The impact of the European Union (EU) renewable energy directive policy on the management of Indonesian palm oil industry

R A Arief, A R Cangara, M N Badu, A Baharuddin, and A Apriliani

Department of International Relations, Faculty of Social and Political Sciences, Universitas Hasanuddin, Jl. Perintis Kemerdekaan KM. 10 Makassar 90245, Indonesia.

E-mail: acacangara@unhas.ac.id

Abstract. This research aims to analyse 1) the interest of the European Union on Renewable Energy Directive; 2) the protection forms of the European Union on Renewable Energy Directive toward Indonesian Palm Oil; 3) the transformation of Indonesia palm oil managerial after of European Union Renewable Energy Directive. The result of this research shows that there is two interest of the European Union in implementing the policy of Renewable Energy Directive, that is in environment protection with simultaneous criteria and palm oil protection in European unions. It is found that trading protection towards Indonesian palm oil is a form of green protectionism. This protection then implements non-tariff protection as a form of trade barrier. It impacts palm oil exports from Indonesia to the European Union. This protection influenced the policy transformation of palm oil management in Indonesia. The policies are RSPO, ISPO, Presidential Directive on Primary Forest and Peatland, and Presidential Directive on Moratorium and Forest Land Allocation. This research proves that palm oil production in Indonesia changed after the implementation of the Renewable Energy Directive in the European Union. This improvement of palm oil production proves that the policy is influenced by the market drives and not on an only environmental issue.

1. Introduction
One of Indonesia's leading commodities is palm oil, where Indonesia is known as one of the largest palm oils producing countries in the world. The development of the palm oil industry can be said to be a tropical vegetable oil revolution, and it is equivalent to the world green revolution of the 1950s. The revolution provided a major change in the world trade in vegetable oils marked by the dominance of palm oil in the production and consumption of the people[1]. It also encourages Indonesia to be highly active in utilizing their tropical land to become oil palm plantations.

In Indonesia, palm oil has been the pride of plantation products since 1970 as it has contributed the highest non-oil and gas foreign exchange income to the state budget post of 300 trillion rupiahs[2]. The strategic value of Indonesia's palm oil production is directly proportional to the policy for palm oil expansion. In 2013 the land area was 10.47 million hectares and amounted to 14.03 million hectares in 2018. This vast land is divided into three land areas belonging to the people, the private sector, and the state[3]. This increase in the land area has boosted Indonesia's economic growth, opened up jobs, increased farmers' incomes, and created added value for the palm oil management industry.

The amount of palm oil produced by Indonesia, namely CPO (crude) and PKO (processed), is divided into domestic consumption and exports. 46.17 million tons of palm oil was produced in 2018,
and nearly 10 tons were allocated for domestic consumption, while the remainder was exported to countries in need. Indonesia is the largest producer of palm oil in the world, along with Malaysia. These two countries, if totaled, control 85-90% of total world palm oil production[3]. In Indonesia's palm oil exports, the most favored product is crude palm oil (CPO). One of the largest markets for Indonesia's palm oil exports is the European Union. In 2015 European Union exports reached 4.233 million, while in 2018, it increased to 4.78 million tons per year. The European Union has indeed become the world's producer of vegetable oil, palm oil included. Palm oil is generally used as fuel for the European Union as renewable energy.

The large amount of Indonesia’s palm oil production, which is exported to the European Union and other countries, influences national palm plantation policies and land expansion. In 2018, it was recorded that there were up to 14.03 million hectares of palm plantations. This expansion is in line with government policies in making oil palm as development goods[4]. The practice of clearing oil palm land in Indonesia is not without problems. Increasing demand that is not accommodated by an increase for land will be a problem, such as an insufficiency for palm oil supply. The expansion of land then requires Indonesia to deforest, clearing by burning, and converting peatlands into oil palm plantations[5]. The expansion of oil palm plantations makes Indonesia become the country with the second-largest level of forest loss after Brazil[6,7]. As a result, Indonesia became the third-largest contributor of carbon dioxide emissions after China and the United States, even though Indonesia was known as the world's lung country. The practice of Indonesia's palm oil production, which is not environmentally friendly, has caused several countries to respond to this. The biggest response was carried out by the United States and the European Union, the most persistent response being from the European Union as it is a region with the lowest levels of carbon dioxide emissions.

