



Universiteit Leiden

COOPERATION ON ENERGY SECURITY IN ASEAN

EXPLORING THE ROLE OF REGIONAL NORMS IN
FOSTERING COOPERATION IN SOUTHEAST ASIA

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Word count:
14.988

July 2019

Abstract:

Energy security in this day and age is an increasingly complex concept for policymakers to deal with. In order to sustain future economic growth while keeping in account issues of territorial disputes and environmental pollution, many scholars have anticipated a great role for ASEAN, the regional organisation in Southeast Asia, in fostering regional cooperation on energy security. The dominant perspective within the literature analyses ASEAN in practical terms of material outcomes and claims that ASEAN should follow a similar path as the European Union, focussing on functional cooperation. However, the current research concurs with a marginalised and underdeveloped perspective in the literature and claims that norms and the establishment of a regional identity are crucial in understanding cooperation on energy security in Southeast Asia. The contribution of the research is twofold. First, its analyses of ASEAN's regional energy security policies, the Laos-Thailand-Malaysia-Singapore power interconnection project and nuclear energy developments finds that ASEAN's normative approach is crucial in understanding development of and the rationale behind cooperation on energy projects in the region. Secondly, it finds that contrary to the assumption of many scholars in the existing literature on energy security in ASEAN, ASEAN's norms are not static but undergo change through a process of *norm localisation*, in which external norms and practices are adopted and localised within pre-existing institutional norms and practices. The thesis concludes that norms play a crucial role in ASEAN's approach to fostering regional cooperation on energy security, dictating both form and function of cooperation. A normative approach is therefore key in gaining a better understanding of the development of energy security cooperation amongst Southeast Asian states.

List of abbreviations:

ACE	ASEAN Centre for Energy
ADB	Asian Development Bank
AEC	ASEAN Economic Community
AECA	ASEAN Energy Cooperation Agreement
AMEM	ASEAN Ministers of Energy Meeting
APAEC	ASEAN Plan of Action on Energy Cooperation
APG	ASEAN Power Grid
ASCOPE	ASEAN Council on Petroleum
ASEAN	Association of South East Asian Nations
ASEANTOM	ASEAN Network of Regulatory Bodies on Atomic Energy
CNE	Civilian Nuclear Energy
HAPUA	Heads of ASEAN Public Utilities/Authorities
IAEA	International Atomic Energy Agency
LTMS-PIP	Lao PDR-Thailand-Malaysia-Singapore Power Integration Project
SOME	Senior Officials Meeting on Energy
TAGP	Trans-ASEAN Gas Pipeline

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1. Introduction

Southeast Asia is one of the fastest growing economic regions in the world and the World Economic Forum forecasted that the region will become the world's fifth-largest economy by 2020 (ASEAN Post 2019). Growth in ASEAN economies is characterised by greater industrialisation, urban migration, increased motorisation and an expanding middle-class, resulting in a growth in energy demands of approximately 60 per cent in the past 15 years (Nicolas 2009, 8; ASEAN Post 2019). In their energy outlook report of 2017, the International Energy Agency expressed their concerns about the capacity of ASEAN countries to meet their growing energy demands with domestic production (International Energy Agency (IEA) 2017). With the current pace of energy development in the region, ASEAN members are shifting from being energy exporters to energy importers which decreases the region's energy security and with that the sustainability of their future economic growth.

Next to a growing energy demand, the increasingly complex nature of energy security also complicates the region's energy security. Energy security in the late 20th century and early 2000s became understood in terms of the four A's: availability, affordability, accessibility, and acceptability of energy (e.g. Winzer 2012; Ang, Choong & Ng 2014; IEA 2018). However, the depth of this definition has been changing over time according to technological advancements and new global norms such as environmental stewardship (Ibid., 1078). The Paris Agreement on Climate Change 2015, aimed at reducing the global carbon footprint, is an outcome of such a shift in thinking about energy security. This agreement will complicate energy security matters in the developing countries within ASEAN as it affects the region's energy security by increasing standards for energy consumption. Rather than the traditional definition of the four A's with a focus on availability and affordability, policymakers in Southeast Asia now have to deal with additional factors and dimensions such as reliability, efficiency and environmental sustainability (Vivoda 2010). Moreover, these additional factors combined with a rising demand for energy also become potential sources for intra-mural tensions and conflicts that will undermine both the region's economic growth and energy security.

As such, the ASEAN leaders adopted the *ASEAN Economic Community (AEC) blueprint 2025* at the 27th ASEAN Summit in 2015. The blueprint emphasises energy security issues and envisions regional cooperation on energy grids, energy market integration and on the development of renewable energy technologies (ASEAN 2015a). Establishing cooperation on

such a range of energy-related issues is, according to the blueprint, desirable in realising an ASEAN region that is considerably self-sufficient in its energy demand. Cooperation on energy is, however, not a new phenomenon within ASEAN. Since the 1970s ASEAN has been involved in establishing cooperation to prevent energy supply disruptions. Yet, ASEAN has had only minimal concrete results in institutionalising and realising regional energy security policies. Nevertheless, since energy security has become increasingly complicated, ASEAN has been active in a wider range of energy-related projects over the past few decades. Against this backdrop, it is imperative to examine how regional organisations such as ASEAN can contribute to the future developments of energy security cooperation in the region.

Within the existing literature on the topic, there is a particular dominant Eurocentric view that focusses on analysing ASEAN in terms of a functionalist approach to regionalism, subsequently creating high expectations. These analyses have led to the facile conclusion that ASEAN falls short in delivering concrete results, rendering it ineffective. However, framing ASEAN in terms of practical outcomes potentially misreads ASEAN's approach towards regional energy security cooperation. The current thesis, therefore, concurs with the marginalised focus within the literature that studies the relevance of norms and socialisation processes within ASEAN's institutions in fostering regional cooperation on energy. Although these normative explanations are not novel in studies about ASEAN's role in the region, they are underdeveloped within the field of energy security cooperation and the current thesis is amongst the first to explore it more in-depth. The core aim of the current thesis is to explore the following question: To what extent is a normative explanation approach applicable to the development of regional cooperation on energy security within ASEAN? Challenging the assumption that ASEAN should work the way the European Union does is important in creating a deeper understanding and appreciation of ASEAN's role in fostering regional integration.

The next section will lay the foundation for this research by exploring the existing literature on ASEAN's role in the development of energy security cooperation. Thereafter, this thesis develops an analytical framework to explore the relevance of normative explanations in cooperation on energy security. Probing such a hypothesis concurs with a marginalised explanation in the existing literature whose research left the current thesis unsatisfied and, therefore, motivates the current research to fill this gap in the literature. The subsequent chapter will apply the analytical framework to identify broad trends in ASEAN's history of energy security cooperation and will consider two specific case studies: the Laos-Thailand-Malaysia-

Singapore (LTMS) power interconnection project and civilian nuclear energy. It finds that ASEAN's regional policies are informed by the norms of the ASEAN way that express the importance of non-interference, equitable treatment and cooperation as means to achieving a regional community. Normative explanations, however, are more difficult to find in the individual case of the region's first multilateral power interconnection project, in which rational cost-benefit calculations seem to be dominant factors in decisions made on cooperation. Yet, the project's participants perceived the project as crucial for realising regional cooperation policies and therefore the analysis concluded that norms indirectly influenced cooperation on the LTMS project. The case of nuclear energy shows how the form and function of cooperation on nuclear energy are driven by ASEAN's norms. Moreover, it finds that ASEAN's institutions and norms play a crucial role in responding to global pressures and the 'localisation' of external norms and practices in the region. The thesis concludes that ASEAN's norms play a key role in defining both form and function of cooperation while influencing countries' preferences towards engaging energy issues on a regional level. The normative approach therefore is relevant in gaining a better understanding of rationales behind energy security cooperation within ASEAN.

2. Literature Review

In 1997, Kent E. Calder published his book *Asia's Deadly Triangle: How Arms, Energy and Growth Threaten to Destabilize Asia-Pacific* in which he predicted that the economic growth of the Asia Pacific region would result in energy shortages that give rise to dangerous tensions and an arms race in the region (Calder 1997). In 1999, Thomas Christensen similarly discussed how asymmetric power relations and political mistrust coinciding with rising energy shortages in East Asia could destabilise the region's energy security (Christensen 1999, 49, 50, 72). Nevertheless, to this day such a scenario has not unfolded in the way Calder and Christensen predicted. ASEAN is argued to have had an important role in mitigating and managing (inter-state) conflicts among regional powers in East and Southeast Asia (Qin 2013, 18; Koga 2018, 77-80). Although academic literature still debates the exact role of ASEAN in this, the absence of major armed conflicts and inter-regional wars suggests that ASEAN has been successful to some extent in managing the region's traditional security issues, providing regional stability.

