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Research Article

Indonesia's Climate Change Policies: Under the Tug of Domestic and International Influences

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Abstract

Paris Agreement with its 'bottom-up' approach is an attempt to address climate change problem. The Parties of the Paris Agreement decide their own policies in the national scope and present it as pledges in the form of Nationally Determined Contributions (NDCs). I explore the evidence to the shaping of the climate change policies in Indonesia, mainly regarding NDCs and the engagement of actors behind the shaping of that pledge. The main question is which actor or combination of actors in terms of domestic and international interests actually influenced and shaped Indonesia's NDCs? This article aims to give practical evidence regarding the influences of different positions among competing interests through negotiation. In terms of Indonesia's policymaking, this study is hoped to foster a viewpoint for the sake of acceptable practices to intensify policymaking preferences. In this literature review Liberal Intergovernmentalism propositions were used in examining the dynamics at the domestic level as well as transnational/regional negotiation and interdependence. I also used multiple sources from other studies and governmental documents in the analysis of this qualitative research. As a result, some evidence were found, showing the influence of domestic actors such as Local and Environmental NGOs, CSOs, public perceptions to certain extent, and insignificant influence of business groups. I also found that the transnational institutions and developed countries have impacts on Indonesia's CC policy framework, funding provision and the balance between mitigation and adaptation.

Keywords: *Climate Change; Paris Agreement; NDCs; Policy; Intergovernmentalism*

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INTRODUCTION

Climate change has been posing an existential threat to humankind and has tangibly been affecting global ecosystems. The international community's coordinated attempt to address the problem has only been the Paris Agreement as a continuation of previous negotiations. Given the 'bottom-up' approach that was agreed upon, the Parties of the Paris Agreement have the right to decide their own policies to be implemented in the national scope and present the policies as pledges in the form of Nationally Determined Contributions (NDCs). As one of the Parties, Indonesia submitted its NDCs in 2016. Through this study, I explored the engagement of actors who have shaped the Climate Change (CC) policies in Indonesia, primarily reflected in its NDCs and its derivative policies. This research focuses on the negotiation in the policymaking process since the government is influenced by the ongoing process of domestic and international interactions. Therefore, the main research question is 'which actor or combination of actors in terms of domestic and international interests influenced and shaped Indonesia's NDCs?'

The focus on NDCs comes from the fact that it reflects each state's definitive statement of their policies and commitments to the international community as well as to domestic audiences that the state represents. However, NDCs have the nature of voluntary, that they are not enforceable by any legal means. They are nonetheless important because they highlight how CC would affect the country and how they intend to mitigate and adapt to the threat.

This study, firstly, attempts to make a significant contribution to a growing body of academic research on CC policies. Such an area of study offers a broad opportunity to observe. Some literature studies have been conducted in this area, many of which focused on describing and comparing NDCs (Leinaweaver & Thomson, 2021; Pauw et al., 2020; Xunzhang Pan et al., 2018). Leinaweaver and Thomson (2021) concluded by categorizing two perspectives as a framework of NDCs content, which are commitment and negotiation perspectives. In the commitment perspective, a state uses NDCs as signals to their citizens as constituents and allied countries that the state intends to fulfill the pledge, whereas negotiation perspective views NDCs as ongoing process of interstate relationships. Pauw et al. (2020) analyzed the conditional NDCs in terms of feasibility and equity. Consistent with the conceptions of equity, developing countries are more likely to make their NDCs conditional, which are too high to be covered by support from developed countries (Pauw et al., 2020). Also, Xunzhang Pan et al. (2018) compared NDCs from the top six emitter countries against the promised goals in the Paris Agreement.

Other studies have engaged on the evaluation of CC policy implementation (Climate Action Tracker, 2021; OhAiseadha et al., 2020; Fujiwara et al., 2019). Climate Action Tracker develops the method to track the implementation progress of all states and displays on the website in real time. Meanwhile, OhAiseadha et al. (2020) examined the breakdown in the US\$3.66 trillion spent on global CC expenditure over the period of 2011 to 2018, most of which was spent on mitigation, and only 5% on adaptation. Whereas Fujiwara et al. (2019) explored the practice of CC policy evaluation in the European Union countries.

Some studies have also proposed methods of measurement (Iyer et al., 2017; Hofman & van der Gaast, 2019; Uitto et al., 2017). Iyer et al. (2017) utilised a state-level model of the US ingrained within a global integrated assessment model, resulting the needs for “global stocktaking exercise in the NDCs evaluation using metrics broader than emissions to better illuminate their effectiveness in addressing long-term CC goals” (p.1). Alternatively, Hofman and van der Gaast (2019) suggested the utilisation of Technology Needs Assessment (TNA) program. In their study, they described and analysed TNAs since 2001 with a focus on developing countries to strengthen NDCs. A set of methods are also suggested in Uitto et al. (2017).

However, there are still limited and far fewer studies that explore the process or how the NDCs are made and their dynamics. For instance, Jernnäs et al. (2019) examined the governance mechanisms and the roles for the government envisioned by those mechanisms, as well as cross-national patterns of roles amidst international politics that could be complementary or conflictual. Their findings include: most of states rely on market mechanism regarding their NDCs; the method for the governance mechanisms evaluation still requires to be specified; and “differing views on the state’s roles makes explicit different perspectives on what constitutes an ambitious and legitimate contribution to combating CC” (Jernnäs et al., 2019: 1).

Therefore, this study aims to give a piece of practical evidence to fill the gap, especially regarding the influences of different positions among competing interests. I offer an empirical contribution in exploring the impacts of international and domestic negotiation that is novelty in this article. It is expected to be a steppingstone for some further and detailed studies. Secondly, in the context of Indonesia’s policy, this study addresses the implication of interaction among actors. In its turn, the analysis will foster a viewpoint for the sake of acceptable practices to intensify policymaking. While this study is not a comprehensive analysis of Indonesia’s CC policies, it is hoped to shed light on the policymaking process in setting policy preferences.

In order to understand the interactions within the process of policymaking, I applied the theory of Liberal Intergovernmentalism (LI) developed by Moravcsik (1993) as the foundation of my analysis. I considered LI framework as a preferable approach at least for three reasons. First reason is that LI provides a clear conceptual framework for focusing on specific policy outcomes, namely Indonesia's NDCs. Indonesia's NDCs were formed through a number of bargaining stages. This framework enhances the understanding of the sequential stages. Secondly, the propositions of LI help the examination of the case in terms of policymaking processes, particularly in examining the negotiations behind the curtain and choosing preferences. LI has been effectively used to explain European Union's dynamics, so I expect it to be beneficial to apply in Indonesia's context as well. As for the last reason, LI asserts the recognition both domestic and international actors involved. This coincides with the fact that NDCs are the commitment towards not only state's citizens but also the international community. Hence, this case study is supposed to contribute to the applicability of the LI model in the policymaking engagements. As a progressing theory, LI theory is open for various evidence across countries, including Indonesia.

Liberal Intergovernmentalism (LI)

LI is based upon two components; the liberal theory on how interdependence influences national interests and the intergovernmental theory on international negotiation (Moravcsik, 1993). LI elaborates the essential function of regional dynamics into a multicausal framework, which could help policymakers develop policy decisions. Given its "bottom-up" theoretical framework, it engages with 'varied social preferences about how interdependence should be managed, shows how asymmetries in those preferences affect interstate bargaining outcomes, and explain why international institutions can help coordinate' (Moravcsik, 2020). The LI model breaks the decision-making process down into three steps, i.e., national policy preference formation, interstate negotiation, and outcome or the institutional delegation. In Figure 1 demonstrates the model of LI:

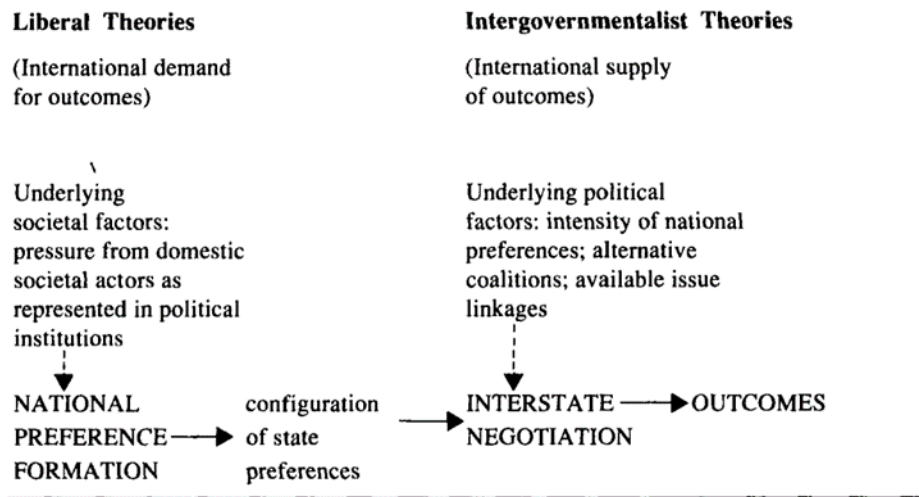


Figure 1. The Liberal Intergovernmentalist framework of analysis
 Source: Moravcsik, 1993: 482

LI was used in the present study to analyse the initial stage happened at the internal of the state itself, which resulted in a policy output (NDCs) that reflects national identity or values. The output often comes from the pressure from the local societies. As the continuation of this stage, the policy preference happens to intermingle with interstate negotiation. In the next step, LI was used to point out the urgency to examine the role of other critical actors in international relation (IR). As suggested by LI, “state-society relations -the relationship of states to the domestic and transnational social context in which they are embedded- have a fundamental impact on state behaviour in world politics” (Moravcsik, 2003: 513). Evidence have affirmed the significance of various actors other than the government itself, such as MNCs, IGOs, Environmental NGOs, as well as pressure groups.

Before going further about the practical analysis, it is essential to mention three assumptions involved in LI that characterize these interactions. Moravcsik (2003) asserted three assumptions to restate LI theory's foundations. In general, these three premises stipulate the underlying state preference by the interaction between the government as the central actor in the decision-making process, the societal actors, and the international system. These assumptions are described as follows:

Assumption 1 the supremacy of societal actors

The “bottom-up” idea in politics underpins LI, meaning that individuals organise collective action by competing politically under limitations of resources and different values. It is understood that individual and civil society tend to conduct rational action for the sake of their own optimal welfare (Kant, 1991). In pursuance of this goal, they tend to have risk-averse nature, i.e. discretion concerning costs in gaining a higher benefit. LI solicits the condition that behaviour of competing interests in environmental (climate change) policy, leads to cooperation, bargaining or conflict. This first premise helps the study by contextualising the formation of Indonesia’s preference that incorporates societal ideas from domestic actors.

Assumption 2 representation and national preference

LI argues that the state is an institutional representation of social actors' coalition when the government determines its preference while interacting in international politics. Since LI generally contends that representative government is built upon democratic fundamentals, hence the state takes on the characteristics of the constituents. Government officials “act according to the principles they profess to hold just, and according to the interests of the electors they claim to represent” (Doyle, 1986: 1161). State choice represents elites' perspective on interests that can change, for instance, by replacing political leaders or changing normative views (Keohane & Nye, 1987). As the counter-argument, representation failure may arise as the central government's bias exists, when some groups monopolise relation with key domestic bureaucracies, they therefore inhibit the policy considerations (Moravcsik, 1999). For example, when a business group prevents governmental leaders from accepting the proposal of Local NGOs because it is opposing their interest in gaining economical resources that produce pollution. This assumption leads the study to further examine the debate and tug between either opposing interests.

Assumption 3 the international system and interdependence

The barrier between states is disappearing increasingly in world society. The idea of interdependence has been essential in LI for interacting and cooperating between countries in the multinational institution. Interdependence here is defined by Moravcsik (2003) as “the set of costs and benefits created for foreign societies when dominant social groups in a society seek to realise their preferences” (p. 520). In applying this concept into practice, the regulatory and facilitating role of the international institution is prominent. An international organisation such as UNFCCC is required to institutionalise policy network and to provide a media for coalition building in CC policies. In accordance with the interdependence notion, state member parties in UNFCCC may prefer their influence to other parties by bargaining and negotiation. This assumption assists the

study in exploring Indonesia's NDCs related to the international regime perspective.

Power based on bargaining and negotiation

LI asserts that the state allocates its resources as a function of its preferences, which reflect a pattern of multinational bargaining and negotiation. Therefore, states position in a negotiation reflects the nature of their preferences. Further, a state must cooperate with others as it cannot avoid interstate engagement. Interstate institution regime, where most of the cooperation takes place, may survive as time goes due to the rationality in seeking benefit. At the same time, there is an alteration of power among dominant states. Cooperation would succeed not merely depend on a hegemony but also on parties' collective involvement in negotiation to gain a long-term advantage (Steans et al., 2010). However, LI views the situation of states' power as asymmetric, or not necessarily a balanced degree. This uneven bargaining position has become a source of influences during the negotiation, as Keohane & Nye (1989) states:

Less dependent actors can often use the interdependent relationship as a source of power in bargaining over an issue and perhaps to affect other issues, at the other extreme from pure symmetry is pure dependence...and that is where the heart of political bargaining process of interdependence lies (p. 11).

State's capacity to negotiate impacts the outcome of bargaining. Those who have strong preferences and clear positions shall be more effective in negotiating than those constrained by domestic and international interests (Keohane & Nye, 1989). For instance, rich countries which have provided loans or aids in overcoming climate change problems to their allies may subtly impose their views on some issues to be implemented by the recipients. The bargaining capacity on this issue may be weakened or strengthened by the characteristic and procedural condition within the UNFCCC system.

Interaction between domestic and transnational actors in policymaking

In the legal and political framework behind the climate policy provided above, stakeholders may pursue various interests. Some theorists suggest that to some extent, states inevitably reflect the concerns of interest groups, especially in the domination of major parties or elite groups in politics (Steans et al., 2010). Meanwhile, state and civil societies are considered independent but interact, and somehow, elements of those societies attempt to influence the government's behaviour immensely. As democratic value suggests, people have power over the government inasmuch as they can shift their political leaders via the periodic vote.

While LI holds the notion that the state sovereign is essential, some aspects of it can be transferred to institutions such as the UNFCCC or ASEAN. Moreover, other transnational actors may also attempt to influence climate policies such as MNCs or international environmental

NGOs. For instance, Greenpeace focuses on escalating environmental issues like CC and forestry. Whereas MNCs affect domestic and foreign policies by its ties that transcend states boundaries. Increasing transaction and network across the globe alter the pattern of political actions (Doyle, 1986: 34). These factors also cause the policies driven between countries to impinge and intervene with one another. Besides, there are channels of contacts between government agencies (e.g., ministries, cities) across countries, leading to a coalition in decision making upon policy questions of environmental issue. The coalition is expected to increase the success in achieving CC policy objectives effectively. One aspect that prominently requires more attention has been in financing. CC finance became an element where the negotiations are obvious and impacting state's NDCs.

Liberal Intergovernmentalism on climate change finance

Socioeconomic regulation and redistribution are fundamental social identities significant to the state's foreign policy. It underlies state preferences on social welfare, financial, and environmental positions debated in international economic negotiations (Moravcsik, 2003). As the matter of providing public goods for adaptation and mitigation, CC problem shapes states' behaviour since the policy implementations impose significant transnational externalities. Some states are exposed to negative externalities by others. States that produce negative externalities or take advantage from others' positive externalities may have an opportunity to "free ride" on their neighbours' domestic policy, instead of spending budget in a cooperation (Keohane & Nye, 1989). Hence, this condition incentivises international policy coordination.

When negative externalities exist, 'the formation of a coalition creates an incentive for recalcitrant governments to compromise...the threat of exclusion from a coalition is a more powerful incentive to cooperation than a single state's threat of non-agreement' (Moravcsik, 1993 : 503). For instance, developed countries choose to provide CC funding loans or financial assistance to developing countries, rather than exclusion from a coalition that may impose a higher cost. Since there would always be mutual expectations within the cooperation, in return, the donors may increase their reputation regarding CC commitment and intensify the cost-effectiveness of threats and side-payments. Whereas the recipients of the assistance are obliged in financial commitments allocation as mandated in the terms and conditions, such as what takes place in Indonesia's case.