The response is in line with the European Union's renewable energy policy known as the Renewable Energy Directive (RED). RED is a policy issued by the European Parliament to mitigate the impact of the use of non-renewable energy (fossil fuel) that have an impact on global warming or the contribution of greenhouse gases[8]. RED is issued since 2009 by the European Union Parliament. This policy sets out the production and promotion of energy from renewable sources in the EU. This policy requires the European Union to meet the target of 20% of its total energy needs with renewable energy by 2020. The RED policy requires its member states to implement renewable energy programs in their national action plans, including biofuels. It certainly also affects not only the member states but also other countries that partner with the European Union in the provision of biofuel materials. Indonesia, as the largest supplier of biofuel raw materials (palm oil) in the European Union, is feeling the effects of this regulation. The practice of Indonesian palm oil production, which is considered environmentally unfriendly, led the European Union to impose protection against the imports. The trade barrier imposed by the European Union on Indonesia is indicated as a measure of protectionism. The European Union limited the unsustainable Indonesian palm oil market. Trade protection done by justifying the environmental issues is classified as new protectionism, in which the European Union uses non-tariff barriers. This article uses a new type of protection, namely green protectionism, where environmental issues are the reason for discrimination of certain trade products.

2. Methodology

The type of research used by the author is descriptive qualitative. This method explains the impact of the European Union Renewable Energy Directive policy on the management of the Indonesian palm oil industry. This study describes Indonesia's policy in responding to the European Union's environmental policies. The study uses portrayals based on empirical facts accompanied by supporting arguments, and then the description will be analyzed to draw analytic conclusions.

Data collection techniques used in this study were through interviews with transferrers or researchers related to the research object, for example, the Indonesian Ministry of Trade and NGOs associated with the issue of oil palm. Furthermore, researchers also use the method of library research or literature review, as a way of collecting data by examining various sources of literature relating to the problem under study. It covers books, journals, written reports, articles, collection of news stories
on the internet, and documents related to the research object. Furthermore, the data analysis technique used is qualitative. In qualitative analysis techniques, problems are described and explained based on data and the interrelation of facts that exist with each other so that conclusions can be drawn. The period of study is set from 2011 to 2019.

3. Results and discussion

3.1. The European Union's interests in the renewable energy directive (RED)

The concentration of the European Union on environmental issues dates back to 1972 at the Stockholm Conference, Sweden. This awareness is then carried out through the implementation of European Union policies that are starting to emerge. It began in 1973, namely, the formation of the Environmental Action Program (EAP)[9]. The formation of this EAP is based on the main argument that there is an interdependent relationship between economic growth, welfare, and the environment. This EAP will then be the beginning of various environmental policies or movements in the European Union.

Starting with the 1973 EAP, the European Union and its member states continue to support efforts to prevent environmental problems. There are various environmental policies issued by the European Union. One of the EU policies to save the environment is the Renewable Energy Directive (RED). This policy sets out for the production and promotion of energy from renewable sources in the EU. With it, it requires the European Union to meet the target of 20% of its total energy needs with renewable energy by 2020. This policy is then reduced to a national target of individual member states. EU member states must also ensure that at least 10% of their transportation fuel comes from renewable sources by 2020[10].

3.1.1 Environmental protection with sustainable criteria. According to the PASPI research institute, the European Union's need for vegetable oil is growing along with the need for use in biodiesel products. Other vegetable oil products as substitute products are not fully able to meet these demands, because the productivity of rapeseed oil, soybean oil, and sunflower oil is far below CPO. High productivity and lower prices cause palm oil to be considered as a competitor commodity of EU vegetable oil in the global market. The three vegetable oils produced by the European Union are superior commodities for farmers in the region. The existence of palm oil, especially those produced by Indonesia, threatens the sustainability of the European Union vegetable oil commodities. The superiority of palm oil and its derivative products causes the expansion of palm oil in the international market to be remarkably high and finally puts pressure on other vegetable oil commodities, especially for the European Union[11].

