty Earth, NRDC, PFPI, Sum of Us, and FÖP are among the active civil society organizations that actively engage in the biofuel discussions in the EU (Interview 16). These CSOs initiated an open petition on YouMove to bring the

contentious issue of biofuel use promoted by the RED I before the EC (European Comission) in the official consultation process (Fern 2019; European Federation for Transport and Environment 2019). This group maintains that the EU's RED I has contributed to the increase of GHG emissions and, therefore, should demonstrate moral responsibility for the unintended negative impact due to its "eco-friendly" policy.

Given the long history of the EU's commitment to environmental policies and the power of environmental CSOs in the EU's policymaking arena, it is inevitable that environment and climate mitigation become the significant feature of establishing RED II and its delegated act. As it is outlined in the directive:

> "In accordance with Article 194(1) of the Treaty on the Functioning of the European Union (TFEU), promoting renewable forms of energy is one of the goals of the Union energy policy. That goal is pursued by this Directive. The increased use of energy from renewable sources or 'renewable energy' constitutes an important part of the package of measures needed to reduce greenhouse gas emissions and comply with the Union's commitment under the 2015 Paris Agreement on Climate Change following the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (the 'Paris Agreement') and with the Union 2030 energy and climate framework, including the Union's binding target to cut emissions by at least 40 % below 1990 levels by 2030."

At the outset, reducing greenhouse gas remains the bloc's top priority. However, the directive does include several articles that specifically mention economic potentials such as employment and regional development that might result from stimulating the regional renewable energy sector. The EU's "protectionist" measure becomes evident for Indonesia as the directive explicitly outlines, that:

> "The increased use of energy from renewable sources also has a fundamental part to play in promoting the security of energy supply, sustainable energy at affordable prices, technological development and innovation as well as technological and industrial leadership while providing environmental, social, and health benefits as well as major opportunities for employment and regional development, especially in rural and isolated areas […]" (RED II Paragraph 3)

> "Production energy from renewable sources often depends on local or regional SMEs. The opportunities for local business development, sustainable growth, and high-quality employment that investments in regional and local energy production from renewable sources bring about in the Member States and their regions are important. The Commission and the Member States should therefore foster and support national and regional development measures in those areas…." (RED II Paragraph 61)

When asked about the Indonesian claim that RED II is a form of the EU's protectionist measure, a representative from the EU's business group diplomatically answered that:

> "Such argument is understandable from an Indonesian point of view. [However] to understand the details of the RED, you must understand the European societies. Not even at the European level, but at the member states level. Environmental and social issues are important topics for non-governmental organizations (NGOs). In some countries like France and Germany, farmers' lobbies are powerful. This also applies to Eastern European member states." (Interview 4)

Greenpeace Austria also corroborates the idea through personal written communication that:

> "In general, regional products are always the best choice. In Austria, we should use more regional organic vegetable oils [*to avoid further unintended environmental impacts of palm oil*]." (Interview 23)

These statements partly explain why Indonesia accuses the EU of its protectionism toward its regional vegetable oil business. In this case, there is a possibility that the EU tries to extend its sustainability criteria to the downstream industry with an intent to further promote and protect its own economy.

6.2 The Impacts of Renewable Energy Directive II and ILUC Delegated Act

RED II has both direct and indirect impacts on the Indonesian palm oil sector. While the most significant impact can be seen in the export and revenue, the indirect impacts are generally visible in the Indonesian policies related to palm oil management. Indeed, the issuance of RED II and the ILUC as supplemented delegated acts have caused some decline in palm oil direct export to the EU. However, Indonesian domestic production and revenue remain stable. It is generally caused by the absorption of palm oil market in China and India as the largest importers. Further, RED II also caused policy interactions that influence the Indonesian political arena. Each of these impacts will be discussed in the following sections.

6.2.1 The Impact on Palm Oil Export and Indonesian Palm Oil Production

The government of Indonesia claimed that the launch of the ILUC delegated act is ill-motivated. They claimed that the RED II and its Delegated Act are a form of the EU's attempt to "protect its home-grown vegetable oils" (Interview 6; Interview 8; BPDPKS 2019; Tyson and Meganingtyas 2022). This claim hinges on the fact that palm oil is the only agricultural product that cannot be counted as a renewable energy resource for the European transportation market. Since palm oil can no longer be regarded as renewable energy sources, palm oil producers will also lose their chance to receive financial incentives, as stated in the RED II Article 29(1) (ibid.). The concern is related to the Indonesian export volume and its economic implication for the palm oil industry (Interview 8).

However, some economic modeling shows that even a total ban from the European market will be less likely to affect the palm oil export from Indonesia (Interview 13, Interview 14). Rifin et al. (2020), for example, found that export stoppage to the EU will have a relatively small impact on output, land use, prices, and employment. The study also shows no significant impacts of palm oil suspension on Indonesia's macroconditions. Another run by Busch et al. (2022) shows a similar result. The impacts of a ban would be minor since approximately 52 % of Europe's imports will be shifted to other countries. Hodijah (2020) estimates through the general equilibrium model that trade barriers imposed by the EU will only reduce Indonesia's nominal GDP by -0.02 %, its real GDP by -0.03 %, and its TOT by -0.49 %. These economic projections are aligned with palm oil export statistics that show a relatively constant volume of palm oil exported to the global market (Table 6). The EU's position as only the third largest import destination may have caused this insignificant export shock (Interview 17, Interview 14, Hodijah 2020).

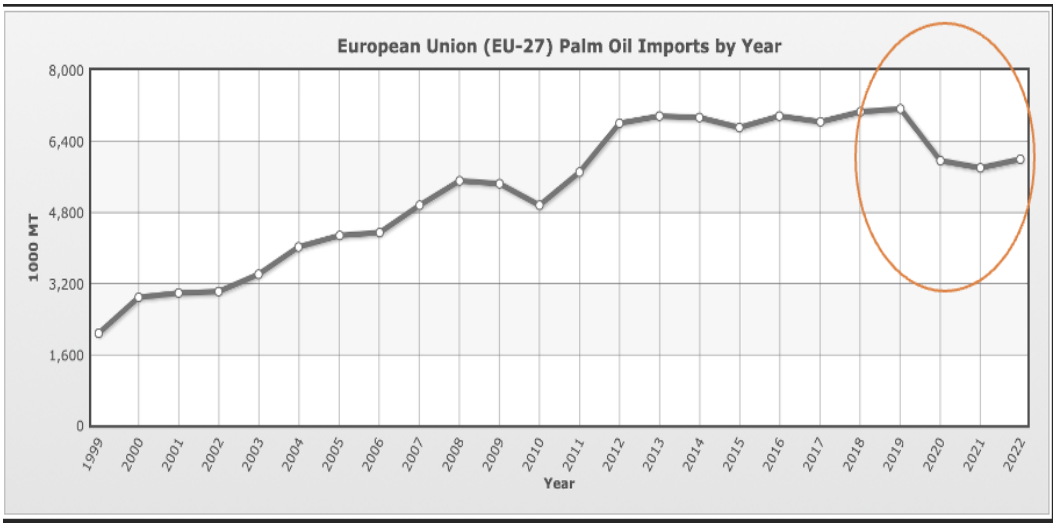
Table 6: Indonesian Palm Oil Export from 2012-2020

Export Destination	2012	2013	2014	2015	2016	2017	2018	2019	2020
	net weight in ton								
India	5264,0	5752,4	4920,4	5424,6	5424,6	7325,1	6346,2	4576,6	4568,7
China	3087,5	2623,7	2649,2	4105,2	3111,8	3601,1	4166,5	5791,1	4390,5
Pakistan	755,3	1089,2	1826,8	2325,6	2106,4	2193,8	2458,5	2215,9	2487,0
Netherlands	1458,1	1546,8	1294,1	1261,9	1048,5	1286,4	1161,1	914,9	682,8
US	57,6	463,0	491,8	732,7	955,8	1153,4	1112,8	1189,0	1123,7
Spain	274,0	620,8	907,0	998,9	1116,1	1367,9	1168,6	1078,8	1135,9
Egypt	508,0	746,4	1038,1	1156,3	999,2	1201,4	936,9	1095,1	970,9
Bangladesh	743,5	656,4	1048,6	1134,8	926,1	1231,4	1402,3	1351,5	1026,6
Italy	653,5	1024,8	1356,8	1193,6	913,9	1066,5	888,9	751,3	944,7
Singapore	952,1	844,0	789,6	782,0	718,7	610,8	424,5	580,3	360,6
Others	5921,5	6403,3	7647,3	8233,8	6745,4	7732,5	9236,1	10003,4	9634,7
Total	19675,1	21770,8	23969,7	27670,8	24066,5	28770,3	29302,4	29547,9	27326,1

Source: GAPKI 2021

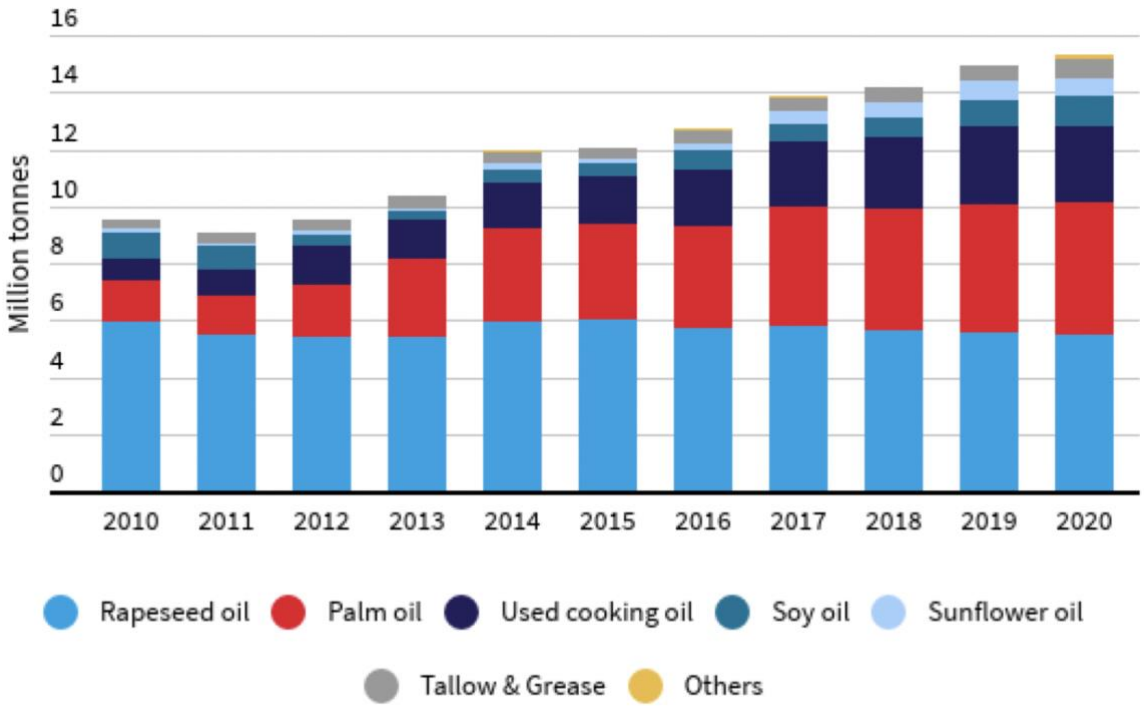
Aligned with data provided by Index Mundi (2022), GAPKI (Indonesian Palm Oil Association) observed that there was quite a decline in palm oil export to the EU in 2020 (GAPKI 2021). However, it is unclear whether the decline was due to the market shock caused by the implementation of RED II or the supply chain disruptions caused by COVID-19 (Interview 17). However, Transport and Environment (2021) reported that, the use of palm oil as biodiesel in the EU has slightly increased by 4.4% in 2020. This was primarily caused by the decisions of big countries such as Germany and Italy to increase their share of biofuels by more than one percentage point in their total fuel consumption (Transport and Environment 2021).

