

The Partnership between Indonesia and United Kingdom to Achieve the Net-Zero Emission Goal on Behalf of Sustainable Development Action

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Abstract. This study has investigated Indonesia and UK bilateral cooperation, particularly in the sustainable development sector initiated by domestic agenda and international pressure through the United Nations, which created a sub-organization, United Nations Framework Convention Climate Change (UNFCCC) which focuses on climate change and sustainable development. With that, UNFCCC set a standard for countries by creating a Paris Agreement and set long-term goals for countries to achieve Net-Zero Emission Goal as a commitment to sustainable development. Therefore, it opened the first collaboration of Indonesia-UK, namely the United Kingdom Climate Change Unit Indonesia (UKCCU Indonesia) and continuing with the United Kingdom Partnering for Accelerated Climate Transitions (UK-PACT) as well as the MENTARI program (Towards Indonesia's Low Carbon Energy Transition which this program progressively helps two countries in achieving Net-Zero Emission Goal by implementing low carbon development, green economy, green growth, and green jobs, as well as this research, identify opportunities and challenges of this collaboration such as green investment, high reciprocity, COVID-19 pandemic situation, lack of funding, competing for interest, and greenwash issue that analyze by using theories such as international cooperation theory and green economy theory as well as qualitative method through public references and interview data collection which can enrich the research discussion.

Keywords: Indonesia; United Kingdom; Climate change; International cooperation; Green economy

1. INTRODUCTION

1.1 BACKGROUND

The industrial revolution made significant changes to how humans work and produce things, one of which was implemented in how industries in the world operate. In the past, the work process was still traditional, where workers had to use more physically to produce something. However, industries see this as a big problem due to the limited human resources and the high cost of human resources. In short, industries are entering the era of digitalization which finds mobile machines or robots and provides benefits such as simplifying people through its effectiveness and efficiency and increasing a company's productivity. This digitalization replaces humans with devices to meet the natural behavior of industries, namely profit; however, industries and companies see profit as the only key to success without seeing the side effects of pursuing profit by justifying any means.

The side effects are environmental problems experienced by each country and its industries, namely environmental pollution through carbon dioxide or CO₂ caused by companies that want to meet productivity (Cunanan, 2018). Human activity continues to elevate carbon emissions and increase human needs. It is causing the problem of Green House Gas (GHG) emissions are a universal problem for every country due it has "border-less" environmental effects, which can cause heat by trapping the heat and cause many climate effects caused by greenhouse gasses (Nunez, 2019).

The side effects of climate change are believed to be the impact of the increase in the average temperature of the earth's surface caused by the accumulation of GHG in the atmosphere from global development activities (United Nations Development Programme Indonesia, 2007, p. 3). The impact of climate change can disadvantage many people regardless of their boundaries. The effects such as unpredictable weather patterns that will damage agriculture industries, floods, drought, storms, rising ocean, not enough food, health risk, poverty, and other climate change effects that in the end will disadvantage many people to their lives.

With the common problems emerging and felt by many countries, whether developed or developing countries, the United Nations created a framework to respond to climate change that happens around the world, namely the United Nations Framework

Convention On Climate Change (UNFCCC). This UN entity focuses on a global response regarding climate change established in 1992 as the result of international cooperation to mitigate GHG, including climate change impacts. The framework entered into force in 1994; until now there are 197 parties, including Indonesia, who have agreed to the international treaty (Legget, 2020, pp. 1-2). The UNFCCC has an objective focus on global temperature to keep temperature rise below 2oC and as close as possible to 1.5oC through international cooperation by working with any countries to create a universal solution, develop climate change strategies, impacts mitigation, economy adaptation, share knowledge and innovation to maximizing and meet the main objective of UNFCCC framework (United Nations Climate Change, 2021).

The Paris Agreement and the 1997 Kyoto Protocol Mechanism have been the result of UNFCCC keeping its main objectives; which Paris agreement is a legal agreement on climate change to achieve a climate-neutral by incorporating technology and finance among 196 parties, and the UNFCCC established the Kyoto Protocol Mechanism which regulates the rights of polluting the world where in the past the right was given for free yet now the right become limited or in other words, Kyoto Protocol urging 192 parties to force countries to limit and reducing greenhouse gasses emissions under main UNFCCC target also UNFCCC divided the parties to work in this agreement such as Annex 1 and Non-Annex 1 where Annex 1 includes the industrialized countries or developed countries. Yet, the Non-Annex 1 mostly are the members of developing countries; an example is Indonesia (United Nations Climate Change, n.d.)⁵. Under the Kyoto Protocol, to increase the effectiveness of 192 parties, the Kyoto Protocol also makes three mechanisms that encourage the sustainability of each party in reducing gas emissions; the three mechanisms are;

- Emission Trading (ET)
- Clean Development Mechanism (CDM)
- Joint Implementation (JI)

According to the Kyoto Protocol, ET is carbon trading that allows countries or industries with emissions units permitted but not used in their business operation and can sell carbon units to the industries or companies that exceeded their capacity. Also carbon market not only provides units that can trade yet also a scheme called;

- A removal unit (RMU) activity such as reforestation of land to reduce gas emissions or even land-use change to greener and mitigate emissions
- An emission reduction unit (ERU) generated by the Joint Implementation project was a country investing in greenhouse projects in other countries
- A certified emission reduction (CER) that generated from a clean development mechanism where Annex 1 countries investing greenhouse projects in Non-Annex 1 countries, and such projects can be returned with CER/Carbon credits equivalent to one ton of CO₂

Besides, Clean Development Mechanism and Joint Implementation are mutual benefits schemes that allow a country to invest in greenhouse projects in other countries, such as in Non-Annex 1 countries who vulnerable to climate change impacts; however, in Clean Development Mechanism, the investor can get the certified emission reduction that can sell in the particular carbon market.

In addition, the impact of climate change on Indonesia's climate condition may lean towards destruction that 5,8 million km² of water will be dangerous for fishers due to extreme waves, unpredictable rainfall, increasing water level, decrease in the production of rice, rising temperature and according to Badan Perencanaan Pembangunan Nasional (BAPPENAS), Indonesia will face economy loss by 115 trillion if the Indonesian government without intervening climate policies and if Indonesian government shows climate policies it will at least reduce 50.4% Gross Domestic Product (GDP) loss risk (Medrilzam, n.d.). Therefore, Indonesia ratifying as become a member of UNFCCC and agreed to the Kyoto Protocol that Indonesia government issued the legal base Indonesia regarding UNFCCC, which implied in Undang-Undang No.17 Tahun 2004 that shows Indonesia's commitment to take a role in mitigating emissions by working closely with UNFCCC and its parties by welcoming various opportunities to achieve the Low Carbon Development Strategies or (LEDs).

LEDs are strategies for on focusing economic growth while encompassing low emission and social inclusivity in; which these strategies have become a national priority agenda that has a target in Rencana Pembangunan dan Rencana Kerja Pemerintah (RPJM) 2020-2024 as well as five main strategies such as waste management & circular economy, green industry development, low carbon

marine & coastal, sustainable energy development, and sustainable land restoration to achieve high economic growth while reducing emissions up to 27,3% in 2024 (Medrilzam,2021). To complete a higher degree of low carbon development, Indonesia issued Presidential Regulation No.98 of 2021 on the implementation of Carbon Economic Value (CEV) which is a simplified Indonesian concept of Carbon Trading Mechanism made by the UN that means it spells Indonesia's seriousness in wanting mitigating climate change by establishing a greenhouse gas emissions inventory, determine the baseline greenhouse gas emissions, set target for climate change mitigation, and establish mitigation plan, and also it becomes the second country in Southeast Asia (after Singapore) to regulate carbon market systems and pricing (Mandelli, 2022).

In the latest climate change conference, 2021 UN Climate Change Conference of Parties 26th (COP26), Indonesia committed to set a Net-Zero Emission Goal that will be implemented in all Indonesia's industries sectors and update a new Nationally Determined Contributions (NDC), which is a climate action plan to cut emissions and required to improve every five years while Net-Zero Emission Goal is an objective for countries to reduce their emission into close as zero in particular target period. The new Indonesia's NDC is Indonesia has set targets for emission reduction and net-zero emission by 2060 or sooner, which requires Indonesia to transform their economy into a green economy that synergizes infrastructure, technology, and financing to have environment quality improvement with low carbon development (Ministry of Energy and Mineral Resources, 2021).

According to the UN, Indonesia is the ten largest greenhouse gas emitters contributing to over two-thirds of global emissions (United Nations, n.d.). Therefore, the Indonesian government is open to any international cooperation to create mutual benefits, which Indonesia and the UK do. Both countries commit to work closely towards valuable outcomes based on the Paris Agreement and COP26 in achieving low carbon energy transformation, including upgrading national action on a climate mitigation plan. Indonesia chose the UK as their partner because Indonesia sees the UK as a country that can impact Indonesia's policies and mitigation plan for one of the pillars that Indonesia is focusing on, which is climate change through the UK's experiences, investments, and technologies. In contrast, the UK

chose Indonesia as its partner due to Indonesia playing a strategic role in the global effort to mitigate climate change and reduce emission, which can be seen through Indonesia's big potential for renewable energy capabilities and becoming one of the world's lungs as well as exploring new UK bilateral collaboration areas. Therefore before COP26, Indonesia's Ministry of Energy and Mineral Resources and the UK government was launched a program called "Mentari program," which an Indonesia-UK low carbon energy partnership that aims for Indonesia's transformation into a greener economy; hence this program will continue Indonesia-UK low carbon energy partnership and enhance other cooperation in other sectors such as infrastructure, poverty reduction, and climate change goals also Mentari framework consists of delivering policy towards improvement on the legal framework, brokerage as a third party, collaboration, and networking, demonstrate viable business for the community, and improvement of livelihoods (Adminmtr, 2020).

1.2. RESEARCH OBJECTIVE

The purposes of this research are as follows:

- Provide an understanding of sustainable development and low carbon development concepts through an international cooperation perspective so that readers are aware that significant economic development must also be based on social and environmental development because these three aspects are connected and then give a view of how international cooperation will provide platform and solution that supports development action
- Identify and analyze Indonesia's challenges and opportunities in executing a mitigation plan for achieving net-zero emission goal so that readers can understand that sustainable development also requires support and assistance from all stakeholders and be able to understand Indonesia's potential in absorbing carbon, renewable energy, and low carbon development as well as UK potential on further collaboration expansion. Through that, it will contribute to the public in understanding green developmental approach and become complementary literature for readers in understanding related concepts

1.3. PROBLEM FORMULATION

The climate mitigation plan framework created by the United Nations became an opportunity for Indonesia to get international cooperation and

assistance to achieve a net-zero emission goal. Also, the mechanism of Carbon Economic Value triggering helps the Indonesian government exchange technology, innovation, and profitable solutions by cooperating actors. As Indonesia committed to achieving the Paris agreement and low carbon development, Indonesia opened a dialogue with the UK to have bilateral cooperation on assisting Indonesia to transform their economy into more focus on environmental quality conditions and social inclusion, thus giving a solid foundation for Indonesia to move forwards through energy efficiency and climate mitigation plan. It all started in April 2011 when the Department for International Development from the UK (DFID) and the Foreign and Commonwealth Office of the British Government (FCO) established UK Climate Change Unit in Indonesia (UKCCU) to help Indonesia through policies, finance, and development expertise to help Indonesia meet its national climate change objectives until now hence the UK also have in line vision and mission on how they want to elevate other countries, especially developing countries capacity to have such resilience of climate change while can improve UK strategies to achieve net-zero emission. Therefore, with the current condition of Indonesia and the UK government in taking net-zero emission goal, this study will highlight a research problem on how far Indonesia and UK cooperation can bring virtue to the Indonesian environment and social aspects, as well as identify the challenges and opportunities of Indonesia collaboration with the UK while at the same time on what level Indonesia can bring shared-benefit towards UK development strategies. Hence, Referring to the problem identification above, the research question is being made as follows:

- How is the partnership between Indonesia and the UK in achieving the net-zero emission goals for sustainable development?
- What are the challenges and opportunities of the Indonesia and UK sustainable development partnership on the net-zero emission goal?

1. LITERATURE REVIEW

2.1. THEORETICAL FRAMEWORK

2.1.1. INTERNATIONAL COOPERATION

Before discussing the international cooperation theory, the concept of international cooperation was introduced early after World War 1 in overcoming the unbalance of state power through

global platforms such as the League of Nations, which had the principal objective of maintaining world stability and peace. In international cooperation, each actor or state has its own identity, scope, role, and task as its foundation in starting the international cooperation; therefore, international cooperation tends to be related to global politics since both concepts have the same approach, which many states are doing formal dialogue in attaining resolution or cooperation. According to Liberal institutionalism, the term international cooperation, in general, is when actors (states/non-states) do a solution and strategic interactions for any issues such as economic, environmental, and social problems (Xinyuan Dai, 2017). In international cooperation theory, the actor focuses on states that become the main unitary actor. In contrast, the non-state actors such as non-governmental organizations, multinational corporations, social movements, and media become secondary actors yet still matter in the practice of international cooperation theory; hence international cooperation theory argues that states/non-state actors who make its rules may have the basis of rationality which they are nothing but want to pursue their profit, interest, cost-benefit calculations, and materials such as security in the military and economy prosperity (Xinyuan Dai, 2017). In international cooperation, there are two types of collaboration, namely bilateral and multilateral, and each type has different practices and roles. Bilateral, bilateral is an action between two countries/non-countries in exchanging solutions in terms of politics, culture, and economy through formal dialogue between presidents, ministers, ambassadors, and possibly businesses that start bilateral cooperation in the example the cooperation between Indonesia and UK partnership in tackling climate change (Laoli, 2021). While multilateral cooperation is an action between three or more countries/non-countries in creating solution and benefits for participants, for example, United Nations, ASEAN, and APEC however, multilateral theory argue that this kind of partnership will be ideal for the international system due to multilateral more able to adapt to external changes such as global problems and play an important role in shaping the international agenda (Scott, 2022), which implied in Indonesia-UK partnership that the bilateral concern arises from the influence of multilateral cooperation that is focusing on the same issue as the UNFCCC (multilateral cooperation) that succeeded in adapting the global problem and has succeeded in shaping the agendas of countries including

Indonesia and the UK which eventually establish collaborations that specifically discuss climatic conditions.