The Indonesian Context

Indonesia as one of significant CC funding recipient has been categorized as vulnerable to the impact of CC, shown by the rise of its rank in the Global Risk Index within the last two decades (World Economic Forum, 2019). Indonesia has been in the top ten emitters of CO₂ with 6.1 gross ton emission a year (UCS, 2020) and considered as the largest emitter from land conversions (e.g., forest converted to cropland or pasture) along with Brazil and Congo (UNEP, 2020). Moreover, Indonesia is highly vulnerable to natural disaster affected by CC, particularly in low-lying regions throughout its thousands of islands. This fact explicitly shows that Indonesia is a prominent actor in terms of environmental damage if no course of action is taken regarding mitigation and adaptation.

Realising the increase of adverse risks, Indonesia has conducted some efforts to manage the CC impacts, one of which is by its active contribution in the international negotiations. Indonesia participated as one of the first countries ratifying the United Nations Framework Convention on Climate Change (UNFCCC). Indonesia demonstrated its commitment by committing to the Kyoto Protocol ratification in 2004 proceeding the Conference of the Parties (COP)-3 in Kyoto, 1997. The ratification includes joint implementation, emission trading and development mechanism. Indonesia's engagement in international negotiation was continued by hosting the 13th session of the COP-13 Bali in 2007, which generated a chance to leap forward, founded the Forest-11 group, and became the leader in the global Finance Ministers dialogue process to address the financial impacts and economic costs of CC (NCCC, 2009). Indonesia started to implement the mainstreaming CC issues as national development priorities in the National Action Plan according to article 3.4 and article 4.1 of UNFCCC.

Indonesia requested the UNFCCC Secretariat in 2008 to provide assistance and assessment for financing needs to determine the mitigation and adaptation measurements which was responded by UNFCCC by conducting the National Economic, Environment and Development Study (NEEDS). Indonesia was also involved in Reducing Emissions from Deforestation and Forest Degradation (REDD+), a UNFCCC initiative to enhance countries that possess tropical forest to reduce landscape emissions.

In its development, the Kyoto Protocol failed to achieve the target of reducing world emissions due to the lack of commitment from industrialised countries to reduce their emissions. Therefore, at COP-21 Paris, in 2015, The Parties agreed to adopt the Paris Climate Agreement which aims to withstand the increase in global average temperatures below 2° C above pre-industrial level and continuing the efforts to reduce temperature increase to 1.5° C. Furthering

Indonesia's commitment on CC negotiation, its government participated in the Paris Agreement. Through Indonesia's NDCs, the commitment was manifested as a pledge. NDCs alone embody efforts of every state in reducing national Green House Gas (GHG) emission and adaptation to the impacts of CC (UNFCCC, 2020). As for Indonesia, the pledge includes emission level reduction from Business as Usual (BAU) by 26% in 2020 and 29% by 2030 with national interventions, continued by a target up to 41% by 2030 with international supports. The pledges are understood as Indonesia's preference for CC issue, which is influenced by international and domestic interactions and pressures. Indonesia has been an active participant in multinational engagements such as with ASEAN, which should take courses of action according to ASEAN's values, become part of world society under the UN, or interacted with major states.

Meanwhile, due to the idea of democratic country, the government of Indonesia needs to take the voices of citizens in the form of citizen representative, NGOs or private business actors into consideration. Hence, in responding to the main research question, two sub-questions arise: 'To what extent do domestic actors influence Indonesian CC policies'; and 'To what extent do international and regional organisations and developed countries influence Indonesian CC policies?'

The framework of this study is to answer the questions by utilising the propositions of the LI theory and relating it with the contextual evidence regarding Indonesia. LI's propositions to address the research questions include: (1) the formation of national preference at domestic level that incorporates societal factors; and (2) transnational perspective or the international regime perspective. In the following section, the methodology would be described.

RESEARCH METHOD

The main design of this study is making a two-level analysis of domestic and international negotiations that gave impact over the content of Indonesia's NDCs as the CC policy. Downie (2014: 146) mentioned "the two-level perspective proposes that in international negotiations, the COGs monopolize the state's external representation". He also asserted that by using the two-level framework, scholars have been trying to "incorporate the preferences and behaviour of domestic actors into explanations of international negotiation outcomes" (p. 32). On the one hand, Indonesia needs to respond to the domestic pressures in shaping its policies. On the other hand, international negotiations also take part in influencing Indonesia's preferences. By applying LI theory in the previous section, both sides of influences could be linked to draw a conclusion on which actors shape the CC policy in Figure 2.

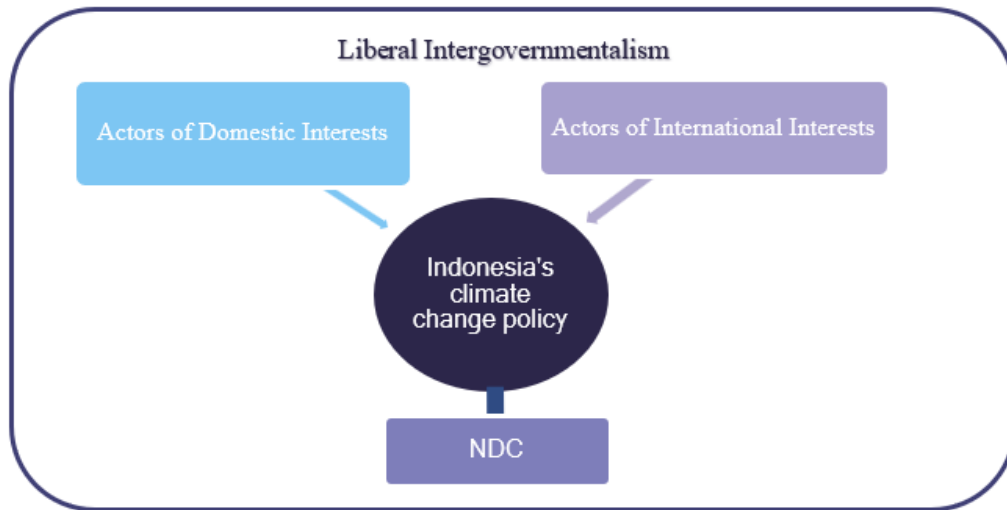


Figure 2. The research framework

Source: Processed by author, 2021

I began by performing the stakeholder analysis to identify both domestic and international actors in a single framework. Stakeholder here is defined as “any group or individual who can affect or is affected by the achievement of the organisation’s objectives” (Freeman, 1984 : 46). Stakeholder approach is prescriptive, which leads to a practical direction for managers and descriptive, because of its impact for research (Freeman & Mcvae, 2005). I chose to use Eden & Ackermann’s (1998) method in conceptualising the relationship among stakeholders by categorising them into two dimensions, namely their interest and their power to influence. However, the categorisation is rather subjective instead of objective measures, as long as the main actor, i.e., state government, remains the central decision maker in this analysis. This method is an advancement from Mendelow’s matrix developed by Mendelow (1991). This methodology aims to predict organisational behaviour in accordance with each quadrant of stakeholders, not that the leaders shall pay attention to one particular stakeholder, but to achieve a goal by paying a certain degree of attention to a certain actor.

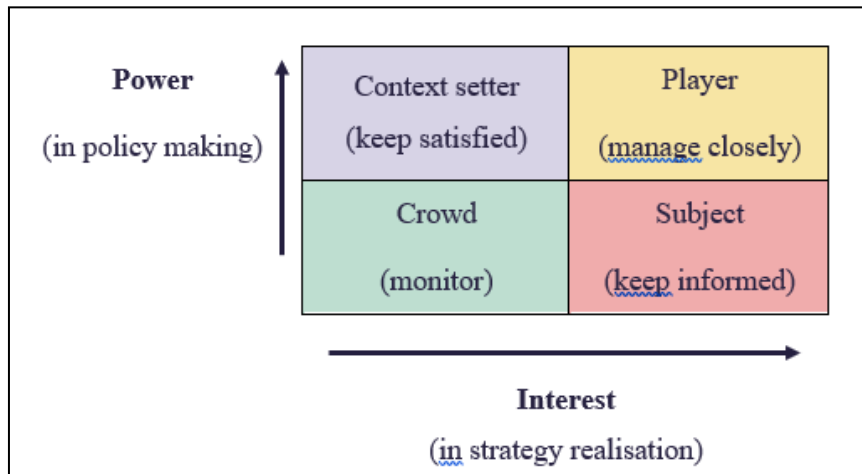


Figure 3. Stakeholder grid

Source: Mendelow, 1991

The Stakeholder grid in Figure 3 seeks to differentiate stakeholders into categories by the degree of interest and the degree of influence on the issue’s direction. The overlapping between both groups represents the essential player in policymaking (Eden & Ackermann, 1998). Subject means the one subjected to the policy’s consequence, has a high interest in the issue, regardless of the power to give influence. However, this category may be encouraged to support the policy by involving, informing, and consulting. Context setter is an independent actor who has the ability to affect the context significantly but uncontrolled by the policymaker, while the most unaffected actor is the crowd as a bystander, which is deemed unimportant unless encouraged to participate more and seek more power. Understanding which stakeholders involved and their categories give us insight into how policymakers may respond to them, hence this stakeholder framework helps in analysing the facts. The framework is also useful for addressing certain behaviour in certain actor. The next step is employing LI to explain how the negotiation and bargaining processes were, as well as the outcome of those processes.