Figure 13: Palm Oil Imports to the EU by Year



Source: Index Mundi 2022, GAPKI 2022

Figure 14: Feedstocks in Biodiesel Production in Europe in 2020



Source: Transport and Environment (2021)

Transport and Environment found that there is no slowdown in biofuel production within the bloc. Rapeseed, palm oil, and soy oil are increasingly used in energy applications such as biofuel for transport sectors, heating, and electricity production. Even if the total amount of palm oil imported to the EU is declining, there is an indication that the imported palm oil is used as a biofuel feedstock in a bigger proportion than of the food industry (Transport and Environment 2021). In 2020, Europe imported 8.1 M.t of palm oil, and 58 % of this amount was used in biodiesel production. In line with these findings, GAPKI recorded that import figures to the EU do not indicate any significant decline (GAPKI 2021). Despite the RED II, the use of palm oil as biofuel continues to exist. This condition is most likely enabled by the energy crisis caused by the Russia-Ukraine war (Interview 7; Interview 8; Interview 9; Transport and Environment 2021). Further, some reports also show that the EU is still importing palm oil directives from China and India (Euractive 2020).

6.2.2 The Impact on the Indonesian Sustainability Governance and Domestic Biofuel Policies

RED II has also indirectly impacted the national policy landscape in Indonesia. In general, it helped accelerate the legalization process to increase the domestic biofuel consumption target as an alternative track to absorb palm oil production, inducing the idea of improving the Indonesian palm oil downstream industry, and developing a policy framework for sustainable palm oil.

1 Improving the Domestic Biofuel Market

The changes in the ministerial regulation on the target transportation biodiesel mix marked the importance of biofuel use for Indonesian domestic use. The most notable event from these changes is the issuance of MEMR Decree No. 227/2019. The regulation contains a national plan to accelerate the implementation of mixing 30 % biofuel into diesel oil in 2019. This change was triggered by the establishment of the revised RED by the EU in 2018. As the union re-evaluated what was defined by renewable energy, palm oil biofuel fell under the ILUC criteria. Realizing the potential impact of this regulation, the GoI fast forward with the implementation of the so-called B30 in 2019

Now that the state can no longer rely on its European market, it started to increase its mixing target to 30 %. This B30 scheme was primarily developed to absorb excess supply while slashing its fuel import bill and boosting the domestic market. Indonesian officials claim that Indonesia will be the first to implement such a high percentage of biofuel blending mandate.

> *"B30 will be one of the Indonesian paths to decrease its reliance on fossil fuel. Based on Law No.30/2007 on Energy, the country needs to transform its energy [resources] from fossil fuel to renewable energy, and one of our resources is palm oil. That is why the President is eager to develop further what was once known as B20 to become B30. He also hints at the development of B100." (Interview 7)*

Kanya Dewi Lakshmita, general secretary of the Indonesian palm oil association, maintains that B30 could serve as the best strategy to divert the market amidst "discrimination" from the EU (Interview 17; GAPKI 2019). Through this B30 mandate,

the state is expected to produce 7.8 million tons of palm oil biofuel. This number is more significant than the average Indonesian export to the EU, which only amounts to 4.5 million tons (ibid.). According to the palm oil smallholder's association, the B30 mandate has contributed to FFB price stabilization amidst the spread of negative sentiment in the branded market.

2 Improving Downstream Industry

Strengthening the palm oil downstream industry is part of the GoI's attempt to enhance the added value created within the region (Interview 7). Despite its status as crucial horticulture, Indonesia is still to catch up with its downstream industries and palm oil derivatives. Palm oil value-added is primarily captured by importing countries with advanced palm oil processing technologies (Interview 8). Most Indonesian palm oil products exported to global markets are feedstock for food and non-food finished products. The rapid growth of the palm oil demand created an opportunity for Indonesia to enhance its capacity. The Indonesian Ministry of Industry maintains that:

> *"The use of CPO has been increasing, around 15-20 % for energy and the rest for foods and non-foods. We have included a roadmap in the master plan of national industrial development," (Interview 7)*

In general, the state has three strategies to enhance its downstream industries, namely, 1) developing oleofood such as margarine, cooking oil, and specialty fat; 2) developing oleochemicals such as surfactant and lubricant; 3) developing Fatty Acid Methyl Esther (FAME) for biofuel purposes. In 2020, Indonesia earned a foreign exchange of USD 22.97 billion by exporting palm oil derivatives in the form of confectionary, personal wash, fatty acid, fatty alcohol, glycerin, and FAME (Kemenperin 2022). The export of Indonesian palm oil derivatives shows an upward trend. It is predicted to grow following the increasing demand for palm oil products globally. In 2008, 55 % of Indonesian palm oil export was in the form of CPO. A significant increase is evident in 2020 as the state only exports 17 % of its palm oil as CPO; the rest takes the form of processed palm oil.

3 NAP SPO for Improving the Acceptance of ISPO

National Action Plan for Sustainable Palm Oil (NAP SPO) is a policy framework to achieve sustainable development goals in the palm oil industry. The plan is outlined in the President's Instruction No.6/2019, mandating government at the national and regional levels, 14 ministries, and 26 provinces where palm oil is growing. NAP SPO is described in documents compiled by multi-stakeholders containing an action plan to be carried out by all parties in answering the root problem faced by the Indonesian palm oil sector (FOKSBI 2022). There are five components charted in the framework. First, to reinforce data, coordination, and infrastructures in palm oil plantations. Second, to increase the capacity and capability of palm oil planters. Third, to conduct environmental supervision in cultivation. Fourth, to implement good governance and conflict management, and fifth, to support the acceleration of ISPO implementation.

Developing a database for palm oil growers becomes a priority in this national action plan since data availability has long been a stumbling block in the Indonesian sustainability governance. Overlaps between concession data issued by various levels of government are a reality in Indonesia (Pacheco et al 2017; Interview 2), making it hard to step forward with legality issues. Information about administrative boundaries, land ownership, and land use is limited and scattered in several government institutions. It is not rare that the information on legal concession boundaries shows discrepancies from effective operations on the ground. As outlined in some interview excerpts:

> *"Smallholders are the most vulnerable in the Indonesian palm oil sector, especially those considered illegal by the state. Legal and illegal are not easily determined due to the lack of geospatial data. That is why we start this project by collecting primary data assisted by drone technology on the ground." (Interview 9)*

> *"It is unsurprising that it is hard for the government to answer campaigns against palm oil. We do not always have the data to support our claims. We do not even have data to prove that palm oil contributes to smallholder's livelihood better than any other commodities they had previously planted." (Interview 14)*

This data opacity has cast doubts on the state's commitment to improving the sustainability and transparency of the palm oil industry. However, there is hope that

transparency can be fostered under this NAP SPO data. At least, awareness of the importance of data availability and transparency is already built.

In 2020, the Indonesian government issued Presidential Regulation 44 on the Certification System of ISPO (Interview 9; SPOS 2022). The regulation becomes the legal basis for implementing mandatory ISPO certification for all actors involved in the nationwide palm oil production. The issuance of this regulation marked the acknowledgment of the social and environmental aspects of the palm oil industry and the Indonesian attempt to protect the crop's reputation in the international market. Even though the discussion on sustainability issues in Indonesia had already existed before RED II, this constant pressure from the international community helped induce more public-private partnerships in strengthening Indonesian sustainability governance.

An initiative called Strengthening Palm Oil Sustainability (SPOS), for example, is one of the cooperative programs supported by the UK government to further revamp the ISPO (SPOS 2022; Interview 9). Together with relevant ministries/agencies, this program aims to solve the issue of land ownership legalities, plantation permits, and registrations that hinders traceability and deforestation prevention attempts (SPOS 2022; Interview 1; Interview 21; Interview 14). The program administrators are actively communicating with the Indonesian government. They are directly involved in hearings for policy impact assessment conducted by the Ministry of Environment and Forestry, the Ministry of Agriculture, and the Ministry of Economics (Interview 14).

Regarding sustainability governance, Indonesia is confident with its standard ISPO. The development of this national standard was prompted by the government's skepticism toward the private governance mechanism, RSPO (Choiruzzad, Tyson, Varkkey 2020). In this context, the ISPO is "an expression of government sovereignty" (Astari and Lovett 2019) to resist intervention from the North (Hospes 2014; Schouten and Bitzer 2015; Higgins and Richards 2019). Through this mechanism, Indonesia aims to implement mandatory certification in the entire palm oil production chain within the state. This state-driven mechanism is supplemented with the existing Indonesian legislation to ensure that all actors conform to a higher agricultural standard.

Presidential Decree No. 44/2020 ISPO has already gained its legal basis to be implemented as a mandatory mechanism. As opposed to other certification systems, which are voluntary, the ISPO could be groundbreaking in palm oil sustainability governance. However, global skepticism about implementing this standard still hampers international recognition. Indonesian officials admit that obtaining the recognition of this standard from the EU is a work in progress. It might take years until the plan is materialized.

> *"We need to improve the acceptance of this standard through bilateral and G2G discussion. Getting recognition from the European market is still a long way to go. Because learning from our experience in the FLEGT, they will always be skeptical of locally developed certification systems." (Interview 9)*

To improve ISPO's acceptance in the EU market, Indonesia is trying to copy its experience with FLEGT VPA (Forest, Law Enforcement, Governance, and Trade Voluntary Partnership Agreement); an agreement to implement an EU-developed plan for fighting against illegal logging in tropical countries. In assuring its commitment to this mechanism, Indonesia developed its legal verification system for timber called SVLK (Sistem Verifikasi Legalitas Kayu / Timber Legality Assurance System). Based on this experience, the state believes that ISPO can be recognized as another sustainability standard supported by Indonesian law (Interview 9; Interview 15).