International cooperation has always been important towards global problems that need a collective effort and will always matter in the future. The agreement or “products” that are still relevant and assist countries resulting from multilateralism are Sustainable Development Goals, Paris Agreement, Kyoto protocol, and other frameworks with a different scope of field that help governments in providing resolution, strengthening commitment, reducing costs, giving reciprocity concept, and create a long-term relationship through mutual interdependence and other benefits however the international cooperation also have challenges in its vision and practices. The first challenge is that the wide-reaching members of multilateral cooperation can have implications for the rules of collaboration, which tend to be harder to organize in collective action. There are possibilities for a “free ride,” which eventually asks how good institutions are and can create “everyone cooperates or else no one will cooperate again” (Xinyuan Dai, 2017). The second challenge, domestic politics or national institutions always matter due international cooperation/agreements have to pass through regulations in respective countries in order able to execute and change the behavior of domestic actors; hence it will bring a loop because particular actors will lack the capacity in terms of resources to meet the agreements thus ultimately make cooperation more difficult (Xinyuan Dai, 2017; Kate O'Neil, 2004).

One of the theories derived from Neo-Liberalism is Functionalism. The basic idea of functionalism is derived from Neo-Liberalism; namely, an institution is for maintaining peace and cooperation. Thus functionalism is the fulfillment of the specific task of the institution to tackle problems and issues which concern more than one state, such as issues of climate change; they believe the cooperation between states in institutions is more likely to cooperate in social and humanitarian problems not only about how to maintain peace (Angelo Jr.Golia, 2020, p. 5). Examples of Functionalism theory in international cooperation theory are the United Nations, World Health United Nations Framework on Climate Change, United Nations Development Programme, and other global platforms; in this case, UNFCCC is a prime example of an international organization that encourages to have international cooperation on

climate change issue for countries including Indonesia-UK collaboration who adopted an action of exchange in terms technology innovation, financing, and mitigation of how climate change should address. International cooperation played an important role and evolved in the past. Countries like Indonesia were more concerned about maintaining peace. However, nowadays, the areas covered by collaboration are more wide-ranging and collective, such as social and environmental issues. Concepts such as UNFCCC, Kyoto Protocol, and Paris agreement are used as the “umbrella” of the Indonesia-UK partnership and in how both countries carry out their goals. The international cooperation concept describes Indonesia's collaboration with the UK on climate issues influencing international institutions/agreements that can change behavior in particular countries by taking action, making policies, and making agendas. Besides that, this theory also will be used to analyze the “outer shell” of the Indonesia- UK partnership that considers the non- state actors who also have an important role in cooperation and then analyze how the short-term/long-term challenges are viewed from the perspective of international cooperation theory.

2.1.2. GREEN ECONOMY

In Indonesia’s sustainable development strategies, a concept of a green economy is introduced where the green economy is one of the crucial components in sustainable development because this concept shows an idea of using natural resources and the environment based on economy native or profit native that can lead to environmental degradation if there is no check-and-balance. The green economy definition was firstly introduced by the United Nations Environment Programme (UNEP), which defines a green economy as one of the results of “improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcities” (United Nations, n.d.), however, the definition of Green Economy evolve time over time such an economic concept that encourages the performer to set green norms and rules and sanction to those who deviated from the norms into more modernize definition “economic development through green jobs and green investment in terms of production, distribution, and consumption which ultimately give a contribution to the environment” (Armida Salsiah Alisjahbana, 2018). The green economy concept tries to “reboot” the traditional economic system, which gives vulnerable action towards the environment.

Therefore the green economy is related to the ideas of Green Growth and Low-Carbon Development, meaning the use of the green sector and industries as a key role in economic growth while emphasizing a reduction in fossil fuels in terms of production, distribution, and consumption (United Nations, n.d.).

The green economy is a not concept that tries to question the sustainable development principle, yet the green economy tries to give a small scope and ideas that there is a need to be aware and promote environmental cost while nation seeking profit, yet according to United Nations Division for Sustainable Development sets of green economy principles as follows:

- The green economy was a concept for focusing on sustainable development
- A green economy should generate green jobs and investments
- A green economy should behave country to have energy efficiency and effectiveness
- A green economy should construct boundaries for countries regarding its environmental security and justice
- The green economy should use as a framework for decision-maker actors
- A green economy is used as a tool to measure beyond Gross Domestic Product (GDP)
- A green economy should create fairness for generations and countries
- A green economy should protect ecosystems and biodiversity
- A green economy should offer well-being for people, social protection, poverty reduction, and access to services
- The green economy should improve governance and the rule of law that encompass inclusivity, participatory, transparency, stability, and democratic
- A green economy should create a sense of inclusivity; the external factors left behind by a nation/government (United Nations, n.d.).

Countries that ratified Sustainable Development Goals automatically embedded the concept of the green economy towards the country’s vision and mission. Therefore, through Badan Perencanaan Pembangunan Nasional (BAPPENAS), Indonesia set up an “Indonesia Green Growth Program,” which supports Indonesia in achieving a green economy that can decrease Indonesia’s poverty. At the same time, it increases the inclusivity of social aspects, environment quality, and energy efficiency. Indonesia Green Growth Program was

established for Indonesia's contribution to Nationally Determined Contribution (NDC), low carbon development, and funding green investment projects, as well as designing an innovative green economy that is embedded in Green Growth programs such as Energy Efficiency, Sustainable Landscape, Special Economic Zone/Kawasan Ekonomi Khusus, and Green Climate Fund Indonesia's preparation.

Green Growth Program by Indonesia was launched in June 2013 to normalize the concept of Green Growth and Sustainable Development into the country's planning process. Green Growth Program is aware that the green growth concept must be developed with the condition of hearing the ones left behind, such as those with poverty and environmental justice (Global Green Growth Institute, 2014, p. 2). The concept of green growth in Indonesia has been influenced by the role of international organization and international cooperation, especially once Indonesia ratified the Kyoto Protocol and Paris Agreement also in green growth concept there are some versions;

- Weak Green Growth: When country or businesses do emission reductions and environmental safeguards as well as focus on natural capital as the engine for economic growth
- Moderate Green Growth: When a country or business goes beyond environmental protection but focuses on green jobs in green sectors and also implements low carbon technology in green industries
- Strong Green Growth: When a country or business goes beyond creation, a revolution for a major economy in the long-term and low-carbon development can be the main engine for the economic course and improve productivity across all sectors (Global Green Growth Institute, 2014).

Green growth can be categorized as a success if there is an increase in natural resources and environmental services quality and quantity; meanwhile, at the same time, there is an increase in productivity across economic sectors and also an increase in technology innovation that supports a green growth economy (Global Green Growth Institute, 2014).

The mechanism shows that natural resources with the support of appropriate policy, economic incentives, adequate technology, an adequate quantity of human resources, and funding can increase economic productivity across all sectors resulting in an enhancement in the quality of public

and private goods, ultimately will bring the sense of sustainable development that derived from natural or even failing the sustainable development depending on how perpetrator can balancing between economic productivity and environmental protection as well as keys factor in terms of policies, technologies, human resources, and finance. Besides that, another challenge of the green economy or green growth is to challenging the prolonged concept in current countries and businesses that is "Business as Usual," especially in green industries business as usual concept is a condition where governments or companies tend to not aware about emission, environmental protection, and social inclusivity that can lead to unsustainable development.

To mitigate the challenges, countries along with the UN created a concept called "Low Carbon Development," which means a new development to maintain economic development through low carbon emissions and intensity low carbon emissions that emphasize Sustainable Development Goals No 13 (climate change) as a solid base for low carbon development. In Indonesia, BAPPENAS created a low carbon development project, focusing on growth in forestry, agriculture, transportation, waste, and blue carbon sectors. Hence in early 2020, Indonesia's Ministry of National Development Planning and the governor have an agreement on project implementation in South Sulawesi, Central Java, West Java, Papua, West Papua, Riau, and Bali (Kementerian PPN/Bappenas, 2020) as well as through Indonesia-UK partnership such as UK-PACT, Mentari program, Friends Indonesia Renewable Energy (FIRE) which at least the three cooperation programs are concrete actions from the Indonesia-UK partnership that encourage both countries to practice low carbon development and achieve net-zero emission goal.

Referring to the explanation above, the theory and sub-theory above will become the tool for analyzing the partnership of Indonesia-UK in achieving the net-zero emission goals through mentioned practices. In other words, the approach above will specifically investigate the medium-individual level, which explains the relation of theory to described Indonesia-UK partnership. The view will give an idea of the green growth concept in Indonesia to begin entering the gap of the current economic system and try to replace the mainstream financial system in Indonesia and intended to evolve as Indonesia sustainable development

activities to keep playing its role in Indonesia's developmental action. Indonesia's dependency on mainstream energies and economic activity will slowly be replaced by sustainable energies, green economy activities, and green jobs. Yet, the green economy concept, which is a net-zero emission goal, is one of the products and goals of the international organization and international cooperation influences, sustainable development concept, and green economy concept that will change Indonesia's view on its capabilities and prospects that ultimately will help Indonesia focusing on balancing three main pillars or help Indonesia to achieve net-zero emission goal as well as seeing green economy development from UK perspective that implements in Indonesia and UK collaboration.

2.2. PROPOSITIONS

The concept of a net-zero emission goal is complex, requiring it to connect three interconnected pillars, such as economy, society, and environment, to achieve a development that supports environmental and social progress. Hence, this concept binds international organizations and developed and developing countries to make bilateral/multilateral cooperation to preserve the world, gain a political level, gain good acts to protect their capabilities and opportunities, and boost their economy. Therefore, the thesis propositions are made:

1. Indonesia and UK indeed create bilateral cooperation that can help both countries to fulfill their agreement in terms of reducing emissions and having economic growth while paying attention to environmental quality
2. Bilateral cooperation between Indonesia and the UK will bring opportunities and several challenges for both countries as the results of the collaboration, such as helping to improve Indonesia's sustainable policies, large-scale investment in Indonesia, UK foreign affairs strategy, Indonesia's regional leader in sustainable development as well as COVID-19 recovery, competing for interest, and bias concept.

2. METHODOLOGY

3.1. RESEARCH SUBJECT

The subject of this research is Indonesian and UK governments and bodies related to research topics that discuss bilateral cooperation regarding low carbon development. In detail, the bodies from each government:

- Indonesian government
 - o Ministry of Foreign Affairs
 - o Ministry of Environment and Forestry
 - o Ministry of National Development Planning
- United Kingdom government
 - o Foreign, Commonwealth, and Development Office (FCDO)
 - o Department for Business, Energy, and Industrial Strategy (BEIS)
 - o International Climate Finance (ICF)

These particular institutions will be the main research subjects, meaning this research study will have institutional boundaries appropriate to the topic. Hence, the survey is accurate and relevant.

3.2. RESEARCH OBJECT

The object of this research is the partnership between Indonesia and the UK in low carbon development and net-zero emission goal as an action for sustainable development, which also automatically becomes the main variable of this research. Therefore, the main object becomes the main principle of the issue to be analyzed. The research object will be examined by involving the main variable and sub-variables to solve the problem to be studied.

As mentioned before, the main variable of this study is the partnership between Indonesia and UK as an action plan for a net-zero emission goal that involves the international organization such as UNFCCC, setting up the Paris Agreement, Kyoto Protocol, and framework for countries such as Indonesia and UK to carry out the plan and policies in order achieve its objective. In addition to supporting the main variable, the sub-variable explores partnership opportunities and challenges. This opportunity will mention how this collaboration allows Indonesia and UK to fulfill the universal goals and how the momentum will bring Indonesia and UK's position internationally. Furthermore, this thesis will focus on this collaboration's internal and external challenges, such as discussing green investment and competing interests and then the practice of greenwashing, which will give a helicopter view of an issue.

3.3. RESEARCH METHOD (DESIGN)

The data that will be used in research must be based on reliable facts and scientific data. In this research, the study will be using qualitative research methods

to offer a different approach through analysis based on observations, interviews, and documents such as text, books, articles, and journals; hence in the qualitative method author tends to use deductive reasoning which means gather multiple abstract data from interviews, observations, documents, and visuals into specific conclusion and create patterns from the beginning by organizing data into increasingly more enhance units of information (John W. Creswell, 2018)

The qualitative method address important points and characteristics that are suitable for this study, such as the researcher becomes the main key due qualitative researchers collect data through examining written and unwritten data and not rely on questionnaires or instruments developed by another researcher; qualitative research gathers various data and tends to share the ideas freely not constrained by particular mechanisms thus therefore in this study it has inductive data analysis where researcher analyzes the data from bottom-up approach means building patterns and themes into more units of information then researcher look back at its data and determine deductively whether they need to gather additional details (John W. Creswell, 2018). As described before, this study uses a case study approach, which means this study brings a specific example of a particular topic to be analyzed by researcher and participant perspective through in-depth data involving multiple sources of information such as interviews, documents, and reports, thus case study approach begins with choosing specific entity/individuals and bounds within particular place and time as well as choosing special issue, problem, and concern (W.Creswell, 2013).

In this case study approach, the type of qualitative case study suitable for this research is an Intrinsic case study, where the researcher focuses on an issue or issue and then selects one bounded case to illustrate the point; for example, in this study where the author focuses on the climate change issue and then sets low carbon development as a bounded case to illustrate the climate change issue. The reason qualitative data methods are suitable for this research is understanding the research problem and question based on the researcher and literature lens to have an in-depth understanding and in-depth analysis; another reason is that the qualitative method gives flexibility to the researcher after begins collecting data, for example, the question of a participant may change and modified or in other words the process that may change give an

indication the researcher is digging deeper and deeper into the topic under study. Besides that, this paper is not simply testing literature review theories. However, it tries to construct a new concept based on the author's conclusion that reflects participant role through their background, culture, concern, and experience that can shape their interpretations, thus influencing the author on the direction of the study. Therefore, this research approach is a qualitative case study that analyzes specific issues and aims to describe, compare, and explain an issue.

4. RESULTS

4.1. RESEARCH OVERVIEW

4.1.1. THE ROAD TO LOW-CARBON DEVELOPMENT COLLABORATION BETWEEN INDONESIA AND UNITED KINGDOM

The partnership began when the issue of climate change entered the international political arena. Climate change is a global issue involving environmental degradation by human activities such as unbalanced usage of resources, overuse of fossil fuels, and lack of sustainable practices. Climate change generates not only environmental degradation, yet it's affecting people's health, food production, infrastructure, and climate change impacts more vulnerable marginalized people or developing countries, eventually putting people at risk in particular conditions. After impact identifications, bit by bit, the regulator of international politics, the United Nations, has shifted the awareness of environmental destruction as a common problem and needs collective action.