Regarding the source of data, this case study uses a literature review which incorporates government documents, reports from the mass media and academic studies to explore the issues in Indonesia’s CC policy in the perspective of LI. Information that I used were Indonesia’s NDCs document, database on Indonesia’s long-term strategy (LTS) as well as CC governance and the official documents published by the Ministry of National Development Planning (BAPPENAS), the Ministry of Environment and Forestry (MoEF), and the Ministry of Finance (MoF). Since the literature resources on Indonesia’s plans for a CC policy are limited, I decided to use insights and

study results from international publications and reports as well.

In assessing the policies to answer the research questions, I employed a case study approach derived from a range of sources. The sources of information and assessment include: a case study by Jotzo (2018) which explores Indonesia's negotiation in ASEAN; quantitative method in the study of Shimizu & Rocamora (2016) in examining financial component of NDCs; utilisation of Climate Budget Tagging (CBT) in Mutiara et al. (2020) to attest Indonesia's real budget allocation; climate finance tracking method in the Landscape of Public Climate Finance in Indonesia (MoF and CPI, 2014); ISEAS Yusof Ishak institute (2020) quantitative survey for public/citizen's value related to Indonesian CC policy; and exploration of official documents and complementary sources. These secondary data have been selected by their characteristics which fit to respond the elements of the research question. They were categorised and ordered by addressing the interaction.

It is important to define the limit of the timeframe of the study, which is related to 2014-2015 when Indonesia was preparing its first NDCs and for the Paris negotiations. The analysis will also cover a glimpse of the ongoing developments after the commitment was announced to the international community.

RESULT AND DISCUSSION

Main Issues

There are three issues under the contention of this study. The first is the policymaking process in formulating NDCs that involves various actors. I will give a brief explanation of the events and how the engagements were conducted in the formulation stage. The second issue is the financial aspect within CC policies, i.e., assessing how the allocation of financial resources for CC budget. The third one is the balance between mitigation and adaptation in Indonesia's CC policies.

The first issue is the formulation and submission of the NDCs. Given the relatively short period to prepare and communicate the NDCs, conducting relevant processes could support the government to decide the policy promptly. The process should strengthen institutional cooperation in delivering the outcome of CC policy to the constituents in the future implementation. The process might also enhance the legitimacy of the NDCs. Later I will discuss the policies proposed by the actors in the NDCs policymaking process, and how the behaviour of the government in response through its policies is.

The next issue is the financial aspect. There are two elements of the financial issue to be examined as the implications of financial involvement by participating interests in Indonesia's CC policies. As required by the Paris Agreement, developed countries should voluntarily provide financial assistance to developing countries respecting to both mitigation and adaptation. This provision aims to achieve a balance between adaptation and mitigation. At another level, domestic actors and private sectors are also involved in providing financial resources because of the national budget constraints. Moreover, the assessment includes the promised and actual transfer of financial resources in the LTS and MoF documents. It deals with how much the proportion should the government invest for mitigation or adaptation.

Thirdly, the assessment is on the content of NDCs investigated in terms of its emphasize on adaptation and mitigation. State's negotiating position in UNFCCC is strongly reflecting its NDCs features, whether in favour to adaptation or mitigation. There is a notion of a trade-off between adaptation and mitigation because of the constrain of resources such as funding, time, or political agenda. Several studies have asserted that mitigation investment should have more priority than adaptation (Kane & Shogren, 2000; Bruin et al., 2009), while Lecocq & Shalizi (2007) argued that investment in adaptation may be applied when more certainty is profound. Their contentions are about the uncertainty of the adverse impacts of CC in term of spatial location. In line with their argumentation, Leinaweaver & Thomson (2021) also mentioned that adaptation has fewer externalities beyond the state. Its benefits also depend less on other states' actions than the mitigation.

Furthermore, mitigation and adaptation should get into a synergy or co-benefit. Mitigation and adaptation should not compete with one another, but rather both are interconnected in funding needs (Shimizu & Rocamora, 2016). The Paris Agreement also states in article 9(4) on financial provision and article 10(6) on technology transfer that a balance between adaptation and mitigation should be achieved.

Stakeholder Analysis

Inclusively engaging stakeholders has been necessary to maintain the participatory process supporting national policies in the CC area. An effective stakeholder engagement is essential in applying the principle of leaving no one behind and ensuring equity across all programming areas (UNDP, 2017). The consultations that incorporate diverse stakeholders are intended to gain comprehensive input in policy preferencing, legal designing, or programme recommendations which eventually shape the NDCs. Challenges that a state must encounter in preparing and advancing NDCs, especially for a developing country, are ultimately "determined by country-

specific conditions including ... stakeholder groups and sectors impacted by climate change, political priorities, and the level of civil society engagement” (Vener et al., 2019: 31). In this section, the involving stakeholders that have influenced Indonesia’s NDCs are addressed, and their roles are described through the following stakeholder matrix in Figure 4:

<p>High power to influence CC Policy</p>	<p>Satisfy: Medium-priority stakeholders with whom the policymakers need to work and engage</p> <p>e.g. Environmental NGOs, Major states, ASEAN</p>	<p>Manage: High priority stakeholders that have the ability to influence and take decisions</p> <p>e.g. Policymakers (local & national government), UN agencies</p>
<p>Little power to influence CC Policy</p>	<p>Monitor: Low priority stakeholders to involve only when resources permit or where there is significant added value to the process</p> <p>e.g. Media</p>	<p>Involve, Inform, and consult: Medium-priority stakeholders who could be most affected, and would be beneficial to consult with and keep informed</p> <p>e.g. Civil societies, Business groups</p>
	<p>Doesn't matter much to them and/or does not work closely on CC issues</p>	<p>Matters a lot to them and/or works closely on CC issues</p>

Figure 4. Stakeholder Power-Interest matrix of stakeholders by level of power and participation
Source: Processed by author, 2021

Each stakeholders’ power and influence as shown in the Mendelow’s matrix are described below, in the order of their locus (government, domestic, and international actors):

1. State Actors

Central government plays a key role as policymaker as well as the executing agency. Consequently, it would receive and allocate most of the climate finance which flows out of the national budget. However, there is a nature of sharing authority between bureaucratic levels of governments due to its institutional arrangement. Given the decentralised model in Indonesia, it is

crucial to strengthen the arrangements and coordination for planning and to implement CC policies. An effective arrangement “includes both horizontal coordination, across ministries and segments of society, and vertical coordination, across national, subnational, and local levels” (Vener et al., 2019: 31-32). The arrangement is conducted to achieve synergy among policy agencies, horizontally (across ministries at the national level) and vertically (between state, provinces, and local governments).

At the national level, BAPPENAS has the central position in deciding climate finance system as well as coordinating loans or grants associated with CC policies. This ministry is the leading agency in charge of designing CC policies. As the financing agency, MoF is responsible for planning and implementing the policies that CC goals are allocated in budget, market, and pricing regulations. Meanwhile, MoEF has a responsibility to perform the policy and communicate the progress to the UNFCCC, which includes information on financial needs.