The RED II establishment also strengthens dialogues between all palm oil-producing countries involved in the Council of Palm Oil Producing Countries (CPOPC) (Interview 14; CPOPC 2022). Indonesia and Malaysia initiated the platform in 2015 to empower each other's position in the international market. Since its establishment, the agency claims that it has continuously tried to improve the quality and quantity of palm oil while paying specific attention to the environment, worker welfare, and standardization of processes (Moenardy et al., 2021).

6.3 The Litigation in the WTO and Its Relation to the Current Negotiation of the Indonesia-EU Comprehensive Economic Partnership Agreement (I-EU CEPA)

6.3.1 The WTO Litigation (DS593) and Its Current Progress

The Indonesian government sought to restore the reputation of palm oil through a WTO proceeding called DS593. Indonesia and Malaysia, in separate cases, protested and lodged their complaints while persuading other palm oil-producing countries to follow suit. The main argument in this proceeding is that the EU has discriminated and unfairly treated palm oil. The argument goes around the inconsistencies of this measure with the provisions included in the WTO regulations (GAPKI 2020). The state aims to challenge RED II at the dispute settlement body and requested the first consultation with the EU in December 2019. Indonesian Trade Minister Agus Suparmanto maintains that this measure is taken following several scientific reassessments and consultations with actors involved in palm oil production in the state, including associations, businesses, and policymakers (Reuters 2019).

Indonesia claimed that the RED II is inconsistent with several articles under the Technical Barriers to Trade (TBT) Agreement, as well as several articles under GATT 1994 (Articles I, II, and XX), and the Agreement on Subsidies and Countervailing Measures. There are already resolved anti-dumping cases filed at the WTO regarding biofuels — the EU- Argentina case and the EU- Indonesia case. Argentina and Indonesia prevailed in these tariff cases filed by the EU (Tyson and Meganingtyas 2022; Interview 9; Interview 14). Meanwhile, the current case of the Indonesia-EU biodiesel dispute has only reached the consultation stage.

Several academics do some legal analyses regarding the potential outcome of this dispute settlement. The GATT articles I and III concerning non-discrimination disciplines and the EU's strategy to justify its measure through Article XX of the GATT are relevant to this issue. Articles I and III stipulate equal treatment and competitive opportunities for like products to avoid discrimination. Article XX of the GATT provides general exceptions. The contracting parties could justify their trade restrictions that are

aimed to “protect human, animal, plant life, or health” (GATT XX) or to conserve “exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption” (GATT 1986, 37–38).

These legal studies show that “the freeze and phase out” measures outlined in the ILUC delegated act are less likely to be justified under the GATT Article XX. This argument is based on the fact that palm oil is the sole commodity that falls under the high-ILUC risk criteria (Tyson and Meganingtyas 2022; Mayr Holaus and Madner 2020; Pradana 2019; Limenta 2020). However, this lawsuit is still years from reaching the final assessment.

While the Indonesian Permanent Representative in Geneva oversees the WTO dispute settlement, the embassy in Brussels becomes the forefront of the Indonesian palm oil negotiation in the capital of Europe (Interview 7; Interview 8). Soon after the directive's adoption, the Indonesian government had no opportunity to advance its view on the decided act. Hence, the Indonesian Embassy in Brussels initiated a consolidation act involving all the Indonesian embassies in the EU informing all relevant government agencies in the EU them about the objection levelled by the government of Indonesia on the launch of the directive (Noor 2020).

In April 2019, Coordinating Minister of Economic Affairs, Darmin Nasution, also visited Brussels to have a discussion with EU Parliament committee members on Environment (Interview 7; Interview 8; Tempo, 2019). Indonesia, again in March 2019, raised its concern regarding the “discrimination” against palm oil in a seminar called “ASEAN — EU Relations: Advancing a Partnership for Innovation and Sustainability” organized by an EU think tank based in Brussels (Kemlu 2019).

Then, in 2021, the EU's Vice President, Frans Timmermans, met the Indonesian President, Joko Widodo, to discuss the future of palm oil exports. Despite the EU’s multiple attempts to reaffirm the importance of palm oil as a poverty reduction path for Indonesia, the Vice President does not indicate any leniency toward the palm oil issue (Interview 8; Biofuel International 2021). The Indonesian government is still eager to influence RED II through the IEU-CEPA. Indonesian officials have threatened to review

the trade agreement to ensure the proper position of palm oil in the planned agreement (Reuters 2021).

6.3.2 The DS593 and How It Influences the Ongoing Indonesia-EU CEPA

Indonesia is among the ten members of the ASEAN with the largest economy in the region in terms of GDP (35 %). As one of the fastest-growing economies in Southeast Asia, with an average GDP growth of approximately 6 % in the past ten years, Indonesia positions itself as Europe's 5th largest trading partner in ASEAN (European Commission 2022). The value of bilateral trade in goods amounted to € 20.6 billion in 2020 (European Commission 2021). For Indonesia, the EU remains a top export destination for its primary commodities, such as vegetable oil products (including palm oil), electronic machinery, footwear, rubber, and chemical products (EIAS 2022). The Netherlands is the leading destination for Indonesian exports, followed by Germany, Spain, Italy, and Belgium. Meanwhile, Indonesia relies on Germany's imports of mechanical machinery and vehicles. It is followed by other high-tech producers such as Italy, France, the Netherlands, and Belgium (ibid.).

After years of exploratory discussions, former Indonesian President Susilo Yudhoyono and former European Commission President Jose Manuel Barosso agreed to examine how to deepen the EU's and Indonesia's commercial relations in 2009 (Interview 7; Interview 8; Vision Studies EU-Indonesia 2011). The planned CEPA negotiation was officially launched on 18 July 2016. The negotiations have completed eleven rounds by November 2021, with COVID-19 hampering some sessions since early 2020. With a total trade value of USD 25.5 billion in 2020, it is expected that both parties can gain access to more comprehensive economic benefits. To Indonesia, this FTA (Free Trade Agreement) is critical to attracting more foreign direct investments from the EU and ensuring its commodities remain competitive in the EU market.

Following RED II, Indonesia-EU's bilateral relations entered a new phase. In response to the "discriminatory" measure outlined in the directive, Indonesian officials threatened to review the Indonesian-EU CEPA to ensure the proper position of palm oil

in the European market. In the interest of protecting its palm oil sector, Indonesian officials set new strategies to set the suitable position of the commodity in the agreement. However, the EU maintains that the palm oil issue should not be a stumbling block in the trade negotiation. As EU foreign affairs chief, Josep Borell, confirms:

> *"Palm oil is one issue that cannot jeopardize a broad approach to stronger cooperation (with Indonesia), covering many different fields. We have to look for a solution." (Tempo 2022)*

The negotiation on TSD (Trade and Sustainable Development) outlined in the draft of CEPA might be the most critical issue for Indonesian palm oil. A report published by Fern (2021) shows that Indonesia and the EU do not share the same understanding of sustainability issue in general. The EU is primarily eager to keep the TSD chapter focusing on the environmental and social aspects. On the other hand, Indonesia would also include the economic side of the palm oil industry (Interview 6; Interview 7; Interview 8). According to the report, Indonesia requests trade incentives or rewards for efforts for improved sustainability (ibid.). When asked about their comments on the Fern report, an Indonesian official gives a hint regarding in which direction the state wants this negotiation to go:

> *"Such measure should be seen as necessary. If we refer to the Sustainable Development Goals. In that case, it will be apparent that sustainability should focus on the environmental impact and the people's livelihood. If we talk about palm oil, we talk about the livelihood of small farmers in Riau, West Sumatra, and Kalimantan. Limiting export would also mean limiting their right to develop. So, it is vital to put some economic dimensions on the negotiation's trade and sustainable development part." (Interview 9)*

The report on CEPA published in December 2019 indicates the Indonesian effort to negotiate palm oil in separate documents. As noted by the official report:

> *"Discussions resulted in an overall positive outcome, with more constructive engagement on some long-standing differences in drafting and progress made in consolidating several articles such as context and objectives, right to regulate, labor/social agreements, multilateral environmental agreements, and transparency. Nonetheless, important conceptual differences remain, such as Indonesia's request that the*

> *parties should compensate each other in case the expected economic benefits coming from sustainability efforts would not materialize. Indonesia informed it was planning to table additional proposals on vegetable oils, but otherwise, no substantive discussions were held on this subject." (CEPA 2021)*

Following the December meeting, the report shows that the trading partners met by video conference to continue negotiations and concluded the 10th round of the negotiation. Limited progress has been made in trade and sustainable development. The report maintains: "*that both sides are still apart on the overall conceptual approach for the chapter and its relation to the other parts of the agreement*." The EU also highlighted that both parties are actively working on the text consolidation to further make progress on trade and climate and the commitment to the Paris Agreement. The latest round was conducted between 8-12 November 2021 via video conference with very few hints on developing the consolidated text about the TSD. Further development of the planned palm oil proposal remains unknown.

While the negotiations continue despite the WTO litigation on RED II, pressures keep coming from CSOs. Both national and international NGOs are concerned about the upcoming agreement's human rights and social and environmental impact. A series of campaigns have been launched since the first round of negotiation. For example, the Indonesian Forum for the Environment (WALHI), put pressures on the Government of Indonesia and the EU for not making trade-off on the palm oil issues outlined in the CEPA (Walhi 2017). The Civil Society Coalition for Economic Justice published a statement of action stating that the interests of the palm oil industry should not be the basis of a plan review for an economic partnership between the EU and Indonesia (Walhi 2017; Interview 16). Further, in 2021 a coalition of Indonesian CSOs is calling for a moratorium on CEPA negotiations to give the public a chance to engage in these negotiations and make the deal work for people and the planet (Walhi 2021; Fern 2021; Interview 15; Interview 16). These concerns are bound to be raised as the Indonesian government has not conducted any impact assessment, and all negotiating texts remain confidential and closed to the public (Fern 2021).

When talking about the possibility of achieving an agreement with the EU in the CEPA negotiation, Indonesian officials often refer to its success in ratifying the European Free Trade Agreement (EFTA) in 2018 and the Swiss Referendum on Palm Oil result. Under the EFTA, Indonesia and Iceland, Lichtenstein, Norway, and Switzerland agreed on easing palm oil access to the countries. In addition, Switzerland agreed to reduce import tariffs on palm oil if the exporters successfully meet sustainability standards. Due to palm oil's bad reputation in European countries, the Swiss's contra-globalization group and some non-governmental organizations (NGOs) declined the idea of allowing palm oil to enter the Swiss market. Hence, under the Swiss direct democracy, a referendum was called to determine if palm oil should be allowed to benefit from the FTA. In March 2021, with a slight majority of 51.6 %, Swiss voters agreed on allowing palm oil to be part of the FTA (Kausch 2021).