Not surprisingly, therefore, many scholars support the idea that ASEAN is a crucial actor in the future developments of non-traditional security matters such as energy security cooperation as well. ASEAN first got involved with the region's energy security issues during the oil crises in the 1970s. At the time, their major concern was to establish some form of cooperation that could prevent major energy supply disruptions (Karki et al. 2005, 499). The same year, the members signed the ASEAN Energy Cooperation Agreement (AECA) that intended to broaden cooperation beyond the oil sharing in the future. Oil crises and the subsequent supply disruptions were major influential factors in initial cooperation on energy security. Since 1995, ASEAN has been releasing consecutive ASEAN Plan of Action (APAEC), in which it clarifies cooperation plans that go beyond building regional resilience towards oil crises and also touches upon renewables, energy-efficiency, regional planning and nuclear energy. Over the past decades, ASEAN has been involved in a multitude of cooperation projects and has published elaborate cooperation policies aimed at enhancing the region's energy. Nevertheless, the academic literature is still critical about the results ASEAN has achieved through their approach in fostering energy security cooperation.

2.1 From national disparities to regional incapacity

A potential explanation found in the existing literature argues that ASEAN is unable to provide concrete results on energy security cooperation due to national disparities between members

that hinder possibilities for effective energy security cooperation on a regional level (e.g. Lidula et al. 2007; Sovacool 2009; Tongsovit et al. 2016; Senderov & Vorobev 2018). In the literature on energy security cooperation, such a critique is firmly grounded in debates on prospects of ASEAN energy security cooperation and integration. According to these scholars, internal differences such as disparities in resource endowments, economic development gaps and inequality within countries in terms of actual access to electricity undermine ASEAN's ability to institutionalise regional energy cooperation. This is not merely due to *power*-difference between ASEAN members, but also because in many occasions countries simply do not possess the capacity required to implement regional regulations and policies. In this way, national differences in fields like economic development and resource endowments translate into a regional incapacity to implement and institutionalise policies, reducing the effectiveness of these regional policies.

An uneven endowment in indigenous energy resources has, for example, led to a division between energy-producing and resource importing countries, which resulted in different priorities in national energy policies but also regional energy cooperation (Tongsovit et al. 2016). Differences in levels of economic development exacerbate the issues of diverging priorities, especially in countries that are reliant on oil production for their economic growth (Senderov & Vorobev 2018, 8). Subsequently, regional goals often require far-reaching national institutional change, creating distrust about who determines the goals and standards. On a local level, regional large-scale energy projects often undermine the livelihood of local communities, and subsequently they undermine the willingness of governments to commit to regional approaches that potentially cause such issues (Simpson 2007, 550). Moreover, corruption and unstable governments in the region exacerbate issues of distrust among countries in relation to committing to regional standards and agreements (Lidula et al. 2007; Sovacool 2009). In this way, these scholars believe the lack of concrete results on regional projects can be explained by internal disparities that lead to the persisting distrust between members in determining who sets regional goals and standards.

The literature on overcoming these issues is divided into two main bodies. On the one hand, some scholars believe that ASEAN should take a functionalist approach to energy security cooperation and develop cooperation in the way the European Union has done. Their greatest critique reflects broader debates on ASEAN, identifying it as an inefficient 'talk shop' that is not able to offer any concrete institutional arrangements to deal with the needs of functional

cooperation (Katsumata 2006, 187; Breslin & Wilson 2015, 133). These scholars find that cooperation works better when focussing on low-key functional areas that will spill-over into regional institutions with enhanced authority (Breslin & Wilson 2015, 133) On the other hand, there are scholars that argue that such a view misreads ASEAN regionalism, arguing how ASEAN's institutions are a 'norm brewery' that reflect shared normative understandings and interests, and these institutions then will influence the participants' interests and policies (Katsumata 2006, 195). Similarly, some scholars within the energy security literature contend that ASEAN regionalism takes a more normative approach that relies on confidence-building and norm diffusion to influence national policies and build the foundation for cooperation on energy security matters.

2.2 Functional cooperation: success based on material gains

The functional approach is the most prominently researched and subsequently the most established approach in the field. These scholars highlight ASEAN's weak institutional architecture and persistence on non-interference has led to largely ineffective efforts in establishing and institutionalising energy security cooperation, and the subsequent lack of significant results (e.g. Karki et al. 2005; Nicolas 2009; Aalto 2014; Shi & Kimura 2014; Shi 2016; Andrews-Speed 2016; Wananti & Hanif 2018). Scholars in this particular body of literature believe that this weak institutional architecture has affected regional cooperation on energy security matters, disabled ASEAN to move beyond intra-regional diversities, and prevents bottom-up functional cooperation that could result in *spill-overs*, requiring cooperation in other areas as well, as seen in the European Union. It is important to notice that these scholars agree on certain normative and conceptual understandings of what constitutes an effective regional organisation: the ability to effectively coordinate responses to functional challenges, focussing on practical outcomes that generate material benefits (Ba 2014, 297, 309; Hadiwinata 2015, 4). From this perspective, ASEAN's progress on energy security cooperation projects is deemed inefficient as it has not yielded significant material benefits or greater authority for ASEAN's institutions.

A major theme within this body of literature is the slow pace of the development of an intra-regional power grid, a project that intends to enhance energy security by securing cheap access to energy supplies (Wu 2016, 109-110). The slowdown in domestic production of energy and the subsequent reliance on energy imports has provided a strong catalyst for intra-regional energy security cooperation (Aalto 2014, 94-95; Shi & Kimura 2014). Nevertheless, the

persistence of statist trade institutions and state-owned energy enterprises heavily impacts the influence of regional agreements, as it enables non-tariff barriers such as customs procedures (Aalto 2014, 94-96; Andrews-Speed 2016, 7-8). They find that this process is invigorated by tendencies to prioritise domestic developments of energy sectors over regional ones (Shi & Kimura 2014, 11). Subsequently, lacking political will on a national level and the mercantilist national energy policies limit the opportunity for ASEAN to integrate energy markets, harmonise legal and regulatory frameworks, and build regional institutions with the authority to manage regional energy security cooperation (Shi & Kimura 2014, 9; Wu 2016, 116; Andrews-Speed 2016, 12). The persistence of political distrust and state-owned enterprises in this way enable countries to undermine the integration of a regional energy market, something ASEAN cannot prevent due to institutional shortcomings.

A solution offered by this body of literature is enabling stronger authority for ASEAN and enabling it to back up the integration of the energy market with enforcing mechanisms (Karki et al. 2005, 508; Aalto 2014, 95, 99; Shi & Kimura 2014, 9). This would enable the effect of spill-overs, strengthen functional cooperation on energy issues, and enhance regional credibility of commitments as not adhering to them has consequences (Nicolas 2009, 28; Shi 2016, 678; Wananti & Hanif 2018, 194-195). Yet, a set of diplomatic norms, often termed *the ASEAN way*, prevents this from taking place. ASEAN relies on consensus, dialogue, consultations and voluntary implementation of policies, and therefore these scholars believe that ASEAN's role is nothing more than a political 'talk shop' (Nicolas 2009; Andrews-Speed 2016). These authors, therefore, believe that unless ASEAN undergoes substantial institutional change and moves beyond these barriers, it will not be able to foster effective cooperation in the region.

A first step would be focussing on functional cooperation areas in for example sub-regions, with a strong role for ASEAN in the harmonisation and institutionalisation processes (Wu 2016, 119-120; Andrews-Speed 2016, 13). Sub-regions such as the Greater Mekong Sub-region often exists out of 'coalitions of the willing' and therefore achieving substantial agreements of cooperation will be more likely to happen. Another way is the *ASEAN-X* system based on consensus but with binding consequences, enabling flexibility in cooperation in functional areas on specific tasks while strengthening the credibility of agreements made within the group (Wu 2016, 120; Cossa 2009, 43). Successful experiments within these sub-regions could them result in spill-overs that enhance the authority of regional institutions (Andrews-Speed 2016, 13; Wu 2016, 119-120). Nevertheless, despite almost including the *ASEAN-X* system in the ASEAN

Charter in 2007, ASEAN's policies mainly focus on the region as a whole and eschew the use of binding decisions and modified consensus systems with enforcement mechanisms (ASEAN 2015; ASEAN 2017). Therefore, these scholars recognise that there is potential, but they believe that only significant institutional change can help ASEAN fulfil its role as an effective regional organisation.

2.3 From 'I' to 'we': the role of shared norms in building cooperation on energy security

The second body of literature argues that this functional perspective is only one side of the explanation and argues that we should take into account the relevance of norms and identity in ASEAN's regional approach (Elliot 2010; Qin 2013; Wong 2015; Caballero-Anthony & Trajano 2017). Debates about ASEAN tend to be discussed in terms of practical outcomes and therefore make certain conceptual assumptions of what a regional organisation is supposed to be – an organisation that is focussed on enhancing material benefits in the region. However, this ignores ideational factors involved with an approach focussed on diffusing norms, building trust and a regional identity (Acharya & Layug 2012; Ba 2014, 205-306; Alisson-Reumann 2017). Within the literature on energy security cooperation, therefore, this body of literature emphasises the importance of the confidence-building and socialisation processes through which ASEAN diffuses norms and builds a regional identity, subsequently fostering cooperation on energy in the region.