The share of world palm oil increased by around 8% in 1980, and until 2015 it reached 30%. This indicates that palm oil share value has increased four times. Meanwhile, in the same year, vegetable oil from the European Union, namely soybean oil, decreased from 53% to only 30%. RED brings losses to Indonesian palm oil, and that is because the existence of RED in the trade relations between Indonesia and the European Union as a most strategic market interrupts the development of palm oil imports as a raw material for biofuels. Therefore, Indonesia considers the existence of RED as a black campaign of the European Union as it discriminates against Indonesian palm oil commodities.

3.2. Form of EU’s RED trade protection against Indonesian palm oil

EU’s Protection Measures for Indonesian Palm Oil. Reports on Palm Oil and Deforestation of Rain Forest from the European Commission explicitly state that Indonesia and Malaysia are countries with substantial rates of deforestation due to oil palm plantations. The recommendation then led the European Union to establish protection against Indonesia's unsustainable palm oil. The form of protection is carried out in the name of environmental sustainability as a basis for implementing protection. This was then implemented in non-tariff barriers in the form of Technical Barrier to Trade. It was stated so because the sustainability prerequisites contained in RED in terms of energy imports did not meet Indonesia's palm oil commodities.
3.2.1 Impact of environmental protection enforcement on Indonesian palm oil. The protection of non-tariff trade on palm oil imports then led to a reduction for Indonesian palm oil imports done by the European Union. This RED European Union policy was increasingly discussed until finally, in 2018, Indonesia's palm oil exports fell. In 2017 Indonesia's palm oil exports of 5.342 million tons fell to 4.78 million tons in 2018. This condition then affected the development of Indonesia's palm oil production and export because the European Union is the most strategic market in marketing. 22% of Indonesian CPO commodities and their derivatives enter the European Union market without import duties, and 55% are subject to tariffs below 5.1%[12]. It also affects the price of palm oil, which has been declining from 2018 to 2019. The policy on limiting palm oil also influences Indonesia's palm oil production. Even though in 2000 - 2018, Indonesia's palm oil production has increased, but their markets are increasingly closed to exports due to the effect of the European Union's protection.

The protection of palm oil from Indonesia is further exacerbated in the European Union's plan to improve its renewable energy policies through Renewable Energy Directive II (RED II). RED II is a continuation of the previous RED policy and began to be implemented in 2024. The European Union is committed to ensuring energy sustainability in the amount of 32% of the target of using renewable energy[13]. The policy will reduce the use of vegetable oils that do not meet sustainable criteria related to deforestation and ILUC, including palm oil as biodiesel[14]. The EU Commission plans to phase out the use of crude palm oil (CPO) based biofuel to 0% by 2030[12].

Narrowing the market in the European Union has the potential to worsen the condition of palm oil in the future. Therefore, as a step against protection, Indonesia reports to the WTO. Indonesia considers that the European Union's protective measures discriminate against Indonesian palm oil. According to The Council of Palm Oil Producing Countries (CPOPC), the EU's move violates the principle of non-discrimination in the WTO, and there are indications in the implementation of technical trade barriers (TBT)[15]. In response to these accusations, the European Union press release suggested that RED had fulfilled the regulations contained in the WTO. RED establishes sustainable criteria for biofuels and biomass that are global, objective, and non-discriminatory. In addition to that, the sustainability criteria in biofuel aim to meet the European Union's renewable energy targets and not limit the access of the biofuel market in the European Union[13].