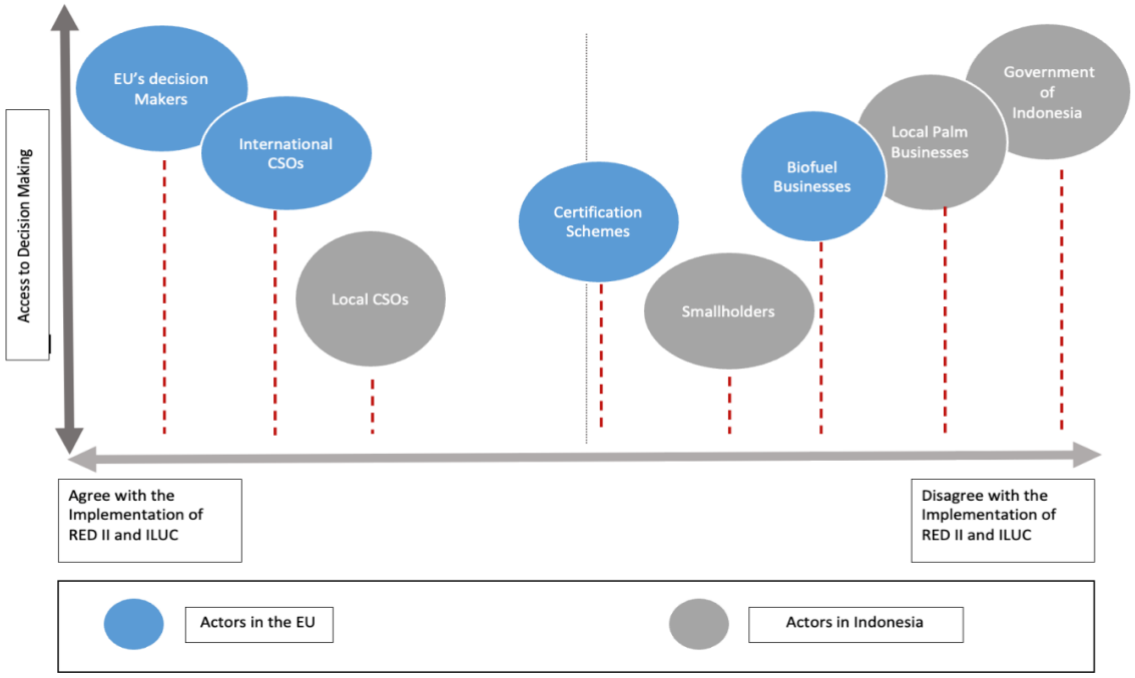
To Indonesia, the referendum's result is considered a rosy outlook for the future of the commodity in the European market. Indonesian stakeholders expected that the EU would learn from the Swiss referendum and will eventually show some leniency on the regulations. As uttered by an Indonesian business representative:

> *"If we talk about the Swiss referendum, […] it can be a strike back to the EU-CEPA. They will look at the citizen of Switzerland and think that palm oil is not that bad after all. Even though our export to Switzerland is not that significant, the country is powerful [so they may influence the EU's perception]." (Interview 17)*

On the EFTA, Switzerland also agreed to reduce the import duties and increase the quota on palm oil import from Indonesia (SPOS, 2022). The agreement on the palm oil trade must respect the provision of the articles in the EFTA on sustainable vegetable oil management (Interview 14). Indonesian officials also highlighted that the EFTA could be an exemplary trade agreement on the sustainability issue. As a follow-up to the EFTA ratification, Indonesia and Switzerland are also engaged in bilateral negotiations regarding the palm oil sustainability requirements (Interview 6). Indonesia considered these steps as a pragmatic solution to the palm oil issues.

6.4 Mapping the Interests of Actors in the Network

Figure 15: Interest Map in Palm Oil Production Network



Source: Author's creation based on the analysis

Figure 15 above is a visualization of how the interests of significant actors involved in the network interact with each other regarding RED II. The horizontal axis denotes the actor's level of agreement toward the implementation of the directive and its delegated act. The vertical axis signifies the level of access that each actor has in influencing the decision-making process. The analysis shows that the interest of the Government of Indonesia is highly associated with the interest of palm oil businesses. Based on the interviews, there is little to no indication that smallholders are within the state's priority. The only statement that might refer to smallholders is regarding employment opportunities and less about income security and sustainability measures. The EU's interest has a slightly more straightforward path for the inclusion of smallholders. The RED II explicitly mentions that it still welcomes palm oil import sourced from smallholders with land ownership of less than 2 ha. Despite the indication that the EU aims to protect its vegetable oil producers, the fact-based environmental arguments backing up the EU's regulation dominate the public narratives.

The section below will further discuss the interests of the respective actors in the palm oil network. The section will be divided into two subsections which are organized based on the geographical position of each actor.

6.4.1 Actors in Indonesia

The Government of Indonesia

As outlined in sections 6.2 and 6.3, vigorous attempts to promote biofuels have been made by the GoI (Pichler 2010). Poverty alleviation, sustainable economic activities, the path to renewable energy development (ibid.), tax revenue, employment, and income (Tyson, Varkkey, Choiruzzad 2018) are among the most cited rationale behind the surge of palm oil production in Indonesia. Under Joko Widodo's administration, palm oil and other extractive commodities are considered prima donna that can bring revenues to the state (Yasinta and Karuniasa 2021).

In this context, it is important to note that the palm oil sector is highly politicized in Indonesia. The current administration aggressively defends Indonesian agribusiness and "accuses palm oil critics and environmentalists of double standards" (Tyson Varkkey and Choiruzzad 2018). Statements about the economic contribution of palm oil conveyed by the Indonesian ministries often rest on the notion that palm oil serves the best interests of all Indonesians (ibid.). However, it contradicts the fact that one person is known for their powerful defense against palm oil environmental campaigns. Luhut Binsar Panjaitan, the Indonesian Coordinating Minister of Maritime Affairs, is known as a militant defendant in the palm oil sector. His relation to the palm oil sector is highly linked to his position as the Chairman of PT. Toba Sejahtera (a company interested in energy and palm oil plantations) (ibid.). This has further strengthened the arguments that the current administration is highly linked to the interest of the palm oil business (Interview 9; Interview 14; Pichler 2010; Tempo 2022). Further, corruptions and the centralized nature of the palm oil sector in Indonesia are very well documented. Only a few companies control the whole industry making it a breeding ground for an oligopolistic market (Pichler 2010; Tyson Varkkey and Choiruzzad 2018; Tempo 2022).

This political constellation has resulted in politicized public communication regarding palm oil issues. The government of Indonesia (GOI) publicly sends messages saying that sustainability concerns advanced by an external entity such as the EU are a threat to the state's sovereignty (Interview 2; Interview 21). Hence, many Indonesians perceive that Europe likes to extend its value to developing nations and to "*preach about how to behave and act per the universal values of human rights, democracy, and environmental protection"* (Interview 21), which contradicts the history of their "colonial cruelty" (Interview 9). This fact has led to a strong response from Indonesia about the issuance of the RED II (The Jakarta Post 2021).

Indonesia and the EU are both concerned about sustainability but have different perspectives and parameters on how environmental standards should be upheld (Tyson and Meganingtyan, 2022). Since economic growth, investment, and employment are high on President Joko Widodo's agenda, any criticism toward palm oil has compelled the administration to rise and defend the strategically important national crop (ibid.). There are at least four counter-narratives advanced by the Indonesian government used as arguments against the palm oil campaign spread in the EU (Interview 13). First, Indonesia considers RED II as a trade barrier to safeguard European vegetable oils such as sunflower and rapeseed (Ilaiha 2020; Arief 2020; Limenta 2020; Interview 4; Interview 6; Interview 9). Second, the dominating environmental discourse advanced by the EU is considered unequal treatment of SDGs (Sustainable Development Goals). Indonesia claims that the EU ignored the importance of palm oil as a path to eradicating poverty (Noor 2020; Interview 6). Third, methodologies used to develop ILUC criteria push rapeseed oil further in the regional market. Fourth, any attempt by the EU to govern palm oil sustainability can be regarded as a threat to Indonesian sovereignty (Dermawan 2017; Interview 13).

The administration always maintains that it will do whatever it takes to push the state's economic growth further (ibid.) It is evident in the statement posted by the Indonesian Minister of Environment and Forestry, Siti Nurbaya Bakar, that: "*The massive development of President Jokowi's era must not stop in the name of carbon emissions or the name of deforestation*." This statement has received backlash from environmental CSOs,

who interpreted the post as a sign that Indonesia will continue clearing its forest in the name of "development" (Mongabay 2021). Despite the Indonesian claim that there is no trade-off between the economy and the environment in the state's development program, the evidence suggests otherwise. According to Greenpeace International, the Indonesian palm oil business keeps expanding to undisturbed land, causing an illegal burning of a tract of forest as large as the city of Seoul in November 2020 (Suoneto 2021).

Smallholders Association

Smallholders are often instrumentalized by the government in defending their palm oil sector. Smallholders are often depicted as the most economically vulnerable production group that will be hard hit by the campaign against palm oil use. In facing the RED II, for example, Indonesian officials often claim that the EU's policy tends to ignore the livelihood of the sixteen million smallholders in the palm oil industry. However, as was proven in the previous sections, the economic impact caused by the establishment of the RED II on the smallholders is relatively minor. SPKS, APKASINDO, and POPSI, the three significant Indonesian palm oil associations, confirmed that:

> *"So far, there is no major impact of the policy perceived by the smallholders, especially regarding FFB prices. The price is improving these days since the CPO has reached the price of IDR 16.800, almost IDR 17000. In this setting, smallholders have already profited with the price of IDR 3500-3600 per kg." (Interview 11)*

Since the price of FFB is the only indicator directly linked to the smallholders, it becomes an impact indicator for this producing group. As all FFB they harvested can be sold to the milling, and there is no significant incline on the price, smallholders will consider that their livelihood is guaranteed (Interview 10; Interview 11; Interview 12). Indeed, since June 2022, smallholders have observed a sharp decline in palm oil prices. However, this situation is inflicted by the palm export ban and the domestic market obligation instructed by the GoI to ensure supply in the national market (see Jakarta Post 2022). Since 2021, the fluctuations in palm oil prices have been primarily influenced by the COVID-19 supply chain shock and the Russian-Ukrainian war rather than by any environmental policies implemented by importing countries (ibid.).

As for the sustainability issues, the smallholder associations are more concerned with the availability of smallholder data and legality issues to improve their access to certification mechanisms. The associations currently prioritize data collection that should identify smallholders through the so-called "by name, address, and spatial". This data is expected to help smallholders gain legal status on their ownership as stipulated in any certification systems. Until this third decade of palm oil plantation development in Indonesia, legality is still a prerequisite that remains to be met (Pacheco et al. 2017; Interview 10; Interview 12).

