KF-VUB KOREA CHAIR REPORT

BEYOND TRADITIONAL SECURITY:

SOUTH KOREA'S POSITIONING TOWARDS THE CYBER, ENERGY, MARITIME AND TRADE SECURITY DOMAINS

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TABLE OF CONTENTS

1. INTRODUCTION

Since the end of the Cold War and especially over the past two decades, military threats have become more diluted. A plethora of non-military, non-traditional threats have deepened our understanding of security at the individual, societal, state and global levels. Given the multifaceted nature of contemporary security threats, adaptable and holistic ways of thinking are required. Each state confronts a wide range of security threats, affecting different issue-areas: geopolitics, socio-political, or status and power, among others. As such, each country develops and adapts its perception of threats and security needs, which is essential to achieve 'national security'.

South Korea is not any different. Since the end of the Cold War, the conceptualization of security in South Korea has shifted from a narrow focus on military affairs, and now also encompasses non-military affairs as well. The shift resulted from normalisation of relations between Seoul on the one hand and Beijing and Moscow on the other – together with a different approach towards North Korea. This new conceptualization has driven the different administrations sitting in the Blue House to take into consideration and address non-traditional security dimensions.

South Korea's geographical location and nature as a middle power forces every administration to maintain a flexible strategic approach, taking into consideration the alliance with the United States as well as relations with China and other powers in the Northeast Asian region. But as the COVID-19 pandemic shows, South Korea – along with all other countries – ought to decisively broaden the scope of its national security to put non-traditional security dimensions at the centre. In a sense, the COVID-19 pandemic further justifies the road that South Korea has travelled since the end of the Cold War.

The Moon Jae-in administration's National Security Strategy, announced on 20 December 2018, provides an overview of the situation in the Korean Peninsula and at the global level, together with the challenges and opportunities that South Korea will face.[1] Overall, the Moon administration has five national goals which direct policy towards the people, the economy, development, and the Korean Peninsula of Peace and Prosperity,[2] in a bid to achieve peace, understood as South Korea's core national interest. The Moon administration stresses multilateralism and the idea that joint efforts, whether at the regional or global levels, will be necessary to manage transnational challenges.

Among the many non-traditional security dimensions that South Korea needs to address today, four that stand out include cyber, energy, maritime and trade. These four issues pose a threat to South Korea insofar they have the potential to imperil economic growth, public health, social stability, and national defence, among others. After all, South Korea is a resource-poor country dependent on international trade to drive growth. In the case of cyber, the threat also directly relates to relations with North Korea, which uses cyberattacks, among others, to address its poor economic conditions.

Cyber-security has now become an issue of utmost concern for South Korea's non-traditional security. The country's approach to cyber-security started with a vague approach and hazy understanding of cyberspace – in common with most other countries – until it developed into sound and adaptable countermeasures to cyber-threats to national security.[3] The focus has been mostly on North Korea but it has also expanded over time. In the case of the Moon administration, it has widened the number of potential cyber-threats, but also started to take into account Sino-American competition as one of the many unknowns to be prepared for. South Korea is now also seeking to work together with partners.

South Korea's traditional understanding of energy security was linked to a stable supply of fossil fuels, which was a prerequisite for the nation's economic development. Attention to renewable energy has been relatively underplayed until the last decade.[4] Previous administrations sought to address South Korea's over-reliance on fossil fuels from the Middle East through a diversification of supply origins and increase in nuclear power plants. The Moon government's 3020 Renewable Energy Plan doubles down on incremental steps by the Lee Myung-bak and Park Geun-hye administrations to increase the share of renewable energy in the country's energy mix. Notably, the 3020 plan aims to phase out nuclear- and coal power plants, and to increase the share of renewable energy to 20 percent by 2030.[5]

South Korea is connected to the outside world through international waters, which are "blighted by entrenched disputes and conflicts, particularly apparent in the East China Sea (ECS) and the South China Sea (SCS)".[6] Approximately 90 percent of world trade takes place via maritime routes and, given South Korea's dependency on sea routes, Seoul has a strong interest in maritime security.[7] Not only is South Korea dependent on sea routes, but it has played an increasingly important role in regional and global maritime security, for instance, seen in its participation in multinational counterpiracy operations.[8]

South Korea's geostrategic location, at the centre of major trade routes and also as a major hub for international trade, makes trade security of utmost importance for the country. Among the strategies pursued to ensure the promotion of the national interest, South Korea plans to strengthen inter-Korean economic links and to implement the Northern Economic Cooperation, which aims to create a peaceful and cooperative environment supportive of South Korea's prosperity in the long term. South Korea wants to advance multilateral trade cooperation, reinforce economic cooperation with the United States and China, strengthen customized economic cooperation with large emerging markets such as ASEAN and India, and attempt to further East Asian economic integration.