As a result, the United Nations created sub-intergovernmental organizations called UNFCCC that manage, regulate, and advise countries in response to the climate change threat. The convention has produced several agreements regarding climate change response. Two are the Paris Agreement and Kyoto Protocol, international treaties and mechanisms binding United Nations members to take collective action on climate issues. Because of that, Indonesia and the UK carry out bilateral cooperation in the context of resolving the climate change issue due to particular reasons which Indonesia sees the UK as a country that can help Indonesia's policies and mitigation plan for one of the pillars that Indonesia focuses namely climate change through UK experiences,

investments, and technologies since Indonesia government also realize that the climate change implications are more severe towards developing countries and need a reliable partner that factually have progressive action such as became the first major economy to pass a net-zero emission low, stops providing any direct support for thermal coal mining, coal power plants, and coal power plants overseas as well as support for the fossil fuel energy sector officially ends in March 2021 (UK Export Finance, 2021), which can help Indonesia achieve more and take higher-level targets and goals. At the same time, the UK chose Indonesia as its partner due Indonesia play a strategic role in the global effort to mitigate climate change and reduce emission, which can be seen through Indonesia's big potential in renewable energy capabilities, global impact in terms of carbon stocks that become one of the world's lungs, and one of the ways for the UK to exploring a bilateral collaboration area.

Climate change is a global challenge whose many implications have been felt by many countries and will continue to feel as a result of the emissions by human activity. For example, like in the UK, the winter climate is projected to become warmer and wetter on average even though cold or dry winters still occur. Hence the UK's summer is projected to become hotter, and not only climate risk, but it has also risked public health through heatwaves, especially for older people, and a greater risk of flooding that impacts both the UK's environment and daily lives. Furthermore, in 2020, total rainfalls were causing heavy storms and strong winds that wiped out parts of the UK (Met Office, n.d.). Future climate change impacts as a result of demand for a growing population. It harms the water environment due to human activities, especially for the public water supply for agriculture, which will damage the UK's community's production, distribution, and consumption. Also, biodiversity, soils, and land use will be affected by climate change implications, particularly in increasing sea temperature that affects marine ecosystems, period spring life-cycle events, and affecting unwanted species migration, and soil quality and structure. Thus lastly will affect human health impacts which will decrease economic growth, either short/long-term (Environment Agency, 2018).

According to United Kingdom's national meteorological service (Met Office), the UK has climate change implications that are being felt across the UK; according to the data above, in 2020

UK the least snowy year generally declined since the 1960s, and the UK sea level has risen by 16.5 cm, UK near-coast sea surface has been the warmer since 2002, 6.2 longer leaf season due to higher number of growing degree, the United Kingdom's wettest year since 1998, and the warmest year since 2002 (Met Office Press Office, 2021). Also, according to Climate Transparency, the UK population will significantly increase by 9% by 2050 and become more civilized through UK globalization, meaning it will bring such negative impact due to climate change where UK community will be more exposed in terms of assets, health, and livelihoods that can affect national capacity and development (Climate Transparency, 2021). Therefore, the data emphasizes the need for UK transition in terms of energy to create better economic growth and green job opportunities by spreading awareness to UK's public stakeholders, thus carrying out an action plan to mitigate and adapt to current climate situations. In the UK, UK adaptation to climate change is delivered through a UK program called "National Adaptation Programme" (NAP), which consist of government setting on what should be done, how it should be done, key strategies, and outcomes that the UK wants to achieve, and measuring progress towards objectives also jobs distribution to all work organizations such as public bodies in which they should reporting their progress towards adapting climate change hence NAP setting strategy to exercise in the next 5 years 2023 that work together with all stakeholders such as private companies, data centers, telecommunication, energy sector, public bodies, and regulators therefore NAP produce a framework for public stakeholders and community through report called "Adaptation Reporting Power" (ARP) that consist government strategy following latest NAP furthermore NAP role is to describe climate change risk in every sector that will affected by climate change such as describing climate risk on biosecurity, water availability, water quality, natural carbon stores, risk on forestry, risk on agriculture process, climate risk on energy sector, information technology sector, transport sector, and climate risk in business sector that affecting supply chains and productivity (Department for Environment Food and Rural Affairs, 2018). Thereupon, various action was already done by the UK government to adapt and mitigate climate change implication. Climate Change Performance Index (CCPI) shows the UK remains in the top 10. It is still regarded as a leading country for climate policy, a policy effort to regulate the community in overcoming climate

change implications. Also, the government has created guidelines to support development, such as carbon capture usage and storage (CCUS), carbon removal, electric vehicles, and hydrogen.

The UK government has decreased terms of GHG emissions; in 2018, the actual emissions were 7.1, yet in 2019 they dropped to 6.9, which is below the Paris compatible pathway that regulates countries must be below 7.4 also according to CCPI data that energy use per capita in the UK which primary energy supply has shown decrease that in 2018 it has 106.0 and in 2019 it decrease by 102.4 also the share of renewable energy has shown an increase from 10.3 in 2018 into 11.6 in 2019 (Climate Change Performance Index, 2022). To conclude, the UK's overall strategies and action plan support the UK on track for a 1.5c Paris Agreement target that reflects UK efforts in domestic reduction targets, policies creation, and implementation and play a major role in global climate finance (Climate Change Performance Index, 2022). Moreover, UK proper adaptation and mitigation comes from the support of organizations and public stakeholder taking appropriate action to adapt to the short-term and long-term climate impacts meaning the UK officials are engaging both directly and indirectly, such as indirectly supporting organizations to take a role in mitigating climate changes. Indirectly UK government try to build awareness and capacity to the public in order able to overcome climate risk and encourage other communities to do the same action, which indicates that UK policies and action plan in socializing climate change were well structured and well implemented across the UK; therefore, Indonesia sees the UK as a strategic partner that can significantly help Indonesia to reduce climate change implications.

Along with that, UK domestic and international agenda surely has climate change pillar as their one of foreign policies key point or strategy for instance UK have various strategic pillars domestically and internationally such as by increasing clean growth and climate adaptation, reducing domestic GHG, understanding and mitigating financial risk due to climate change, create transparency for stakeholders, and become international leadership on climate change to follow UK action and standard as to achieve UK's primary goal of net zero emission goal in 2050 hence UK government will encourage suppliers, exporters, and their international alliance to encompass climate change into their agenda, organizations operations, and business line (UK Export Finance, 2021)

furthermore as in their foreign policies strategies UK plan to be international climate leader, UK with its government bodies namely Foreign, Commonwealth, and Development Office (FCDO) and supporting bodies such as BEIS and ICF which work together to carryout national interest and projects to create better world to living as well as to promote nation-self-interest on having secure place and prosperous country hence FCDO will unite development and diplomacy into single framework therefore it will try to shape international order into adjust and able to overcome to any global challenge particularly in climate change issue where UK will help countries through global action and development in COP26 in order accelerate the energy transition and energy efficiency also FCDO priorities are linked with current global objective namely SDG which encompass every single SDG's objectives (Foreign, Commonwealth & Development Office, 2021).

FCDO also carries out bilateral and multilateral missions to any countries or institutions and remains to prioritize the UK mission. For example, seek relations with ASEAN and other developing countries to integrate them into a green and low carbon development economy. In sustainable development concept, UK with FCDO use diplomatic concept to take step on sustainability in vulnerable countries and create significant progress meaning UK try to lead by example through reducing environmental impact and contribution to low carbon development for instance UK aid through Official Development Assistance (ODA) as one of the methodologies from Organization for Economic Cooperation and Development (OECD) which a support resources for developing countries such as for Indonesia that categorized as lower middle income country besides that not only FCDO who play a role to help low-middle income countries to thrive in various sectors particularly in climate sectors but BEIS through UK's ICF that established for developing countries in tackling climate change and implement sustainable development in their practices such as provide funds and technical assistance that work with DFID/FCDO, BEIS, and Department for Environment, Food & Rural Affairs (DEFRA) hence ICF play vital role in delivering national interest through foreign policies, international assistance, and transfer of knowledge. Clear and strong UK foreign policies and international interest surely show the UK's seriousness towards creating sustainable development in every country

and being inclusive in their foreign policies; therefore, the UK do bilateral cooperation, which the bilateral partnership was preceded by FCDO, whose mission is to help countries especially developing countries to take them from poverty by making ambitious approach in economic development also to bring prosperously and build a better developing country; therefore, UK starts to invest in Indonesia, especially for the “green” approach investment to enhance Indonesia’s climate policies, action, strategies as well as help Indonesia to secure universal goals. At the same time, the UK carries out the SDG's objective: “leave no one behind.”

Meanwhile, Indonesia, as one of the recipients of green assistance from the UK, is still in the midst of the widespread use of the concept of “business as usual,” which is very contradictory to what the UK wants to do in carrying out its sustainable development mission. Indonesia's climate change implications have been broad and equivalent to Indonesia’s community due to Indonesia’s behavior. Energy supply still highly relies on coal such as there are still fossil fuel subsidies in Indonesia’s community plus there are still existing palm oil that plays a major role in Indonesia’s export and import. According to the Directorate General of Climate Change Control at the Ministry of Environment and Forestry, 94% of Indonesia’s greenhouse gas emissions are dominated by CO₂. Also, more than 80% of the deforestation due to continuous clearing for oil palm industries has a significant impact on the global climate, eventually making Indonesia the third-largest emitter of GHG emissions in the world (Databoks Publication Team, 2019). Furthermore, Indonesia’s climate change implications have been various such as Indonesia is vulnerable to sea-level rise, which Indonesia become fifth highest in the world in terms of population size inhabiting lower elevation coastal zones, rice production is vulnerable due to global changes in El Niño patterns that impact onset and length rain season, and World Bank analysis shows that Indonesia is facing relatively high mortality risk by exposing to flooding and extreme heat as well as average loss in terms of GDP. (Transparency, 2021)

Besides that, according to CCPI data, Indonesia’s GHG emissions increased in 2018; Indonesia had 6.2 actual emissions. In 2019 Indonesia had an increase of 6.3 actual emissions, which is still far more than the Paris compatible pathway target in 2019, with at least 5.6 emissions. Thus besides a

trend of an increase, Indonesia also has a rising trend in terms of primary energy supply from 35.0 in 2018 to 36.0 in 2019, still far more than Paris compatible pathway target that having at least 49.6 primary energy supply plus Indonesia has a flat trend in terms actual share of renewable energy that having 18.7 in 2018 and 2019 (Climate Change Performance Index, 2022). The data indicate that Indonesia is a country that is vulnerable to the impacts of climate change, both in the short and long term. Thus, Indonesia, in this phase relatively a country that still depends on the primary energy supply, namely fossil fuel and coal gas, and has a relatively high risk of the impact of climate change and still has an increasing trend in terms of emissions and primary energy supply which means Indonesia needs structured, proper management, and international assistance in the energy transition.

As a result, Indonesia officials take some mitigation policies and sustainable development concept in their practice for example Indonesia government set a law framework for various sectors to adapt and mitigate climate change through Presidential Regulation 98 year 2021 that provide a basis for climate mitigations in the forestry, agriculture, energy, transport, industry, and waste sector in so-called Nilai Ekonomi Karbon which become guidelines for reducing GHG emissions through policies, plans, and action in achieving Indonesia’s NDC as sustainable development action and targets thus Indonesia NDC is carryout due to Indonesia’s climate mitigation and adaptation that encompass emissions baseline, emissions target, mitigation scenario, adaptation scenario, management, funding, technology and innovation, and capacity improvement which must carry out by government bodies, local institution, private companies, and community in every Industry/non-industry sectors and with that the Indonesia’s foreign policies strategy may varied that is try to focusing low carbon development and energy transition in their foreign policies framework and interests also Indonesia’s energy companies that start diversify their business line into more low carbon development and sustainable development for example PERTAMINA which state oil company has established biofuel refinery, renewable power in geothermal, established solar PV, established biogas power, promote green hydrogen, establish car battery industry as well as electric vehicle charging infrastructure hence other state-owned coal company called Bukit Asam do such diversify

in their business operation where try to aims diversify 50% of its revenue from non-coal sectors by 2026 then the company has started their project which involved in rooftop solar PV in one of Indonesia's international airport, Soekarno-Hatta, in 2021 furthermore the dominant electricity companies called PLN also putting renewable energy resources, electric vehicle charging infrastructure, and car battery industry into their business missions however not only state-owned companies but private companies also take a role in reducing Indonesia GHG emissions such as Indika Energy became the first Indonesian company to join the Powering Past Coal Alliance a coalition for better transition from coal into more green and sustain energy (Arief Wijaya, 2017; IESR 2021; Direktorat Utama Pembinaan dan Pengembangan Hukum Pemeriksaan Keuangan Negara, 2017)

Besides the Indonesian model on carbon emission system, Indonesia in taking the Net-Zero goal has a different point of view. Indonesia will have the so-called FoLU Net-Sink in 2030. FoLU is Indonesian government ambition on decreasing emission of forestry and land use based on environmental and carbon governance thus having programs such as decreasing deforestation, law enforcement, and implementation of development and public campaigns therefore this strategy needs multi-stakeholder collaboration. Net-Sink is different from Net-Zero because Indonesia not have the approach of zero deforestation as through UUD 1945 Indonesia should able to manage their natural resources to develop the value of Indonesia yet still upholding the principle of equality and sustainable hence according to Ministry of Environment and Forestry, Siti Nurbaya Indonesia has not yet reached the peak of its development which is different from industrial countries which they able to enjoyed what has been built before when they were already independent therefore Indonesia still need to do deforestation and other developmental approach to improve their national development yet still aware regarding sustainable development, ecological security, and ecological equality (Wibowo, 2022). Moreover, Indonesia's key strategies and priorities in their domestic and international policies are stated in RPJM 2020-2024 report where Indonesia's mission to realize Indonesia fair, prosperous, and developed vision thus embedded the current motto from Jokowi presidency which is economy transformation as one of its key strategy, In Indonesia's economy transformation, it still remains focus on Indonesia impact due to COVID-19 but at the same time

preparing solid foundations for Indonesia to carry out economic transformation in accordance with latest RPJM that include Green Recovery in Indonesia's framework meaning it focus on economic diversification which including low carbon development, food security, equal infrastructure distribution and access also digitalized community and economy hence the policy direction of development strategy also putting low carbon development as one of policy direction yet still remain focus on economy recovery, social recovery, and equal infrastructure (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional, 2021).