Strengthening their collective actions and organizations is another priority set by smallholder associations. Access to information on the official FFB prices and training on good agricultural practices, for example, cannot be adequate if some independent smallholders remain unorganized. Being part of a cooperative might also enhance smallholders' bargaining positions vis-a-vis mills and companies. As Apkasindo stated:

> *"We still have to push forward with the institutionalization of our independent smallholders. It will boost their bargaining positions before companies and ensure the adequate income they receive from selling their fruit bunches. It will also open their access to high-quality seeds, training on good agricultural practices, and plantation management. Hence, their yields and knowledge of sustainable palm oil will be improved." (Interview 10)*

Indonesian Palm Oil Business Associations / GAPKI (Gabungan Pengusaha Kelapa Sawit Indonesia) and Corporations

For local palm oil businesses, the RED II is not more than discrimination set up by the EU to protect locally produced vegetable oils (Interview 11; Interview 17). In September 2020, GAPKI published its official feedback on the European Commission's public consultation website. GAPKI maintains that the RED II revision should operate on the non-discriminatory principle. A non-discriminatory measure, in GAPKI's perception, is the ILUC definition singling out palm oil as the only commodity affected by the policy (ibid.). GAPKI demand equal treatment for all vegetable oils and a fair assessment of the "like" products such as soy, rapeseed, and sunflowers. GAPKI also supported the recognition of ISPO as an official sustainability verification for Indonesian palm oil. As outlined in the official feedback:

> *"All existing and recognized standards for palm oil (including Indonesia's government standard, ISPO) should be included and recognized without prejudice by the EU."*

GAPKI maintains that if the EU persists with its RED II and ILUC delegated acts, it will exacerbate the existing exclusion of the palm oil industry. Citing the official feedback, GAPKI considered the RED II a part of "*efforts that seek to regulate or impose Western 'sustainability' criteria onto developing world farmers*," which will disproportionately impact smallholder farmers. GAPKI also emphasizes the Indonesian commitment to improving its ecological management to support its arguments. The moratorium on land permit issuance, ISPO regulations, and the conservation of orangutans are among the measures that are considered an improvement by GAPKI.

In line with GAPKI, large businesses such as Musim Mas view the EU's decision with much regret. Musim Mas maintains the RED II appears contrary to the EU's food security agenda and failed to create a level playing field for countries in the Global South to participate in world's economy. As Musim Mas corporation communication officer stated it:

> *"The phasing out of Palm Oil from the blend list necessarily means that more other soft oil crops are required to meet the same Biofuel demand. This would, in consequence, serve to exacerbate the very issues of environmental impact and food security concerns." (Interview 17)*

As expected, corporates such as Musim Mas, Wilmar, and Sinar Mas were among the businesses that managed to capture the opportunity created by the original RED. With the former directive, these corporates could expand their business portfolio to the biofuel sector.

Local CSOs

The CSO's movement in palm oil campaigns and lobbying is driven by the interest to bring the environmental and social aspect of the palm oil industry under the spotlight to enable more political attention on the sector (Pichler 2010). Unlike in Europe, where environmental and social CSOs can collaborate under the European

Environmental Bureau (EEB), the movement of Indonesian CSOs is somewhat sporadic (Interview 4; Interview 15; Interview 16). At least there are two streams of CSO's role in biofuel in the campaigning landscape. Of course, classifying CSOs into these two streams is oversimplifying reality. However, this segmentation is essential to observe the complex dynamics in the Indonesian palm oil sector. Some local CSOs try to influence policymaking from the inside and work closely with the government. Some others have decided to stay out of the political arena (Interview 4; Interview 16). These two streams show the difference in their approaches and interests.

KEHATI, for example, is one of the CSOs closely collaborating with the GoI. Their stances toward the RED II are more inclined toward the government, even though not entirely. Assisting the GoI with its program SPOS, KEHATI maintains that:

> *"The government needs **to intensify soft diplomacy** in dealing with discriminatory trade practices against palm oil through constructive dialogues. For this reason, the government needs to equip itself with data, information, and scientific arguments that can be proven scientifically and based on field data (evidence base)." (Interview 4)*

Hence, the approach put forward by KEHATI is to collect as much primary data as possible. The goal is to gain information beyond the statistical data provided by the Ministry of Environment and to equip the government with a scientifically proven set of data to answer any pressures related to sustainability. KEHATI believes that the complex issues faced by Indonesia for these three decades could be eased by strengthening the database that includes factual spatial information about palm oil plantations.

On the other hand, local NGOs such as Walhi and Kaoem Telapak decided to stay independent. They are more concerned with the environmental and social impact of the development of the RED II. Walhi maintains that the GoI's arguments on the discrimination against palm oil are disputable. As stated by Walhi's Climate Justice Campaign Leader:

> *"The decision to no longer use palm oil for biofuels is the right decision. First, it is not an alternative to fossil energy because carbon emissions are three times larger. Secondly, the economy is not much profitable; no added value rotates in the country because of the export of palm oil in the form of CPO and then processed in the Netherlands and other European countries into biofuels." (Interview 15)*

Human rights and prevalent land disputes in palm oil expansions are other targets of CSO's campaigns. Kaoem Telapak emphasizes that the RED II should be used as an opportunity to devise more careful and detailed criteria for palm oil instead of seeing it as a threat. The EU's proposal to address products linked to deforestation should be seen as a consumer's contribution to improving ISPO's performance.

6.4.2 Actors in the EU

EU Policy Makers

In response to protests from palm oil-producing countries, specifically Indonesia and Malaysia, the EU laid off its defenses, stating that no discrimination is intended. The European Commission maintains that there is no particular vegetable oil targeted in the regulation, and that all feedstock is treated equally (Interview 2; Interview 4; Interview 24). Further, palm oil certified with low ILUC risk can continue to benefit from incentives. In its defense, the EU also notes the importance of smallholders in the Indonesian and Malaysian palm oil industry. Smallholders are given specific regulations in the delegated act to ensure that their access to the market, tenure, and independence over land are secured. However, the delegated act sets the threshold of smallholders to two hectares which received backlash from the palm oil smallholder association SPKS. The association maintains that the implementation of this definition will exclude more smallholders from access to the global market (Interview 10).

The most recent development of this RED II debate is that the EU will reassess the data and methodology for determining high-ILUC risk crops (EU 2022). The reassessment begins in 2021 and will be revised in 2023. The EU states that the reassessment will consider any efforts undertaken by Indonesia to improve its palm oil sustainability, such as ISPO, the moratorium on palm oil permits, the one map

policy, and the National Action Plan on Sustainable Palm Oil. Further, the EU intends to consult experts from producing countries when setting, reviewing, and reporting on ILUC certification criteria (EU 2022). The EU confirms that among the main points that will be considered in the reassessment is the following:

> *"Article 29 (Sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids, and biomass fuels) is amended to extend the existing land criteria for agricultural biomass (e.g., no-go areas) to forest biomass (including primary, highly diverse forests and peatlands). The aim is to prohibit biomass sourcing from primary forests for energy production. No forest biomass for electricity-only installations will be eligible for RES support from 2026, with a ban on national financial incentives for using saw or veneer logs, stumps, and roots for energy generation". (Renewable Energy Directive Article 29, 2019)*

When the Russia-Ukraine war strikes in early 2022 and causes uncertainty in the energy supply, the EU plans to accelerate its transition to greener energy to reduce its reliance on fossil fuels. The reassessment of the directive aims to further increase its renewable energy target from the current 40 % (decided in the RED II reassessment) to 45 %. The revision also introduces new measures to help the bloc achieve its climate neutrality by 2050. The European Commission has now passed the proposal to the European Council and the Parliament for the check and balance process. The other two institutions will consider the proposed revision and other concepts under the European Green Deal.

Biofuel Businesses

The European Palm Oil Association (EPOA), published its official statement on establishing the RED II in 2019. The association calls for recognition of the efforts made by businesses to ensure the sustainable resourcing of palm oil. It highlights that the association is highly committed to sustainable palm oil development. Based on the ESPO monitoring, the association maintains that 74 % of palm oil used in food and feed in Europe is certified sustainable, while 84 % of palm oil imported into Europe is sourced under No Deforestation, No Peat, No Exploitation (NDPE) policies (Interview 4; EPOA 2022). The association raised its concern about the disruption of the vegetable oil market should the sustainable palm oil supply be ceased in the bloc.

Aligning with several points advanced by the GoI, the EPOA also emphasizes the livelihood of smallholders impacted by the palm oil "ban."

The European Biofuel Board, an association of European biofuel producers, states that the classification of high and low-ILUC risk biofuels should lead to rewarding good practices and agricultural improvements and stimulate demand for sustainable raw materials. In their official position, the board is primarily concerned with the methodology by which high and low-ILUC criteria are determined. However, there is no indication that the association is concerned with the supply of palm oil entering the bloc. Unlike the EPOA, the EBB maintains that the association:

> *"Welcomes the European Commission's recognition that sustainable crop-based biofuels, including those classified as low ILUC risk, have a pivotal role in decarbonizing the transport sector. Therefore, provided that potential ILUC concerns are addressed, crop-based biofuels should remain a crucial instrument to comply with the goals of the Paris Agreement, decarbonize the transport sector, and be potentially expanded in the future." (EBB; 2022)*

International CSOs

The green lobby from civil society organizations helps amalgamate European environmental policies. Brussels alone hosts 180 environmental organizations under the EEB (Biliouri 1999; EEB 2022). These environmental lobby groups' active involvement in the EU's policymaking dates back to the 1980s. At that time, the EU began to value information and expertise provided by CSOs to support their legal action and positions (Biliouri 1999). Therefore, the development of the RED II cannot be isolated from this lobby. A European fat and oil business representative, who is also involved in the RED II legislation process, states that:

> *"To understand the RED II, it is also important to understand better how strong NGOs in Europe are. I know the best from the Netherlands because I live here, and we see the group like the friends of the earth [……] and WWF they are pushing on politicians and the fossil fuel debate. We have two kinds of NGOs we have the environmental ones and the social ones. and especially the environmental ones are very fundamental. They also cooperate with Transport and Environment in Brussels [……] They order research [from T&E] which supports their point of view." (Interview 4)*

International NGOs, in this regard, are pushing for zero deforestation. What matters for most environmental NGOs is that palm oil-producing countries can stop expanding their plantation to primary forests and peatlands. These NGOs, aligned with several local NGOs, are supporting the state in increasing productivity to maintain palm oil as its export commodity. A representative of Greenpeace maintains that:

> *"We recognize palm oil as an important commodity for Indonesia and export, and income is important for some local communities, local farmers, and so forth. We are not anti-palm oil; we believe there can be growth in palm oil production and continued growth, but not through expansion and deforestation. It can be the expansion of degraded area potentially or growth and productivity. So, for example, 40 % of Indonesia is by smallholders, and smallholders' production is generally 50 % and half of the company's production. The fastest way you can increase production is simply by helping small farmers to increase their productivity so they can produce more oil from land, which is currently not as productive as it could be. Indonesia can keep growing its production just simply by increasing productivity. So that we believe where Indonesia should go to keep expanding palm oil production and that would be fine." (Interview 2)*

In the global arena, biofuel's contribution to reducing GHG is already a contested notion. Many environmental organizations pointed out that the use of land-based biofuel may only have limited ability to tackle climate change and potentially generate more emission. In the context of palm oil use, Greenpeace states that:

> *"There is nothing wrong with [palm oil use] in the food product, but a lot of palm oil is being used for or burned for fuel. [It] has no good use to it at all. It makes no climate sense, particularly when it comes to expansion and deforestation. No sense at all to grow palm oil and burn it for energy when there are many other ways you can produce energy." (Interview 2)*

Certification Schemes

In response to the establishment of the RED II, ISCC published its position and analysis on the potential impact of excluding palm oil from the biofuel market. The chairman of the ISCC board maintains that if RED II intends to stop deforestation, the step might be far-fetched. The import of palm oil as biofuel does not amount to more than 4 %, and no uncertified palm oil is entering the European bioenergy (ISCC 2019). Phasing out palm oil will open opportunities for other uncertified vegetable oil to make

up for the market niche. Further, ISCC also highlighted that producers might perceive the banning as a signal of the EU's dishonoring of more sustainable production.