This report is thought of and designed to address and discuss the conceptualizations and perceptions of non-traditional security in South Korea, with a specific focus on four dimensions: cyber, energy, maritime, and trade security. The authors will delve into the ways in which previous South Korean governments have strategized these security areas, to then also examine how these strategies have informed the policy of the Moon administration. By focusing on non-traditional security, the authors wish to go beyond oft-discussed Korean Peninsula security issues. Thus, the report will serve to shed light on how South Korea seeks to strengthen its national security.

2. CYBERSECURITY: EVOLVING BUT INSUFFICIENT DETERRENT

History indicates that new technologies often increase the instability of national and global security. Cyber is no exception. Cybersecurity concerns threats from the newly emerging cyber technology. In cyberspace, where the activities of nations and societies are interconnected, the types of threats are different from those in more traditional security areas. Threatening cyber activities include cyber espionage, cyberattacks and cyber influence, as per the US Worldwide Threat Assessment of 2019, which is issued by the US Director of National Intelligence. These three activities indicate, respectively, the stealing of information, disruptions to critical infrastructure, and influencing citizens.

Cybersecurity is an emerging and intensifying non-traditional security subject in South Korea. In traditional security areas with relatively clear military fronts, South Korea could stop threats with its conventional forces and the extended deterrence of the United States.

But the South Korean cyberspace is in a different situation because the country is not armed with a well-developed defence-offense cyber capability, and does not have an extended cyber-deterrence or NATO-style collective cybersecurity.[9]

For South Korea, therefore, potential cyberwarfare is especially risky. The country is surrounded by countries with strong cyberwarfare capabilities – together with powerful conventional forces. Furthermore, some of the countries around South Korea stand accused of not respecting international norms. They have also been accused of displaying an aggressive posture in pursuing their interests in the cyber domain. Furthermore, Sino-US competition may well influence their posture. Thus, it is likely that malicious cyber activities targeting South Korea will increase in the future.

2.1. Background

Cyberspace has generated a new security structure. Its relative independence from traditional security allows cyberthreats to accelerate the anarchic trends affecting global security. Countries with less developed traditional military forces can now challenge more powerful countries with cyber technology. Security actors are also changing. In traditional security domains, the power of non-state actors is limited. In cyberspace, however, non-state actors can have a major impact. Hacker groups or government-related organizations can lead cyberattacks as proxies for central governments. While cyberspace is changing rapidly, and dangerously, there is no control regime like the Strategic Arms Limitation Treaty (START) or the Conventional Forces in Europe (CFE) Reduction Treaty, which reduced the nuclear and conventional forces threats, respectively.

Under these conditions, some cyberattacks and operations with destructive purposes have materialized and been successful. Cyber espionage and cyber influence operations have also been on the increase. Cyber threats are therefore becoming central security concerns. That is why the United States, which operates an open cyberspace and, presumably, is the main target of cyberattacks, pointed out continuous cyber threats as the most serious danger to its national security. In 2017, the Office of the Director of National Intelligence of the United States issued the Worldwide Threat Assessment report, which listed cyberattacks as the top threat, above terrorism and weapons of mass destruction (WMD).[10]

Likewise, the 2019 version of the same report also ranked cyber threats as the top threat, and added that adversaries and strategic competitors would increasingly use cyber

capabilities to threaten the United States and its allies and partners.[11] The US National Counterintelligence Strategy of July 2020 pointed out that the United States faces threats from state and non-state cyber operations.

