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INDONESIA-SOUTH KOREA ENERGY COOPERATION TO TACKLE THE CHALLENGE OF ENERGY SECURITY: A NEW SOUTHERN POLICY APPROACH

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Abstract

Indonesia and South Korea are dealing with energy insecurities; The two countries after the COVID-19 pandemic are pursuing economic recovery in the next decade. But economic recovery needs a secure energy supply to support the economic growth, and that compounds vulnerabilities. Pursuing economic growth will increase the two countries energy consumption, while this pressure is not in line with the decreasing capacity of conventional energy production, such as oil and gas. We offer three strategic recommendations through the new southern policy approach, namely bilateral cooperation in investment and trade in oil and gas between Indonesia and South Korea, bilateral cooperation in research and development of renewable energy, and bilateral cooperation in developing Indonesia's capacity to maintain maritime security around the Malacca Strait and other strategic waters through which South Korean gas imports from Indonesia pass. These three recommendations are significant in overcoming energy security challenges and maintaining economic growth between Indonesia and South Korea. The new southern policy must target the interests of the two countries for energy security in the future.

Keywords: *Energy Diplomacy, Energy Cooperation, Indonesia, South Korea, A New Southern Policy*

A. Introduction

South Korea Energy Diplomacy to Indonesia

South Korea's energy diplomacy with Indonesia represents a strategic partnership aimed at addressing energy security concerns, diversifying energy sources, and fostering bilateral economic growth. This collaboration involves various aspects, including energy trade, technology transfer, and renewable energy development. South Korea's reliance on energy imports, particularly oil and gas, has driven its pursuit of energy diplomacy to ensure a stable supply and enhance energy security. Indonesia's status as an oil and gas producer has positioned it as an attractive partner for South Korea's energy needs. This relationship is evident through significant LNG imports from Indonesia. According to data from the International Group of Liquefied Natural Gas Importers (GIIGNL), Indonesia was one of the

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top suppliers of LNG to South Korea, with substantial trade volumes in recent years (GIIGNL, 2020).

The collaboration serves both countries' interests in diversifying their energy portfolios. South Korea's commitment to diversification aligns with its "Low Carbon Green Growth" policy, emphasizing a shift towards cleaner and more sustainable energy sources. By engaging in energy diplomacy with Indonesia, South Korea secures access to a diverse set of energy resources that complement its energy transition goals. Beyond energy security, the partnership brings economic benefits to both nations. South Korean companies have invested in Indonesia's energy sector, particularly in exploration and production activities. These investments contribute to Indonesia's economic growth and infrastructure development, while also providing South Korea with potential returns on its investments. Energy diplomacy also extends to the realm of renewable energy. South Korea's expertise in renewable technologies, such as solar panels and wind turbines, presents opportunities for collaboration with Indonesia. By sharing knowledge and resources, both nations can accelerate their transitions towards cleaner energy sources. This aligns with South Korea's goal to increase the share of renewable energy in its energy mix, as outlined in its 9th Basic Plan for Long-Term Electricity Supply and Demand (Ministry of Trade, Industry and Energy, 2020).

Indonesia and South Korea have recognized the critical importance of addressing their energy demands while simultaneously diversifying their energy sources to ensure long-term energy security. South Korea, as one of the world's leading economies, has historically been heavily dependent on energy imports, particularly crude oil and liquefied natural gas (LNG), leaving it vulnerable to supply disruptions and price fluctuations. On the other hand, Indonesia, as a significant oil and gas producer, has faced challenges in sustaining its domestic energy production to meet its growing demand. This mutual recognition of energy challenges has spurred the two countries to engage in energy diplomacy to secure reliable sources of energy and ensure economic stability. As outlined in the "Korea-Indonesia Comprehensive Economic Partnership Agreement" (CEPA), both countries have aimed to strengthen cooperation in the energy sector, enhancing "the access of their goods and services to each other's market" (Ministry of Trade, Republic of Indonesia, 2020). This trade agreement has laid the foundation for energy trade and investment between the two nations.