However, this position has little to do with implementing the directive. The adoption of the RED II has been visible in the current development of how several EU member states transpose the directive into their national regulation. As can be seen in Table 8, eight member states have totally or partially agree to an early implementation of the RED II, even before 2030. While Austria, Germany, and the Netherlands have opted to ban palm oil with high ILUC risk, other member states such as Belgium, Denmark, France, Italy, and Portugal opted for a total ban on palm and soy biofuel feedstock (MPOB 2022).

Table 8: List of EU-27 Countries with early adoption of the RED II

Member States	PO Phased out	Measure
Austria	Yes	Ban of high ILUC biofuels from 2022
Belgium	Yes (Drafted)	Ban of palm and soy from 2022
Denmark	Yes (Ordered by Parliament)	Ban of palm and soy from 2022
France	Yes	Ban of palm since 2020, cap of soy since 2021
Germany	Yes (Drafted)	Phase out of high ILUC biofuels from 2022, effective ban from 2026
Italy	Yes (Drafted)	Ban of palm and soy from 2023
Netherlands	Yes (Drafted)	Ban of high ILUC biofuels from 2022
Portugal	Yes (Ordered by Parliament)	Ban of palm from 2022

Source: MPOB 2022

6.5 Current Development and the Risk of a Green Trade War?

The trade war entangled in green politics is among the narratives circulating in the media following the EU's measure on palm oil biofuel (Choiruzzad 2014; Interview 14). The Oxford Dictionary of Economics defines a trade war as: "*a situation when countries try to damage each other's trade. The tools of a trade war include tariffs, quota restrictions, or outright bans on imports from the other country; subsidies or subsidized credit for exports to the other country; or exports to third countries where the opponent is a rival. During a trade war, such methods may be intensified in a series of tit-for-tat reprisals for measures taken by the opponent*" (Oxford Dictionary 2022).

Meanwhile, the increasing number of cross-border conflicts implicating trade and environmental concerns contributes to the emergence of the term "*green trade war.*"

Mark Wu and James Salzman (2014) are the first legal scholars who brought the term to an academic journal to describe the significance of environmental issues in WTO disputes. A specific definition of the term can be seen in a Paris Globalist article that regards the "green trade war" as a "*wave of disputes and retaliatory measures relating to renewable energy technologies*" (Cannon 2016). Muhammed Magassy, a CSPO advisory board member, first used the term to explain the possible outcome of the palm oil issue. In his article "Green Trade War on Palm Oil," Megassy argues that the EU's measure in limiting palm oil can be considered as "protectionism," which further pushes the Global South away from "western consumers."

Referring to Oxford Dictionary's definition, it is essential to consider two indicators before categorizing the Indonesia-EU WTO dispute as a trade war. First, a trade war entails using tools to impose trade barriers such as tariffs, quotas, or outright import bans. Second, the war may include a series of retaliation for measures taken by the opponent. Indeed, after the RED II adoption in 2018, the GoI sought to retaliate by raising import tariffs on EU dairy products. The government also issued a series of threats, including boycotting EU goods, spurning European aircraft manufacturers from future jet deals, and pulling out of the Paris Climate Agreement (Pandey 2019). However, none of the mentioned threats have been brought to action. A research analyst at an Australia-based strategic research institute maintains in an interview with DW (Deutsche Welle) that: *"Escalating tariffs in a larger 'trade war' will hurt the Indonesian economy more than that of the EU members in the long run. So, it is unlikely that the Indonesian government would engage in tit-for-tat tariffs if there is a significant risk of an escalating trade dispute."* Considering that a trade war will only hurt its economy, it is understandable that the trade war is not materialized. So far, Indonesia has only threatened to implement tariffs on smaller imports, which would not significantly impact the EU (Sjeerm 2020).

The EU has requested the establishment of a panel at the WTO to challenge the export restrictions on raw materials for stainless steel imposed by Indonesia. Since January 2020, the GoI has introduced a total ban on the exports of nickel ore and required obligatory domestic processing on nickel and iron raw material to ensure the

more value captured by the state. This has brought these two trading partners once again into conflict, resulting in a series of events that many news articles will consider a "trade war" (Morse 2019; Idris 2019).

Regardless of the claim that Indonesia is ready to go further with a "trade war," the prospects of an actual retaliation seem minor as there is less at stake for the EU (Sjeerm 2020). The two parties do not have a mutually dependent trade relationship. Almost 10 % of Indonesia's goods make their way to the EU, which makes the bloc Indonesia's third largest import destination. However, Indonesia is only rank 31st in the EU's trading destination. If the disagreement were to intensify and Indonesia moved forward with its threats, it would put Indonesia in a disadvantageous position at best and a self-destruction at worst (Sjeerm 2020; Pandey 2019). Though the palm oil and nickel issue has become a sticking point in the negotiation, it is less likely that the dispute will influence other areas of the Indonesia-EU bilateral relations. Both parties still rely on and continue to collaborate in other sectors, such as tourism, national defense and security, and education (Interview 6; Interview 7; Interview 8; EIAS 2022).

7 Conclusion

This research has shed light on the impacts of RED II on the bilateral relations of the two trading partners, Indonesia and the EU. The overarching topic guiding the thesis was how different actors are involved in the palm oil production network, how the state plays its role, and how power dynamics are formed in the context of policymaking related to the sector. The starting point was to combine the concept of power in the GPN with the *strategic relational approach* to the state. This research sought to answer the main question: *To what extent does Indonesia-EU's dispute on palm oil related to RED II lead to a green trade war?* The theoretical framework was applied to an environmentally motivated regulation established in the EU and how it interacts and creates dynamics in the palm oil sector. Mapping the palm oil sector and the policy landscape of the Indonesian industry became the basis for finding relevant actors involved in the Indonesian palm oil industry. With insights from expert interviews and document

analysis, the author managed to discuss the likelihood of a trade war caused by the straining tension between Indonesia and the EU.

Through the GPN's concept of power and strategic relational perspective, the analysis shows that the strained relationship between Indonesia and the EU is a contingent product of a changing balance of political forces and interests located within and beyond these states. This finding can be further elaborated on in five points. First, the implementation of RED II was motivated by the European Commission's intention to correct its biofuel market and to respond to the growing criticism levelled by CSOs and the European Parliament. In the beginning, the EU encouraged the use biofuel to gradually reduce fossil consumption through the launch of the first Renewable Energy Directive (RED I). However, this directive has also led to the growing import of vegetable oil sourced from global producers including palm oil. Dissatisfied with this development, many CSOs decided to launch campaigns against palm oil biofuel and influence the European Parliament to push the European Commission to react.

With this pressure from civil society organizations and the European Parliament, the European Commission agreed to establish a recast of the regulation to correct the mistake. This event marks the birth of RED II and the ILUC delegated act. In this context, the European Commission agrees to cap their import and to slowly phase out the use of oil derived from unsustainable production while encouraging the use of regional vegetable oil in the bloc. The government and the Indonesian palm oil businesses find themselves disadvantaged by the implementation of this regulation. To address this effect, the Indonesian government, supported by the Indonesian palm oil businesses, reacts by filing litigation at the WTO.

Second, the implementation of RED II has impacted several aspects of the palm oil sector in Indonesia, both directly and indirectly. The direct impact is visible in the number of Indonesian palm oil exports to the EU. Indeed, the implementation of RED II has caused some declining effects in the Indonesian direct export to the EU. However, the revenue from palm oil export does not seem to be affected. In this context, it is also important to note that, the EU remains an indirect palm oil consumer through the import of palm oil derivatives from China and India (Euractive 2020). This finding raised

another question: if the palm oil global export does not seem to be affected then why does the government of Indonesia insist on pursuing litigation at the WTO? The answer lies in the EU's power to significantly influence the sustainability narrative.

Despite the EU's position as only the third largest palm oil export destination, the Indonesian government is aware of the EU's power in influencing the global perception of palm oil. The genuine concern of the Indonesian government is that campaigns and environmental regulations created by the EU will influence India and China (as the largest importers) to follow suit and curb market access for palm oil. This concern has indirectly impacted the Indonesian policy landscape. In addressing further damage to the palm oil reputation, the government seeks to focus more on improving the acceptance of the Indonesian palm oil certification scheme and revamping its sustainability management through the issuance of several national policies. On the other hand, many Indonesian civil society organizations are more concerned on the ineffectiveness of this new national policies, and therefore push for more action from the EU to further encourage the sustainability management in Indonesia.

Third, the litigation process at WTO on the palm oil issue hampers the free-trade negotiation between the two trading parties. Currently, both the litigation and the Indonesia-EU Comprehensive Economic Partnership Agreement (CEPA) are still on progress. This poses several challenges in predicting the exact implications of the RED II on the bilateral relations between the EU and Indonesia. Whether the RED II exercised discrimination toward palm oil is still to be decided by the WTO dispute settlement body. Indeed, the WTO litigation seems to cause some obstruction in the CEPA negotiations and strained diplomatic relations between Indonesia and the EU. The negotiations on CEPA reached a standstill after eleven rounds of meetings. With limited power that Indonesia has in influencing the European regulation, the country left with less flexibility. So far, there is no significant progress reported by both trading partners on how to consolidate the text, especially concerning the Trade and Sustainable Development (TSD) article.

Fourth, the two contrasting views between the EU and Indonesia are the result of different societal power structures occurring in each state. This event should be perceived as dynamics instead of a linear process. Both states are highly influenced not only by internal forces. While the landscape of the EU's law-making is dominated by environmental lobbyists and CSOs, the Indonesian ones are closely related to the palm oil businesses. This is evident in the European Comission's mandate to Ecofice and IIASA in developing some criteria to justify the removal of palm oil as an eligible biofuel feedstock under the RED II. The analysis shows some indications that the EU aims to further develop its own vegetable oil market and to secure employment in its own industry. On the Indonesian side, Association of National Palm Oil Businesses (GAPKI) has more power in influencing the regulation. GAPKI controls almost all national palm oil data and has representatives in the government. Despite the claims made by Indonesia that the RED II can jeopardize the livelihood of smallholders in the country, their involvement in the production network is less of a concern. The main interest of the government of Indonesia is to secure a close link to the palm oil businesses. Hence, the measures taken by the government of Indonesia only reflect its interest in capital accumulation and investment possibilities.