NATO, which considers cyber threats a significant danger, has strengthened its ability to counter cyberattacks.[12] Meanwhile, China, Iran, North Korea and Russia are consistently ranked as highly capable cyber actors by the United States, which implies that they impose serious threats to the political, military, and economic domains of any country. Furthermore, the cybersecurity conflict could sharpen amid Sino-US competition. Most notably, the so-called 5G war between both of them is not only a technological rivalry, but also a competition for hegemony in the cyber domain.

2.2. The trend of cyber threats to South Korea

The main cyber threats to South Korea come from North Korea. Between 2009 and 2014, North Korea launched at least seven cyberattacks against South Korea – focusing on disrupting South Korean infrastructure – as per government figures.[13] There is no clear proof of any North Korean cyberattack in 2015, according to the South Korean government. In 2016, however, North Korea resumed its cyber operations, focusing on cyber espionage and political influence. North Korea hacked the security firm of a finance company and targeted ten institutes, distributing malicious programmes to a total of 19 personal computers.[14] It also stole a large number of US and South Korean classified military documents, including a plan to decapitate the North Korea leadership in the event of war.[15] Between 2017 and 2020, during the Moon administration, North Korea launched at least three cyberattacks, according to the government: a hacking attempt on a Bitcoin exchange,[16] an email phishing to the Ministry of Unification,[17] and 73,000 coronavirus-related malicious emails between January-February.[18]

Table 1: List of North Korean cyberattacks against South Korea, confirmed by the South Korean government

Date	Cyberattack
July 2009	DDoS on 17 US and South Korea public and government websites
July 2010	DDoS on South Korean government and private sector websites
March 2011	DDoS on W40 South Korean public, government, military, and private websites, including US Forces Korea
April 2011	Nonghyub Bank server disrupted, data erased
March 2013	MBR wiper attack shut down 32,000 bank and media agency computers
June 2013	DDoS on 16 government and media websites, targeting DNS servers
December 2014	Data exfiltration, extortion, attempted MBR wiper attack on Korea Hydro & Nuclear power
May 2016	Hacking the security firm of a finance company and distribution of malicious codes to institutes and personal computers
September 2016	South Korean classified military documents stolen
September 2017	Hacking attempt on a Bitcoin exchange
January 2019	Email phishing to the Ministry of Unification
January-February 2020	73,000 coronavirus-related emails sent

Source: Various

North Korea has also threatened the South Korean and global cyberspace through cyber espionage and political influence campaigns. In 2017, a cyber research firm reported a malware campaign by North Korea.[19] In March 2018, a report said that the UN North Korea Panel of Experts had been hacked by a 'nation-state actor', thought to be North Korea.[20] That same year, North Korea hacked the accounts of North Korean defectors in May and South Korean think tanks in June.[21] Before the US-North Korea Hanoi summit in February 2019, North Korea hacked South Korean institutions.[22] In 2019, the number of foreign

hacking attempts targeting South Korea's defence information nearly doubled compared to the year before.[23] In 2020, there were several reports about North Korea's cyberattacks against South Korea and globally.[24] Simultaneously, cyberattacks increasingly sought to steal money from around the world. The UN assessed that North Korea's ill-gotten gains in 2015-2019 amount to US$670 million.[25] In 2019, the UN was also probing 35 North Korea suspected cyberattacks in 37 countries raising up to US$2 billion, including ten cyberattacks against South Korea.[26]

China also poses a cyber threat to South Korea. The spectrum of Chinese cyber activities covers cyberattacks, cyber espionage, and cyber influence activities. China hacked the South Korean government, military, defence firms and private firms during the THAAD crisis of 2017,[27] and before the US-North Korea summit of 2018.[28] According to the South Korean Ministry of National Defense, the hacking attempts, mostly using Chinese IPs, to the South Korean military database coming from abroad sharply increased in recent years: approximately 4,000 in 2017, 5,000 in 2018, and 9,500 in 2019.[29] The private cybersecurity company FireEye has also warned Chinese hackers are targeting South Korea's infrastructure.[30]

South Korea's cybersecurity strategy has evolved in four stages, according to the threat from North Korea. The first stage run until the first half of 2009. As this period was an initial preparation phase, there was no distinctive strategy. The second stage covered from September 2009 to July 2013, under the Lee administration. During this time, the Korea Communications Commission released the Comprehensive Countermeasures for National Cyber Crisis in April 2009[31] and the Masterplan for National Cybersecurity in August 2011.[32] The third stage ran from July 2013 to the first half of 2019. In July 2013, under the Park administration, the National Cybersecurity Measure was announced by the Ministry of Science and ICT.[33] Attention to cybersecurity increased as the number of source countries, intensity, and types of cyberthreats increased and became more complicated. All the above strategies revolved around North Korea. The fourth stage began in April 2019, when the Moon administration issued the National Cybersecurity Strategy (NCS).

