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Regional Energy Security as a Platform for Cooperation

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Introduction: Establishing Energy as a National and Regional Security Concern

Energy security, which is affected by the interplay of multiple factors such as economic, political, environmental, and demographic, among others, is a national security issue and considered as a compelling national interest in many countries around the world. On the other hand, highlighting from the non-traditional security discourse, energy security encompasses human security,¹ for it impacts people's livelihood, such as food, economy, health, and environment.

Energy security commonly pertains to sustainability and affordability of energy supplies. The International Energy Agency (IEA) defines *energy security as the uninterrupted availability of energy sources at an affordable price*. Energy security has many aspects. Long-term energy security mainly deals with timely investments to supply energy in line with economic development and environmental needs. On the other hand, short-term energy security focuses on the ability of the energy system to react promptly to sudden changes in the supply-demand balance.² Energy security is defined as *to focus only on energy availability and affordability, with comparatively little emphasis on sustainability or manageability of the environmental impacts of energy extraction and usage* (Sovacool 2009).³ Notably, energy security encourages development of an energy security system, which includes soft (eg policies and programs) and hard infrastructure (eg pipelines).

The growing economies in Southeast Asia and the vulnerability of the region to the adverse impacts of climate change have challenged the ASEAN member states to accelerate efforts on enhancing energy security. Meeting their energy needs has prompted the ten ASEAN countries to come up with some energy-related bodies that commonly seek to improve energy security and sustainability of energy use and reduce economic cost, making energy

as one of the prominent features of regional cooperation in Southeast Asia.

In 1976, ASEAN's initiatives on regional energy cooperation commenced with the advent of the ASEAN Council on Petroleum (ASCOPE), as a venue to discuss oil and gas industry matters.⁴ In 24 June 1986, the Association of Southeast Asian Nations (ASEAN) agreed on ASEAN Energy Cooperation, emphasizing the cooperation in developing energy resources among the ASEAN member states, with the purpose of strengthening the economic resilience of the individual states, as well as the solidarity and integrity of ASEAN.⁵

Realization of the importance of energy cooperation among ASEAN states led to the formulation and signing of the ASEAN Petroleum Security Agreement (APSA), which came into force in March 2013. This agreement primarily aims to establish the ASEAN Emergency Petroleum Scheme in times of supply shortages through the use of Coordinated Emergency Response Measures (CERM). Further, the APSA also introduced the physical integration of energy infrastructures such as the development of ASEAN Power Grid (APG) and the Trans-ASEAN Gas Pipeline (TAGP).

Afterwards, the ASEAN Plan of Action for Energy Cooperation (APAEC) 2010-2015, which covers the energy component of the ASEAN Economic Community (AEC), came into force. The APAEC 2010-2015 seeks to bring policies to actions that are geared towards a cleaner, more efficient, and sustainable energy community.⁶

Energy security is a shared interest and responsibility among ASEAN member states. The adoption of the APSA, APAEC, and the AEC indicates the vital role of enhancing regional energy cooperation, as the region faces increasing energy security challenges in the 21st century.

Trends in Energy Security Issues with focus on Economic and Environmental Aspects

Energy security is not only about reliability and affordability of energy. While pursuing this objective, it is also important to take a look at various economic and environmental factors that impact on energy security.

According to the IEA in Southeast Asia Energy Outlook⁷, the share of renewable energy in the region's primary demand is projected to fall from 24% in 2011 to 20% in 2035. The use of coal is projected to triple, growing at 4.8% annually on average. For natural gas, consumption is projected to increase around 77% from 141 billion cubic metres (bcm) in 2011 to around 250 bcm in 2035. As for oil, the IEA projected it to increase from 4.3 million barrels per day (mb/d) to 5.4 mb/d in 2020 and 6.8 mb/d in 2035.⁸

From an economic perspective, the increasing energy demands is fueled by gross domestic product growth and the regional population that is seen to increase from 600 million in 2011 to 740 million in 2035.⁹

Another energy security problem is the widening gap between demand and supply. The IEA report shows that the energy demands will increase by more than 80% in 2035 and the region needs to invest a total of about \$1.7 trillion in energy-supply infrastructure between 2013 and 2035.¹⁰ The increasing population and the rising energy demand from economic output and improved standards of living will likely put added pressure on energy supplies. Moreover, growth in energy demand is correlated with growth in per-capita income. According to IEA, ASEAN GDP per capita is set to increase at 3.7% annually.¹¹