This body of literature ties in with the constructivist literature that has researched ASEAN's ability to shape and influence social discourses and systems of knowledge that shape, fix and reproduce meaning and significance (Yoshimatsu 2017, 7-9). By engaging actors in its ASEAN-led institutions, ASEAN can socialise the actors within specific norms and codes of conduct it stipulates (Acharya 2011, 20-21; Fjäder 2012, 81; 67; Yoshimatsu 2017, 9). In these institutions, voluntary participation in dialogues, consultations, knowledge exchanges and regular formal and informal meetings enable a platform to deepen social relations amongst participants which eventually results in strengthened mutual trust and a deeper recognition in the need for regional institutions (Ibid.). It also enables ASEAN to socialise members in an environment in which the norms of the ASEAN way – e.g. non-interference, institutional informality, equitable treatment with regards to development gaps, pragmatic flexibility – dictate the conditions for cooperation (Ibid.; ASEAN 2015; ASEAN 2017, 6). This body of literature therefore stresses the relevance of ASEAN's role in strengthening cooperation based on ideational factors rather than a focus on practical outcomes and material gains.

The attention for ASEAN's normative approach in energy security increased especially after the Fukushima Daiichi nuclear disaster in Japan. The disaster showed that the consequences of such a disaster are transboundary in nature and also involve other normative areas such as accountability and human security – protecting citizens against the dangerous aspects of nuclear energy such as disasters and radiation leaks while distributing the benefits of such risks equally (Wong 2015; Caballero-Anthony & Trajano 2017, 207). These scholars therefore argue that there is a need for a common vision in the region that 'reflects the values and preferences of the community to feel that they have a stake in protecting, securing and making sacrifices for this community' (Wong 2015). This will lead to a stronger regional community that is willing to cooperate on energy security (Wong 2015; Caballero-Anthony & Trajano 2017, 2010). Fostering cooperation through a normative approach also enables the reduction of potential tensions and escalations among neighbouring countries that can result from enhanced nuclear capabilities, pollution as a result of burning coal, and illegal extraction of (disputed) energy sources (Caballero-Anthony & Trajano, 207). In this way, these scholars highlight how ideas, values and norms become powerful tools in shaping both regional and national energy agenda's, as they define the policy context in which actors identify their interests (Elliot 2010, 30). They, therefore, believe that ASEAN is crucial in engineering a regional common vision and norms that they considered as a key factor in fostering cooperation in Southeast Asia.

Although this perspective is not novel within the constructivist literature on ASEAN in general, the current literature found that it is relatively underdeveloped within the literature on energy security cooperation within ASEAN. The previously mentioned authors have approached this perspective from a more general point of view, falling short in providing in-depth case studies that analyse the normative perspective in practice. The current thesis will, therefore, fill this gap in the literature by exploring ASEAN's normative approach with in-depth case studies, offering a novel approach to ASEAN's regional cooperation on energy security that also contributes to broader debates surrounding ASEAN as a regional organisation.

3. Methodology

3.1 Method and hypothesis

As concluded from the literature review, there is not much previous research and thus evidence for the influence of ASEAN's normative approach to regionalism specifically in the case of energy security cooperation. The current thesis will fill this gap believing that a mere focus on functional regionalism that values 'function' over 'form' misreads the way ASEAN regionalism in the case of energy security might work (Yoshimatsu 2017, 11). The hypothesis it will test throughout the coming paragraphs concurs with this perspective and assumes that the norms are crucial in explaining ASEAN's approach in fostering energy security cooperation in the region. The hypothesis regards the process of norm diffusion and confidence building as crucial in decisions to engage in regional cooperation rather than hastening towards agreements on a regional level for the sake of generating concrete (material) outcomes.

Yet, an important note in advance is that energy security is a difficult field for normative explanations. The field has always been closely related to realism as material factors such as energy are crucial for the growth of economies and with that material power and thus national security. However, even if that is the case, the objective of this research is not to make judgements about the merits of the different potential approaches to regionalism. Rather, it is to consider an alternative way of understanding ASEAN's approach that is generally marginalised in debates on ASEAN's approach to energy security but is nonetheless relevant to our understanding of ASEAN and regional energy security cooperation.

In testing the hypothesis, the current thesis will employ a within-case study and through process tracing, it will explore the key norms and mechanisms at work that cause ASEAN countries to enter energy security cooperation, or not. The utilisation of this method allows a certain degree in flexibility in its analysis (George & Bennett 2005, 734), while attaching importance to contextual conditions, chronology and selectivity in the sequencing of causal mechanisms (Mahoney 2015, 202-203, 217; Beach 2017). This is relevant for the analysis as it will enable the current thesis to trace and identify key determinants and mechanisms across lengthy periods of times while exploring, for example, the decision to initiate energy cooperation after the oil crises in the 1970s or the decision to cooperate on nuclear energy despite the lack of nuclear

power plants in the region. As such, the characteristics of this method enable the testing of the hypothesis and providing an answer to the research question.

3.2 Cooperation on energy security matters: a logic of appropriateness or a logic of consequences?

ASEAN's normative approach entails socialising actors in ASEAN's institutions in which certain norms and values are upheld. Its approach constitutes two sets of ideational elements. The first concerns norms as concluded from the literature review, e.g. the norms of non-interference with sovereignty, pragmatic flexibility and equitable treatment in regard to development gaps. The second ideational element concerns the practical implication of these norms; the cooperative framework through which ASEAN diffuses these norms and cultivates certain habits and shared values (Smith & Jones 2007, 154-155). This is often called *the ASEAN way* – a diplomatic style of cooperation – and has become a prerequisite for any form of cooperation within ASEAN. It is characterised by a limited authority for regional institutions, consensus building and subsequently a lack of binding quantitative targets or enforcement mechanisms, informality, flexibility in participation (Smith & Jones 2007, 155; Koga 2010, 84-86; Acharya 2011, 6; Alisson-Reumann 2017, 3). As a result, cooperation is practised through consultations, dialogue, track I and track II meetings (meetings on an official ministerial level and unofficial meetings with diplomats and scholars), workshops, training, knowledge exchanges and capacity building (Ibid.). Through these processes, ASEAN intends to diffuse norms and influence the values and preferences of national policymakers, encouraging regional cooperative behaviour on energy security through approaches that are concerned with the energy security of the region as a whole.

In such a way, ASEAN is a site of norm contestation while the ASEAN way 'helps to create and reinforce the convergence between domestic interests, strategic calculations, and regional behaviour' (Acharya 2011, 13; Nesadurai 2013). If then, ASEAN members are being influenced by ASEAN's norms, the behaviour of its members and the subsequent institutions can be seen as driven by the *logic of appropriateness*. This means that the decisions to cooperate on energy security are based upon what social norms deem right for the region as a whole, and thus are made under a pressure in ideational or moral sense rather than material consequences and a mere cost-benefit analysis (Katsumata 2006, 194; Alisson-Reumann 2017, 7; Khoiriati 2018, 290). Such logic can be inferred from the language of official documents, agreements and treaties that, in the case policies are informed by these norms, will reflect the language of trust-

building, identity, and collective interests (Smith & Jones 2007 157-158; Ashizawa 2008, 579; Koga 2010, 86). Furthermore, the observable implications of ASEAN's normative approach will be reflected in the manner in which policymakers and politicians talk about cooperation. They will make statements along the lines of 'let us explore cooperation by establishing platforms for dialogue, consultations and capacity building that act in accordance to national focal points of all members involved' (ASEAN 2012a, 6-9) and 'it is crucial to explore, for example, cross-border power trade on the basis of equality and mutual benefits, accommodating the development of a regional power grid' (Sumranwanich 2016, 39).

Alternatively, if ASEAN's approach towards fostering cooperation on energy security is more in line with functional cooperation, this will be expressed differently. Functional cooperation results from the inability of non-state actors such as private businesses and NGOs to respond to external pressures such as globalisation and subsequently they gravitate towards pursuing material benefits through cooperation (Börzel 2016, 46). They pressure governments to engage in regional cooperation enabling functional and political spill-over effects that result in the transfer of authority to a third party (i.e. relevant ASEAN institutions) (Kim 2014, 378-381; Ba 2014, 279; Breslin & Wilson 2015, 139; Börzel 2016, 46). These spill-overs flow from functional areas, focussing on practical outcomes in the form of material benefits (Ibid.). Subsequently, national policies reflect rational calculations between the self-interests vis-à-vis the costs of regional integration (Ba 2014, 297; Hadiwinata 2015, 6; Fjäder 2012, 92). Such an emphasis on relative or/and absolute benefits would lead to statements that express the need for concrete timelines, quantitative targets and binding agreements, leading to the establishment of enforcement mechanisms aimed at regulating the deepened interdependence resulting from integration (Börzel 2016, 46). Subsequently, cooperation will reflect a *logic of consequences*, meaning that a cost-benefit calculation is the deciding factor in engaging in cooperation or not.