2.3. The Moon administration and cybersecurity

The North Korea policy of the Moon administration, which puts peace first, undoubtedly influenced an easing in military tensions in traditional security domains. While the denuclearization dialogue was ongoing, North Korea reduced its level of traditional security threats. The Moon administration also maintained friendly relations with China and there was also an evident decrease in tensions with this South Korean neighbour in traditional security domains.

The trend, however, has been different in the area of cybersecurity. There has been a growing number of cyberthreats and cyberattacks. South Korea established the 4th Industrial Revolution as a national project and has been developing hyperconnectivity throughout the civilian and military cyberspace. So the Moon administration has responded to growing cyber threats, but without targeting any specific source behind these threats.

The Moon administration paid less attention to cyber issues in 2017 and 2018, but changed its posture with the NCS. This was the first such strategy by a South Korean government.[34] The NCS was a qualitative jump from previous measures. It has three key elements. To begin with, the new strategy focused on broader threats and not only North Korea. It underlined the increased vulnerability of the cyberspace, the severity of cyber threats, and the intensifying cybersecurity competition among states.[35]

Furthermore, the NCS strengthened deterrent power in the private cyberspace.[36] It added new elements to previous measures: revitalization of civilian-government-military cooperation and establishment of a growth base for the cybersecurity industry. The document also prepared a systematic plan for the execution of trans-governmental and departmental programmes.[37] Finally, the NCS included a clear commitment to global cooperation, which was secondary in previous administrations. It includes the substantializing of bilateral and multilateral cooperation and highlights participation in the discussion of international norms. The NCS also supports developing countries in the upgrading of their cybersecurity capabilities.[38]

Meanwhile, the Ministry of National Defense's task report to the President of 2019 underscores the military side of cybersecurity.[39] The report included new perspectives and approaches. It assessed that the global instability from power politics and international nationalistic trends would deepen, potential threats would increase, and transnational and

non-military threats through the cyberspace would also increase. The status of the cyber capabilities of the military have been boosted, putting them in the list of eight core defence technologies.

The Ministry of National Defense has reformed itself in line with these changes: it has restructured the joint chiefs of staff for cyber operations, developed a cyberwar plan, and reorganized the cyber operation command headquarter.[40] In addition, the following upgrades have been scheduled for 2020: the upgrading and increase of cyber personnel, the advancement of the response capability against cyberattacks, and the investment of US$15.8 million on a cyber tactical training centre.[41]

The defence component of cybersecurity measures is a crucial difference compared with previous administrations. Previously, the most prominent were the National Cybersecurity Measures of July 2013. The Ministry of National Defense already implemented a range of countermeasures, but they were relatively small in number and narrow in scope. The Moon administration raised the bar in 2018 and firmly raised it again in 2019.

The Moon administration has differentiated itself from former administrations by introducing more robust measures through the NCS. However, there has been criticism of the NCS. The main one relates to capabilities. North Korea's cyber capabilities include an estimated 7,000 hackers under the 121 Bureau[42] – considered to be the fourth largest in the world.[43] Although the South Korean Ministry of National Defense plans to increase its manpower to match this number by 2020, there are concerns that South Korea's position of weakness against an asymmetrically stronger North Korea will never disappear. And on top of that, there are also Chinese cyber capabilities. Would South Korea be able to respond to North Korean or Chinese cyberattacks? There is no clear answer.

Although cybersecurity became a fourth warfare domain and has become more important to any modern all-out war, the cyber domain has no distinct legal military basis in South Korea so far. The United Defense Act postulates only land, sea, and the air as the regular domains, and does not separate cyber as an independent domain. This symbolizes the insufficient readiness in terms of cybersecurity.