As for the environmental aspects, the abundant coal supply and low coal prices are factors that lead to strong increase in coal demand. Coal will overtake natural gas from 2020 to become the second-largest component of Southeast Asia's energy mix. This trend on coal demand means that energy-related carbon dioxide (CO₂) emissions from ASEAN countries will rise continuously.¹²

Current Energy Cooperation Set-Up among ASEAN Member States (AMSs)

Energy cooperation is not a new strategy in the ASEAN. As early as 1966, a year before the first ASEAN Declaration in 1967, an energy cooperation agreement was already forged between Thailand and Laos. From 1990 onwards, more agreements were signed between some governments in the sub-region (Zhai 2010).¹³

Scenarios demonstrating cooperative strategy in enhancing energy security have been predominantly bilateral (i.e., between governments), but some efforts are multilateral in nature (i.e., among governments and international organizations). Some energy trades and cooperation projects¹⁴ in the ASEAN include:

- 11 bilateral gas pipeline interconnections as of 2013
- Indonesia supplies natural gas to Singapore and Malaysia through a pipeline
- Laos supplies electricity to Thailand, Vietnam and Cambodia
- Cambodia imports electricity from Thailand and Vietnam
- ASEAN crude oil is sent to Singapore for refining
- Joint energy resource development initiative between Malaysia and Thailand

In terms of regional energy cooperation, ASEAN's aspirations to develop a regional power grid (i.e., 1981 APG and 1976 TAGP) are considered to be the two most prominent collective measures the AMSs took in enhancing energy security in Southeast Asia. Aside from the APG and the TAGP, there are also joint ventures to diversify energy sources (e.g., Renewable Energy and Civilian Nuclear Energy Programs); develop clean technology; promote energy efficiency and conservation; and, harmonize energy policy and planning at the regional level. These programs are all laid out in the APAEC 2010-2015, the current blueprint for ASEAN cooperation in the field of energy security.

However, a 2013 study sponsored by the Economic Research Institute for ASEAN and East Asia saw major tasks that should be included in the Action Plan, particularly in building institutional infrastructure that will still be incomplete by 2015.¹⁵ Studies associate such unimpressive advancements primarily with financial constraints, technical and regulatory differences, and members' individual energy priorities.

With regard to energy security or any regional concern for that matter, the most likely scenarios that one should anticipate will almost certainly be guided by the so-called *ASEAN Way*. The ASEAN Way provides a certain degree of regional predictability as it sets expectations on how AMSs should behave whether as an individual country or part of the ASEAN in engaging other member-states. It is characterized by non-interference, discreteness, informality, consensus-building, consultation, non-use of force, avoidance of conflict, and non-confrontational bargaining rather than subscribing to majority votes, legalistic decision-making, litigation and confrontational methods such as sanctions and economic embargoes.¹⁶ ASEAN members participate in regional affairs on *voluntary and non-binding basis*¹⁷ because it respects national

identity, independence, and sovereignty of each member-state.

Arguably, the ASEAN Way is a soft approach toward regionalism. It is a diplomatic framework that Southeast Asian states are known for. The ASEAN Way is considered to be a key factor in the survival and operational success of the ASEAN.¹⁸ However, it is not impervious to contentions. For one, the ASEAN Way in itself is an implicit, highly fluid, and sometime vague code of conduct and not a solid set of rules and regulations. It is also regarded by some quarters as a cause of the relatively slow pace of regional integration processes because it does not effectively facilitate the institutionalization of concrete collective efforts¹⁹ that compel national action.²⁰ This may be attributed to the voluntary and non-binding basis of regional arrangements in the ASEAN, which may not provide enough incentives and tend to make AMSs rely on self-motivation when it comes to regional cooperation.

As a case in point, the reliability of the ASEAN Petroleum Security Agreement (APSA) in protecting AMSs from petroleum-related emergency situations and economic shocks has been a topic of contentions because of the voluntary nature of oil stockpiling. Oil stockpiling is a strategy used by countries individually or collectively to lessen their exposure to crises (e.g., natural disasters, economic shocks, war) that may affect oil supply. In the case of APSA, member countries are encouraged to individually store oil which can be used by any AMS in *distressing* situations. Since stockpiled oil can be used by any member-state provided that certain conditions are met, the oil may be seen as a non-excludable public good the same way as light coming from a lighthouse can be utilized by ships regardless of whether or not they pay port fees. Historical accounts show that provision of such type of good simply cannot survive that long in a voluntary system of contribution; in economic parlance, the APSA may encounter a *lighthouse problem* at a regional scale. Mandatory set of rules will have to be set.