Indonesia, with its abundant natural gas reserves, has emerged as a crucial LNG supplier for South Korea. This trade arrangement benefits both countries by enhancing South

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Korea's energy security and Indonesia's export revenue. As highlighted by President Moon Jae-in during his visit to Indonesia in 2018, the two countries aim to "expand cooperation in the energy sector, including energy resources, infrastructure, and new and renewable energy" (The Blue House, 2018). The energy diplomacy between Indonesia and South Korea has been characterized by their collaboration in LNG trade. South Korea, as one of the world's largest LNG importers, seeks to diversify its sources of energy to enhance energy security. By securing LNG supplies from Indonesia, South Korea reduces its dependence on a single source, mitigates supply disruptions, and ensures a stable energy supply for its industries and consumers.

The importance of this trade arrangement for South Korea's energy security cannot be overstated. A diverse range of LNG suppliers, including Indonesia, contributes to South Korea's ability to manage potential geopolitical and supply-related risks. This aligns with President Moon Jae-in's commitment to enhancing energy security, as highlighted during his visit to Indonesia in 2018: "We have agreed to expand cooperation in the energy sector, including energy resources, infrastructure, and new and renewable energy" (The Blue House, 2018). For Indonesia, the LNG trade with South Korea brings substantial economic benefits. It provides an avenue for revenue generation and export earnings, contributing to the country's economic growth and foreign exchange reserves. This aligns with Indonesia's broader economic goals and its strategy to leverage its energy resources for economic development. During President Moon Jae-in's visit to Indonesia in 2018, the emphasis on energy cooperation was evident in his statement: "We are going to expand cooperation in the energy sector, including energy resources, infrastructure, and new and renewable energy." This sentiment underscores the shared vision of both countries to collaborate across various aspects of the energy sector, including the strategic LNG trade (The Blue House, 2018).

South Korea's New Southern Policy (NSP) is a strategic initiative that aims to deepen its engagement with countries in Southeast Asia, including Indonesia, by fostering economic cooperation, enhancing diplomatic ties, and expanding people-to-people exchanges. This policy reflects South Korea's recognition of the region's growing economic significance and geopolitical relevance. Announced in 2017 by President Moon Jae-in, the NSP focuses on three pillars: People, Prosperity, and Peace. It seeks to build a stronger partnership with ASEAN member countries, including Indonesia, by promoting mutual interests and

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addressing shared challenges. The policy aligns with Indonesia's efforts to strengthen its international partnerships and promote regional economic integration.

One of the primary objectives of the NSP is to bolster economic cooperation and trade between South Korea and Southeast Asian nations, including Indonesia. Indonesia is a key partner in this regard due to its growing economy, abundant natural resources, and expanding consumer market. South Korea aims to diversify its trade partners beyond traditional markets and tap into the immense economic potential of Indonesia. Under the NSP, South Korea emphasizes infrastructure development as a means to enhance connectivity and promote economic growth. This includes collaborations in areas such as transportation, energy, and digital connectivity. For Indonesia, this could translate into opportunities for foreign investment and technological cooperation, aligning with Indonesia's own infrastructure development goals. The NSP places a strong emphasis on the digital economy and innovation. South Korea seeks to share its advanced technological expertise with partner countries and support the growth of digital industries. This aspect of the policy has implications for Indonesia's efforts to develop its digital economy and capitalize on its burgeoning tech sector.

South Korea's New Southern Policy (NSP) is a comprehensive foreign policy initiative that aims to strengthen diplomatic and economic ties with Southeast Asian nations, including Indonesia. This policy's emphasis on cooperation, trade, and people-to-people exchanges has significant implications for energy diplomacy between South Korea and Indonesia. The NSP aligns with South Korea's strategic interest in securing diverse and reliable energy sources, promoting renewable energy technologies, and contributing to global sustainability goals. Indonesia, as a major energy producer and a key player in the Southeast Asian region, becomes a vital partner in fulfilling these objectives. One of the primary objectives of South Korea's NSP is to enhance energy security by diversifying energy sources. Indonesia's abundant natural resources, including oil, gas, and coal, offer South Korea an opportunity to access a diverse range of energy supplies. By engaging in energy diplomacy with Indonesia, South Korea can reduce its dependence on specific energy sources and regions, thereby increasing its resilience against supply disruptions.