3. ENERGY SECURITY: FROM CRITICAL INFRASTRUCTURE TO RENEWABLE ENERGY TRANSITION

For South Korea, energy security traditionally was synonym with a stable supply of fossil fuels from international markets. In the post-Cold War era, secure energy supply was a prerequisite for the country's rapid economic growth and South Korean governments centrally organised critical energy generation and distribution infrastructure, creating an oligopoly in the former and a monopoly in the latter. Renewable Energy (RE) has for the most part played a very small role, and large conglomerates and state-owned energy providers have slowed down decentralisation and innovation on the domestic energy market.

The Lee and Park administrations both made initial attempts to reduce South Korea's over-reliance on fossil fuels from the Middle East and to introduce climate friendly and sustainable policies that do not inhibit economic growth. Under Lee, the internationally oriented 'Resource Diplomacy' was designed to intensify cooperation with energy-exporting countries beyond the Middle East, especially with Russia. Lee's administration furthermore launched the Global Green Growth Institute (GGGI) and secured the Global Climate Fund (GCF) – a UN agency – for South Korea. The Park administration sought to solve the reliance on fossil fuels and to address pollution and climate change with additional investments into nuclear power plants, despite the 2011 Fukushima accident. Under Park, also first steps towards investments in RE technologies such as solar and combustibles were undertaken. They were small in scale, but noteworthy in that they initiated a transition towards RE that was largely absent before.

The Moon administration's 3020 Plan doubles down on the two previous administrations' incipient attempts to address the questions of pollution, climate change, and reliance on fossil fuels. The plan is designed to increase the share of RE to 20 percent by 2030 and promises to lead the country through a transition towards clean and nuclear-free energy.[44] High levels of fine dust from coal-power plants and the 2011 Fukushima nuclear power plant disaster resulted in growing public support for greener energy generation and a nuclear phase-out. This gives the Moon government the necessary tailwind for its investment-heavy RE plans. These developments exemplify that today, non-traditional security dimensions such as climate change and public health are increasingly included into the discussion on energy security in South Korea.

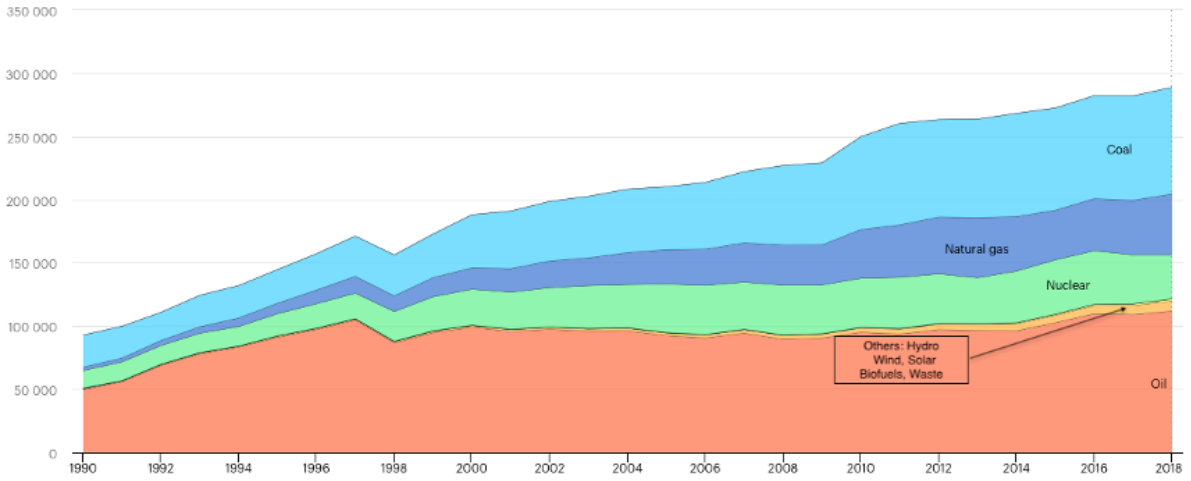
3.1 Background

Stable energy supply is without a doubt one of the most important preconditions for any modern society to function. A stable supply of energy permeates every aspect of everyday life; transportation, communication, hospitals, schools, national defence, international commerce and finance, artificial lightning, entertainment etc. all rely on a secure supply of energy. Since energy supply, especially electricity generation and distribution, is central for any modern society, it is typically regarded as critical infrastructure.[45] Hence, energy security impinges upon most dimensions of national security, both from a traditional and non-traditional security perspective.