Particularly in the climate change development sector, the Indonesian government set document policies called "Pembangunan Berketahanan Iklim," which encompass priority locations and climate resilience action, climate resilience institutions, the role of the non-governmental organization on climate resilience, sources of funding to support climate resilience, set monitoring, evaluation, and reporting mechanism hence one the other side which foreign policies framework, the Indonesian government still uphold the mission of "Politik Luar Negeri Bebas Aktif" meaning Indonesian government will still carryout Jokowi vision and mission but trying to combine with free and active politics such as strengthening Indonesian leadership in the forum and international organizations, engagement in ASEAN and the UN Security Council, and prioritizing total diplomacy which diplomacy for peace and humanity in support nation interests (CSIS, n.d.). In this case, it will strengthen the national economy through its economic diplomacy, which prioritizes trade collaboration, investment, and expansion of export markets to non-traditional countries but also try to "open its doors" to welcoming all countries to invest and create economic interdependence, especially in a multilateral organization such as in G20 where Indonesia sees G20 as strategic opportunity to increase national development and capacity but also sees bilateral relations as a key that is no less important to accelerate national growth considering Indonesia's vision namely free and active politics.

As free and active politics are always embedded in Indonesia's foreign affairs strategy, Indonesia opens its door to collaboration with European countries, namely the United Kingdom, to improve both economies, social, and self-image as the result

of collective action on an issue, namely climate change. Furthermore, the Indonesian government needs assistance from developed countries to help Indonesia achieve its climate objectives and eventually utilize existing bilateral relations with the UK. However, they have a new focus on the environment. Both countries see this cooperation as cooperation that benefits both parties. In other words, this cooperation is at least profitable either through capital or natural resources, yet if viewed from a diplomatic perspective the UK will be able to maintain existing relations and have the opportunity to "explore" sectors that have not been done in bilateral cooperation with Indonesia and also to increase self-image in the international arena. For Indonesia, this collaboration will certainly help Indonesia to create, improve, and carry out their national action plan. Thus, a creative concept with the assistance of a country that has relatively good performance in solving problems as well as trying to collaborate with developing countries as their mission also in this collaboration can help Indonesia fulfill global promises such as net-zero emissions and sustainable development goals. Similar to the UK, with the prospect of this bilateral cooperation, Indonesia can improve its self-image internationally and regionally, such as in ASEAN, in which Indonesia has the opportunity to become a leader in climate change adaptation and mitigation. To add more, as countries divided into Annex 1 and Non-Annex 1 countries Indonesia and UK collaboration may occurred due to concept of "Political ethics" where Non-Annex 1 countries provide service to industrialized countries or annex 1 countries and eventually press developed countries to have a moral responsibility to their partners therefore the bilateral cooperation can be conduct based on mutual goodwill of countries (Wibowo, 2022).

4.2. DATA ANALYSIS AND RESEARCH RESULTS

4.2.1. THE PARTNERSHIP BETWEEN INDONESIA AND UNITED KINGDOM IN ACHIEVING THE NET-ZERO EMISSION GOAL FOR SUSTAINABLE DEVELOPMENT (ONGOING)

Indonesia plays a crucial role in international climate change negotiations, potentially becoming the central player in connecting developed and developing countries. It has demonstrated its role in bilateral partnership with the UK. Indonesia has ambitious plans to reduce GHG emissions and is

committed to international organizations such as United Nations to achieve its targets such as SDG and Net-Zero emission goals; if Indonesia success in achieving its targets, it can encourage other developing countries to do the same, therefore, Indonesia and UK carry out bilateral cooperation in various period. In the first period, Indonesia and the UK conducted bilateral green-focus collaboration in 2011 by establishing the United Kingdom Climate Change Unit (UKCCU) in Indonesia during the Susilo Bambang Yudhoyono presidency.

The UKCCU is a result of a good relationship between the UK and Indonesia; the goal for Indonesia is to meet green growth, climate change solutions target, and a sustainable future, thus including reducing carbon emission by 41% and moving to a low carbon economy that achieves 7% growth (Department for International Development, 2011). UKCCU in Indonesia has contributed to global goals such as climate action (Goal 13), responsible production and consumption (Goal 12), and building peace, justice, and strong institutions (Goal 16), thus having a focus on three specific areas, namely forestry, energy, and international climate negotiations, therefore, UKCCU helping to shape Indonesia's low carbon development in support of Paris climate commitments through bottom-up planning and helping Indonesian government to improve environmental regulations, especially in oil palm sector that become current Indonesia's trend energy supply as well as poverty reduction through low carbon and managing natural resources in a sustainable way (Department for International Development, 2014).

The UKCCU in Indonesia has significantly increased Indonesia's capabilities, awareness, and action plan to better adjust forestry, land-use resources, and energy efficiency. Also, UKCCU under those action plans will continue beyond the cooperation timeline due to long-term structural changes in those specific three sectors meaning the post result will continue to be felt and can be improved by the next government, such as during the Jokowi administration, which began in 2014 which has a commitment to overcome climate problems in Indonesia, especially in sustainably using natural resources and eliminate fossil fuel subsidies and at the sametime also focus on small business development, infrastructure, poverty, education, and healthcare. As there was an updated political context, there was an annual conference by

the United Nations called COP21, which was the 21st climate negotiations of the UNFCCC in Paris. This meeting led to new international climate agreements that are universal for all countries aiming to keep the global temperature at 1.5c – 2c under Intergovernmental Panel on Climate Change (IPCC), namely Paris Agreement, and this international agreement is made in such a way that not only for industrialized countries but also for countries that are vulnerable to climate change for example not only limited to investment commitment but will facilitate through technology, science, and also make vulnerable countries able to adapt low-carbon economy and low carbon development (France Diplomacy, 2020) like what the UK did towards Indonesia which facilitated Indonesia to adapt, mitigate, and shift into low carbon development.

A newly appointed president and updated international agreement create momentum for Indonesia to enhance their opportunities in maximizing their action plan towards the UK. For example, in 2018, through UKCCU, Indonesia and UK were significantly reducing emissions by promoting sustainable land use of forest that contributed to over 2.8 million hectares from deforestation and led to better land use for Papua; hence all Indonesian exports of timber and wood products certified as legal towards European Union (EU) due to promoting responsible production and consumption as well as supporting provincial government level to make more sustainable, especially for Papua local government due the most remaining forest in Indonesia and amongst the lowest human development indicators (Department for International Development, 2018).

The UKCCU in Indonesia focuses more on climate and environment than economic development, which can be proven by the result of the UKCCU program from 2011 until 2018 that significantly helped Indonesia carry out low carbon development concept in Indonesia policies and actions. However, it still focuses on the economic sector. As described before, the partnership benefits Indonesia materially and the UK through increasing Indonesia-UK trade trends. Indonesian legal timber and palm oil create value to the UK economy, creating £10 billion and employing 150,000 workers, thus helping United Kingdom's economy and self-image in the 2015 Paris climate conference by submitting emission reduction targets (Department for International Development, 2018).

The second phase of Indonesia and UK partnership in climate and environment was begun with the second partnership forum initiated by the UK and Indonesian government; this second partnership forum was one of the ways to maintain established bilateral relations for both countries, and as Jokowi's administration's priority that prioritizes human resources, infrastructure, and economic development. The second partnership was held in 2019, led by Indonesian MoFA Retno LP Marsudi, The Chancellor of the Duchy of Lancaster, and the Secretary of State for Foreign and Commonwealth Affairs United Kingdom Delegation that talk bilateral and international cooperation in various fields, one of them is climate change that talks explicitly about UK help on Indonesia's low carbon development action, therefore in 2021 UK launch country program that works in partnership with countries to have clean growth and GHG emission reduction opportunities thus achieve their NDC in regards the 2015 Paris Agreement called United Kingdom PACT (Partnering for Accelerated Climate Transitions) a joint program that manages by UK departments such as ICF, FCDO, and BEIS (UKPACT, 2020). UK PACT is committed to helping developing countries by investing £11.6 billion over five years until March 2026 and assisting developing countries by funding projects that are aligned with the vision and mission of the Paris Agreement, namely reducing carbon emission, sustainable development, and sustainable economy also sharing skills to the community in developing countries, therefore, in general, there are three models in terms of how to carry out the strategy:

- Country program

- o The country program is the partnership mechanism that works with countries that most who are vulnerable to climate change implications, i.e., developing countries; until now, the countries that have participated are Indonesia, Kenya, Mexico, Nigeria, South Africa, Malaysia, Colombia, and China which work by having bottom-up approaches such as discussing with local, regional, and national communities in terms of setting up the priorities, context analysis to have clear project pipelines, and engagement with government partners (UKPACT, 2020)

- Skill-share and Secondments

- o This type of model provides an exchange of information and skills between UK experts and partner countries to help achieve collaboration

objectives as well as strengthen capacities of resources by evaluation of work, workshops, training, advice, and demonstrating solutions; including skill and information exchange are climate change legislation, policy development, greenhouse gas inventory, offshore wind power, renewable energy in general, smart grid and storage, energy market regulation, green finance, low carbon transport planning, and low carbon public transport however this type of strategy also offer long-term effect which it able partnership countries to transfer temporary staff that can last from 6 months to 2 years to deliver more sustainable skills and able to accelerate low carbon development in partnership countries (UKPACT, 2020)

- Green Recovery Challenge Fund

o This type of model is a strategy where the UK, through UK PACT and ICF, funds green-related projects which support low carbon development, green finance, and inclusive economy, meaning it encourages the private company and local stakeholders to play a role in countries' green development which remains supervised, assisted and managed by UK expert (UKPACT, 2020).

In this case, UK PACT collaboration expansion in Indonesia started in 2021 when both countries agreed to maximize Indonesia's opportunities as a nation with great opportunities for an inclusive economy, low carbon development, and energy efficiency. Therefore UK PACT is implementing its all strategy plan, such as investment in infrastructure, green projects, knowledge exchange, and support for the economic transition. Until now, the Indonesia-UK PACT is implementing its mission, which is a bottom-up approach.

As a result, Indonesia-UK PACT has become a source of innovation and creativity for Indonesia's climate mitigation effort by combining local, national, and regional contexts with stakeholders and government that produces several action plans such as focusing on Indonesia's low-carbon cities and transport by creating a green project that works with Institute for Transportation & Developmental Policy (ITDP), Jakarta Transport Agency, and Indonesian Ministry of Transport to have e-ride hailing for Indonesian community namely Migo e-bike and will help Indonesia achieve their ambitious target to reduce net-zero emission goal as well as air quality improvement. With the

existing UK PACT models, UK PACT plays a role by implementing the Green Recovery Challenge Fund that provides a funding mechanism for Indonesia ride-hailing e-bikes, supporting local stakeholders while improving the nation's climate and providing connection towards private companies, which in this type of Indonesian community able to have e-bike while the local stakeholder able become the partner of e-bike company who will also earn income as well as improving nation's climate, besides ride-hailing UK PACT also try to realize Indonesia's 10.000 electric busses target in 2030 which work together with ITDP, PT TransJakarta, and Jakarta Provincial Government to decrease GHG emission by 50.3% hence to support Indonesia's electric busses Indonesian government and PT TransJakarta issue a bond namely "Green Bond" in London Stock Exchange with the help from UK PACT as a way to funding electric busses in Indonesia as well as investing for a better climate (UKPACT, 2020; Muslimawati, 2022). Besides that, UK PACT also supports policies and laws improvement in terms of climate change mitigation and adaptation by working together with Indonesia's Parliament and Westminster Foundation for Democracy which is a UK body that is committed to empowering society through making the national political system more equal, inclusive, and liable (UKPACT, 2020).

Collaboration between two countries certainly will have a good impact on each other. However, this collaboration may cause an issue because the multiple focus of countries that cooperate with UK PACT make each country have the potential for an unequal development concentration due to conflicts of priorities and politics. Therefore, Indonesia uses another momentum to create more focus and centralized cooperation that directly concentrates on Indonesia as United Kingdom-Indonesia Third Forum started in 2021. The Third Forum was held on 7 April 2021 and signed by Indonesia MoFA Retno L.P. Marsudi, United Kingdom Secretary of State for Foreign, Commonwealth, and Development, and The Right Honorable Dominic Raab, Member of Parliament Affairs. Thus United Kingdom-Indonesia Third Forum was a continuation of the previous forum in which they also agreed to maintain bilateral cooperation in many areas especially focusing on climate and environment; hence this third forum emphasizes the November COP26 objectives that restate the commitment of countries should achieving SDG and Net Zero Emission as well as

enhancing nation action on mitigating and adapting climate change.

As there is a need for direct concentration of cooperation from the UK towards Indonesia, both countries agreed to establish a new program to increase Indonesia's energy transition and low carbon development and achieve Indonesia's milestone, which is the net-zero emission goal through the United Kingdom-Indonesia MENTARI Low Carbon Energy Partnership and United Kingdom-led Friends of Indonesia Renewable Energy (FIRE) dialogues between Indonesia, UK, Germany, and Denmark as greater support for Indonesia low carbon energy transition (Foreign, Commonwealth, and Development Office, 2021; Pribadi, 2021). MENTARI program is a part of the action from the UK Prosperity Fund, which is an action plan from the UK Foreign and Commonwealth Office that aims to reduce poverty and inequality through the inclusive economy by enhancing low-middle income country productivity, revenue, living standards, opportunity, and empower the community; therefore, MENTARI program plays a role to improve Indonesia's economy in terms poverty reduction, better access for electricity, and achieve low-carbon climate change goals by working together with British Embassy Jakarta and Ministry of Energy and Mineral Resources that will run through in 4-year program start from 2020-2023 which focusing on economic growth while scale-up Indonesia's climate action progress and this program will work across Indonesia but will particularly focus on eastern Indonesia due to eastern Indonesia have economic inequality (Mentari, 2021). MENTARI will assist eastern Indonesia through project opportunities, policy actions, and development activities; however still pay focuses on the rest of the region then MENTARI will support the Indonesian government by working together in creating accurate policies and regulations in carrying development action, constructing awareness through knowledge sharing particularly in green project investment, provide funding for green project, and demonstrating renewable approaches with that this program consist model of work that will be implemented:

- Policy Strand

- o MENTARI will become a platform for Indonesia's institutions and public stakeholders that deliver policies along with the implementation of flexible demand-driven such as assisting the

Ministry of Energy and Mineral Resources in terms of low carbon regulations, renewable energy tariffs, assisting Perusahaan Listrik Negara (PLN) in improving their operation through planning, procedures and capacity building also defines the accurate business- model framework in regards to a developmental project which in result help improve Indonesia's various sector in order presenting low carbon development (Mentari, 2021).