B. Theoretical Framework

Energy diplomacy, a subset of international relations, plays a pivotal role in shaping countries' energy policies, addressing energy security concerns, and fostering cooperation

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among nations. This theoretical explanation delves into the concept of energy diplomacy, its key drivers, and practical implications, supported by credible references. Energy diplomacy refers to the strategic use of diplomatic channels and negotiations to ensure a country's energy security, facilitate energy trade, and promote sustainable energy solutions. It involves bilateral and multilateral agreements, resource allocation, technology exchange, and collaborative initiatives in the energy sector (Yergin, 2019).

Energy diplomacy draws from several theoretical perspectives. Realist theories emphasize the role of power and national interest in international relations. Energy resources are considered strategic assets, and energy diplomacy can be seen as states vying for control over these resources to enhance their own security (Hadian & Aslani, 2017). Neorealism focuses on the structural constraints of the international system. Energy interdependence can create opportunities for cooperation and conflict, as states navigate the dynamics of resource scarcity and abundance (Hakimian & Moshiri, 2019). Complex Interdependence highlights the multiple channels of interaction between states beyond just military and economic power. Energy diplomacy embodies this complexity, as states engage in cooperative agreements to ensure resource access and economic growth (Keohane & Nye, 2000).

The dynamics of Energy Diplomacy has far-reaching implications such as ensuring a stable energy supply is essential for global economic stability and security. Collaborative efforts in energy diplomacy mitigate potential conflicts and promote international stability (Yergin, 2019). Besides that Energy diplomacy shapes the trajectory of countries' energy transitions. By promoting renewable energy technologies, countries contribute to sustainable development and environmental preservation (International Renewable Energy Agency, 2021). Energy diplomacy can reshape geopolitical alliances and partnerships as countries align with energy-rich nations to secure resources and enhance their influence (Kapila & Amaratunga, 2018).

South Korea's energy diplomacy is a critical component of its foreign policy, encompassing efforts to ensure energy security, diversify energy sources, and collaborate on sustainable energy initiatives. We can see that South Korea's energy diplomacy aligns with realist theories, as it seeks to secure access to energy resources and build partnerships to enhance its national security. The state's emphasis on strategic alliances and energy partnerships reflects realist principles (Hadian & Aslani, 2017). Moreover, their Energy diplomacy also resonates with constructivist perspectives, where South Korea's engagement in international energy governance reflects its commitment to global norms and cooperation.

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Collaborative efforts to address climate change through renewable energy align with constructivist values (Kapila & Amaratunga, 2018). But, to the best of our knowledge, South Korea's energy diplomacy is shaped by complex interdependence, reflecting the multifaceted connections between states beyond traditional power dynamics. Energy cooperation involves economic, technological, and environmental dimensions, showcasing the complex nature of international relations (Keohane & Nye, 2000).

Therefore, South Korea's energy diplomacy, as embedded within its New Southern Policy (NSP), reflects the nation's strategic engagement with Southeast Asian countries. South Korea's limited domestic energy resources drive its need for secure and diversified energy supplies. Engaging with energy-rich countries, such as Indonesia and Vietnam, enhances energy security (Ministry of Foreign Affairs, Republic of Korea, 2017). Energy diplomacy aligns with economic interests. By fostering trade relationships, investments, and infrastructure projects, South Korea stimulates economic growth and technological exchange (Kapila & Amaratunga, 2018). The NSP aims to elevate South Korea's presence in Southeast Asia. Energy cooperation acts as a platform for strengthening diplomatic ties and increasing regional influence (Ministry of Foreign Affairs, Republic of Korea, 2017). South Korea's pursuit of energy security drives energy trade agreements, investments in energy infrastructure, and exploration of new markets in Southeast Asia. This bolsters economic ties and strengthens diplomatic relations (KOTRA, 2020). Collaborating with Southeast Asian nations in renewable energy projects aligns with global sustainability goals. South Korea shares its technological expertise while supporting partner countries' clean energy transitions (Ministry of Foreign Affairs, Republic of Korea, 2020). Energy diplomacy enhances South Korea's geopolitical influence in the region. Shared energy projects, such as gas pipelines, reinforce strategic partnerships and contribute to regional stability (Lee, 2019).