Nonetheless, if such (short-term) material benefits are not the main deciding factors in ASEAN's member's decision to engage in cooperation, a normative approach might better explain the behaviour that leads to this specific decision (Romaniuk & Grice 2018). As such, the differences between both approaches can be summarised as a division between cooperation based on a logic of appropriateness (deciding what is *right* to do based on regional norms) vis-à-vis a logic of consequences (a rational calculation of material interests gained from engaging in or abstaining from regional cooperation).

3.3 Case studies and data

The current thesis employs this analytical framework to energy security cooperation in ASEAN. First, it will explore the language and context of the regions' consecutive ASEAN Plans of Action on Energy Cooperation (APAEC), that serve as policy blueprints for regional cooperation. These plans are formulated in cooperation with think-tanks and diplomats and endorsed by ASEAN's ministers on energy, therefore reflecting both political feasibility and desired form and function of cooperation. Analysing these will help the current thesis to identify regional trends in ASEAN's approach towards fostering regional cooperation. Thereafter, the thesis will apply the analytical framework onto two more in-depth case studies:

- 1) The Laos PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP), part of the ASEAN Power Grid and the region's first multilateral interconnection project.
- 2) Civilian nuclear energy developments in the region. Currently, Southeast Asia has only four nuclear reactors, of which most exist for experimental purposes and none are economically viable (Ariffin 2018). Still, the growing energy demands in the region makes a compelling argument for Southeast Asian nations to engage in nuclear energy.

By following such an order, the thesis will be able to provide both an understanding of bigger trends in ASEAN's energy policy, as well as define more specific how, and which norms play a crucial role in ASEAN's approach in fostering regional cooperation on energy security. In doing so, the research is mainly supported by primary sources obtained from official websites of ASEAN's regional bodies, as well as government statements by individual members and ministerial meetings. Furthermore, the arguments will be supported with publications of scholars, think-tanks and data from several organisations (e.g. the IEA, the ACE, the UN and the ADB). Yet, some relevant data from organisational bodies closely associated with the APG and nuclear energy is restricted, and the lack of time and means to employ elaborate interviews with politicians and policymakers involved renders the quality of the overall data imperfect. Nevertheless, the current research is an important first step in future research that can expand our knowledge of the development of ASEAN's cooperation on energy security.

4. Analysis: From paper to practice?

The previous chapter developed an analytical framework that will help this analysis to identify the characteristics of normative and functional cooperation in energy security cooperation in ASEAN. The current chapter will apply this framework while exploring the applicability of the hypothesis and provide an answer to the research question. The first section will provide a contextualised historical overview of broader trends within ASEAN's involvement with the region's energy security, focussed on the consecutive ASEAN Plans of Action on Energy Cooperation (APAEC). The subsequent sections will analyse two in-depth case studies: the case of the LTMS-PIP (Lao PDR-Thailand-Malaysia- Power-Integration-Project), and the case of civilian nuclear energy.

4.1 ASEAN's history in regional energy security cooperation

As mentioned before, ASEAN's involvement with the region's energy security started shortly after the oil crises in the 1970s, after which the main rationale behind a regional approach was to prevent and mitigate the consequences of energy supply disruptions. Their efforts since then can be divided into roughly three periods. The first period indicates the initial efforts as a response to the oil crises and was mainly based on functional cooperation. Nevertheless, soon after, ASEAN initiated new efforts that intended to move beyond these cooperation efforts on a bilateral basis to more regional approaches based on policies created within ASEAN's regional institutions and according to shared ASEAN norms. The third period is marked by a move towards more functional and outcome-based approaches that follow (external) scrutiny on ASEAN's results and global trends in for example environmental sustainability that pressured ASEAN to move towards more outcome-based and result-oriented functional; cooperation initiatives. However, although ASEAN's normative approach has been challenged to some extent due to new global norms and normative validations of ASEAN as a regional organisation, it continues to be key factors in explaining cooperation on energy security.

4.1.1. Oil crises, supply disruptions and intra-regional cooperation

Initial initiatives for cooperation in the 1970s, such as the *emergency petroleum sharing scheme*, were based on the functionalist logic of material benefits and mainly consisted of strengthening pre-existing bilateral agreements. Although a regional organisation for petroleum was established, it had only a limited role in managing cooperation on the oil sharing scheme

(Nicolas 2009, 19; ASEAN 2012a). ASCOPE was mainly involved in the oil industry. Shortly after, ASEAN also established the HAPUA to enhance existing power grid connections, mainly relying on existing bilateral agreements (Nicolas 2009, 19). In such a way, early efforts such as the establishment of ASCOPE, the HAPUA and the oil sharing scheme were therefore focussed on a specific functional area: the oil industry and power grids; while cooperation was aimed at realising material gains in case of supply disruptions (Nicolas 2009, 18). The participating countries in these initiatives were able to push for national interests in cooperation that was more focussed on bilateral agreements than regional approaches.

These early efforts based on functional cooperation created certain expectations for future developments, and the literature review showed that many scholars therefore researched what factors obstructed the continuation of this functional cooperation. The early efforts did not result in significant functional or political spill-overs and subsequently ASEAN still lacks authority in managing for example a regional oil stockpile or a regional power grid (Andrews-Speed 2016, 4). As such, although a functionalist logic motivated initial effort on cooperation, ASEAN's normative approach provides an alternative explanation for regional cooperation that extended beyond pre-existing bilateral cooperation in the subsequent decades.

4.1.2. The rise of regional cooperation under ASEAN

The signing of the ASEAN Energy Cooperation Agreement in 1986 was a first agreement that followed a logic of appropriateness more so than a logic of consequences. The agreement states intentions to move beyond cooperation on energy grids and oil sharing schemes on a bilateral basis, and create regional cooperation that spans planning development, training, information exchanges, conduction of regional studies and developing regional strategies to promote energy-related trade within the region (ASEAN 1986). The agreement also clarifies that 'cooperation is fundamental to strengthen regional economic resilience and solidarity of ASEAN' (Ibid.). The contents of the agreement suggest that it intends to explore regional shared interests and priorities through several knowledge exchanges and regional studies to ensure that the cooperation is based on the norms of equitable treatments without interfering with national sovereignty (Ibid.). As such, the agreement enabled a platform for ASEAN's members to engage in dialogue on a multitude of topics related to energy in order to socialise members under ASEAN's innocuous normative approach and in this way build a foundation for cooperation.

The continuation of such a process that promotes norms of non-interference and equitable treatment in cooperation through the ASEAN way is reflected in the language and form of cooperation initiatives throughout the 1990s. The first regional plan, the APAEC 1999-2004, does not mention a transfer of authority to ASEAN, nor does it mention an approach aimed at creating short-term material benefits (ASEAN 2012a). Rather, it ‘intends to establish platforms for its members to engage in voluntary dialogue, consultations, and information exchanges’ (ASEAN 2012c, 6). Furthermore, the plan emphasises all projects should ‘act in accordance to national focal points of all members involved’ (Ibid., 6-9), showing adherence to the norms of non-interference and equitable treatment, and does not mention enforcement mechanisms for ASEAN to enforce the policies. Overall, the main aim of the plan is directed at confidence building through consultations, technical guidance and regional planning and capacity building in seven areas of energy cooperation (Ibid.). This first concrete regional approach to energy security cooperation, therefore, shows how ASEAN’s norms are dominant in dictating the language of cooperation, and subsequently, the form of cooperation is dictated by norms of the ASEAN way.

The subsequent APAEC 2004-2009 shows how trust was developed and capacities were built, and as such it offers more detailed plans to foster cooperation. Although not radically different from its predecessor, the APAEC 2004-2009 aims to more effectively reduce development gaps through capacity building programmes and track-two workshops (ASEAN 2004, 15-17). In doing so, the plan states the relevance of national laws, measures and policies, reproducing the importance of the shared norm of non-interference with domestic affairs (ASEAN 2004, 15-16, 29). The plan also reiterates the necessity of continued cooperation on energy security to realise an ASEAN community as described in the ASEAN Vision 2020 (ASEAN 2012b). In such a way, the contents of the two first major regional policy blueprints express the need for cooperation in a way that does not interfere with national sovereignty and takes into account national capacities and development gaps. These documents reflect a language of regional community building through shared norms and interests. This echoes the need for cooperation in order to realise a regional community with ‘One Vision, One Identity’ based on shared norms and interests (ASEAN 2012e). The contents of the first two APAEC in this way follow the norms of the ASEAN way, not referring to binding quantitative targets with short-term material benefits, but rather emphasising capacity building processes and consultations as a way to strengthen cooperation and building a regional community.