3.3. Transformation of management policy for the Indonesian palm oil industry after the imposition of the EU's RED

Indonesia's policy in addressing environmental issues with sustainable schemes existed before the European Union's RED was issued in 2009. Before the existence of sustainable schemes in oil palm plantations, practices that occurred in all Indonesian plantations ignored social and environmental problems[16]. Meanwhile, after the existence of a sustainable scheme, it can be said that the practices of Indonesian oil palm plantations have gradually changed. The policies related to palm oil before and after the European Union RED are as follows:

3.3.1. Roundtable on sustainable palm oil (RSPO). RSPO is an international multi-stakeholder organization that was founded in 2004. The RSPO is a business initiative in which members voluntarily join an agreed mechanism to produce and use sustainable palm oil. With the existence of the RSPO, it is expected that its members can carry out plantation practices that adhere to the principles of sustainability, which prioritize aspects of legality, the environment, and long-term socioeconomic feasibility[17]. Seeing the need for adjustments to existing laws in Indonesia, the RSPO, together with the Directorate General of Plantations, formed a Memorandum of Understanding (MoU) regarding the application of sustainable palm oil in Indonesia. Up until 2019, there were 195 palm oil mills which had held certificates for sustainable palm oil[18]. From those mills, the volume of certified palm oil reaches 7,819,243 tons. It means that more than 39 million tons of Indonesian palm oil has not been certified in the RSPO.
3.3.2. Presidential directive on the moratorium on primary forests and peatlands. Environmental damage caused by the conversion of primary forest and peatland has made the Indonesian government respond to this. One of the steps taken is to issue a Presidential Directive on primary forests and peatlands. The Presidential Directive emphasizes business licensing in primary forests and peatlands since 2011. This temporary Presidential Directive has led to renewed policy implementation. In 2019, the latest Presidential Directive No. 5 of 2019 was issued related to the termination of land clearing permits[19]. The present Presidential Directive aims to balance and harmonize economic, social, cultural, and environmental development, as well as implement efforts to reduce greenhouse gas emissions through reducing emissions from deforestation and forest degradation[20]. The Presidential Directive, which aims to protect forests, is not yet effective, as it can be seen from the increase in the average amount of forest loss in Indonesia.

3.3.3. Indonesia sustainable palm oil (ISPO). ISPO is a policy issued by the Indonesian government to support sustainable palm oil. ISPO is a certification issued by the Ministry of Agriculture of the Republic of Indonesia in 2011, which regulates the national oil palm industry. With the existence of ISPO, companies are urged to obtain certification by making it mandatory for all palm oil companies to support the development of oil palm that meets sustainable principles. However, since it was implemented in 2013, the implementation of the ISPO system has been considered slow[21]. The total number of big palm oil companies is 1600, and only 502 companies have received ISPO certification until 2019. It indicates that only about 32% of Indonesian palm oil companies meet the ISPO criteria. To deal with this problem, in 2019, in order to support environmental improvement, the Government of Indonesia requires that ISPO certify all palm oil companies by 2020. According to Sawit Watch, many companies that have obtained ISPO certificates cannot be said to have fulfilled social and environmentally friendly aspects. Despite obtaining an ISPO certificate, conflicts and environmental destruction continue to occur. The European Parliament considers that ISPO certification is only implemented by 15% of Indonesian palm oil producers. Furthermore, the lack of involvement from civil society in the certification is a factor that ISPO cannot be said to be credible in applying sustainable principles in palm oil production[22].

3.3.4. Presidential INStruction No. 8 of 2018 on palm oil moratorium. This Presidential Instruction is a policy issued by President Joko Widodo regarding the postponement and evaluation of licensing of oil palm plantations as well as increasing productivity of oil palm plantations on September 19, 2018. This Instruction gives orders to central and regional government agencies in re-evaluating the release of forest areas and delaying the opening oil palm plantations for three years[23].