The New Southern Policy (NSP) is the signature foreign policy initiative by President Moon Jae-in of the Republic of Korea (ROK) officially launched in November 2017 during his official state visit to Jakarta, Indonesia. Seoul established "people, prosperity and peace" as the three pillars of the NSP. It gives particular emphasis to "promoting people-to-people exchanges (socio-cultural cooperation), seeking mutually beneficial economic cooperation, and building a community that supports regional peace and security (political-security cooperation)" as core areas of implementation. The first and foremost core element of the NSP is economic diversification. The task is to realign and expand Seoul's external economic portfolios and links with fast-growing economies in Southeast Asia and India. The

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underlying motivation behind economic diversification is twofold. The first is the economic imperative to secure new markets and new sources of growth for the Korean economy that has been mired in low growth since the aftermath of the 2008 financial crisis. The GDP growth rate of the Korean economy since 2010 has been hovering just over 2 to 3 per cent per annum. While Seoul does not delimit the geographical scope of engagement under the NSP, the countries that are prioritized as the first tier of "NSP" target countries" are those in Southeast Asia and India (Including Indonesia as the biggest market in Southeast Asia).[1]

Based on the theoretical vantage point, we differentiate at least three overarching frames for the field of energy policy, each of these frames is marked by one interconnected dimension or prioritized component concerning energy security. These dimensions are 'availability,' relating to the relative independence and diversification of energy fuels and services; 'affordability,' which does not just mean low prices for energy consumers but also stable prices to increase planning and investment security; 'sustainability,' referring to both the protection of the natural environment and preventing the total depletion of non-renewable energy sources by making a timely swift to renewable energy sources.[2]

Indonesia – South Korea Energy Cooperation: A New Southern Policy

[1] Choe Wongi, "New Southern Policy: Korea ' s Newfound Ambition in Search of Strategic Autonomy," *Asie Visions*, no. 118 (2021).
[2] For further explanation see. Thijs Van De Graaf et al., *The Palgrave Handbook of the International Political Economy of Energy*, *The Palgrave Handbook of the International Political Economy of Energy*, 2016.

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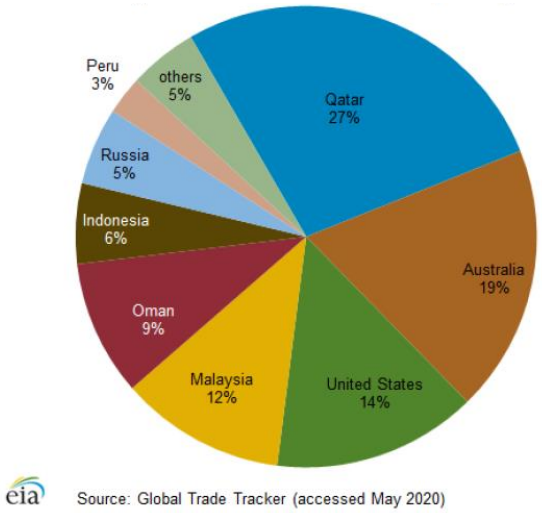

Chart.1. South Korea's LNG imports by source,

Regarding energy availability, South Korea must supply its rapidly rising thirst for energy, arguably under the most competitive energy neighbourhood globally. One neighbour, Japan, has been the largest liquefied natural gas (LNG) importer and the second-largest oil importer on Earth. And next-door China alone accounted for more than one-third of world oil-demand growth during 2000–04.[3] Based on data from EIA, Indonesia represents 6% of South Korean gas imports. Amid Indonesia's efforts to increase LNG production, there is a potential to increase Indonesia's LNG exports to South Korea.

Therefore, **the first strategic recommendation** is strengthening bilateral cooperation in investment and trade in oil and gas between Indonesia and South Korea. Indonesia is a maturing producer in the midst of shifting its focus from exports to imports. Oil production has been declining since the early 1990s, while gas production has been falling since 2010. Declining production and rapidly rising demand affect Indonesia's supply security and pose a challenge to future export revenues from liquefied natural gas (LNG). Given this context and Indonesia's still significant gas reserves, maximizing domestic production through increased E&P investment is a core policy objective. The future of Indonesia will determine by attracting foreign investment for developing LNG production in Indonesia. In an attempt to attract investment for exploration and production, at the beginning of 2015, Indonesia's Ministry of Finance exempted oil and natural gas exploration activities from the land and building taxes as a means of increasing future supply. This tax has negatively impacted exploration efforts in the country since 2010. Indonesia began

[3] US Energy Information Administration (EIA), *Country Analysis: Korea*, 2020.