4.1.3. Institutional scrutiny and global trends: speeding up the process of cooperation

During the period that the first two APAEC unfolded, several developments put the normative approach of ASEAN under pressure, and therefore the APAEC 2009-2015 and the APAEC 2016-2020 reflect a trend towards more *outcome-oriented* cooperation in certain functional areas. The oil crises in the late 2000s and the World Summit on Sustainable Development in 2002 stressed the need for the development of renewable energy sources (ASEAN 2004, 4; ASEAN 2012f; Abidin & Rosli 2013, 144). These events coincided with technological developments that enabled renewable energy generation (Ibid). The most recent influential event was the Paris Accord on Climate Change in 2015, which obliges all members to actively pursue the reduction of their carbon footprint (ASEAN Post 2019). These events contributed to pressure on ASEAN to speed up cooperation processes to create desired outcomes.

Moreover, intensified interaction with other regional organisations and external dialogue partners on energy issues resulted in both internal and external scrutiny on the ability of ASEAN respond to functional challenges, and with that raised concerns about ASEAN's reputation (Ba 2014, 309). ASEAN's approach to the hydropower developments in the Greater Mekong Sub-region (GMS), for example, became criticised for its inability to involve China in the Mekong River Commission, whereas the Chinese alternative, the Lancang-Mekong Cooperation was able to involve all relevant ASEAN members (Biba 2010, 615; Guangsheng 2016). These developments also coincided with a broader discursive shift in discussions about ASEAN as a regional organisation. ASEAN's normative approach became scrutinised by external partners who had distinct institutional practices that relied more on binding agreements and enforcement mechanisms (Ba 2014, 309). The issue of energy similarly has increasingly been discussed in broader platforms such as the ASEAN+3 Energy Partnership, the AMEM+3 and the East Asian Summit. The feedback effects of these interactions between distinctive institutional cultures pressured ASEAN to incorporate the institutional characteristics of those external partners, which meant reforms towards more functional cooperation (Ibid., 311). The adoption of the ASEAN Charter in 2007, turning ASEAN into a legalised 'rule-based' entity, and the adoption of the Declaration on the ASEAN Economic Community Blueprint, aimed at fully realising a regional community by 2015, are the outcomes of such debates.

These developments are also reflected in ASEAN's regional policies on energy security cooperation. The APAEC 2010-2015, for example, is the first plan to mention quantitative targets to 'expedite the overall pacing of activities by coordinating arrangements, monitoring

and scorecard schemes’, and expresses the need for regional legal and regulatory institutions (ASEAN 2010, 12; ASEAN 2017, 9). Not surprisingly, therefore, the plan is themed ‘Bringing policies to actions: towards a cleaner, more efficient and sustainable ASEAN energy community’ (ASEAN 2010, 2). The APAEC 2016-2020 was also undeniably influenced by the AEC Blueprint 2025 and the Paris Climate Accord. It proposes several (aspirational) quantitative targets intended to increase the speed of cooperation projects and implements a scoring system to monitor progress (ACE 2015, 6; Rahmandi, Hanifah & Kuntjara 2017, 4). *Outcome-based strategies* link each of the policy plans and cooperation initiatives with their desired outcomes, clearly shifting the focus of the plan towards a more results-oriented approach. Moreover, the two APAEC also include elaborate plans to engage the private sector in projects in order to reduce protectionist tendencies by state-owned energy enterprises, opening up national energy sectors for regional cooperation (Andrews-Speed 2016, 5; Wu 2016, 114-117). These developments reflect a functionalist logic that acknowledges the importance of quantitative targets and outcome-based policies and reflects the spill-over logic in which non-state private actors can pressure governments to engage institutionalising regional cooperation to realise domestic interests.

However, such a shift in language does not mark a departure from ASEAN’s normative approach but rather shows how ASEAN adopted, adapted and ‘localised’ international norms and expectations about regional organisations (Acharya 2004, 245-246). Rather than either accepting or rejecting new institutional practices and norms, ASEAN adapted them to fit with pre-existing norms and practices to the extent possible. Although both APAEC mention quantitative targets, these are still voluntary without enforcement mechanisms (ASEAN 2010; ACE 2015). Moreover, the targets are regional targets, meaning that the plans do not specify targets for individual members, nor do they offer clear timelines in which these need to be fulfilled. The outcome-based strategies similarly might seem like a departure from the prior confidence-building approach, but under closer investigation, they still entail the ‘promotion of energy efficiency’ and ‘enhancing cooperation’ through regional and national studies, track-two workshops and meetings, capacity building and regional training programmes (ACE 2015). The plans for cooperation are a continuation of capacity and confidence-building processes, and still lack of enforcement mechanisms that can guarantee material benefits from regional projects. They also continue to express a language of regional community building in which cooperation is beneficial for all member states of the ASEAN community (ACE 2015, 45). It shows how there might be a slight shift in language about cooperation, towards functional

outcome-oriented cooperation, ASEAN's normative approach remains relevant in explaining the form of cooperation based on shared norms developed within ASEAN's institutions.

4.1.4. Conclusions: norms, regional policies and practices

The current paragraph has identified three broad historical trends in ASEAN's cooperation on energy security matters. Starting with functional cooperation in the oil industry, ASEAN expanded its network of cooperation beyond oil supply disruptions and incorporated new developments such as cooperation on renewable energy technology in the second period. Although without a promise of short-term material benefits when engaging in cooperation, ASEAN members still committed themselves to regional cooperation through dialogues, consultations, track-two workshops and meetings, in order to build cooperation based on equitable treatment, pragmatic flexibility and non-interference with national sovereignty. Such cooperation based on a logic of appropriateness can be inferred from the language of the APAEC – the regional policy blueprints endorsed by national ministers of energy – and support the argument that ASEAN's norms inform regional policies and practices. During the third period, ASEAN seemed to be pressured towards more functional outcome-based cooperation as expressed by the *outcome-based strategies* and the quantitative targets stated in the most recent APAECs. However, this shift does not validate the emphasis on mere results-oriented approaches found in the existing literature, since regional plans continue to emphasise cooperation according to shared regional norms. Subsequently, the analysis finds that ASEAN's normative approach remains relevant in explaining regional policies on energy security and policy practices. It is, therefore, safe to assume that the official language of regional cooperation as expressed in the regional policy blueprints confirms the hypothesis, arguing that ASEAN's normative approach is indeed relevant in understanding the rationale behind regional cooperation on energy security.

4.2 Building an integrated energy market through the ASEAN Power Grid: the case of the LTMS-PIP

As concluded from the analysis of the regional policy blueprints, cooperation on energy security is informed by ASEAN's norms of non-interference, equitable treatment and pragmatic flexibility. As such, cooperation is formed by the diplomatic norms of the ASEAN way, in which confidence-building processes make sure that cooperation reflects the interests of all members. The form and function of cooperation, therefore, follow a logic of appropriateness

rather than the functionalist logic of consequences. The following section will provide an in-depth analysis of the Lao PDR-Thailand-Malaysia- Power-Integration-Project (LTM-PIP), the first multilateral power interconnection project that was signed within ASEAN in 2017. By analysing the development of this project and the context in which it was established, the current thesis traces the key factors that led to the decisions to establish the LTMS interconnection project.

4.2.1. The ASEAN Power Grid: bringing policies to actions

ASEAN's involvement in realising the ASEAN Power Grid (APG), a flagship programme since the 1990s, follows the characteristics of its normative approach: enabling a platform for its members to engage in dialogues, consultations, knowledge exchanges and (feasibility) studies. At the 17th AMEM in 1999, for example, its central role was described as guidance in national capacity-building, a platform for the sharing of experiences between members, and providing assistance in the liberalisation of energy markets (ASEAN 2012g). In 2007 all members signed a Memorandum of Understanding on the APG (ASEAN 2007). The MoU follows ASEAN's norms of non-binding consensus and non-interference, as it states that it respects national laws, regulations and authorities and enabled governments to terminate their participation in the MoU at any moment, expressing adherence to the ASEAN way (Ibid.). The influence of these norms becomes even more evident in the APAEC 2010-2015 that states that the APG projects will 'adopt aspiration goals to accelerate cooperation but also takes in account the domestic energy situation of individual members' (ASEAN 2010). The Philippine undersecretary of the department of energy, Felix Fuentebella, continues that the APG is crucial in realising regional self-reliance and will help 'powering the ASEAN community' (PTV 2017). Ministerial statements and ASEAN documents thus reflect the influence of ASEAN's norms, and participating countries acknowledge the relevance of the project in creating a regional community. They express how intensifying cooperation on the APG is desirable for the regional community as a whole but needs to happen in a way that it is consensus-based and takes in account development gaps, eschewing any form of interference with national sovereignty.