Certification providers do not seem to have enough power to push sustainability as expected by the EU. The certification mechanism remains voluntary and costly for most palm oil farmers and producers in Indonesia. ISCC, as the most used certification for palm oil as a biofuel, has limited access to the EU's policymaking. Despite its attempt to convince EU policymakers that sustainable palm oil is feasible, the EU does not show any leniency in its regulations. On the other hand, environmental CSOs managed to table their interests and push forward with a more ambitious climate target. The plan to include soybean oil in the high-ILUC risk criteria on the next recast of the RED is evident in this case. Most of the problems also come from the Indonesian internal land registration issue. Since land ownership has to comply with a series of segmented authorities (national, regional, and local levels), the procedures become complicated and unsupervised. There is still a big portion of smallholder groups facing difficulties in obtaining sustainable certification due to legality and financial issues. Even the exact number of palm oil smallholders in forest areas remains unclear. The GoI does

not seem to be concerned with this issue as the demand for palm oil continues to rise. This is where the role of the CSO campaigns fills the gap.

Fifth, with regards to the "green trade war" narrative heralded by media on the palm oil litigation at the WTO, the prospects of an actual retaliation seem minor. EU has less at stake compared to Indonesia. Considering the motivation, impact, current litigation processes, and interests of respective parties, the EU still has a stronger influence on the trade relation. The trade relations between Indonesia and the EU are not mutually dependent. Indonesia exports almost 10 per cent of their goods to the EU, while the country itself only managed to secure its position as the 31st largest of the EU's trading partners. If the disagreement persists and the government of Indonesia were to intensify the dispute, Indonesia will find itself in a disadvantageous position. Despite the palm oil issue, both trading parties still maintain their diplomatic relations and continue to collaborate in other sectors, such as tourism, national defense and security, and education. The narrative of the "trade war" which was initially declared by the President of Indonesia, Joko Widodo, has subsided over time along with the rise of the domestic vegetable oil crisis they faced in the middle of 2022.

Despite the greenwashing problems surrounding the EU's political arena, the European power in influencing the sustainability narratives remains strong. This has effectively pushed the Indonesian government to work on its sustainability management to correct palm oil reputation. The RED II has significantly impacted Indonesian national policy on palm oil. On that basis, future research should focus on the implementation of the national policy on sustainable palm oil and the dynamics on improving the acceptance of Indonesian palm oil standard in the global market. As Indonesia is currently focused on enhancing value addition in the palm oil production chain, future research could further examine the government's strategies for achieving its goal. It could also contribute to a deeper understanding of how national palm oil sustainability measures develop over time.

8 Bibliography

Arief, B.N., 2007. Masalah penegakan hukum dan kebijakan hukum pidana dalam penanggulangan kejahatan. Kencana Prenada Media Group.

Aurini, J.D., M. Heath, und S. Howells. 2016. „How to Design a Qualitative Project and Create Research Question:Selecting the Right Tools for the Job.“ In *How to of Qualitative Research: Strategies for Executing High Quality Projects*, von J.D. Aurini, M. Heath und S. Howells, 34-67. London: Sage.

Bair, Jennifer. 2005. *Global Capitalism and Commodity Chains: Looking Back, Going Forward*. 2. Vol. 9. Competition & Change . Competition & Change .

Bazeley, P. 2013. *Qualitative Data Analysis. Practical Strategies.* Los Angeles: Sage.

Brad, Alina. *Der Palmölboom in Indonesien: Zur Politischen Ökonomie einer umkämpften Ressource*, Bielefeld: transcript Verlag, 2019. https://doi.org/10.1515/9783839447574

Budidarsono, S., A. Susanti, and A. Zoomers, Oil palm plantations in Indonesia: the implications for migration, settlement/resettlement and local economic development, in *Biofuels-Economy, Environment and Sustainability*. 2013, InTech.

Canossa, Violante di, Erwinsyah, Xusheng Wan, Chen Lixian, Mark van den Boogard, and Tina Stoum. 2020.

Carlson, Kimberly M., Robert Heilmayr, Holly K. Gibbs, Praveen Noojipady, David N. Burns, Douglas C. Morton, Nathalie F. Walker, Gary D. Paoli, und Claire Kremenk. 2018. *Effect of oil palm sustainability certification on.* Bd. 115 (1), in *Proceedings of the National Academy of Sciences* , 121-126. DOI:DOI: 10.1073/pnas.1704728114.

Choiruzzad, S.A.B., Tyson, A. & Varkkey, H. The ambiguities of Indonesian Sustainable Palm Oil certification: internal incoherence, governance rescaling and state transformation. *Asia Eur J* **19**, 189–208 (2021). https://doi.org/10.1007/s10308-020-00593-0

CNN Indonesia (2019) Menlu janji perjuangkan kepentingan sawit Indonesia, 29 October, https://www.cnnindonesia.com/internasional/20191029161325-106-443835/menlu-janji-perjuangkan-kepentingan-sawit-indonesia

Coe N. M., Yeung H. W. C. (2015). *Global Production Networks: Theorizing Economic Development in an Interconnected World*. Oxford: Oxford University Press.

Coe, N. M., P. Dicken, and M. Hess (2008). “Global production networks: Realizing the potential”. In: Journal of Economic Geography 8.3, pp. 271–295.

Coe, Neil (2018): Global Production Networks. In: Cook, Gary/Johns, Jennifer/McDonald, Frank/Beaverstock, Jonathan and Pandit, Naresh (ed.): The Routledge Companion to the Geography of International Business. New York: Routledge, 147-160.

Corley, R.H.V. & Tinker, P.B.. (2015). The Oil Palm: Fifth Edition. 10.1002/9781118953297.

Dannecker, P, und C Vossemer. 2014. „Qualitative Interview in der Entwicklungsforschung. Typen und Herausforderungen.“ In *Qualitative Methoden in der enwicklungsforschung*, von P Dannecker und B. (Hg.) Englert, 153-175. Vienna: Mandelbaum Verlag.

Dannecker, P., & Englert, B. (2014). *Qualitative Methoden in der Entwicklungsforschung*. Mandelbaum.

Disdier, Anne-Célia, Stéphan Marette, und Guy Millet. 2013. *Are consumers concerned about palm oil? Evidence from a lab experiment.* Bd. Volume 43, in *Food Policy*, 180-189. doi:10.1016/j.foodpol.2013.09.003.

Drajat, Bambang. 2013. *Upaya mengatasi black campaign kelapa sawit dan langkah strategis ke depan*. Lembaga Riset Perkebunan. Jawa Barat. Zugriff am 30. 12 2020. http://pse.litbang.pertanian.go.id/ind/pdffiles/Pros_2012_05B_MP_Bambang.pdf.

Efeca. (2016, March). *Comparison of the ISPO, MSPO* (Rep. No. Vi). Retrieved October 10, 2017, from EFECA website: https://www.sustainablepalmoil.org/wp-content/uploads/sites/2/2015/09/Efeca_PO-Standards-Comparison.pdf *Environmental Science*, *2*(1), 1195032.

EU RED. (2016). Proposal For A Directive Of The European Parliament And Of The Council On The Promotion Of The Use Of Energy From Renewable Sources. [Online]a vailable at: http://eur- lex.europa.eu/legal-content/en/txt/?uri=celex:52016pc0767r%2801%29

European Commission. 2019. Commission Delegated Regulation (EU): Supplementing Directive (EU) 2018/2001 as regards the determination of high indirect land-use change-risk feedstock for which a significant expansion of the production area into land with high carbon stock is observed and the certification of low indirect land-use change-risk biofuels, bioliquids and biomass fuels. Brussel, 13.3.2019 C(2019) 2055 final. Available from: <https://ec.europa.eu/energy/sites/ener/files/documents/2_en_act_part1_v3.pdf>.

European Commission. 2021. *The texts proposed by the EU for the trade deal with Indonesia*. November 2021.*Foreign Policy*, 56-65.

European Parliament (EP). 2009. Directive 2009/28/EC of the European Parliament and of the Council of the European Union of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. Journal of the European Union. European Parliament, Brussels, Belgium. [online] URL: http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX% 3A32009L0028

European Union. 2022. EU-Indonesia CEPA Negotiations. https://www.eeas.europa.eu/delegations/indonesia/eu-indonesia-cepa-negotiations_en

Fargione, J., et al., Land clearing and the biofuel carbon debt. Science, 2008. **319**(5867): p. 1235-1238.

Fern. 2022. Using tariffs to incentivise sustainable palm oil. https://www.fern.org/publications-insight/using-tariffs-to-incentivise-sustainable-palm-oil-2454/

Gerasimchuk, Ivetta, and Peng Yam Koh. 2013. *The EU Biofuel Policy and Palm Oil: Cutting subsidies or cutting rainforest?* International Institute for Sustainable Development. Geneva, September.

Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Re- view of international political economy*, *12*(1), 78-104. 35

Gereffi, Gary & Fernandez-Stark, Karina. (2016). Global Value Chain Analysis: A Primer, 2nd Edition.

Gereffi, Gary, Ronie Garcia-Johnson, und Erica Sasser. kein Datum. *The NGO–industrial complex*. Bd. 125, in

Gereffi, Gary/Humphrey, John/Sturgeon, Timothy (2005): The governance of global value chains. Review of Inter- national Political Economy, 12:1, 78-104.

Gibbon, P., & Ponte, S. (2005). *Trading down: Africa, value chains, and the global economy*. Temple University Press.

Greenpeace. 2019. *Cutting Deforestation Out of the Palm Oil Supply Chain: Company Scorecard*. Company Report, Netherlands: Greenpeace. Zugriff am 23. June 2021. https://www.greenpeace.org/static/planet4-sweden-stateless/2019/01/019ca40a-019ca40a-palm-oil-scorecard-final.pdf.

Greenpeace. 2020. *Destruction.Certified*. Company Report, Netherlands: Greenpeace. Zugriff am 23. June 2021. https://www.greenpeace.org/international/publication/46812/destruction-certified/.

Grumiller, J. (2019). A strategic-relational approach to analyzing industrial policy regimes within global production networks: the Ethiopian Leather and Leather Products Sector (No. 60). ÖFSE Working Paper.

Hai TC (2013) Malaysian corporations as strategic players in Southeast Asia's palm oil industry. In: Pye O, Bhattacharya J (eds) The palm oil controversy in Southeast Asia: a transnational perspective. ISEAS, Singapore, pp 19–47

Haraway, D, (1988). Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14 (3) 575-599.

Henderson, J., Dicken, P., Hess, M., Coe, N., & Yeung, H. W. C. (2002). Global production networks and the analysis of economic development. *Review of international political economy*, *9*(3), 436-464.