4. Conclusion
The interest of the European Union in the Renewable Energy Directive policy consists of two things, namely environmental protection with sustainable criteria and protection of vegetable oil in the EU region. Trade protection carried out by the European Union in the name of RED is a form of green protectionism, as the basis of decision making in environmental issues. There are several policies taken by Indonesia in order to provide confidence to the international community regarding Indonesia's sustainable palm oil. The policies include membership in the RSPO, ISPO, Presidential Instructions related to the Moratorium on Primary Forests and Peatlands, and Presidential Instruction on the delay and allocation of forest land. EU trade protection for palm oil affects Indonesia's export volumes and prices in the market. Therefore, it finally makes Indonesia put efforts to improve palm oil production. In conclusion, economic interests drive the environmental movement so that Indonesia can continue to export palm oil to the European Union as a very strategic market. Improved palm oil and environmental policies are influenced by market impetus, not just based on concerns about environmental degradation. The existence of RED has finally influenced Indonesia's palm oil production in order to meet sustainable criteria.
References

[1] Byerlee, D., Falcon, W. P., & Naylor R L 2017 The Tropical Oil Crop Revolution: Food, Fuel (New York: Oxford University Press)
[2] GAPKI 2018 Sawit sumbang devisa 300 triliun untuk negeri ini apa maknanya
[3] Badan Pusat Statistik 2018 Indonesian Oil Palm Statistics 2017 (Jakarta)
[4] BPDP Indonesia 2014 Promosi dan Diplomasi Sawit Berkelanjutan
[5] Committee on the Environment P H and F S E U 2017 Report on Palm Oil and Deforestation of Rainforest
[6] Cipto H 2016 Setiap Tahun Hutan Indonesia Hilang 684.000.hektar Kompas
[7] Baharuddin A, Lubis A, Lubis M A, Utami A, Umam K, Faturrahman and Yunita U 2019 Hybrid Non-Governmental Organizations (NGOS): Study of the Mangrove Forest Rehabilitation Program in Indonesia by the Blue Forest Krit. J. Ilmu Sos. dan Ilmu Polit. Univ. Hasanuddin 5 37–49
[8] Dewi R 2013 Implementasi Renewable Energy Directive Uni Eropa Interdepend. J. 1 150
[9] Hey C EU Environmental Policies: A short history of the policy strategies EU Environmental Policy Handbook (Brussels: EEB)
[10] European Commision 2019 Renewable Energy Progress Report (Brussels)
[11] Jannah S M 2018 Ekspor Sawit RI ke Eropa Masih Terganjal, Ini Biang Keladinya
[12] Pablo S 2019 Industri Sawit di Antara Pusaran Konflik RI dan Uni Eropa CNBC Indones.
[13] Delegation of the European Union to Indonesia 2019 Kelapa Sawit: Apa yang baru dalam kebijakan Uni Eropa?
[14] The International Council on Clean Transportation 2019 International Policy and Market Drivers of Indonesian Palm Oil Demand (Norway: TICCT)
[15] BPDP 10 Sikap Pemerintah Atas Diskriminasi Uni Eropa Terhadap Kelapa Sawit 2019
[16] Sawit Watch 2019 Permasalahan Produksi Sawit di Indonesia
[17] Kementerian Pertanian 2015 Studi Bersama Persamaan dan Perbedaan Sistem Sertifikasi ISPO dan RSPO (Jakarta: Kementerian Pertanian RI)
[18] Simanjuntak D 2019 7,8 Juta Ton CPO Indonesia Bersertifikasi RSPO Invest. Indones.
[19] Nugraha, I., & Saturi S 2019 Presiden Teken Inpres Setop Izin di Hutan Primer dan Gambut, Masih Ada Revisi Berkala?
[20] BPKP 2011 Instruksi Presiden Republik Indonesia Nomor 10 Tahun 2011
[21] Forest Watch Indonesia 2017 Enam Tahun ISPO
[22] Murdaningsih D 2018 Sertifikat ISPO Belum Cukup untuk Ekspor Sawit ke Eropa Republika
[23] BPDP 2018 Inpres No 8 Tahun 2018 Tentang Moratorium Lahan Sawit.