The first result of the APG project is the LTMS project signed in 2017, and it is the first multilateral power trade agreement in one of the sub-sections of the regional APG. With that, ASEAN has reached the goal to establish at least one multilateral power trade project by 2018 (ASEAN 2018). The project entails an electricity trade from Laos to Singapore via existing power-grid connections through transit countries such as Thailand and Malaysia (MTIS 2014).

In 2017, however, in 2017, Singapore decided not to sign the MoU on the project in 2016 without giving any reason in particular (Owen, Finenko & Tao 2017, 146). The remaining participants signed the Energy Purchase and Wheeling Agreement at the AMEM in 2018, officially initiating the trade of 100MW of Laos' hydropower generated energy through Thailand and into Malaysia (EIU 2017). The project is considered as an important experiment and also an important development for realising the APG.

4.2.2. Policy practices: regional norms or rational calculations of self-interest?

Regional policies on the APG invoke a logic of appropriateness in regional cooperation projects, meaning that style of cooperation follows ASEAN's norms and the rationale behind cooperation is based on the interests of the region as a whole. In the practical reality of the LTMS project, however, it is challenging to make a case for norms as deciding factors in the rationale behind cooperation. Rather, every country cooperation on the project seems to flow from a rational calculation of the material benefits and the costs of integration through the LTMS project.

Laos' involvement in the deal is predominantly driven by a pursuit of national economic objectives. A major reason to engage in the multilateral project is because its domestic economy is mainly driven by electricity exports, and the projected growth of its hydropower sector has resulted in export-oriented policies that position Laos as 'the sub-region's power battery' (ADB 2010, i, 4; Kouphokham 2016, 195). The projects also provide adequate financial funds to further develop the renewable energy sector and mitigate social consequences of hydropower projects (Phouthonesy 2015; IEA 2015, 18). It becomes even more evident that the deal is in the self-interest of Laos as revenues through the three biggest state-owned enterprises and the transfer of revenues from private plants to the government through concession agreements are predicted to increase rapidly (ADB 2010, 5, 38; Kouphokham 2016, 195). As the multilateral deal requires only limited investments since most power-grid interconnections already exist and regional studies have revealed it requires only limited harmonisation of technical matters, the costs of such integration of power grids clearly outweigh the material benefits for Laos' government (Phouthonesy 2015). It shows that the rationale for Laos in this project seems to be based on rational calculations of national interests rather than the direct result of ASEAN's normative approach.

For Thailand, the situation is slightly different as they do not directly benefit from the deal, but the required investments for involvement in the deal seem to outweigh the potential benefits of such integration. Initial costs for realising the deal were significantly low since most of the power interconnections had already been established through existing bilateral agreements (TEPPO 2015, 6.7-6.9; Sumranwanich 2016, 22-29). Initial costs for participating in the deal were therefore significantly lower than the potential benefits of the LTMS project. In the long run, the deal could also include power trade to Thailand, which would enable it to diversify its energy sector away from a dependence on gas and oil, while decarbonising the energy sector (IEA 2015, 13; Fukuwasa, Kutani & Li 2015, 47). This is in line with their most recent national energy policy released in 2018, which states the ambition of turning Thailand in a low carbon society and develop renewable energy sources (Hong 2019). According to Thailand's energy policy and planning office, the LTMS power trade could buy Thailand time to develop and install its own sustainable power generators, while forming a back-up for Thailand's increasing power demand (TEPPO 2015, 6.7-6.9; Fukuwasa, Kutani & Li, 47). The LTMS project is therefore a rational calculation of national interests for Thailand. It buys time and allows Thailand to obtain knowledge and experience in order to develop their own power sector, while at the same time enabling a reliable and affordable supply of energy. Such material benefits that are in line with national interests outweigh the low costs of participation in the project.

Malaysia has a similar motive. Already in 2011, Malaysia expressed the need to diversify its energy sector towards more sustainable and renewable energy sources (Zulkifli 2019, 200). Although Malaysia has large fossil fuel reserves, many of lie in environmentally sensitive areas, making them hard and costly to extract. Nevertheless, their energy sector is still heavily dependent on fossil fuels (Owen, Finenko & Tao 2017, 176). As such, the government issued the Feed-in Tariff act for renewables in 2011, reducing the cost and providing subsidies for renewable energy imports (KeTTHA 2008, iii). The ministry of energy, green technology and water also stated in its energy plan released in 2008 and 2017 that these developments are intended to stimulate the domestic renewable energy industry and ensure reasonable costs for renewable energy (KeTTHA 2017a, 34; KeTTHA 2017b). As such, the LTMS project, enabling trade of power generated by hydropower from Laos to Malaysia, very well fits within Malaysia's national development plans. The decision to participate in the project for Malaysia too, seemed driven by material benefits rather than a direct influence of ASEAN's norms.

The withdrawal of Singapore from the deal can also be explained by a logic of consequences rather than a logic of appropriateness, as a rational cost-benefit calculation seem to be the main motivation for Singapore's withdrawal. Singapore does not have any domestic energy sources and almost its entire energy sector relies on gas imports (Allan 2019, 282). Importing cheap and sustainable energy from Laos therefore seems to be a viable solution in strengthening national energy security. However, it is important to note that Singapore has a progressively liberalised energy market (Ibid.). Therefore, importing hydropower would benefit Singapore's industries by reducing the price of energy but it also would negatively impact the development of Singapore's domestic energy sector (Owen, Finenko & Tao 2017, 148). With regards to this issue, the Singaporean minister of energy stated at the AMEM: 'Singapore is not ready to impose a load of 100MW electricity to the domestic system. More time is needed to carry out the direct absorption of the 100MW that would need to bypass the normal bidding process' (The Star Online 2015) The reason to withdraw therefore can be traced back to a rational calculation of the costs and benefits of this deal for the domestic economy, a process in which domestic pressure from private energy enterprises have forced the government to put the deal on hold and prioritise the development of the domestic energy sector.

4.2.3. Rational calculations of interests as part of the bigger picture: realising the APG

The analysis of national energy policies has revealed that the key factors directly influencing decisions to participate in or withdraw from the multilateral LTMS power trade deal are based on rational cost-benefit calculations of such a multilateral interconnection project. National motives for participation largely are driven by national policy objectives and interests of domestic industries and enterprises and emphasise the short-term material benefits gained from participating. Nevertheless, such rational calculations are not necessarily incompatible with ASEAN's normative approach and the normative explanation remains relevant in understanding the LTMS project as part of a bigger picture: the regional APG.

Although countries involved in the LTMS project gain direct (material) benefits from it, they also expressed their continued commitment to realising the APG project and mentioned the LTMS project as a crucial first step. A Thai representative from the countries' national electricity generating authority for example stated that the LTMS project is an important experimental project in exploring and studying cross-border power trade that is crucial for future development of the APG and the realisation of a true regional community under the AEC (Sumranwanich 2016, 39). A representative of Malaysia's energy ministry mentioned the

LTMS project as an important step in realising a regional power grid and explains that the timing of the project coincides with ASEAN's regional goal to initiate at least one multilateral power deal by 2018 (Hashim 2015, 12). The Malay government hopes that the project will pave the way for multilateral energy trading within the AEC and expressed intention to further expand their power grid interconnection into the ASEAN region (KeTTHA 2017ab, 47). Such statements expressing commitment to the regional APG despite the lack of material benefits or direct relevance to the national energy security and the perception of the LTMS project as a crucial step in realising the APG indicate the ability of ASEAN's norms to shape perceptions and interests.

Moreover, a rational calculation of interests is not necessarily incompatible with ASEAN's normative approach to fostering regional cooperation (Koga 2016, 84; Romaniuk & Grice 2018). As mentioned before, ASEAN can be considered as a *norm brewery* where individual national interests and norms are formed into shared regional norms and interests (Katsumata 2006; Koga 2016; 84). The development of the LTMS project very well fits within the regionally defined interest of realising a regional power grid that can deliver economic benefits for all ASEAN's members. The way in which this project unfolds in reality is again according to the norms of the ASEAN way in which the norm of pragmatic flexibility allowed Singapore to postpone their involvement in the project. The project also adheres to the norms of consensus and equitable treatment, as all countries involved are inclined to fully commit to the multilateral project as a result of their direct policy interests. Furthermore, their direct material benefits gained from the LTMS project do not reduce their commitment towards realising a fully integrated regional power grid that would benefit the region as a whole. The definition of the project as a 'pathfinder to completing existing efforts towards realising the APG and AEC' reinforce the credibility of the perception of the LTMS project is a part of realising a bigger goal; the APG (ASEAN 2016). In such a way, the LTMS project can therefore be regarded as a project that has risen from shared regional norms and interests aimed at realising a regional power grid.