- Brokerage Strand

- o MENTARI will play a role in becoming a broker for low carbon energy projects in Indonesia that work with international & national financial institutions as well as government agencies in presenting financial mechanisms, thus becoming owner/stakeholder consultations in giving technical assistance to renewable energy projects aside that MENTARI will establish match-making for the project owner and investor through MENTARI's events and one-on- one engagement (Mentari, 2021)

- Demonstration Project

- o MENTARI will deliver renewable energy projects and demonstrate in eastern Indonesia to generate inclusive business models and economically feasible business; then MENTARI will do the local capacity building towards the local community and sharing knowledge, particularly for marginalized groups; hence MENTARI will assist public stakeholders through feasibility project studies, stakeholder consultations, and technical assistance (Mentari, 2021)

- Collaboration and Networking

- o MENTARI will provide activities of knowledge exchange and learning in low carbon energy sector and then scale-up platform through engaging events and one-on-one collaboration that allow the community, public stakeholders, international/local investors, project developers, and academia to share knowledge and skills which can empower renewable energy (Mentari, 2021)

- Gender and Inclusion

- o MENTARI tries to differentiate the program from other projects which try to unite marginalized group and women in enhancing renewable energy project by combining the previous program such as the policy strand, brokerage strand, demonstration project, and collaboration and networking, which women and marginalized groups have roles such as event

hosting, participating, and organize renewable energy projects (Mentari, 2021).

It is very clear that the MENTARI program by design has a direct and inclusive approach to all stakeholders, not only government-to-government but also gathering all components that have their respective roles, such as donors, media, private project developers, local institutions, technology providers, and indeed Indonesia's minister that related to the development of this renewable energy. The MENTARI program has primary goals such as increasing economic growth and implementing climate change mitigation. However, if viewed in detail, the MENTARI program has a mission for Indonesia to provide access to energy that is safe, reliable, and also environmentally friendly, particularly for eastern Indonesia's community.

Two districts in East Nusa Tenggara province, Mata Redi and Mata Waga, have become the target of the project demonstration due its social and economic situations such as the dominant educational background is an elementary school and the uneducated, the main occupation of the rural community is farmer and herders, and their current energy demand is still dominated by traditional energy such as firewood and kerosene thus apart from that the lowest electrification ratio is in East Nusa Tenggara at 88%, Maluku at 92%, and Papua at 94% this means that it was emphasizing the need of economic growth by having sustainable and clean energy to promote low carbon development like MENTARI's mission in which they reduce poverty through low carbon development and generate high and inclusive economic growth (Adminmtr, 2021; Jayani, 2021). As the MENTARI action plan mentioned, MENTARI will demonstrate a renewable energy project through a small-scale renewable energy solution that can produce social and economic benefits for the community, particularly for the women and marginalized groups in Mata Redi and Mata Waga, which both villages were considered as underdeveloped villages by the Indonesian government and will assist by MENTARI to have access for electricity and provide a framework that can benefits community by promoting participatory action, gender and inclusion, local institution involvement, and collaboration with local government. To add more, MENTARI establishment would be said as the program that comes at the right time; for instance, according to the Ministry of Energy and Mineral Resources, the

potential of renewable energy spread almost throughout Indonesia, particularly in the Eastern Indonesia province in the Wind Turbine sector which hold by Papua by having 22.371 Mega Watt meaning MENTARI development on Eastern Indonesia may help Indonesia to achieve greater equal access and distribution of clean energy throughout Indonesia as well as job opportunities around that area (Jayani, 2020). Hence Indonesia has a 23% target in 2025 to achieve better renewable energy in terms of access and distribution across Indonesia; therefore, it is very appropriate to focus on eastern Indonesia due to the high number of opportunities, which also can be achieved with assistance from the MENTARI program (British Embassy, 2021).

Indonesia and UK indeed carry out cooperation that emphasizes equal partnership, shared benefits, and mutual commitment to achieve greater economic, social, and environmental conditions meaning that this partnership not only benefits Indonesia's needs but Indonesia also contributes to UK conditions especially contribute to UK's effort to achieving net-zero emission goal as UK sustainable developmental action. Indonesia's role in the UK sustainable development effort is creating a Joint Working Group (JWG) as both countries' effort to support sustainable agricultural production is non-discriminatory and maintain mutual respect for national legislation and standards. Hence JWG will be beneficial for Indonesia and UK by addressing both countries' challenges of sustainable agriculture in meeting increasing demand, particularly in UK conditions where it will require large businesses from the UK to ensure that the agricultural goods are aligned with relevant local laws and standards (Foreign, Commonwealth, and Development Office, 2021). Indonesia's role in UK sustainable development, especially in achieving the net-zero emission goal, is through becoming co-chairing of the Forest, Agriculture, and Commodity Trade (FACT) Dialogue in COP26, which, in this case, Indonesia by UK support emphasizes doing trade while promoting sustainable development such as protecting forestry, inclusive economy to reduce poverty, food security, and protecting the ecosystem therefore through FACT the UK and Indonesia has created four frameworks to achieve FACT objectives such as:

- Trade and Market Development
 - o This framework is becoming the main issue for FACT due to the need for a secure and sustainable market in terms of agricultural and

forest commodities; this framework will support green jobs and protect forests and their ecosystem, which 1.6 billion people depend on forests, including indigenous people, local communities, smallholder farmers, and employee of forest-based therefore there is a need for growing global market share in the agricultural sector (UN Climate Change Conference UK, n.d.).

- Smallholder Support

- o This framework aims to scale up smallholder capacity, access, and conditions to meet increasing environmental standards and support their role in deforestation and policy development to improve smallholder finance and global markets (UN Climate Change Conference UK, n.d.).

- Traceability and Transparency

- o This framework is to support technology development and transparency that can provide the fundamental basis for enhanced collaboration also; this framework promotes the need for digital innovation and improving institutions in order to facilitate trade in sustainable agriculture commodities as well as protect critical ecosystem (UN Climate Change Conference UK, n.d.)

- Research, Development, and Innovation

- o This framework aims to show how Research, Development, and Innovation can support FACT's objective through innovation on practices, research to enhance actor knowledge, and such research and development to minimize the land area expansion while meeting agricultural commodities demand (UN Climate Change Conference UK, n.d.).

Indonesia and UK aware that only working together can bring such sustainable practices and development hence Indonesia and UK collaboration based on mutual respect, trust, and benefits to deal with vital matter such as energy efficiency, inclusive economy, green growth, and sustainable development in all sector therefore Indonesia and UK acknowledge that sustainable development is crucial for economic development in all industry furthermore Indonesia and UK believe that the only reliable and long term economic growth comes from clean and sustainable energy which both countries agreed to not keep using “business as usual” concept where natural resources in a way unbalanced for “what we take with what we return” towards the environment therefore there is a need for energy and economy

transition especially for vulnerable countries like Indonesia with the UK assistance hence leaning towards low carbon development and green economy will be good for government, stakeholders, and community due to generate high quality growth, high quality job opportunities, and high people prosperity opportunities hence achieve universal goals such as SDG and Net-Zero Emission goal.

4.2.2. PARTNERSHIP OPPORTUNITIES AND CHALLENGES

4.2.2.1. THE OPPORTUNITIES

Indonesia and the UK are committed to a long-term strategic partnership that mutually benefits both countries and its community towards promoting sustainable, prosperous, and secure places for countries. In the Indonesia-UK partnership that supports Indonesia’s climate targets, Indonesia needs to decrease its total emissions, especially in energy sectors. Indonesia can totally decarbonize and achieve a net-zero emission goal by utilizing the massive potential of renewable energies. As Indonesia wants to decarbonize and deliver a low carbon development concept, it needs to know how much Indonesia’s potential for renewable energy resources, for example, Indonesia’s potential for renewable energy in hydro, solar PV, wind turbine, geothermal, mini and micro-hydro, bio energy, and marine energy reach 443 GW which means Indonesia has various and big potential renewable energy but the usage still relatively low than other G20 countries which also try to do energy transition and economy transition in achieving Paris Agreement objectives however the assumed potential may differ from time-to-time due technology innovation and resources improvement but the assumed potential will be such tool and information for decision- makers and government bodies to elevate objective by considering climate change adaptation and mitigation (IESR, 2017). After identifying Indonesia’s potential, there will be main critical strategies for the Indonesian government to determine what should be prioritized more to deliver more link-and-match action plans and maximize Indonesia’s opportunities, such as attracting more green investment

First, green investment is an investment in a project, infrastructure, and program that focus on resources conservation, resources production, sustainable distribution and consumption, and

innovation of new and renewable energy, as well as investment activity that is related to sustainable development and green investment is a concept that comes from green economy theory which an investment that will bring green growth, inclusive economy, and green jobs opportunities. As a green economy incorporate all aspects of sustainable development (economy, social, and environment), so make a green investment that must consist of environmentally friendly materials, implementation of reduction, reuse, recycling, and recovery, low carbon technology, talented human resources in terms of energy efficiency, meets environmental standards, and use of renewable energy which can be implemented in Indonesia's infrastructure, industry, agriculture, maritime, and tourism. UK investment through cooperation that has been completed or is currently being implemented is mainly focused on deforestation, land use, set sustainable development policies, funding financial institutions, skill-share, and project implementation: however, not as much investment in Indonesia's energy transition, especially for coal, fossil fuel, decarbonization transport, and help Indonesia's carbon trading the fact that Indonesia's plenteous natural resources should make green investment become the promising opportunities for investors/countries.

Indonesia green investment may start with the topic of "energy reformation" where Indonesia become major fossil fuel consumption that bring Indonesia's primary energy mix still dominated by fossil fuels and transport as become 2nd largest contributor for GHG for example in 2020 Indonesia's coal consumption for electricity and transport fuels cost around 75% of Indonesia's energy mix that consist fossil fuel (coal, oil, natural gas), renewables energy 20%, and others energy on 6% which this means that Indonesia will bring much carbon intensity due to share of fossil fuel and consumptions of fossil fuel hence in detail the electricity generation mix Indonesia generated 62% on coal and the dominant energy in transport sector in 2019 is oil that reach 93% also in Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) by PLN that wants to reduce carbon emissions is still relatively low which only 5.4 percent due to issues of raw material availability and selling prices which result in the potential use of fossil power plants for longer and (Climate Transparency, 2021; IESR, 2022). This means that there is opportunities for Indonesia to have direct investment on transitioning most of its electricity and transport energy mix into more green which renewable energy-based that allow

Indonesia to compatible with Paris Agreement and net-zero emission goal as well as able to have additional development benefits such as improvement of air quality, jobs creation, infrastructure upgrading, and reduce degradation of natural habitat hence Indonesia's renewable energy may thrive once the investment on Indonesia climate action grow meaning Indonesia needs to enhancing their regulations quality and regulation clarity in order giving signal for others nations/investor to invest in Indonesia climate development yet besides that the financial management in terms of bank need also improvement when having the ease of loans for entities and communities as well as improvement on industrial capacity in producing renewable technologies and innovations that align with international standards and regulation.

The Green investment will significantly impact Indonesia's economy and society. The infrastructure sector, particularly the net-zero economy, will deliver Indonesia's higher GDP and bring even higher to become a high-income country and better health quality for the Indonesian community. Also, investment in Indonesia's renewable energy not only means better green growth but also means Indonesia's resilience in terms of infrastructure, economy, and human capability toward destructive climate change. Furthermore, green growth will deliver various job opportunities, which is predicted to add 1.8 million jobs that encompass sustainable development concept in 2030, particularly in the energy sector, electric vehicles, land deforestation, and waste management, while able to increase Indonesia's GDP by 6.1- 6.5% throughout 2021-2050 (Leonardo Garrido, 2021). Indonesia can also take advantage of the momentum as one of the developing countries affected by COVID-19, meaning Indonesia can use the momentum of COVID-19 as a "turning point" for the Indonesian economy toward more green, environmental friendly, and inclusive of stakeholders and according to Rencana Kerja Pemerintah (RKP) also include economy reform due to COVID-19 implications. To attract more green investment, it needs proper regulation and policies in renewable energy, so the investor will have a relatively small risk because it has a stable policy and is attractive to business actors and Investment in Indonesia must also have a competitive advantage due to remembered Indonesia is not the only country that wants to increase renewable energy countries in particularly ASEAN members also have more or

less the same targets and all countries also need investments that are different from business as usual conditions, namely fossil fuels where not all countries have oil. However, in this case, all countries in ASEAN have the same renewable energy sources such as water, solar, biomass, and other renewable energy technologies. These are all opportunities for Indonesia to have a better return on investment through proper regulation and policy. Besides that, to support Indonesia's green economy and growth opportunities,

Indonesia may invest in electric vehicle transition, technology innovation, and research & development to become an energy superpower. As mentioned before, the Indonesia and UK sustainable development collaboration opportunities will also benefit UK interests, as implied in the Indonesia- United Kingdom partnership forum 2021 and UK-Indonesia partnership roadmap 2022 to 2024. Indonesia particularly supports the UK for international development that promotes strong country-level partnership through sustainable development and unleashing the potential of low-middle income countries; therefore, in this forum, Indonesia leads the UK in the UK's mission towards ASEAN countries by supporting the principle of ASEAN centrality, ASEAN Outlook on the Indo-Pacific, and become dialogue partner for ASEAN furthermore UK potential in collaborating with ASEAN can also be emphasized through latest UK-Indonesia partnership roadmap that stated will maximizing UK's role in ASEAN regional and bilateral partnership, supporting ASEAN led mechanism (Political-Security, Economic, Socio-Cultural, and Cross-Sectoral), ASEAN Master Plan on Connectivity 2025, ASEAN recovery effort, and supporting ASEAN digital transformation agenda as well as Asia-Pacific region (Foreign, Commonwealth, and Development Office, 2021; 2022).

All ASEAN mechanism is a mechanism that uphold ASEAN members political, security, social, economy, and environment towards more better conditions and more favorable for all ASEAN countries hence UK sees this as opportunities to have more beyond just cooperation government-to-government but may have greater long-term strategic engagement with ASEAN and Indo-Pacific Region plus with the fact that UK become dialogue-partner from August 2021 it thickening the UK's mission opportunities to play a role in ASEAN and Indo-Pacific countries but still

carryout FCDO mission that protect and favor UK people then shift its position to other countries however this does not mean that the UK prioritize more their interest first as it can see through dialogue partner that bring UK to high-level of access towards ASEAN for example UK and ASEAN establish ASEAN-UK Joint Cooperation Committee that reassert to have shared commitment to the principle of ASEAN and UK international development strategy which have one of its focus on sustainable growth as implied in UK's Clean Green Initiative at COP26 that assist developing countries to have better energy transition and green technology to support developing countries' economies sustainably (Department for International Trade, 2021; Prime Minister's Office, 10 Downing Street, Foreign, Commonwealth & Development Office, The Rt Hon Elizabeth Truss MP, and The Rt Hon Boris Johnson MP, 2021).