At the local level, all the provinces in Indonesia (must?) address CC issues in their policies, i.e., the GHG reduction action plan in 2014 (Sulistyawati, 2020). Their policies are conforming the framework generated by BAPPENAS. However, Indonesia’s decentralisation arrangement focuses on local/city governments instead of provincial governments, which challenges implementation of UNFCCC convention (Salahuddin, 2014). At the lowest level of coordination for the city and local governments, the local regulations in addressing CC risks are established. These sub-national jurisdictions interact directly to collaborate and build coalitions, and in its turn, can drive a policy change. According to the LI framework, in this stage, the national preference is beginning to be formatted.

The participation for gathering the voice of domestic actors have been taking place in all levels. For instance, at the central government level, the plenary meetings by BAPPENAS in March 2014 incorporated representatives of civil society organisations (CSOs), the private sector, and experts to decide on the CC trust fund. Whereas at Indonesian coastal cities, collaborative groups of public authorities and the civil societies organise and decide the adaptation measures. Furthermore, some of the cities joined transnational networks to collaborate on environmental programmes, for instance, the ASEAN Smart Cities Network (ASCN) as the platform for city government participation (Martinus, 2020). Whereas at the lowest level, Program kampung iklim (Proklam) or Climate village program has been established since 2012 as an adaptation and mitigation initiatives at the local level, utilising the local potentials and resources.

2. Domestic actors

A strong focus of the state actors’ policymaking process is the importance of engaging

domestic non-government stakeholders, including the private business sector, environmental NGOs and civil societies. They do not only take part in the planning stage to give policy input but also they also contribute to the financial aspect, as they provide the funding resources.

a. Environmental NGOs

Non-state actors like environmental NGOs played an essential role in the lead up to Kyoto Protocol (Downie, 2014) and to the Paris Agreement. In Indonesia, Environmental NGOs engage as social movement through influencing policies, law enforcement, market and private sectors behaviour, promoting community-based peatland management, and better governance of natural resources management in Indonesia (Ardhian et al., 2016). Align with the assumption 1 of LI -the supremacy of societal actors- the NGOs have the role in pushing the government to increase its contribution in CC issue. There are numerous instances of NGOs, each of which focuses on a particular element of CC, such as WALHI and Raca Institute (environmental issue); Greenpeace Indonesia and Forest Watch (forestry); Jatam (mining). Several Indonesian NGOs have also been admitted to be observers in the UNFCCC process, such as Yayasan Pelangi, Perkumpulan Sawit Watch, and Partnership for Governance Reform (UNFCCC, 2021).

The influence of environmental NGOs in Indonesia is considerably strong in terms of CC problem framing. This role is determined by developing the organisational capacity in framing problems to convince a diverse target group and the public at large for a policy change (Ardhian et al., 2016). The aim is to form public opinion of the importance of CC. The outcome of the framing could be a public mobilisation, increasing transparency and policy change. Government's strategy to deal with NGOs should be to satisfy to some degree that meets the criteria requested by the NGOs.

b. Business Groups

There have been tensions in this state between the environmental activists and business development groups, due to the exploitation of natural resources that account for a large share of economic growth (Resosudarmo & Jotzo, 2009). Similar to the opposing position pre-Kyoto, a number of the business communities proposed to the government to prevent the ratification of a high measured target of CC policy. Companies whose activities directly affect environment like palm oil industries (which produce the most severe forestry problem), oil companies (which oppose the carbon tax), or mining industries

(which produces water pollution and environmental damage) became the primary challenger of CC issues. Moreover, the ultimate commitment in NDCs is profoundly related to the business sector, as the worst emitters of GHG.

A reform which impacts business interests is “often characterized by a situation where the likely losers from the reform are obvious and concentrated and may have strong political influence based on their existing positions of financial strength or political importance” (Jotzo, 2012: 110). The participation of private sector has been mandatory, especially in disaster management and CC adaptation (Rembeth, 2015). The enactment of Disaster Management Law number 24/2007 (Government of RI, 2007) have also stated clearly the partnership between the three pillars of actors: Government, Civil Society and Private Sectors. Nevertheless, the involvement of the business sector accumulates optimism and skepticism at the same time. The participation by the private sector through intense brainstorming in the policymaking process leads to the outcome that risk reduction is its core (Rembeth, 2015: 295). In contrast, the decision-making might be contaminated with a conflict of interest because of this engagement, i.e., lowering the target that favouring the business groups.

c. Civil societies and the public

Civil societies as a domestic stakeholder is supposed to be engaged early in the formulation process to preserve their contribution, better inform and sustain partnerships. Civil society refers to “individuals engage in collective action and activity, but which are outside the realm of state action or not directly within the purview or control of the state” (Steans et al., 2010: 250). According to assumption 2 of LI -representation and national preference- the state represents social actors' coalition when the government determines its preference. CSOs have traditionally become powerful agents in promoting environmental policies in Indonesia, starting from Suharto administration until now (Jotzo, 2012). One of the most prominent CSOs in this context is AMAN, the Indigenous Peoples Alliance of Indonesian Archipelago. The representatives of CSOs are now often included as official delegations of Indonesia to the UN negotiations in CC.

As an institutional representation of its constituents from diverse social background, Indonesia determines its preference through consultation approach in democratic procedures. In the policymaking process, i.e., the preparation of the NDCs, the government “conducted consultations with various stakeholders ... and civil society organizations; these consultations have included workshops and consultations organized at both the national and provincial levels, as

well as bilateral meetings with key sectors” (Government of RI, 2016: 6). LI also suggests that this group often becomes the counterweight for the impact of business interest in shaping national identity.

3. International actors

a. United Nations system

Having been a part of world society, Indonesia maintains a strong foreign relationship within the UN system. In this context, it is primarily with UNFCCC secretariat (UN Climate Change), a UN agency assigned for the global response to CC's threat. Its function is in facilitating intergovernmental CC negotiations and advancing the implementation of the Convention, the Kyoto Protocol and the Paris Agreement. As one of UNFCCC participants, Indonesia has adopted its broad policy framework from this convention, and has made an adjustment to relate with domestic settings. In this stage, the agency's role is so essential that Indonesian CC framework, more or less, is mirroring what have been decided in the UNFCCC negotiations. Its facilitating and assistance function also benefit government agencies to achieve a consensus on policy actions (NCCC, 2009). Indonesia's engagement with UNFCCC has been described above in section 3.

b. ASEAN

The Association of Southeast Asian Nations (ASEAN) is one regime among regional institutions that continuously develops its policies regarding forests and its member states' environment. Indonesia was one of the founders of ASEAN in 1967; it attempts to take a leadership role since then, including in CC issues. The study of Jotzo (2018) suggested a natural leadership role for Indonesia in ASEAN on CC “not necessarily by way of a formal group within the international negotiations, but possibly by way of an informal role as champion of Southeast Asian interests in the climate negotiations” (pp. 98-99). Thus, Indonesia has been actively participating in CC negotiations in ASEAN. Negotiations resulted from this regime are always impacting its member's policy. To some extent, ASEAN may impose its members to translate and implement the regional policies into domestic settings. Giessen & Sahide (2017) observed that “member states' activities do not seem to be conducted by states as unitary actors; instead, issue-specific actions are based on the interests of issue-relevant bureaucracies, which are in charge of representing a given member state in a given field of an ASEAN's policy”. It appears here that one of the functions of ASEAN is for aligning the interest of a state to affirm its bargaining posi-

tion.

c. Developed Countries

Following the interdependence proposition in LI, Indonesia's policy preferences are interconnected with developed countries' policies. Those countries might be the political alliances, business partners, or the most prominent, the financial source for CC funding. Indonesia takes advantage of Article 9 of the Paris Agreement that states the obligation of developed country to mobilise funds to assist developing countries. The condition for these financial provisions is that the funds must be either for mitigation or adaptation, and the reporting process must fulfil the given standard. Developed countries such as Norway, Denmark, South Korea, Japan, Austria and Germany have committed to support Indonesia through the bilateral mechanism and in REDD++. Indonesia has also collaborated with several developed countries in terms of GHG emission reduction projects, for instance the peat restoration (Indonesia – Norway) with promised fund up to 1 billion USD and the Environmental Support Program (ESP) (Indonesia – Denmark) with the value of 42.7 million USD investment.