In conclusion, although regional policies on a regional power grid reflect the norms of the ASEAN way. Regional policies reflect a logic of appropriateness, in which cooperation is done on the basis of equitable treatment, pragmatic flexibility and non-interference, through means of consultations, technical guidance, and a process regular track I and II meetings. Nevertheless, the LTMS project challenged this normative explanation as under closer investigation of the

rationale behind this cooperation seemed to rest on rational cost-benefit calculations of national interests. Direct material benefits and low-cost requirements for realising the multilateral power trade raised enough political will to realise the deal in a matter of years. This analysis also seems to reject the hypothesis, that argues that norms are the key factor in influencing policy preferences towards cooperation that serve the region as a whole rather than national interests. However, despite this functionalist logic behind the LTMS deal, the participating countries kept referring to the deal as an essential part for realising a regional power grid. This is not consistent with an explanation based on mere rational calculations and material benefits. It shows that ASEAN's norms do influence policy preferences for cooperation; as countries are thought to cooperate on a regional level despite a lack of direct benefits. Therefore, although the LTMS project is mainly based on a functionalist logic, it does fit within the bigger picture of the APG. Norms are therefore not only relevant in determining practical features of the deal (the consensus-driven approach and flexibility for Singapore to join the deal at any moment), they also have shaped an understanding of the LTMS deal as being a crucial element in realising a regional power grid. Subsequently, this section concludes that ASEAN's norms do influence the context in which the LTMS project develops and influence the way in which ASEAN's members give meaning to the project.

4.3 Civilian Nuclear Energy

The previous section showed how in the case of the LTMS project, a rational calculation of national interests were dominant factors in countries' decision to engage in realising the region's first multilateral energy interconnection project. Regional norms and interests only indirectly influenced the project. On the contrary, the case study, civilian nuclear energy, does not involve such direct material benefits gained from cooperation. The region only has five nuclear reactors and the Southeast Asian countries lack experience and human resources to operate nuclear reactors (Putra 2017, 586-589). Regional cooperation on nuclear energy does not provide direct material benefits for the countries, as countries do not possess required technology, human resources and experiences, nor does cooperation offer any direct security benefits since the nuclear reactors, under-operated due to a lack of economic viability, do not pose a direct threat (Ariffin 2018). Subsequently, regional cooperation under the APAEC is mainly aimed at the safe development of nuclear energy in the future, and therefore this cooperation mainly concerns nuclear safety norms. The case study will show how ASEAN's normative approach serves as a platform in which external norms are 'localised' within the normative priors of the region (Katsumata 2006; Acharya 2011, 8). This process enables

ASEAN's members to engage with global norms on environmental sustainability and norms related to the safe and secure development of nuclear energy while meeting the standards of appropriateness defined by the ASEAN way.

4.3.1. Early cooperation efforts on nuclear energy in ASEAN

The ASEAN countries have but limited experience with nuclear energy issues. Although some countries have explored nuclear power generation either on paper or constructed actual power plants, the countries never fully implemented nuclear energy as part of their energy policy programme (Ariffin 2018, Putra 2017, 586). Especially the Fukushima nuclear disaster affected the development of nuclear energy but considering the growing energy demand in the region and the significant goals for renewable energy generation, nuclear energy continues to be appealing to Southeast Asian governments. However, certain tendencies among national governments in the region involving a lack in transparency, corruption, poor crisis management and underdeveloped human security standards, pose a direct security threat to the region when developing nuclear energy (Caballero-Anthony & Jamil 2007, 3). The geographically condensed area exposes many countries to the 'Ring of Fire' of a nuclear disaster (Ibid.). Ensuring regional trust and shared regional norms and standards to diffuse tensions that result from the development of nuclear energy has, therefore, been the main motivation for the region's countries in engaging the topic on a regional level.

In ensuring the safety of nuclear energy developments, ASEAN already established the foundations of a regional normative framework in the 1990s. In the Treaty on the Southeast Asia Nuclear Weapon-free Zone in 1997, two years after the global Treaty on the Non-Proliferation of Nuclear weapons, they already articulated regional norms on safety issues and non-proliferation (Symon 2008, 3; Caballero-Anthony & Trajano 2017, 192). The treaty establishes regional norms and guidelines for countries for countries that intend to pursue nuclear energy (ASEAN 2012h). The standards for nuclear energy developments should be in line with international standards as defined by several international institutions such as the International Atomic Energy Agency (IAEA) and UN conventions like the Convention on Early Notification of a Nuclear Accident (Ibid.). Through annual meetings and capacity-building programmes and knowledge exchanges, ASEAN's members have underscored their commitment to these norms and standards. The mutual trust that was built during these annual meetings and confidence-building programmes was emphasised in the Cebu Declaration on East Asian Energy Security in 2007 and the Singapore Declaration on Climate Change, Energy

and Environment in 2007. Both expressed how cooperation on nuclear energy has been instrumental in fostering closer ties amongst the member states and highlighted the fact that there has been no objection against the use of nuclear energy among the ASEAN member states (Nicolas 2009, 25). In this way, ASEAN cooperation on nuclear energy adhered to the standards of appropriateness of the ASEAN way while diffusing regional standards on the use of nuclear energy.

4.3.2. Global norms, a nuclear disaster and intensification of cooperation

Not only did cooperation on nuclear energy within ASEAN's institutions determine form and function of cooperation between countries in the region, it also played a crucial role in addressing global norms and standards on the use of nuclear energy. Especially the Fukushima nuclear disaster was a global wake-up call that stressed the transboundary nature of nuclear disasters and highlighted the severe consequences of mismanagement of nuclear reactors. As such, international standards on nuclear energy were tightened and the efforts on nuclear energy frameworks in Southeast Asian countries became scrutinised for their lack of transparency and ASEAN was judged for the lack of a regional authority that could enforce compliance to international standards (Wong 2015; Caballero-Anthony & Trajano 2017, 207). Therefore, during the Phnom Penh Declaration on ASEAN: One Community, One Destiny, ASEAN members declared that they would develop a more coordinated ASEAN approach that would contribute to global standards in cooperation with the relevant external partners and would uphold the international safety standards as dictated by the IAEA (ASEAN 2012i). In 2011, the members established the ASEANTOM to monitor progress on nuclear energy, provide with a platform for informal consultations, experience exchanges on best practices, capacity-building programmes, assure compliance to the regional nuclear safety norms and facilitate interaction with relevant external partners (Caballero-Anthony & Trajano 217, 193). In this way, intensified global pressure and global norms requiring transparency and increased regulation on nuclear energy development resulted in the establishment of regional bodies in charge of the interaction between external partners and intra-regional cooperation.

In this regard, ASEANTOM has a crucial role in mediating between distinctive institutional cultures. As mentioned before, whereas international organisations like the UN, the IAEA, EU and the US rely on binding agreements and enforcing compliances, ASEAN's institutions do not possess such authority. The organisation plays an important role in what Acharya calls norm localisation, 'a process in which external ideas and norms are simultaneously adapted to meet

local practices' (Acharya 2004, 251). The role of ASEANTOM is to mediate between the stringent international standards and norms on the safe development of nuclear energy and the existing regional norms and practices regarding nuclear energy. Subsequently, rather than imposing international norms and regulations created by the UN and the IAEA, ASEAN uses organisations like ASEANTOM to engage members interested in nuclear energy and encourage them to implement the several international treaties and conventions (Symon 2008, 14; ASEAN 2016b). Former ASEAN secretary-general Rodolfo Severino stated that he sees this process as crucial to 'ensure that all ASEAN members accede to these conventions and ratify them, while enabling ASEAN scrutiny on national practices and enabling the monitoring of compliance with regional norms on nuclear safety as expressed in the SEANWFZ treaty' (Straits Times 2007). ASEANTOM has become a regional organisation that supports the IAEA in the adoption, implementation and monitoring of international standards and norms (Symon 2014, 14), while making sure that existing norms and practices are not disregarded.

While institutions like the IAEA and the UN, but also nuclear-powered dialogue partners as the US and the EU promote adherence to global norms on nuclear energy such as transparency, accountability and adherence to international security standards, ASEAN's governments feared this might undermine regional norms and practices. Especially norms like transparency and the international monitoring of developments were considered to be potentially conflicting with the regional norm of non-interference (Nicolas 2009, 25; Jwee 2015). Therefore, ASEAN made sure that while not completely rejecting these external norms, it engaged these in its own institutions where the norms of the ASEAN way dictate the terms of cooperation. Subsequently, ASEANTOM conducted several joint studies with the EU and the IAEA on emergency preparedness and response (RSIS 2016). The EU and ASEANTOM also closely cooperate on exchanging best practices, capacity-building programmes and workshops (Symon 2008, 12). Furthermore, the IAEA closely works with ASEANTOM to provide guidance and consultations for ASEAN members to implement international safety standards and build the required human capital to operate nuclear reactors (Caballero-Anthony & Trajano 2017, 197-201). Other nuclear-powered countries, such as the US, Canada, Russia, Japan and China, also have developed joint research projects and workshops with ASEAN (ASEAN 2014, 3). The several meetings, joint workshops and researches ensure that ASEAN's members are willing to engage with the external norms that potentially could undermine pre-existing norms and practices. Thus, rather than dismissing international organisations and the norms and institutional practices they bring, ASEAN's institutions serve as a 'norm brewery' that enables its members to engage,

adopt and ‘localise’ external norms so that these meet the standard of appropriateness defined by pre-existing norms and practices within ASEAN.