UK works in close partnership with ASEAN to have better economic and socio-cultural collaboration; the UK government provides over £300 million ODA annually to support economic-social development, particularly in tackling climate change and providing humanitarian assistance following short-term/long-term disasters hence UK bodies which ICF has doubled its investment from £5.8 billion to £11.6 billion from April 2021 to March 2026 in mitigating climate change, reducing deforestation, and clean green growth hence not only government-to-government investment in social development UK also have a total increase trade in goods and services to ASEAN that worth from £38 billion which an increase of 3.7% from 2020 which shows that UK mission towards ASEAN on a strong route and demonstrate the mutual interest of suchtrade and create a better world to living in (Foreign, Commonwealth, and Development Office, n.d.; Foreign & Commonwealth Office, 2022; Lambe, 2022)

Not only for ASEAN, but the UK also set the eye for the Indo-Pacific region to trade, invest, and cooperate with its members; therefore UK sees Indo-Pacific as a strategic geopolitical and critical region where the "competitive" countries play to achieve their self-interest and mutual interest that requiring UK involvement to organize trading and cooperation route in order develop regional strength and adjust international order. The UK's vision of the Indo-Pacific can be emphasized with the increasing cooperation in ASEAN, either in the short-term or long-term, which can benefit both

parties. The UK uses ASEAN as a platform for the UK to “tap” the Indo-Pacific countries and enhance trade and cooperation among its member; however, the UK may not underestimate ASEAN's value because ASEAN has brought in many “players” who are no less critical to UK’s international development, interest, and its need for adjusting international orders. The UK mission on the Indo-Pacific approximately has similarities with the UK mission on ASEAN such as shared prosperity, countries stability, safer climate, growing economy, and stronger diplomacy. Furthermore, Indo-Pacific is the world’s economic growth engine that accounts for 40% of global GDP, and Indo-Pacific already accounts for 17.5% of UK global trade. Therefore the UK's mission is to be a role model yet equal partner for Indo-Pacific either bilaterally or multilaterally (Cabinet Office, 2021).

The ASEAN and Indo-Pacific countries will always be an opportunity for the UK to explore and create bilateral and multilateral cooperation, thereby simplifying the UK's ongoing outreach to ASEAN and the Indo-Pacific as "Global Britain." Global Britain is a suitable name for the UK, especially after the Brexit period where Britain left the European Union, which highly respected trade and economic security, and the UK was placed in an uncertain future condition to avoid being underdeveloped; Global Britain or the UK wanted to find a "new direction” to invest and cooperate, one of which falls to Southeast Asia which is a growing economy and an important role in geopolitical. The UK also wants to seek a high-status setting in all cooperation platforms to achieve economic security in this anarchic world as implied by the neo-liberal institutionalism theory, which means that trade/cooperation will provide security or reduce conflicts between countries, therefore more is expected from the UK to increase their investment in Indonesia, ASEAN, and the Indo-Pacific then there is much more important reason to cooperate with ASEAN countries that combined ASEAN countries produce \$2.8 trillion GDP and ASEAN vast population that accounts 630 million people becoming a market opportunity for the UK to explore particularly to help ASEAN community in having a sustainable and clean environment and energy with the prospect to reach Indo-Pacific countries to have better more presence within its members and explore bilateral/multilateral cooperation (Parker, 2021). Furthermore, the momentum in which the UK reaches ASEAN and Indo-Pacific members can also be used by Indonesia to increase its presence

in European countries to have better trade and have new and significant sustainable development cooperation towards European countries with assistance from the UK to meet the standards of other countries. At the same time, Indonesia has a position of G20 presidency which includes the concept of sustainable development in the topic of discussion, particularly in the energy transition. This condition can allow Indonesia to realize the vision of "Indonesia climateleader," which means Indonesia can be the strategic leader for ASEAN to bring ASEAN interest into an international platform to get international support in developing ASEAN. At the same time, become a climate leader in the ASEAN region with assistance from the UK. To be clear, UK's role in Indonesia does not define that the UK dictates and can significantly influence Indonesia, but Indonesia and UK consider each country as an equal partner which upholds mutual benefits, mutual respect, and complements each other through “reciprocity”; therefore this condition allows Indonesia and the UK to have conditions of such interdependence between each other in terms of cooperation, economy, and socio-cultural aspect which will also lead to better future trade and mutual benefits for both countries which fit into a liberal concept where states can have absolute gain and reduce the possibility of conflict in this anarchic world through the exchange of interest, value, and desired outcome (Tanius, 2018; Evi & Sasi, 2022).

4.2.2.2. THE CHALLENGES

Sustainable development creates challenges for every country in implementing and managing its concept; therefore, several considerations have been taken by many countries, such as Indonesia and the UK, who work together to implement the idea of sustainable development, which is mutually beneficial for the two countries. However, during the course of cooperation, there are significant obstacles for both countries which prevent them from effectively implementing sustainable development and achieving their targets. Such obstacles vary in context and influence both parties, including the impact of COVID-19, competing priorities and interests, inadequate policies, and growing business social responsibility.

The Indonesia and UK partnership has not been spared the impact of COVID-19. Both countries are aware that COVID-19 has spotted the new “hotspot” to collaborate through bilateral cooperation, meaning that this collaboration will

also diversify its "attention" to work together in the recovery of COVID-19 for Indonesia and the UK, for example, as implied in latest Indonesia-UK third forum which both countries are putting health, vaccine cooperation, economic recovery besides pre-existing topics such as sustainable development, security, infrastructure, and foreign policies. However, all issues are interconnected, and COVID-19 is no less important in influencing domestic and international strategies for both countries since it affects countries' interests and objectives (Evi & Sasi, 2022). In this case, the impact of COVID-19 is causing many unemployment, productivity, and volume of international trade in many countries, including Indonesia and the UK, particularly it risking both countries environmental and social risks such as increasing poverty, escalating inequality, disruption of the food supply chain, and waste problems then it can be linked with greater risk of affected by climate change implications especially when it comes to countries economic growth which limiting the access and production of clean energy as well as investment for better sustainable development actions, particularly among developing countries.

COVID-19 indeed bring such challenge towards Indonesia-UK bilateral cooperation in regards sustainable development collaboration however COVID-19 not becoming the main reason to reduce its policies and strategies which can be seen from UK investment in Indonesia that focus on sustainable recovery, green finance, and green industries with keep in mind the basis of cooperation namely mutual benefits and respects hence COVID-19 becoming such momentum for both countries to create more better green economy for both parties through the making of green jobs creation, boost economic activity through green growth, green funding, and decarbonization of industry hence Indonesia can also do sustainable recovery meaning through this cooperation with UK Indonesia can improving the output from every sectors of economy and making it more inclusive so if any crisis in the future the vulnerable may remains resilience and at the same time reducing number of poor people as they more engage in the business chain (Evi & Sasi, 2022). Not only for Indonesia, but the UK also can make a sustainable recovery or as its governmental vision called "Green Industrial Revolution" to maximize its domestic and international policies outputs which in Green Industrial Revolution there are the Ten Point Plan of recovery from COVID-19 into more

green and continuing to drive down emissions hence the points are advancing offshore wind, low carbon hydrogen growth, promoting nuclear power development, advancing zero-emission transportation, green public transport cycling and walking, green aircraft and ships, green building, carbon capture and usage as well as storage, and protecting UK's natural environment thus all the points have its targets yet giving much more green jobs opportunities however this ambition from UK government will also urge some other countries to work together and deliver global goals such as Paris Agreement and Net-Zero Emission (Department for Business, Energy, and Industrial Energy, 2020).

Other challenges that may hinder the progress of Indonesia-UK sustainable development collaboration may come from the Indonesia condition of competing priorities and interests, meaning the Indonesian government may have conflicting priorities, whether from social, economic, political, or developmental sectors. In detail, Indonesia conflicting priorities can be analyze through the Indonesia latest RKP in 2022 which it encompass Presidential Regulation No. 18 year 2020 about Rencana Pembangunan Jangka Menengah Nasional (RPJMN) year 2020-2024 that stated Indonesia planning for development throughout 2020-2024 thus carry out Jokowi presidency mission such as human development, infrastructure development, regulation simplification, bureaucracy simplification, and economic transformation as well as bring COVID-19 issue to Indonesia development strategy that conclude Indonesia's development theme "Economic recovery and Structural reformation" economic recovery means for getting back of community purchasing power that can elevate economic growth and at the same time implement economic diversification which adding value of economic concept such as low carbon development and enhance the fairness distribution of infrastructure access then not only that Indonesia also focus on climate investment reform and institutional and governance reform which means Indonesian government realize that lack of investment becoming the main reason of lacking proper infrastructure not only for sustainable development but for all sectors and Indonesian government also realize that there is a need for more approach on research and development institution to generate greater innovation that can supporting Indonesia sustainable development furthermore considering that the concept of such transformation is a joint work and require

assistance from suitable parties start from planning to implementation therefore as previous mention Indonesia open its bilateral with the UK in all sector including economic recovery and economic transformation towards sustainable development action in order carryout correctly and achieve both national & international targets (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional, 2021).

As described above, Indonesia has one of its focuses on sustainable development and a green economy as its national priority, including environmental development and improving disaster reliance. In this priority, Indonesia has a target of reducing and overcoming the pollution load to increase the capacity of the environment, especially in handling medical waste post-COVID-19, as well as improving the quality of air, water, seawater, and soil as support for people's living systems hence strengthening disaster resilience both sudden on-set disaster such as earthquakes, tsunami, floods, and other while slow on-set disaster such as environmental damage and implication of climate change furthermore focusing on reducing GHG and emission intensity during the economic recovery from COVID-19 with a focus to reducing land, industry, and energy sectors emission hence Indonesia through policy paper "Pembangunan Berketahanan Iklim" that becoming Indonesia's guideline for planning and implementation climate change development which encompasses:

- Priority locations and climate resilience action lists
- Climate resilience institutions
- The role of a non-governmental organization to support climate resilience action
- Sources of funding to support climate resilience action
- Monitoring, evaluation, and exporting mechanism (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional, 2021)

Indonesia's climate change adaptation and mitigation will not be separated from Indonesia's other comprehensive and inclusive priorities, ranging from economic and social to national priorities, which means that national priorities will not be able to stand alone and have significant progress if they are not balanced by other national priorities plus this priority cannot be separated from the assistance of Indonesia's foreign policy, which prioritizes free and active cooperation and

diplomacy with every country, one of which is the UK. The problem with this point is that with Indonesia's many national priorities, there will be many conflicts of interest in determining what should come first, whether it is more concerned with economic growth due to the impact of COVID-19 or a renewable approach to all concepts.

National development, especially sustainable development such as building the environment and building climate resilience, gets a relatively small allocation of funds from other strategies and this shows the possibility of a lack of focus and seriousness from Indonesia domestically towards climate- sustainable social development for 2022 and this can also be demonstrated through the challenges faced by the Indonesian government in energy sector related to dependence on fossil energy supply, suboptimal mineral and coal transition, weak supervision and control system for unlicensed mining and low quality of human resources in the field of mineral resources that are not evenly distributed (Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional, 2021), this point can also reduce the effectiveness and efficiency of a foreign cooperation where two countries that establish bilateral cooperation will have difficulties if one of the countries has many focuses and has other interests this can also be bolded that a foreign policy will always be related to domestic interests or agendas such as how Indonesia's cooperation with the UK is influenced by Indonesia's domestic interests.

Inadequate policies are also a pair of priority issues and interests of the Indonesian government as previously mentioned, Indonesia is very dependent on fossil fuels, especially in the electricity and transportation generation sector where making policies such as the habit of fossil energy subsidies can hinder the effectiveness of Indonesia's cooperation with the UK, especially in sustainable development and will make renewable energy with the concept of low carbon development difficult to compete with fossil fuels then in terms of sustainable development investment policy Indonesia also needs to implement several points, namely increasing renewable energy targets and policies in terms of clarity, consistency, and credibility, reforming subsidy policies that focus on renewable energy, creating a more effective licensing and procurement process to provide certainty for investors, preparing project risk

management policies with providing standards and technical support, providing policies that facilitate research and capacity building. The structured policy, especially in the sustainable development topic, will give a signal to investors and also the UK to be more confident in providing investments that will benefit both parties; therefore, it can be seen from the one ongoing collaboration Indonesia-UK action plan which focuses on Indonesia's policy reforms (IESR, 2022). Not only that, Indonesia in their policy reformation need to fulfill the rights from below, starting from local communities, customs, and other marginalized stakeholders so that the sustainable principle can be implemented properly, therefore Indonesia must have a target segment in the target policy so that it is right on target which is divided into 3 approaches, namely civil society or institutional approach. local level, rights holders for indigenous peoples and local communities, as well as the separation of barriers between the central and local governments (Wibowo, 2022).

On the other hand, emerging sustainable development across government-to-government creates sparking on different stakeholders, namely businesses which they recently also focused on the concept of low carbon development through their products that are environmentally friendly, inclusive, and also progressively sustainable for the economy and also due to the rise of the environmental crisis issue and public awareness of ecological issues therefore recently stakeholders other than the government such as investors and customers are putting pressure to open information related to how they handle the environmental crisis and what is their role in sustainable development action thus in this case business actors from both sides began to transition the way they do business in how they sell their products by informing that their products have gone through the recycling process, save energy in their manufacture, and have a good impact on the environment in the long-term.

The concept is called "Greenwashing," which is considered an activity of misleading information by companies because their products are environmentally friendly even though the facts have not been confirmed to be transparent and valid. For example, companies that do greenwash make claims that their products are environmentally friendly. Although those claims can have the potential to be accurate, the companies involved sometimes exaggerate claims to increase sales, mislead consumers or make them more

attractive to the public. Then this concept works with how business actors process their goods through rebranding, name modification, and repackaging. Suppose the goods are physical products and convey an environmentally friendly message such as being more natural and pro to the environment. In that case, penetrating their interests can be through advertising, standardizing procedures, and press releases (Kenton, 2022).