It is well known that there are also some impacts of USA's policy for Indonesian CC Policy. The withdrawal of the USA from the Paris Agreement in 2017 created uncertainty about achieving the targets. Without the USA's contributions, the funding supports for a number of multilateral adaptation and mitigation projects were disrupted (Windyswara, 2019). However, the USA's exiting Paris Agreement did not affect Indonesia's commitment to the pledge (IESR, 2017). It is estimated that there would be a fundamental change in Indonesia's policy due to the re-joining of the Paris Agreement by Biden administration, that there is a possibility to increase bilateral cooperation and green investments (Enviro, 2020). The wind of change which is happening in the USA will undoubtedly generate positive opportunity for various Indonesia's CC policies.

Assessment Of Behaviour

Ratification of the Paris Agreement and NDCs submission

The domestic political process in setting preference is a crucial stage; hence CC policy is a manifestation of domestic politics. The CC issue is not only a technical problem of the environment but also dealing with political and economic aspects. As suggested by LI regarding primacy societal values and state representation (Moravcsik, 2003), the internal setting is strongly influenced by domestic variables such as socioeconomic structure and values of the societies.

However, LI explains that the elite group in the surrounding of COG becomes a large filter that monopolises relation (Moravcsik, 1999) and therefore might have prevented some policy considerations. In this case, the elites are strongly related to private industries that highly produce GHG, for instance, minister in the first Yudhoyono administration and chairman of a political party who possessed coal companies (Jotzo, 2012).

Prior to the signing of the Paris Agreement on 22 April 2016 in New York, a coalition consisting of thirty Indonesian NGOs, led by WALHI, attempted to pressure the GoI to ratify the Paris Agreement with the issue of justice, while the private sector proposed otherwise (Windyswara, 2019). This evidence highlights how NGOs influence national preference, given the ultimate outcome on state behaviour. Nevertheless, it is not easy to measure how much influence NGOs have on the government's position, similar to the study of Downie (2014), NGOs were successful in ascertaining that the state does not walk away from the Kyoto Protocol and the Paris Agreement. The attempts of NGOs "to dilute the influence of business groups that advocated abandoning the Kyoto Protocol was particularly successful" (Downie, 2014: 119). Moreover, the NGOs proposal has been in line with GoI's philosophy which refers to the 1945 Constitution of Indonesia Article 28 H paragraph (1) which states that "Everyone has the right to live in physical and mental well-being, to live and get a good and healthy living environment and the right to obtain health services". This juridical mandate shows the position of GoI in the context. Hence, it can be said that the pressure from NGOs was a support or enhancement for national preference.

Consistent with the interdependence idea of LI, there is evidence that suggests the transnational networks affected Indonesia's behaviour. Indonesia was involved in ASEAN negotiations prior to COP-21 Paris, which generated ASEAN community roadmap, including ASEAN Action Plan on Joint Response to Climate Change (AAP-JRCC). Indonesia was urged to undertake substantive actions by submitting INDC on time, sign the Paris Agreement on 22 April 2016, and commit to ASEAN-UN Action Plan on Environment and CC 2016-2020. These actions are conducted not only because Indonesia is a member of ASEAN, but also due to its intention to take a leadership role on CC issues. Thus, the signing of the Paris Agreement and the submission of the NDCs became a priority to be conducted for GoI.

Climate Finance: between mitigation and adaptation

One of the motives to formulate NDCs is that GoI seeks help for funding assistance, investment and technology transfer from developed countries in accordance with Article 9 of the Paris Agreement. Finance is subject to bargaining in most UNFCCC negotiations in terms of

financial funding provided by developed countries and concerning the balance of finance between mitigation and adaptation. State preferences on financial and environmental positions are debated here in international economic negotiations as LI suggests.

The study of Shimizu & Rocamora (2016) figured out the overall request of developing countries that 49% of financial needs were targeted to mitigation, 11% were for adaptation, and the remaining 40% were neither stated explicitly for mitigation nor adaptation. Having the same position with many other developing countries, Indonesia argued in UNFCCC negotiation that there should be a balanced financial allocation between mitigation and adaptation. Measuring mitigation is indeed easier, but budget constraint may also be quite challenging for developing countries in financing adaptation, primarily when climate shocks impact their fiscal base (Lecocq & Shalizi, 2007). Therefore, it is incorrect to assume that developing countries expect less adaptation funding than mitigation (Shimizu & Rocamora, 2016).

Eventually, the result of negotiation shows that in the global accumulation of financial needs negotiated, 81% (USD 2,667.5 billion) were directed to mitigation, and 19% (USD 619.9 billion) were for adaptation (UNFCCC, 2014). This financial flow reflects that the global trend is weighted toward mitigation, shown by the accumulation of NDCs data worldwide. By 2020, the accumulation of funds that developed countries must allocate to developing countries is worth 100 billion USD per year (UN, 2020). These funds can be in the form of grants, investments with a result-based finance system to support mitigation actions, reduce GHG emissions, support adaptation, transfer technology, or capacity building. However, currently Indonesia has received the lowest amount (2.1%) of those allocated funds (UN, 2020).

LI prescribes that there would always be mutual expectations within the cooperation, hence in return, the donors may increase their reputation. Whereas Indonesia as the recipient is obliged in financial allocation as mandated in the terms and conditions. Indonesia prepared its climate finance statement in the NDCs, which in general consists of: commitment of 41% GHG with international financial support; financial mechanisms including reporting as urged by the donors; funding for national adaptation plan; and financial planning process involving stakeholders. MoF (2014) mentioned that mitigation includes energy, forestry, land use, transport modes, waste and water, industry, and fugitive emissions. Meanwhile, adaptation includes agriculture and livestock management, forestry, land use, infrastructure and coastal protection, and disaster risk management. Around 60% of the CC finance was allocated for 'indirect' activities of enabling environments to support future climate action (e.g., policy development), and around 40% of the CC finance went to 'direct' activities (35% supported mitigation, while 5%

went to adaptation). This percentage was developing into a more balanced composition over the years, and in 2018 the composition became 55% for mitigation, 34% for adaptation, and 11% co-benefit for both (MoF, 2019).

However, CC finance is still far away from achieving its target. A study by Mutiara et al. (2020) used Climate Budget Tagging (CBT) to attest Indonesia's real budget allocation to meet its targets. CBT is a process of identifying the amount of the budget allocated to finance specific output aimed for climate change mitigation and adaptation (UNDP, 2014). The main finding of the study showed that the local government's financial availability is not adequate to reinforce Indonesia's NDCs target of 29% GHG emission reduction by 2030. The high budget allocation in the province (7% in 2015; 24% in 2016) and the city/local district (47% in 2015; 16% in 2016) is not sufficient to meet mitigation and adaptation outcome.

Another evaluation comes from MoF, supporting the same notion that the amount of the estimated CC budget is still below the funding needed until 2030. Total funding of USD 236 billion is needed to achieve the NDC target for 2018-2030 or averagely 20.6 billion per year. This evaluation utilises the same method, i.e. CBT, and concludes that the state budget's financial capability will only be 38% of the funding needs (MoF, 2019). This condition stimulates the negotiation for attracting more financial support from both domestic and international sources to meet the targeted activities.

Thematic feature in the NDCs document: stakeholder engagement

Indonesia's NDCs have a set of thematic emphasizes, one of which is the mentioning of stakeholders-inclusiveness. In regards with the LI's primacy of societal actor, Multiple CSOs, led by AMAN, brought the proposal of preserving forests and protecting the rights of indigenous peoples. Therefore, they encouraged COG to commit to the Paris Agreement by including indigenous peoples' rights in the NDCs document. This recommendation was presented by the civil society representation in the 2014 plenary meeting by BAPPENAS to pursue inclusive policymaking.

As a result, Indonesia's NDCs (Government of the RI, 2016) mentioned the continuation of public/communities' involvement in mitigation and adaptation. Those direct and indirect mentioning could be found at least eight times in several topics within the NDCs, which are: participation (p. 2, p. 4, p. 5, p. 6); consultation (p. 6); enhancement (p. 6, p. 12); and transparency (p. 10). However, in four parts of the mentioning, other groups are also mentioned, e.g., private sector and women.