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offering significantly more outstanding shares (35% for oil and up to 40% for natural gas) of production to energy firms awarded any new contracts.[4]

Meanwhile, South Korea relies on imports to meet nearly all of its fossil fuel consumption because of insufficient domestic resources. Like Japan, Taiwan, and mainland China's coastal provinces, Korea as a whole lacks domestic oil and natural gas reserves. Yet South Korea, in particular, has a remarkably high level of energy consumption. Although only the world's 26th-largest country in population and 11th in the gross domestic product (GDP), South Korea was 10th globally in primary energy consumption during 2002, 7th in oil usage, and 5th in crude oil imports. Moreover, South Korea ranks among the world's top five importers of liquefied natural gas (LNG), coal, and total petroleum liquids. South Korea has no international oil or natural gas pipelines and relies exclusively on tanker shipments of LNG and crude oil.

The shared challenges faced by the two countries must be the starting point for the future energy cooperation between Indonesia and South Korea. It means the oil and gas trade cooperation between Indonesia and South Korea must be maintained and strengthened under the new southern policy approach. Through the Indonesia-Korea Energy Forum, which has been held regularly every year, we should maximise the energy diplomacy between the two countries. Indonesia and South Korea must develop energy cooperation through this forum. Energy cooperation between the two countries must strengthen trade between the two countries and seek opportunities for joint exploration in Indonesia.

The second strategic recommendation is bilateral cooperation in the research and development of renewable energy, apart from the potential for collaboration in the LNG sector for Indonesia-South Korea. The potential for developing cooperation in the field of renewable energy is wide open for Indonesia-South Korea. This collaboration can be in geothermal or biomass development investment and cooperation in research and development for renewable technology between Indonesia and South Korea, which each country's universities represent. This effort is significant to find a solution to the decreasing production of conventional energy sources from fossil and the increasing demand for energy from each country.

[4] Energy Information Administration, "International Energy Data and Analysis: Indonesia," *International energy data and analysis* 2015 (2015): 1–20, https://www.eia.gov/beta/international/analysis_includes/countries_long/Indonesia/indonesia.pdf.

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The third strategic recommendation is bilateral cooperation for developing Indonesia's capacity to maintain maritime security around the Malacca Strait and other strategic waters through which South Korean gas imports from Indonesia pass. South Korea has a small number of domestic oil reserves, but the country relies almost entirely on crude oil imports to meet its demand. Nearly all of South Korea's total petroleum and other liquids production of 119,000 barrels per day (b/d) in 2019 was from refinery processing gains, non-conventional liquids, and biofuels production. Moreover, South Korea relies on energy imports distribution through LNG shipments and crude oil because South Korea has no international oil or natural gas pipelines. In 2019, South Korea imported about 2.9 million b/d of crude oil and condensate, making it the fifth-largest importer in the world. Although South Korea imports most of its crude oil supply from the Middle East, South Korea has made strides to diversify its sources of imports. The Middle East accounted for 69% of South Korea's 2019 crude oil imports, down from more than 80% before 2018.[5] Based on this data, most South Korean tanker ship routes have to go through the Indonesian Archipelago Sea Lanes Passage, especially in the Malacca Strait. Meanwhile, in the region, there are many maritime security threats such as piracy and maritime terrorism. This challenge is a strategic potential for South Korea to help Indonesia develop its capacity in maintaining maritime security in its waters.

C. Conclusion

Thus, three recommendations target the energy cooperation between Indonesia and South Korea for the two countries' welfare. In line with each country's national interests, it successfully targets economic diversification to overcome challenges in the future. Three recommendations for overcoming energy security challenges are essential fundamentals for running the economies of the two countries.

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[5] US Energy Information Administration (EIA), *Country Analysis: Korea*.

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