Therefore, both countries in sustainable development cooperation are aware of what they as the government also warns about how businesses work and both governments are also not indifferent to the concept of greenwashing which can hinder the acceleration of the energy transition and hinder the progress of carry out the idea of low carbon development as stated by the UK government that the UK recently created an independent group that specifically takes care of greenwashing issues called The Green Technical Advisory Group (GTAG) who will be an advisor to the UK officials in the implementation of the green economy and will create a framework for investors under the name "Green Taxonomy" a framework that applies certain standards in identifying how the investment is declared as sustainable development or not and also this framework will deal with greenwashing problems that will make it easier for investors and the public to understand how companies can protect the surrounding environment and ultimately will accelerate the application of green economy, green growth, green finance, and also green industry in the UK community in order to achieve the net-zero emission goal target (HM Treasury, 2021), and also through UK bodies, namely DEFRA, which regulates businesses who must provide transparent information to the public and demonstrate to regulators whether they meet requirements such as ISO 14021, which is a requirement that discusses the environmental for stakeholders. On the other hand, Indonesia has few regulations related to the greenwashing issue, such as through UU No.32 2009 article 68, which obliges the public to provide true and open information regarding environmental protection and management, through Ministry Regulation No 2 2014, which regulate ecolabel which declares a product whether in the processing its raw materials and waste of the product already complied with domestic environmental regulation, and through UU No.8 1999 in regards consumer protection that stated there is obligatory for companies to provide information that valid and accurate in their products or services (Wongkar & Apsari, 2022).

However, no specific Indonesian regulation still discusses greenwashing, which may improve Indonesia's sustainable development.

It should be underlined that the problem with the challenge of Indonesia-UK cooperation within the context of greenwashing is not how companies structurally convey information that is misleading to their customers but the issue of how greenwashing provides public opportunities as economic drivers to support corporate practitioners who solely want to increase individual economic growth and provide opportunities for companies to continue to do "business as usual" practitioners, which harms the environment and eventually slows down the implementation of the green economy, green finance, and green industry to achieve net-zero emission goals.

4.3. DISCUSSION

4.3.1. INDONESIA-UK RECIPROCIITY

Indonesia is the only country from ASEAN that includes a member of the multilateral organization, namely the G20; G20 is a multilateral organization that consists of many developed countries and great potential in economic countries such as Argentina, Austria, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the EU. G20 is an organization born with the concept of liberalism, which searches for peace through trade and economic cooperation that align with the G20, which wants to achieve international financial stability, for example, as the effect of the global economic crisis in 1997-1999. Yet, the organization now uses a platform to enhance the worldwide economy and overcome global challenges by involving middle-income countries to discuss in this platform (G20, 2021).

Indonesia's presidency in G20 start from 1 December 2021 until 30 November 2022 as the handover took place in Italy from Prime Minister Mario Draghi to Jokowi on 31 October 2021; hence this will become Indonesia's opportunity to contribute even more towards the world's economic recovery as Indonesia's action to support a sustainable and healthier world based on liberalism principle which freedom of countries and seek peace as G20 host Indonesia create a theme for an international discussion called "Recover Together, Recover Stronger" that bring

global economic recovery which divided into three main points in dialogue such as Global Health Architecture, Digital Transformation, and Sustainable Energy Transition with this Indonesia will encourage other G20 countries to carryout concept of collective action that can be benefitting all nations regardless whether its members of G20 or not and build cooperation with its members and external relations in an effort to strengthen G20 vision and mission.

Like Indonesia and UK sustainable development collaboration, G20 one of panel also focusing sustainable development and energy transition which in this international organization its requires global efforts to have energy security, energy affordability, and inclusive economy to ensuring global sustainable energy with collective approaches hence this panel will discuss such issue start from clean energy technology, promoting energy financing, and securing energy accessibility however not only that G20 also encompass meeting who discuss about health infrastructure resilience and more inclusive health system with the support of digital economy, digital capabilities, and digital entrepreneurship especially for the medium enterprises each panel will have derivative framework for it finance and non-finance topics and in non- finance that discussing agriculture, energy transition, environment and climate sustainability, trade, investment, industry, education, employment, development, tourism, anti-corruption, health, women empowerment, and Joint Finance & Health Task Force thus in finance topics it covered global recovery, strong economic growth due to COVID-19, enhancing payment system in digital era, sustainable finance, inclusive financial system, and international tax agenda which all becoming responsibilities of respective experts and government bodies to analyze and give recommendations in so called Communique furthermore G20 not limited the interest and voices of government-to-government however this organization allow businesses, civilian, science academy, think tanks, labor, women, urban cities, youth, parliament speakers, and supreme audit institutions (G20, 2021).

The G20 is currently still in the ongoing status where Indonesia can still provide strategies and foreign policies that are beneficial for Indonesia's external relations, especially ASEAN; Indonesia is one of the founding fathers of ASEAN, which upholds the friendship and recognition of countries in realizing economic, socio-cultural, and

sustainable development cooperation for each sector. ASEAN has similarities, such as the G20, a discussion platform that discusses current issues and is relevant for members and partners of their respective countries. However, ASEAN has a smaller scope, namely the regional scope, and consists of developing countries still in the economic development stage. From here, Indonesia has an important role, namely Indonesia can explore more about the interests and narratives that come from developing countries or from the regional community, namely ASEAN, to attract international support to increase the productivity, effectiveness, and performance of ASEAN itself, this can also be seen from the concept of "Rational Choice Theory" where each country or individual will do rational calculations where can benefit themselves or in line with individual-self-interest and this concept often used for governments and leaders especially in foreign policy the same as other members of the G20 who also want to improve their rational choices that can benefit their respective countries and their external relations priorities, but the difference is that Indonesia becomes the G20 presidency which has a full role on the agendas and topics of the panels (Ganti, 2022).

When viewed from the ASEAN perspective, ASEAN also has the same basis as other international organizations such as seeking economic growth and social development equally by supporting peace at the country and regional levels and also supporting the concept of bilateral or multilateral cooperation that can provide mutual benefits for members and partners in economic, social, cultural, technical concepts, scientific, and also administrative then ASEAN also has a basis that also wants to have long-term relations with other international organizations which certainly have the same principles and bases, next even though the ASEAN summit 2022 chaired by Columbia it does not change the principles of Indonesia with ASEAN which upholds ASEAN values such as in the roadmap of political-security community, economic community, socio-cultural community, and also ASEAN connectivity in short, the community, especially the economic and socio-cultural community, has the principle that ASEAN has a target to have economic integration, namely ASEAN single market and competitive region which upholds justice between countries and also discusses the key elements of the economic community itself such as discussing how the energy sector, minerals, agriculture, food, forestry,

e-commerce, tourism, science and technology, transport, standards and conformance, and services have an important role in realizing the ASEAN integrated market mission in addition to that ASEAN also prioritizes community building capacity which supports inclusive, equal, and also support human rights for the ASEAN community and then prepare the ASEAN community for inclusive education, inclusive decision making processes, equitable rights for ASEAN women, get out of poverty, prepare human resources to be able to grow in the green economy, green jobs, and climate change, and also prepare community capacity in how they will be affected by climate change or health crises and then ASEAN also has targets in 2025 that make countries in ASEAN become borderless but support competitiveness and inclusiveness and also pay attention to the concepts of sustainable infrastructure, digital innovation, seamless logistics, regulatory excellence, and also community mobility (ASEAN Secretariat, 2020).

ASEAN and Indonesia have targets and frameworks that cover all the needs to become developed countries and countries that can compete with other major developed countries; Indonesia's relationship with ASEAN and the G20 is that Indonesia can become a "strategic leader" for ASEAN member states because Indonesia can lead or deliver aspiration the narrative of developing countries to a much higher level of international and then Indonesia can also have the potential for climate leadership or the leadership on sustainable development at the regional level, namely ASEAN and remembering the UK as an equal partner for Indonesia and ASEAN dialogue partner that brings opportunity for Indonesia to be more confident in becoming a leader for ASEAN with the help from the UK in implementing the strategic plan. On the other hand, as previous mention on opportunities of Indonesia-UK collaboration UK does have a self-interest in ASEAN and Indo-Pacific which is stated in the Third Forum and Roadmap 2022-2024 where the UK supports the meaning of international development to unleash opportunities from low-middle income countries to become prosperous and peaceful countries then the UK's approach with ASEAN and Indo-Pacific also puts forward the freedom and self-determination movement in helping to resolve contemporary issues and the UK also does not want to dictate but the UK will try to help, advise, and provide ease in bureaucracy so that the program able run as soon as possible that ultimately can build cooperation with all ASEAN and Indo-Pacific countries or with

subsequent companies hence as previously explained, the UK has an international development strategy, namely building cooperation in every sector by means of investment, supporting women for success, supporting humanitarian, and also taking the forefront of climate change and with that the UK will try to navigate low-middle income countries to be able to be competitive against the global economy and global challenges and be able to decide on each other's prospects next this is nothing but the UK strategy also in realizing their self-interest such as supporting the economic growth of the UK and supporting the certainty of long-term cooperation that can allow economic opportunities to be wide open for the UK to develop and also to protect the people of the UK from the developing challenges that will come which able to realize UK mission to be "Global Britain" (Cabinet Office, 2021; Foreign, Commonwealth, & Developmental Office, 2022).

To be more clear, the explanation above can be analyzed through the theory of liberal internationalism which like what Indonesia do in its practices, this theory explains that this becoming alternative theory from realism in which this theory argue that global governance, international organizations, and international cooperation are keys to explaining international relations meaning as government want to seek peace in this anarchic world they must use international affairs such as collaboration to create stability and economic growth as a response for global security issues hence this theory also focus on multiple channels namely bilateral and multilateral that allow interaction for government-to-government and non-state actors to give attention to particular issues and solve through collaboration furthermore this theory also emphasize that there is no barriers from the elite towards community meaning there is no distinction between high and low politics therefore states want to maximize its self-interest and mutual interest through cooperation and placing regimes and institutions become central point to gaining claims for conditions (Ningsih Susilawati, n.d.). Furthermore, liberal institutionalism rejects the realist statement that international politics is a political arena to seek power in which military security issues are the top priority. Therefore in this theory, hierarchy does not exist. This theory emphasizes that domestic issues and policies will significantly influence states to cooperate with other states on an international platform, meaning the collaboration will carry out mutual benefits and mutual respect,

which they complete each other loophole to provide better economic growth (Devitt, 2011).

Hence this theory led to so-called collective action and contemporary securities due to liberal institutionalism triggering the development of globalization, which led to interconnectedness and innovation of technology that can develop a new term of security in this meaning that the "security" terms are not only about war but the contemporary or modern security becoming various such as political security, economic security, societal security, and environmental security therefore after identified many securities it creates public to jointly action working together to achieve common objectives which in this case states are doing collective action to attain contemporary securities (Devitt, 2011; Dowding, 2013). Collective action create derivative theory called functionalism in which is an approach to the formation of international organization/international regime to cooperate on social and economic issues which they believe that there is a need more specific cooperation on specific problem to create mutual trust and reciprocity while international regime is a set of rules, norms and procedures which the actors will coverage in certain issue and international regime can solve collective issue through discussion then international regime also discuss that in cooperation towards particular problem there is called "collective goods dilemmas" which one state can be benefited by a framework that create by themselves and coordinate parties to realize its self-interest or in other words states outcome depends on the action of involved parties however regimes not restrict countries to act and develop however regime facilitate countries to achieve its goals (Imber, 2020; Benedict, 2015; Allison & Kerr, 1994)

This theory relates to the statement by Indonesian climate leaders that Indonesia in international affairs makes collaborations to achieve peace and progressive economic growth through bilateral cooperation with the UK. This cooperation also upholds the concept of the institution as an important point in realizing the interests of the Indonesian state and the UK, as Indonesia and the UK collaborate based on an institution, namely the UNFCCC, which discusses sustainable development issues amid climate change. As previously explained, the cooperation between Indonesia and the UK is also influenced by their respective domestic conditions, which will affect Indonesia and the UK in how they will cooperate

on an international platform but still carry the principles of mutual benefit and mutual respect, namely filling in each gap to achieve economic growth. This collaboration basically also embraces contemporary security which in this collaboration discusses economic security such as in the green economy and also discusses socio- environmental security such as in low-carbon development and capacity building for resilience to climate change and cooperation between Indonesia and the UK also encourages the creation of an action plan that supports both interest and self-interest, then the relationship between the above theory and the Indonesian climate leader is as described previously in cooperation through bilateral and multilateral channels cooperating countries can and will achieve self-interest by creating a framework of collaboration that can coordinate each other's self-interest and as a result one country will be affected from the actors who are carrying out the cooperation as described in the collaboration between Indonesia and the UK that explain in how the UK has created this cooperation framework as a strategic move in their approach to Indo- pacific countries as an effort to seeking benefits such as economic growth, short-term and long-term opportunities, and also get assurance about peace by establishing trade with anyone including Indo- pacific countries and besides that Indonesia also doing the same in the bilateral cooperation in which the framework of this bilateral cooperation design as much as possible in terms of how they will can get support from the UK to become climate leaders especially at the regional level while at the same time bringing the ASEAN narrative to a higher platform in order to achieve ASEAN self-interest.