Ideal Scenarios of and Areas for Cooperation: Exploring APAEC and APSA

Since its inception in 1967, ASEAN has sought to engender regional cooperation among AMSs as the ideal approach to a range of economic and security issues.²¹ Indeed, regional collaboration has a number of potential benefits particularly in the field of enhancing energy security.

Firstly, a regional energy sector that is secure, efficient, and interconnected plays a major role in the realization of the 2015 ASEAN Economic Community (AEC).²² It is an essential aspect in achieving the pillars of the AEC which includes a single market and

production base, a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy.²³

Secondly, issues arising from the increasing use of energy require continuous economic growth (e.g., GHG emission, climate change, supply-demand imbalance) are mainly transnational issues which provide more than enough motivation for any state to cooperate with others. A single state simply cannot protect itself from these security threats by relying on its own efforts. Indeed, enhancing energy security is largely dependent on the quality of inter-state relations.²⁴

Thirdly, despite the intense security rivalry brought about by the increasing demand for energy sources, cooperative rather than competitive strategy may prove to be the more economically sustainable and viable choice for any ASEAN state. Considering that each member state varies in endowments and investments when it comes to energy, a cooperative framework facilitates trade more effectively. It provides a win-win scenario, wherein states earn from their energy surpluses while others have enough energy supply to achieve their production targets.

Cognizant of the importance of regional cooperation for energy security, the ASEAN has already laid out essential elements in the APAEC and APSA, which elaborately shape regional energy cooperation in Southeast Asia. These elements are:

- **Physical Interconnection** especially for the AP and TAGP.
- **Clean and Renewable Sources of Energy.** APAEC envisions cooperation in developing alternative and renewable/continuous sources of energy for every member-state. Under the Action Plan, member states are expected to reach 15% of the region's total installed power capacity as collective target for renewable energy.
- **Diverse Areas in Energy Cooperation** namely, Coal and Clean Coal Technology, Renewable Energy, and Civilian Nuclear Energy, as indicated in the APAEC.
- **Energy Efficiency and Conservation**, which entails reduction of energy consumption without sacrificing production. For the APAEC, these can be achieved through institutions' capacity-building, private sector involvement, and expansion of markets for energy efficient products.
- **Harmonious, Win-win Energy Policies.** The APAEC serves as an opportunity to harmonize energy-related operating procedures, technical standards, and policy frameworks in the ASEAN. Under the APAEC's Regional Energy Policy and Planning Program, AMSs individual energy policies

are set to evolve into interdependent and inter-country ones to facilitate regional integration.

- **Collective Action.** Under the APSA, AMSs are encouraged to collectively act in enhancing regional petroleum security and minimizing each member's vulnerability to oil shocks.

Way Ahead: Philippine Interests and How they Figure in Regional Cooperation

The success of energy cooperation in Southeast Asia serves as a litmus test of ASEAN's maturity and capability as a regional organization in solving more complex security problems in the future.²⁵ More importantly, ensuring sufficiency, affordability, and reliability of energy supply is a regional security concern as this will determine continuous economic growth among AMSs. Members must harmonize their national interests with the broader regional interests to effectively enhance regional energy security.

The Philippines' interests in terms of its national energy security are already aligned with the broader regional interests of the ASEAN. As enshrined in the Philippine Energy Plan (PEP) 2012-2030, the Philippine Government will contribute to the fulfillment of the grand vision of the ASEAN for an enhanced regional energy security through the *aggressive implementation* of the action plans under the APAEC's seven (7) program areas.²⁶

Other member states are also moving in the same direction. However, executing coordinated movements toward an enhanced regional energy security is complicated by technological, economic, and geo-political disparities among ASEAN states. Accordingly, as ASEAN matures into a full-fledged economic community, it may want to apply a *different approach to regional cooperation to enhance the ASEAN Way*, and consider working on *institutionalized* and *rules-based* activities.

The constant need for energy should be seen as an opportunity to establish platforms for cooperation. In the long run, efforts to deepen regional cooperation will eventually redound to a more cohesive and economically integrated ASEAN community.

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