Cooperation within ASEAN also reflects the incorporation of external pressure and specific norms and practices regarding nuclear energy development while not departing from existing norms and practices. During the 34th AMEM in 2016, ASEAN governments expressed that ‘continuing efforts to facilitate information sharing and capacity building in collaboration with the IAEA are crucial in ensuring the safe and secure development of nuclear energy. This supports the realisation of the goals of the ASEAN community while adhering to global norms on nuclear energy and targets on reducing the carbon footprint’ (ASEAN 2016b, 5). Furthermore, the APAEC 2010-2015 & 2016-2020 express the need for exchanges of best practices, workshops, training of scientists, track I and II meetings with scholars and diplomats, and intensified dialogues with external partners as crucial to encourage and ensure compliance to both regional and international norms and practices (ASEAN 2012c, 25-27; ACE 2015, 43). This similarly reflects how ASEAN incorporates stricter compliance to international standards and norms on transparency and nuclear safety, while the cooperative norms of the ASEAN way still dictate the style of cooperation.

Such localisation of external norms and practices within the region’s pre-existing institutional norms and practices becomes even clearer in the several intergovernmental meetings and workshops conducted in the years after the Fukushima disaster. During the 29th AMEM, the members engaging with nuclear energy strongly recommended other members to adopt international treaties and conventions on nuclear energy (Symon 2008, 13; ASEAN 2011). This credibility of this commitment is underscored by policy practices. In recent years, countries have closely cooperated with the IAEA to ensure the implementation of all global safety standards on a national level, establishing national monitoring organisations and creating transparency on national nuclear energy developments (Caballero-Anthony & Trajano 2017, 196-204). Also, the regional organisation ASEANTOM has been strengthened as it became designated as a sectoral body under the ASEAN Political-Security Community in 2015 (Ibid., 193). It now reports directly to ASEAN’s foreign ministers, focussing on the monitoring of progress on issues of mutual interest (RSIS 2016, 8). These developments show how intra-regional cooperation incorporated global norms and institutional practices of external organisations to some extent by ‘localising’ these norms within ASEAN’s existing norms and

practices while still meeting the standard of appropriateness of the norms dictated by the ASEAN way.

In conclusion, the analysis of nuclear energy developments in ASEAN has shown how ASEAN's normative approach is not only relevant for fostering cooperation and building trust within ASEAN, ASEAN is also relevant for cooperation and trust-building with external partners. In this, it is important to notice how ASEAN acts as a mediator between external pressures and new safety norms and practices on nuclear energy and existing regional norms and institutional practices. By engaging external actors within ASEAN's institutions, ASEAN has been able to ensure adherence to the cooperative norms of the ASEAN way and subsequently, cooperation with external partners follows a similar style to intra-regional cooperation – cooperation through consultations, dialogues, best practices exchanges and track I & II meetings. At the same time, this process allowed ASEAN members to engage with, adopt and 'localise' international norms and standards on transparency and the safe and secure development of nuclear energy. Although external norms like transparency and international standards and practices have influenced regional practices on nuclear energy, ASEAN's approach prevented upfront rejection by making sure on every step of the way that cooperation and interaction with these external norms have met the standards of appropriateness of the norms of the ASEAN way. This stresses the relevance of the normative approach in understanding energy security cooperation efforts in Southeast Asia. Moreover, it shows that ASEAN's norms are not static, and normative and institutional change does take place, unlike the assumptions of many scholars addressed in the literature review above.

5. Conclusion

Against the backdrop of the increased global awareness about climate change, the increasingly complex nature of energy security and the projected growth in energy demands of the Southeast Asian states, the current thesis explored the role of the regional organisation ASEAN in enhancing the region's energy security. The existing literature on the topic argues that countries are increasingly unable to secure national energy objectives face many challenges in overcoming national disparities in order to establish regional cooperation. A regional organisation like ASEAN has the potential to overcome these issues, but the way in which they should accomplish this continues to be debated. This debate reflects broader normative debates on what an effective regional organisation is and should be. On the one hand, some scholars believe that ASEAN should take a functionalist approach to energy security cooperation and develop cooperation in the way the European Union has done. They analyse ASEAN in terms of practical outcomes and material results. On the other hand, some scholars believe that this misreads the way in which ASEAN regionalism works and take a normative approach in analysing ASEAN, emphasising the importance of norms, regional identities and confidence-building processes that create a community with shared values and a pro-attitude towards cooperation.

The current thesis concurred with the latter, arguing that one should not disregard the relevance of ASEAN's normative approach in fostering regional cooperation on energy security matters. This approach has been relatively underdeveloped within the literature on energy security cooperation in ASEAN and the lack of in-depth case studies in existing research left the current thesis unsatisfied, motivating the research that intends to fill this gap. The research question therefore explored to what extent the normative approach applicable is in explaining the developments of regional cooperation on energy security in Southeast Asia. In probing the hypothesis that normative explanations are indeed crucial for understanding cooperation on energy within ASEAN, the thesis first provided a historical analysis of ASEAN's regional energy security cooperation policies in order to identify broad trends in regional cooperation. Thereafter, it explored two in-depth case studies: the Laos-Thailand-Malaysia-Singapore power interconnection project (LTMS-PIP) and civilian nuclear energy developments.

The analysis of the historical context of ASEAN's involvement in the region's energy security cooperation supported the hypothesis and concluded that regional policies on energy security

are informed by ASEAN's norms of non-interference, equitable treatment and pragmatic flexibility. Furthermore, the style of cooperation follows the cooperative norms of the ASEAN way, relying on consultations, dialogue, track I and track II meetings (meetings on an official ministerial level and unofficial meetings with diplomats and scholars), workshops, training, knowledge exchanges and capacity building. Yet, the analysis also found that in the recent decade, global pressures and external and internal institutional scrutiny on ASEAN resulted in a shift towards more outcome-based strategies resembling functional cooperation. Nevertheless, ASEAN's norms continue to be key factors in determining the form and function of cooperation and therefore it concluded that the normative explanation remains crucial in understanding cooperation on energy security.

The in-depth case study analysis on the Laos-Thailand-Malaysia-Singapore power interconnection project found that the rationale behind cooperation on this project was mainly based on a rational cost-benefit calculation that measured the direct material gains against the costs of integration through the project. Although this conclusion seemed to reject the hypothesis that argues that norms are the key factor in decisions to cooperate, the thesis found that in this particular case norms influence cooperation indirectly. Moreover, it found that rational calculations are not necessarily incompatible with ASEAN's normative approach. Within ASEAN's institutions, its normative approach allows for the convergence of national policy objects into shared regional interests. Understanding this process enabled the thesis to understand the way in which ASEAN created the perception of the LTMS project as part of a bigger picture: the APG. As such, the normative explanation was crucial to explain the fact that countries involved in the project kept reiterating their commitment in realising regional policy goals, and subsequently emphasised the relevance of the normative approach in understanding regional cooperation on energy.

The case of nuclear energy showed how ASEAN's normative approach is not only relevant in fostering cooperation and building trust within ASEAN, ASEAN is also relevant for cooperation and trust-building with external partners. ASEAN acts as a mediator between global pressures and external institutional norms and practices, enabling its members to engage with, adopt and 'localise' international norms and standards on transparency and the safe and secure development of nuclear energy. By engaging these norms within ASEAN's institutions, its members have been able to ensure that these external norms and practices met the standards of appropriateness of the norms of the ASEAN way. This process, furthermore, enabled

normative and institutional change and showed that ASEAN's norms are not static as suggested by scholars in the existing literature on the topic. The case of nuclear energy cooperation, therefore, showed how a normative explanation not only enables one to understand cooperation between Southeast Asian states, it also showed how the normative approach is crucial for their interaction with global pressures.

All in all, the current thesis concludes that although marginalised in existing literature, normative explanations are crucial in creating a deeper understanding of cooperating on energy security issues in Southeast Asia. Several circumstances such as the scope and availability of resources, however, impeded the current research from further substantiating its claims about the importance of normative explanations in ASEAN. Nevertheless, it contributed to the existing literature by making a first step in analysing ASEAN's normative approach in the field of energy security more in-depth. Future research could elaborate on more specific mechanisms of ASEAN's normative approach, substantiating the case for a normative approach in analysing ASEAN's role as a regional organisation.

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