Turning the eyesight to the reality after the submission of NDCs, the public's percep-

tions of CC policies are varied. According to a survey by ISEAS Yusof Ishak Institute (2020), 71% of Indonesian citizens participate in CC issues, yet 24% think that their government is neither “giving enough attention to CC” nor “does not consider CC as a threat”. They assessed GoI’s efforts in addressing CC as aware of the threat but not sufficiently allocating resources (62%) and only 9% perceive GoI has allocated sufficient resources. However, as Torstad (2020) argued from the result of his study, public/citizen’s value and perception have little support on NDCs, so does public attitudes. This little support may be encouraging the government to do more and to inform more in policy implementation, and to take a more ambitious target of CC policies.

CONCLUSION

Indonesia’s role is vital in the CC issues since its position as one of the world’s biggest GHG emitters. In responding to the problem, Indonesia has undertaken some participation in international negotiations and generates numerous CC policies. This study explored the policy-making process regarding Indonesia’s CC policies, mainly regarding Indonesia’s NDCs. It employed the Liberal Intergovernmentalism propositions in examining dynamics in policy preferences at the domestic level, which are derived from societal values by societal actors, and transnational/regional negotiation and interdependence. As a result, I discovered the importance of coordination within governmental institutions at all levels. The ‘bottom-up’ style of participation might be favouring CC policy formulation and implementation. In the meantime, there is some evidence showing the influence of domestic actors such as NGOs (e.g., in encouraging the GoI to ratify the Paris Agreement and submit NDCs), CSOs (in pursuing the involvement of stakeholders), the public (in perceiving their government), and insignificant influence of the attempt from business groups (in preventing a policy). I also found evidence that the transnational institutions and developed countries have impacts on Indonesia’s CC policy. The influences are in the form of policy framework (i.e., UNFCCC), funding constraint and provision (by developed countries), imposing regional value or action (i.e., ASEAN), as well as the balance between mitigation and adaptation (all actors combined). I conclude by drawing out the implications of main findings from the analysis, that the actors of the interests from both levels, domestic and international, have simultaneously shaped Indonesia’s CC policies in different areas of influence. However, the degree of influence needs further research and in-depth examination. Literature studies regarding the policymaking process of CC policies in general, and NDCs in particular, are still limited, so it is expected that this study may have a contribution in this area.

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BIBLIOGRAPHY

- Ardhian, D., Adiwibowo, S. and Wahyuni, E. (2016). Peran dan strategi organisasi non pemerintah dalam arena politik lingkungan hidup. *Sodality: Jurnal Sosiologi Pedesaan*, 4(3): 210-216 (doi: 4.10.22500/sodality.v4i3.14429), [Online]
- Bruin, K. D., Dellink, R., and Agrawala, S, 2009. "Economic Aspects of Adaptation to Climate Change" [online]. Retrieved from <https://www.oecd-ilibrary.org/docserver/225282538105.pdf> [Accessed January 30, 2021]
- Climate Action Tracker, 2021. "The Climate Action Tracker" [online]. Retrieved from <https://climateactiontracker.org> [Accessed January 30, 2021]
- Downie, C. and Edward Elgar Publishing. (2014). *The politics of climate change negotiations: strategies and variables in prolonged international negotiations*. Cheltenham: Edward Elgar Pub. Ltd.
- Doyle, M. W. (1986). "Liberalism and World Politics". *The American political science review*, 80(4): 1151–1169 (doi: 10.2307/1960861), [Online]
- Eden, C., Ackermann, F. (1998). *Making strategy the journey of strategic management*. London: Thousand Oaks, Calif.: Sage Publications.
- Environment Institute (Enviro), 2020. "Biden Extends Green Funding Opportunities in Indonesia" [online]. Retrieved from <https://www.enviro.or.id/2020/11/biden-extends-green-funding-opportunities-in-indonesia> [Accessed January 9, 2021]

- Freeman, R. E. (1984). *Strategic management: a stakeholder approach*. Boston: Pitman.
- Freeman, R. E. and McVea, J. (2005). "A Stakeholder Approach to Strategic Management". *The Blackwell Handbook of Strategic Management*. Oxford, UK: Blackwell Publishing Ltd, 183–201.
- Fujiwara, Noriko, Van Asselt, Harro, Bößner, Stefan, Voigt, Sebastian, Spyridaki, Niki-Artemis, Flamos, Alexandros, ... and Ten Donkelaar, Michael. (2019). The practice of climate change policy evaluations in the European Union and its member states: Results from a meta-analysis. *Sustainable Earth*, 2(1):1-16 (doi: 10.1186/s42055-019-0015-8), [Online]
- Giessen, Lukas, & Sahide, Muhammad Alif K. (2017). "Blocking, attracting, imposing, and aligning: The utility of ASEAN forest and environmental regime policies for strong member states". *Land Use Policy*, 67: 13-26 (doi: 10.1016/j.landusepol.2017.05.012), [Online]
- Hofman, E. and van der Gaast, W. (2019). Enhancing ambition levels in nationally determined contributions—Learning from Technology Needs Assessments. *Wiley interdisciplinary reviews. Energy and environment*, 8(1): 311 (doi: 10.1002/wene.311), [Online]
- Institute for Essential Service Reform (IESR), 2017. "Indonesia was not affected even though the US withdrew from the Paris Agreement" [online]. Retrieved from <https://iesr.or.id/indonesia-tak-terpengaruh-walau-as-mundur-dari-perjanjian-paris-2> [Accessed February 6, 2021]
- ISEAS Yusof Ishak institute, 2020. "State of Southeast Asia: 2020 Survey Report" [online]. Retrieved from <https://www.iseas.edu.sg/home-page-highlights/state-of-southeast-asia-2020-survey-report> [Accessed December 29, 2020]
- Iyer, Gokul, Ledna, Catherine, Clarke, Leon, Edmonds, James, McJeon, Haewon, Kyle, Page, and Williams, James H. (2017). Measuring progress from nationally determined contributions to mid-century strategies. *Nature Climate Change*, 7(12): 871-874 (doi: 10.1038/s41558-017-0005-9), [Online]

- Jernnäs, Maria, Nilsson, Jens, Linnér, Björn-Ola, and Duit, Andreas. (2019). Cross-national patterns of governance mechanisms in nationally determined contributions (NDCs) under the Paris Agreement. *Climate Policy*, 19(10): 1239-1249 (doi: 10.1080/14693062.2019.1662760), [Online]
- Jotzo, F. (2018). “Can indonesia lead on climate change?” In ISEAS–Yusof Ishak Institute (Ed.), *Indonesia Rising: The Repositioning of Asia’s Third Giant*. Singapore: ISEAS–Yusof Ishak Institute Singapore: pp. 93–116.
- Kane, S. and Shogren J, 2000. “Linking adaptation and mitigation in climate change policy”. [online]. Retrieved from <http://link.springer.com/article/10.1023/A:1005688900676> [Accessed January9, 2021]
- Kant, I. and Reiss, H. (1991). *Kant: political writings 2nd, enl.*, Cambridge [England], New York: Cambridge University Press.
- Keohane, R. O. and Nye, J. S. (1987). Power and Interdependence revisited. *International organization*, 41(4): 725–753 (doi: 10.1017/S0020818300027661), [Online]
- Keohane, R. O. and Nye, J. S, 1989. “Power and interdependence 2nd ed.” [online]. Retrieved from https://openlibrary.org/books/OL2041658M/Power_and_interdependence [Accessed January 15, 2021]
- Lecocq, Franck and Shalizi, Zmarak, 2007. “Balancing Expenditures on Mitigation of and Adaptation to Climate Change: An Exploration of Issues Relevant to Developing Countries” [online]. Retrieved from <https://ssrn.com/abstract=1004841> [Accessed January 15, 2021]
- Leinaweaver, J. and Thomson, R. (2021). The Elusive Governance of Climate Change: Nationally Determined Contributions as Commitments and Negotiating Positions. *Global Environmental Politics*, 21 (2): 73–98 (doi: 10.1162/glep_a_00585), [Online]
- Martinus, M, 2020. “ASEAN Smart Cities Network: A Catalyst for Partnerships”. *ISEAS Perspective*, Issue 2020 No.32 [online]. Retrieved from https://www.iseas.edu.sg/wp-content/uploads/2020/02/ISEAS_Perspective_2020_32.pdf [Accessed January 15, 2021]