Henderson, Jeffrey, Peter Dicken, Martin Hess, Neil Coe, and Henry Wai-Chung Yeung (2002). "Global production networks and the analysis of economic development". In: Review of International Political Economy 9.3, pp. 436–464.

Hess, M. (2018). Global Production Networks. In International Encyclopedia of Geography (eds D. Richardson, N. Castree, M.F. Goodchild, A. Kobayashi, W. Liu and R.A.
Marston). https://doi.org/10.1002/9781118786352.wbieg0675.pub2

Horner, Rory (2017). "Beyond facilitator? State roles in global value chains and global production networks". In: Geography Compass 11.2, pp. 1–13.

Indonesia, Ministry of Foreign Affairs of the Republic of. 2019. *Indonesian Minister of Foreign Affairs Urges the European Union to Treat Palm Oil Issue Fairly*. December.

Ivancic, H., & Koh, L. P. (2016). Evolution of sustainable palm oil policy in Southeast

Jiwan, Norman. "3. The Political Ecology of the Indonesian Palm Oil Industry". *The Palm Oil Controversy in Southeast Asia: A Transnational Perspective*, edited by Oliver Pye and Jayati Bhattacharya, Singapore: ISEAS Publishing, 2012, pp. 48-75. https://doi.org/10.1355/9789814311458-007Asia. *Cogent*

Jessop (2008). State power: A strategic-relational approach. Cambridge; Malden, MA: Polity.

Jessop (2016). The state: ⇨Past, present, future. Malden, MA: Polity Press.

Jessop, Bob (2004). "Multilevel governance and multilevel meta governance". In: Multi-level governance. Ed. by Ian Bache and Matthew Flinders. Oxford University Press Oxford, pp. 49–74.

KPK. 2016. Kajian sistem pengelolaan komoditas kelapa sawit. Laporan kajian. Jakarta. Direktorat Penelitian dan Pengembangan Kedeputian Pencegahan Komisi Pemberantasan Korupsi.

Kuckartz, U. (2012). Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung. Basel:Beltz Juventa

Luttrell, Cecilia & H., Komarudin & Zrust, Mike & Pacheco, Pablo & Limberg, Godwin & Nurfatriani, Fitri & L.R., Wibowo & Hakim, Ismatul & Pirard, Romain. (2018). Implementing sustainability commitments for palm oil in Indonesia: Governance arrangements of sustainability initiatives involving public and private actors. 10.17528/cifor/006884.

Marslev, K., Staritz, C., and Raj- Reichert G. (2022) Rethinking Social Upgrading in Global Value Chains: Worker Power, State-Labour Relations and Intersectionality, Development and Change, https://onlinelibrary.wiley.com/doi/full/10.1111/dech.12705

Marti, S 2008, 'Losing ground: the human rights impacts of oil palm plantation expansion in Indonesia', *Friends of the Earth*.

Mayr, Stefan, Birgit Hollaus, and Verena Madner. 2020. *Palm oil, the RED II and WTO law: EU sustainable biofuel policy tangled up in green?* Prod. Comparative & International Environmental Law RECIEL. Review of European. John Wiley & Sons Ltd.

McCarthy, J. F. (2010). Processes of inclusion and adverse incorporation: Oil Palm and agrarian change in Sumatra, Indonesia. *The Journal of Peasant Studies* 37(4):821-50.

McInnes, A. (2017). *A comparison of leading palm oil certification standards.* Forest Peoples Programme. https://www.forestpeoples.org/sites/default/files/documents/Palm%20Oil%20Certification%20Standards_lowres_spreads.pdf

Mongabay. 2015. Sustainable Palm Oil Manifesto Group's High Carbon Stock forests study would continue business as usual, environmentalists say. https://news.mongabay.com/2015/10/sustainable-palm-oil-manifesto-groups-high-carbon-stock-forests-study-would-continue-business-as-usual-environmentalists-say/

Neilson, J., Pritchard, B., & Yeung Wai-Chung, H. (Eds.). (2015). Global Value Chains and Global Production Networks: Changes in the International Political Economy (1st ed.). Routledge. https://doi.org/10.4324/9781315725321

Neilson, Jeffrey, Bill Pritchard, and Henry Wai-Chung Yeung (2014). "Global value chains and global production networks in the changing international political

economy: An in- production". In: Review of International Political Economy 21.1, pp. 1–8.

Obidzinski, K, Dermawan, A & Hadianto, A 2014, 'Oil palm plantation investments in Indonesia's forest frontiers: limited economic multipliers and uncertain benefits for local communities', *Environment, development and sustainability,* vol. 16**,** no. 6, pp. 1177-1196.

Obidzinski, K., Andriani, R., Komarudin, H., & Andrianto, A. (2012). Environmental and social impacts of oil palm plantations and their implications for biofuel production in Indonesia. *Ecology and Society*, *17*(1).

Obidzinski, K., Andriani, R., Komarudin, H., & Andrianto, A. (2012). Environmental and social impacts of oil palm plantations and their implications for biofuel production in Indonesia. *Ecology and Society*, *17*(1).

Oosterveer, P. J. M. (2020). Sustainability of palm oil and its acceptance in the EU. *Journal of Oil Palm Research*, *32*, 365-376. https://doi.org/10.21894/jopr.2020.0039

Our World ind Data. 2022. Palm Oil. https://ourworldindata.org/palm-oil

Pacheco, Pablo, Sophia Gnych, Ahmad Dermawan, Heru Komarudin, und Beni Okarda. 2017. *The Palm Oil Global Value Chain. Implication for economic growth and social and environmental sustainability*. Document. Herausgeber: Center for International Forestry Research. Indonesia. doi:10.17528/cifor/006405.

Paspi (2017) Mitos vs fakta industri minyak sawit Indonesia dalam isu sosial, ekonomi dan lingkungan global (Myth vs facts of Indonesia's palm oil industry in global social, economic and environmental issues), Bogor, PASPI.

Pichler, M. (2010). Agrofuels in Indonesia: Structures, Conflicts, Consequences, and the Role of the EU. *ASEAS - Austrian Journal of South-East Asian Studies, 3*(2), 175-193.

Ponte, Stefano, Gary Gereffi, and Gale Raj-Reichert. 2019. *Introduction to the Handbook on Global Value Chains.* Cheltenham: Edward Elgar Publishing.

Poulantzas, Nicos (1978). "The problem of the capitalist state". In: New Left Review 58.1, pp. 67–78.

Purnomo, Herry, Beni Okarda, Ahmad Dermawan, Qori Pebrial Ilham, Pablo Pacheco, Fitri Nurfatriani, und Endang Suhendang. 2018. *Reducing forest and land fires through good palm oil value chain governance.* Bd. Volume 94, in *Forest Policy and Economics*, 94-106. Zugriff am 20. 12 2020. doi:10.1016/j.forpol.2017.12.014.

Purwanto, Edi, Hery Santoso, Idsert Jelsma, Atiek Widayati, Hunggul Y. S. H. Nugroho, and Meine van Noordwijk. 2020. "Agroforestry as Policy Option for Forest-

Zone Oil Palm Production in Indonesia" *Land* 9, no. 12: 531. https://doi.org/10.3390/land9120531

Rifin, Amzul. 2010. *Export Competitiveness of Indonesia's Palm Oil Product.* Bd. 3, in *Trends in Agricultural Economics.* doi:10.3923/tae.2010.1.18.

Reuters. 2021. EU's Borrell: Palm oil issue shouldn't hamper trade talks with Indonesia. https://www.reuters.com/world/asia-pacific/eus-borrell-palm-oil-issue-shouldnt-hamper-trade-talks-with-indonesia-2021-06-03/

Roundtable on Sustainable Palm Oil. 2013. *Principles and Criteria for the Production of Sustainable Palm Oil.* Zugriff am 19. 12 2020. https://rspo.org/explore?q=Principles+and+criteria.

Ruysschaert, Denis, und Denis Salles. 2014. „Towards global voluntary standards: Questioning the effectiveness in attaining conservation goals: The case of the Roundtable on Sustainable Palm Oil (RSPO)." In *Ecological Economics*, 438-446. Volume 107. Zugriff am 31. 12 2020. doi:0.1016/j.ecolecon.2014.09.016.

Schoneveld, G. C., Jelsma, I., Komarudin, H., Andrianto, A., Okarda, B., & Ekowati, D. (2017). *Public and private sustainability standards in the oil palm sector: Compliance barriers facing Indonesia's independent oil palm smallholders* (No. CIFOR Infobrief no. 182, p. 8p). Center for International Forestry Research (CIFOR), Bogor, Indonesia.

Statistik Indonesia.2016. 'Statistik Kelapa Sawit Indonesia 2016,' Badan Pusat Statistik, Jakarta. BPS 2017, Indonesia Export 2017. Jakarta. BPS.

Teoh, C.H. (2010). Key Sustainability Issues in the Palm Oil Sector.

Tan, C. K. 2015. Malaysia and Indonesia consider steps to lift the flagging palm oil market. Nikkei Asian Review, 10 September. [online] URL:http://asia.nikkei.com/Markets/Commodities/Malaysia-Indonesia-consider-steps-to-lift-flagging-palm-oil-market

Tempo. 2022. Kroni Dana Sawit. Edition: April 2022. https://majalah.tempo.co

The Jakarta Post. (2017). Indonesia up in arms over EU's negative campaign against palm oil. [online] Available at: http://www.thejakartapost.com/news/2017/11/03/indonesia-up-in-arms-over- eus-negative-campaign-against-palm-oil.html

The Jakarta Post. (2017b). Indonesia calls EU's ruling on palm oil 'discriminatory' [online] Available at: http://www.thejakartapost.com/news/2017/04/10/indonesia-calls-eus-ruling-on-palm-oil- discriminatory.html

Tiara Yasinta and Mahawan Karuniasa 2021 *IOP Conf. Ser.: Earth Environ. Sci.* **716** 012113

Transport and Environment. 2021. 10 years of EU fuel policy increased the EU's reliance on unsustainable biofuels. https://www.transportenvironment.org/wp-content/uploads/2021/08/Biofuels-briefing-072021.pdf

Tyson A, Meganingtyas E (2020) The status of palm oil under the European Union's renewable energy directive: sustainability or protectionism? Bull Indones Econ Stud:1–44. https://doi.org/10.1080/00074918.2020.1862411

Varkkey, H, Tyson, A and Choiruzzad, SAB (2018) Palm oil intensification and expansion in Indonesia and Malaysia: Environmental and socio-political factors influencing policy. Forest Policy and Economics, 92. pp. 148-159.

World growth 2011, The Economic Benefit of Palm Oil to Indonesia, World Growth, dilihat pada 1 Juni 2017, <http://worldgrowth.org/site/wp-content/uploads/2012/06/ WG_Indonesian_Palm_Oil_Benefits_Report-2_11.pdf>.

Wurzel, R., & Connelly, J. (Eds.). (2011). The European Union as a Leader in International Climate Change Politics (1st ed.). Routledge. https://doi.org/10.4324/9780203839959