4.3.2. INDONESIA-UK GREEN ECONOMY

As Indonesia-UK collaboration set off from the issue of climate change and urged the concept of sustainable development across countries, including Indonesia- UK, one of its practices encompasses the concept of “Green Economy.” The green economy itself is one of the foundations in how this collaboration has a direction or basis to achieve goals; the green economy is an economic concept launched by UNEP that means a new and environmentally friendly economic path to the surroundings to answer the climate change and economic crisis that supports prosperity and justice for each community while simultaneously suppressing environmental risks then the green economy can also be linked to sustainable development that promotes low carbon, energy

efficiency, and socially inclusive (EleonoreLoiseau, et al., 2016). However, the definition of the green economy may vary according to a particular international organization, but what is certain is that the green economy concept, in general, is a sustainable development based concept that upholds the environmental protection and people approach; therefore, the green economy creates “bridges” for the economic, social, and environmental sector to integrate and create adequate employment opportunities, sustainable trade, energy efficiency, energy effectiveness, and create sustainable trade that upholds bottom-up approach however green economy not replace such sustainable development theory but green economy put stress on there is a need to change on how government, business, and community carryout economy principles

Green economy concept recently have become topic discussion in international platform and national agenda thus green economy may rise because the so-called “brown economy” which this opposite concept of green economy that in this economy the actors of development may do such economic activities that dependent so much on fossil fuels and non-renewable energy sources thus do not consider any side effects towards environment hence in this practice the industries or stakeholders tends to concentrated too much on consumption of natural resources which overlook the energy efficiency and energy security for long-term period therefore in brown economy it may cause much GHG, environmental destruction, and poor jobs opportunities that can lead to global inequalities furthermore this brown economy may lead towards lack of awareness from one of “driving force” of economic growth which businesses and need to keep in mind that the world currently facing complex problems such as energy scarcities and climate change therefore many states and international organization start to transition their economy into more compatible concept to current conditions namely green economy (Worldbank, 2013)

As previous mention on literature studies, green economy theory creates sub- theories namely Green Growth and Low Carbon Development that becoming the theory derived from the green economy where green growth is how green development and green investment can encourage an increase in the economy based on the environment and emphasize the role of natural resources is the key to supporting sustainable

economic growth and of course balanced with sustainable development of the social and economic sectors, then basically green growth has its own meaning to the three pillars in the green economy namely economic, social, and environmental therefore the definition of green growth from the economic side is how the economy can develop by innovating in technology, more concerned with qualitative growth than just improving economic growth, and inclusive in terms of job creation, then in the social aspect green growth is how the community becomes prosperous in the long term and socially inclusive by getting access to technology and energy, access to food security, and access to green infrastructure and then in terms of environmental green growth is to protect natural assets, implement low carbon development, implement the concept of less emission practitioners generate high quality growth, energy efficiency, and climate resilience to future challenges and it can be concluded that green growth is a concept that encourages the economy and development and still attaches importance to the environment as the environment will have a good impact to all stakeholders (Global Green Growth Institute, 2014).

A further driver of the green economy is called low carbon development; low carbon development often interchangeably becomes such discourse in green economy theory due low carbon development can have a significant influence in implementing green economy; therefore, low carbon development is a development that promotes low emission, low environmental degradation, and low carbon growth thus often used as a tool to describe short-term and long-term developmental action for countries and international organizations hence the concept of low carbon development create an approach for governments to take planning and structural solutions in order prepare developed and developing countries for any further complex challenges such as climate change however low carbon development not perfunctory replace principles of previous development policies yet this concept create “additional value” for such policies to prepare with upcoming challenges namely climate change (Allen & Clouth, 2012).

Theories and concepts such as green economy, green growth, and low carbon development are certainly important and becoming current discussions for countries. For example, developed and developing countries compete to transition

their policies and practitioners towards better countries supporting the three main pillars: economic, social, and development. Of course, it will be a discussion that will be a highlight for international platforms and organizations such as the G20A 2022, ASEAN, EU, APEC, UN, and other global platforms, especially in this case UN, which have produced several sub- tasks that support previous theories through UNFCCC, UNEP, UNDP, and different sub- tasks that support the transition green economy and its supporting ideas. Then, there are at least some agreements from discussions of country leaders that support sustainable development and are more aware of the world and national climate, for example, the Paris Agreement, the SDGs, and the Net- Zero Emission Goal and all of these agreements support economic and state transition to a level that is more suitable for the current world situation.

As a result, countries open cooperation through bilateral or multilateral channels as done by Indonesia with the UK, which carries out bilateral cooperation in sustainable development focusing on implementing sustainable development, green economy, green growth, and low carbon development. For Indonesia, it is time for Indonesia to implement the principles of sustainable development such as making transitions such as green finance and green industries, therefore Indonesia created a platform from BAPPENAS called Low Carbon Development Indonesia (LCDI) which this organization upholds economic growth while protecting the environment by implementing three pillars in each of its policies in order to reduce GHG and then LCDI also has the role for Indonesia that organization can provide economic and social growth by encouraging the renewable energy transition, especially in how Indonesia produces electricity and fuel subsidies, improves energy efficiency, and enforces the mission of reducing carbon emissions, especially in the palm oil and peatland industry sectors, and LCDI also has a role in including the concept of sustainable development in Indonesian policy practitioners as it will used in response to COVID-19 meaning LCDI develop called green recovery or sustainable recovery that encourage such low carbon development action as the basis for development due to COVID-19 or it can be called National Economic Recovery (PEN) and through this program LCDI also emphasizes that Green Recovery is a short-term solution that Indonesia does to the economy and its supporting aspects, but

the Green Economy is a long-term solution that Indonesia does to economic reforms (Medrilzam, Yananto, Putri, & Gilbert, n.d.).

The green economy carried out by Indonesia is to recover from COVID-19 and for further global goals that is inclusive, supports equity between generations, supports climate growth, supports adequacy in consumption and production, and well-structure government and sustainable development carried out by LCDI will be implement from 2021 until 2024 and will focus on several sectors such as energy, waste, and plantations and then from the green economy which will be applied to Indonesia amid covid-19 that give expected outcomes such as trying to see how the concept of sustainable development and sustainable economic growth can become priority for PEN or general development plans and then the second outcome that is expected is that Indonesia can contribute to prolonged development of the green economy which can bring Indonesia to achieve domestic or international targets such as SDGs, NDC, and Net Zero apart from that Indonesia also tries to implement the economy circular where this concept is a complement key in carrying out economic recovery which will focus on waste as well as improve the environment and will focus on sectors such as food and beverages, textiles, construction, wholesale and retail trade, and electrical equipment then just like other programs this circular economy program can also be expected to bring the components listed in the green economy such as increasing jobs opportunities and improving the quality of the environment while this circular economy also has a role in reducing Indonesia's emissions by reducing, reuse, recycle, refurbishing, and renewing a product in particular sectors as well as achieving international targets (Medrilzam, Yananto, Putri, & Gilbert, n.d.; Kementerian PPN/Bappenas; Embassy of Denmark; UNDP).

Not only Indonesia, UK negative impact from COVID-19 was created UK new developmental action and new approach to current situation through UK green recovery that plans to reducing emissions while at the same time generating higher economic growth and in order to do that UK plans to have The Ten Point Plan for a green industrial revolution that encompass many topic points start from greening the infrastructure, enhancing renewable energy, renewable energy innovation, and financing action thus these action plan driving green economy concept to achieve UK Industry

low carbon emissions and climate change resilience amid COVID-19 as well as to boosting UK green jobs and the decrease of environmental degradation and The Ten Point Plan may be considered as short-term target for UK green economy strategy in which establish such foundation for businesses and investor as an effort to create strong signal to invest in UK green economy furthermore through Ten Point Plan UK also preparing the future prospect of UK green economy in especially in dealing with the “how” to achieve net-zero emission or in another words UK preparation for long-term strategy in dealing with implementing green economy in order achieving long-term target such as NDC, SDG, and Net-Zero therefore UK create strategy called Net Zero Strategy which in this strategy it encompass the objectives and principles that need to carryout in order achieving UK's net zero target in 2050 and in this strategy it also underline the situation after UK movement from leaving the EU which UK government stated that there will be more opportunities to collaborate in terms of UK diplomacy, industry, sustainable development, and innovation especially regarding sustainable development action such as establishing new system of trading scheme called UK Emission Trading Scheme (UK ETS) in replacing the EU ETS which this new trading scheme is currently applies for dominant energy usage sectors such as power generation and aviation which are two points in the Ten Point Plan (Department for Business, Energy, and Industrial Energy, 2022; Department for Business, Energy, and Industrial Energy, 2020; HM Government, 2021).

Furthermore, to support more UK's green economy development across UK the government start to reform and enhance such sectors across UK such as power sector, transportation, waste, and other crucial sectors with the principle of integrating low carbon energy resources, improving energy efficiency, innovation that support enhancement renewable energy sources, green investment, suitable standards and policies, green infrastructure, and sustainable use of land use in order able to control the graph of reducing GHG moreover UK government will make collaboration to stakeholders such as businesses to help UK objectives through investment, innovation, and projects also UK government aware of the need human resources preparation meaning UK also created such framework to have competitive workers that can implement UK action and achieving objectives for example UK establish task force called The Green Jobs Taskforce which this

task force provide key point to having access for potential workers to adapt and develop in current situation which is green jobs and low carbon development that can contribute to net-zero target and climate resilience (HM Government, 2021).

Apart from investment and skilled workforce, UK also realize there is a need for reforming the government practitioners that are not in line with the green economy activities therefore it should encompass principles of low carbon development when making decisions, procurement decisions, suitable government bodies, and bottom-up government approach while at the same time ensuring the people of government have the skills and talent that are needed to adapt in current situation such as create curriculum for government workers that including climate change training therefore other point in green economy transition central UK government also work closely on local government in order having cost-effective as well as to have more precise community empowerment as an effort for to raise low carbon society not only that UK also empowering business to take action on green economy in terms of business product and services hence lastly UK also take awareness on international leadership and openness of collaboration to any countries and platforms by create assistance in economy and energy transition (HM Government, 2021).

Both countries' domestic implementation for international targets is fully implemented; the green economy aspect starts from its vision, roadmap, and regulations. As both countries are open to collaboration, the ongoing Indonesia-UK collaboration start from UKCCU Indonesia, UK-PACT Indonesia, and MENTARI all encompass the concept of a green economy, green jobs, low carbon development, and green growth; therefore, both collaboration can be analyzed through the green economy theory. Both countries' action toward such cooperation is in line with the principles of a green economy. The partnership is based on equal benefit for the environment, society, and the economy, which seeks economic growth, environmental resilience, and green jobs for the community. Hence Indonesia and UK collaboration agreed that a green economy and its practices become the boundaries of such activities, which encompass low carbon development, scarcity, and energy efficiency. Also, this collaboration not only improves the three main pillars however it also enhances the government policies and regulations to be more appropriate for

the current condition also; this collaboration is in line with the green economy perspective when it should create a sense of “inclusivity” for those who leave behind such as poor people, rural areas, inequality in gender, and others which Indonesia and UK collaboration try to integrate marginalized people to be included in the development strategy.

Furthermore, the Indonesia and UK sustainable development collaboration is undeniable to promote both countries' sustainable economy while simultaneously empowering the community and its environment. However, Indonesia may be categorized as a “weak green growth” country where Indonesia indeed incorporates the concept of emission reductions and environmental protection to improve the national economy and focusing the existing natural resources to become the main driver for green growth. However, Indonesia can be arguably categorized as a country that headed into “moderate green growth”, which tries to seek more green jobs and investment in renewable energy through international investment such as from the UK while on the other hand UK can be categorized as “strong green growth” due UK effort to implement green economy, green jobs, and low carbon development across UK policies, long-term strategies, as well as development activities. However, this does not rule out the possibility that Indonesia and the UK will not further develop the green economy; for example, the UK could become one of the climate leaders at the international and regional level through the net-zero strategy method, while Indonesia could make a full transition to a greener and sustainable economy by adopting clearer and reliable carbon trading scheme which the UK can assist in the process of making carbon trading scheme.

Moreover, implementing a green economy in all sectors of the country can lead to several challenges, such as the previous mention of greenwashing. As described before, greenwashing is a practice of business strategy to reach higher sales growth and use tools such as environmentally friendly products, company branding, and promote support for sustainable development movement to cover up their “business as usual” action such as unsustainable practices and policies or in other words it when businesses are misleading information of their sustainable development.

5. CONCLUSION

Sustainable development in the bilateral framework, particularly for Indonesia and the UK, has created a progressive impact on three main pillars of sustainable development: economic growth, social prosperity, and environmental protection of both countries, plus both countries' foreign policies strategies which can enhance Indonesia and UK domestic and international capacity. This research is conducted to answer the research question about how Indonesia and the UK implement sustainable development to achieve net-zero emission through a bilateral framework. At the same time, identify opportunities and challenges for both countries' collaboration. Throughout the research, literature such as books, articles, reliable website information, and interview about the economy, society, environment, and politics has created conclusion for this research:

- Indonesia and UK collaboration has demonstrated progressive impact on both countries' capacities, such as elevating domestic resilience towards climate change and COVID-19 by creating inclusivity, low carbon development, creating a skilled workforce for a new way of economy and infrastructure, and exchange of knowledge, thus on the other side enhancing foreign policies capabilities to elevate self-interest such as domestic growth. Therefore, by data and practices, Indonesia and UK will achieve their net-zero emission goal in 2060 for Indonesia and 2050 for the UK and other sustainable development objectives
- As both countries' projects will achieve net-zero emission goals in the future, both countries should address their opportunities and challenges. Indonesia can use this collaboration as momentum for big green investment in infrastructure, workers, and policies from governments and investors; hence Indonesia and UK can maximize collaboration opportunities through the principle of reciprocity in which Indonesia can become a key player for other developing countries, especially ASEAN to have international support on sustainable development and can empower Indonesia vision on regional climate leader by the help of UK. At the same time, the UK can penetrate more the market and opportunities collaboration area in ASEAN and Indo-Pacific countries. On the other hand, Indonesia may manage its challenge especially on prioritizing more sustainable development and renewable energy across its national plan, policy reformation to be more inclusive and suitable for current terms development such as greenwash while the UK is also focusing on UK's businesses that directly or

indirectly practice greenwashing which can lead to new challenges for the UK, especially on policies and regulation.

After analyzing Indonesia and the UK's sustainable development, collaboration may lead to new terms, definitions, and concepts that can be discussed more. Therefore some ideas can be explored further, such as:

- For Indonesia MoFA, as the government can use this as momentum to maximize their self-interest, Indonesia MoFA may approach more through match-making and assistance that supports inclusive economic growth for developing countries on international platforms, not only the G20 but other international platforms. Plus, not only as a third party but also as a leader who can always make a significant global contribution from Indonesia's friends in developing countries also an effort to reduce inequality, real inclusive implementation, and implementation of “no one left behind”, ultimately thickening the statement “Indonesian regional climate leader.”
- For the UK embassy in Indonesia, the UK government may always implement “Common but Differentiated Responsibilities and Respective Capabilities”, which acknowledges the different capabilities and therefore always fill the gap of developing countries through leading by examples such as demonstration project, knowledge exchange, and consultation which can elevate UK engagement in Asian countries, especially South-East Asian and Indo-Pacific countries
- For the Indonesian Ministry of Environment and Forestry, the government may use G20 as a platform for updating the latest concept, definitions, and implementation, particularly forestry and land use; to create such action and policies that right on target and as needed, which can elevate Indonesia realization on NDC and Net-Zero goal
- For the Indonesian Ministry of National and Development Planning, the government also can use G20, especially the G20 Development Working Group, as a platform and tool to enhance domestic recovery, Indonesian-based development, and collaboration for the development yet not only in the G20 Indonesia's presidency period but also in a long-term approach.

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