- Mendelow, A. L., 1981. "Environmental Scanning: The Impact of the Stakeholder Concept". Proceedings from the Second International Conference on Information Systems, Cambridge, MA. 407-418. Retrieved from <https://aisel.aisnet.org/icis1981/20/> [Accessed January 10, 2021]
- Ministry of Finance Republic Indonesia (MoF) and Climate Policy Initiative, 2014. "The Landscape of Public Climate Finance in Indonesia" [online]. Retrieved from <https://www.climatepolicyinitiative.org/wp-content/uploads/2014/07/The-Landscape-of-Public-Finance-in-Indonesia.pdf> [Accessed January 9, 2021]
- Ministry of Finance Republic Indonesia (MoF) Fiscal Policy Agency, 2019. "Public Finance for Climate Change in Indonesia 2016-2018" [online]. Retrieved from https://www.id.undp.org/content/dam/indonesia/2020/DOCS/INS-ENGLISH-Full-Report-Public-Finance-for-Climate-Change-in-Indonesia-2016-2018_compressed.pdf [Accessed January 9, 2021]
- Moravcsik, A. (2020). "Liberal Intergovernmentalism" [online]. Retrieved from <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-1065>. [Accessed January 31, 2021]
- Moravcsik, A. (2003). Taking Preferences Seriously: A Liberal Theory of International Politics. *International organization*, 51(4), 513–553 (doi: 10.1162/002081897550447), [Online]
- Moravcsik, A. (1999). A New Statecraft? Supranational Entrepreneurs and International Cooperation. *International Organization*, 53 (2): 267–306 (doi: 10.1162/002081899550887), [Online]
- Moravcsik, A. (1993). Preferences and Power in the European Community: A Liberal Intergovernmentalist Approach. *Journal of common market studies*, 31(4): 473–524 (doi: 10.1111/j.1468-5965.1993.tb00477.x), [Online]
- Mutiara, Z. Z. (2020). "Climate Budget Tagging: Amplifying Sub-National Government's Role in Climate Planning and Financing in Indonesia". In R Djalante et al. (eds.), *Climate Change Research, Policy and Actions in Indonesia*, New York: Springer International Publishing AG: pp. 265-280.

- National Council on Climate Change (NCCC) and UNFCCC, 2009. "National Economic, Environment and Development Study (NEEDS) for Climate Change Indonesia Country Study Final report" [online]. Retrieved from <https://unfccc.int/files/adaptation/application/pdf/indonesianeeds.pdf>. [Accessed January 9, 2021]
- OhAiseadha, Coilin, Quinn, Gerre, Connolly, Ronan, Connolly, Michael, and Soon, Willie. (2020). Energy and Climate Policy-An Evaluation of Global Climate Change Expenditure 2011-2018. *Energies (Basel)*, 13(18): 4839 (doi: 10.3390/en13184839), [Online]
- Pauw, W. P, Castro, P, Pickering, J, and Bhasin, S. (2020). Conditional nationally determined contributions in the Paris Agreement: Foothold for equity or Achilles heel?. *Climate Policy*, 20(4): 468-484 (doi: 10.1080/14693062.2019.1635874), [Online]
- Rembeth, V. (2015). "Indonesian Experiences of Private Sector Involvement. Focus on Partnership". In: T Izumi and R Shaw (Eds.), *Disaster management and private sectors*. Tokyo: Springer Japan: 279–299.
- Resosudarmo, B. P. and Jotzo, F. (2009). Development, resources and environment in eastern Indonesia. In B P Resosudarmo and F Jotzo (Eds.), *Working with Nature against Poverty*, Singapore: Institute of Southeast Asian Studies.
- Salahuddin, M. (2014). "Challenges for the UNFCCC in Indonesia's Decentralisation". *Indonesia Law Review*, 4(1): 1-30 (doi: 10.15742/ilrev.v4n1.72), [Online]
- Shimizu, N. and Rocamora, A, 2016. "Analysis of Financial Components of Intended Nationally Determined Contributions (INDCs): Lessons for future NDCs, Institute for Global Environmental Strategies" [online]. Retrieved from <http://www.jstor.org/stable/resrep02930>. [Accessed February 4, 2021]
- Steans, Jill, Pettiford, Lloyd, Diez, Thomas, & El-Anis, Imad. (2010). *An Introduction to International Relations Theory*. London: Routledge.
- Sulistiawati, L. Y. (2020). Indonesia's climate change national determined contributions, a farfetch dream or possible reality? IOP conference series. *Earth and environmental science*, 423: 120-122 (doi: 10.1088/1755-1315/423/1/012022), [Online]

- The Government of Republic of Indonesia, 2016. "First Nationally Determined Contribution" [online]. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/> [Accessed January 9, 2021]
- The Government of Republic of Indonesia. (2007). Disaster Management Law number 24/2007
- The Union of Concerned Scientists (UCS), 2020. "Each Country's Share of CO2 Emissions" [online]. Retrieved from <https://www.ucsusa.org/resources/each-countrys-share-co2-emissions> [Accessed January 19, 2021]
- Torstad, V., Saelen, H. and Boyum, L. S. (2020). The domestic politics of international climate commitments: which factors explain cross-country variation in NDCs ambition?. *Environmental research letters*, 15(2): 24021 (doi: 10.1088/1748-9326/ab63e0), [Online]
- Uitto, J. I., Puri, J. and van den Berg, R. D. (2017). Evaluating Climate Change Action for Sustainable Development 1st ed. 2017. New York: Springer International Publishing.
- UN, 2020. "100 Billion climate finance report" [online]. Retrieved from https://www.un.org/sites/un2.un.org/files/100_billion_climate_finance_report.pdf [Accessed January 19, 2021]
- UNDP, 2017. "Guidance Note UNDP Social and Environmental Standards (SES) Stakeholder Engagement" [online]. Retrieved from <http://www.undp.org/content/dam/undp/library/corporate/Social-and-Environmental-Policies-and-Procedures/UNDPs-Social-and-Environmental-Standards-ENGLISH.pdf> [Accessed January 9, 2021]
- UNDP, 2014. "Methodological guidebook: climate public expenditure and institutional review (CPEIR)" [online]. Retrieved from https://www.undp.org/content/dam/rbap/docs/Research%20and%20Publications/democratic_governance/RBAP-DG-2015-CPEIR-Methodological-Guidebook.pdf [Accessed January 11, 2021]
- UNEP, 2020. "Emissions Gap Report 2020" [online]. Retrieved from <https://www.unep.org/emissions-gap-report-2020>. [Accessed January 11, 2021]
- UNFCCC, 2015. "The Paris Agreement" [online]. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [Accessed January 11, 2021]

- UNFCCC, 2020. “Nationally Determined Contributions (NDCs)” [online]. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/> [Accessed January 11, 2021]
- UNFCCC, 2021. “Admitted NGOs” [online]. Retrieved from <https://unfccc.int/process/parties-non-party-stakeholders/non-party-stakeholders/admitted-ngos/list-of-admitted-ngos>. [Accessed January 20, 2021]
- UNFCCC, 2014. “UNFCCC Standing Committee on Finance: 2014 Biennial Assessment and Overview of Climate Finance Flows” [online]. Retrieved from <https://unfccc.int/topics/climate-finance/resources/biennial-assessment-of-climate-finance>. [Accessed January 11, 2021]
- Vener, J., Fransen, K., and Levin, J. B. (2019). “Scaling Up Ambition: Leveraging Nationally Determined Contributions and Long-Term Strategies to Achieve the Paris Agreement Goals”. Working Paper. Washington, DC: World Resources Institute.
- Windyswara, D, 2019. “Alasan pemerintah indonesia meratifikasi paris climate agreement tahun 2016” [online]. Retrieved from ejournal.hi.fisip-unmul.ac.id [Accessed January 9, 2021]
- World Economic Forum, 2019. “Global Risks Report 2019” [online]. Retrieved from <https://www.weforum.org/reports/the-global-risks-report-2019> [Accessed January 11, 2021]
- Xunzhang Pan, Jie Tao and Hailin Wang (2018). Comparing and evaluating the nationally determined contributions of the top six emitters under the Paris Agreement goals. *Zhongguo ren kou, zi yuan yu huan jing.*, 16(3): 211–219 (doi: 10.1080/10042857.2018.1510079), [Online]