Since South Korea possesses no meaningful fossil fuel resources of its own, stable supply traditionally relied on imports primarily from the Middle East. About 85 percent of South Korea's energy consumption is derived from fossil fuels, of which 98 percent are imported.[46] In 2015, prior to the Moon administration's push for renewable energy, combined energy imports (oil, LNG, petroleum) made up 20 percent of the country's total imports.[47]

Energy security has been a cornerstone of South Korea's national interest in the post-Cold War era. Without access to reliable and cost-efficient energy sources for its emerging manufacturing sector, the country's economic development as one of East Asia's tiger economies would have been impossible. Stable supply was achieved through centrally organising and strictly regulating the energy market combined with subsidies for fossil fuels and nuclear energy. South Korea has been following this path of a centrally planned energy market despite liberalisations of markets and industries following the Asian Financial Crisis in 1997. This inhibited innovation and led to a comparatively late adoption of RE by OECD standards.[48]

Figure 1: South Korea's Total Energy Supply, 1990-2018, by source, Unit: ktoe



Source: International Energy Agency (IEA)

Figure 1 shows South Korea's total primary energy supply by source in kilotons of oil equivalents (ktoe). As can be seen, South Korea's energy supply is primarily generated by fossil fuels, i.e. coal, gas, and oil. RE accounted for only 2 percent in the country's overall energy consumption as of 2018, and was even more insignificant in the years and decades before.[49] When it comes to electricity production, South Korea has in the past overly relied on fossil fuels and nuclear energy and neglected cleaner alternatives such as hydropower, renewable combustibles like biofuels and waste, and modern RE like wind- and solar energy.

The reason for South Korea's over-reliance on fossil fuels and nuclear energy in the past is mainly to be found in governments' support and subsidisation of state monopolies for relevant technologies. Since the 1960s, the Korea Electric Power Company (KEPCO) was South Korea's only energy company, with majority ownership by the government. Since 2001, it has been split into six entities, where KEPCO retains the transmission and distribution monopoly and possesses engineering capacity for new projects.[50] Lack of innovation and emphasis on stability inflated the oil and nuclear energy sectors into strategically relevant industries that were protected by the state. Large conglomerates invested significantly in nuclear power plant and oil refinement technology, and South Korea emerged as a regional nuclear refining hub and exporter of civilian nuclear energy technology.[51]

3.2. The Lee and Park administrations' attempts to diversify the energy sector

The Lee and Park administrations came to terms with the country's over-reliance on fossil fuels – mainly from the Middle East – and questions of pollution and climate change also received consideration. They attempted to reform South Korea's energy policy through initiatives directed both at international supply lines and at domestic restructuring of main energy sources.

Lee sought to address South Korea's over-reliance on fossil fuels from the Middle East through his so-called 'Resource Diplomacy'. Lee's signature policy intended to combine key foreign policy goals, such as raising South Korea's profile as a middle power in the world and realizing the vision of a 'Global Korea' with a solution to the problem of energy security described above.[52] Specifically, 'Resource Diplomacy' was supposed to deepen cooperation with energy exporting countries in Latin America, Africa, Central Asia, and Russia.[53] The Russian dimension was especially noteworthy, as it involved a gas pipeline

and a railroad connection from Russia to South Korea via North Korea, which was projected to carry about 7.5 million tons of gas per year.[54] Lee's 'Resource Diplomacy' however failed to deliver significant results in terms of a diversification of South Korea's energy supply or with regards to cooperation on energy infrastructure with Russia and North Korea.[55]

The Lee government furthermore devised a *National Strategy for Green Growth* in 2009, and in 2010, the National Assembly passed the *Framework Act on Low-Carbon Green Growth*. These policies dovetailed with Lee's Resource Diplomacy, aiming to achieve energy independence as well as to address climate change without harming economic growth.[56] The government furthermore launched the GGGI and in 2012 secured the UN-operated GCF to have its premises in Incheon.[57] Both institutions have since then contributed to environmentally sustainable economic policies domestically, and also raised South Korea's profile internationally, overseeing low-carbon green growth projects in developing countries.[58]

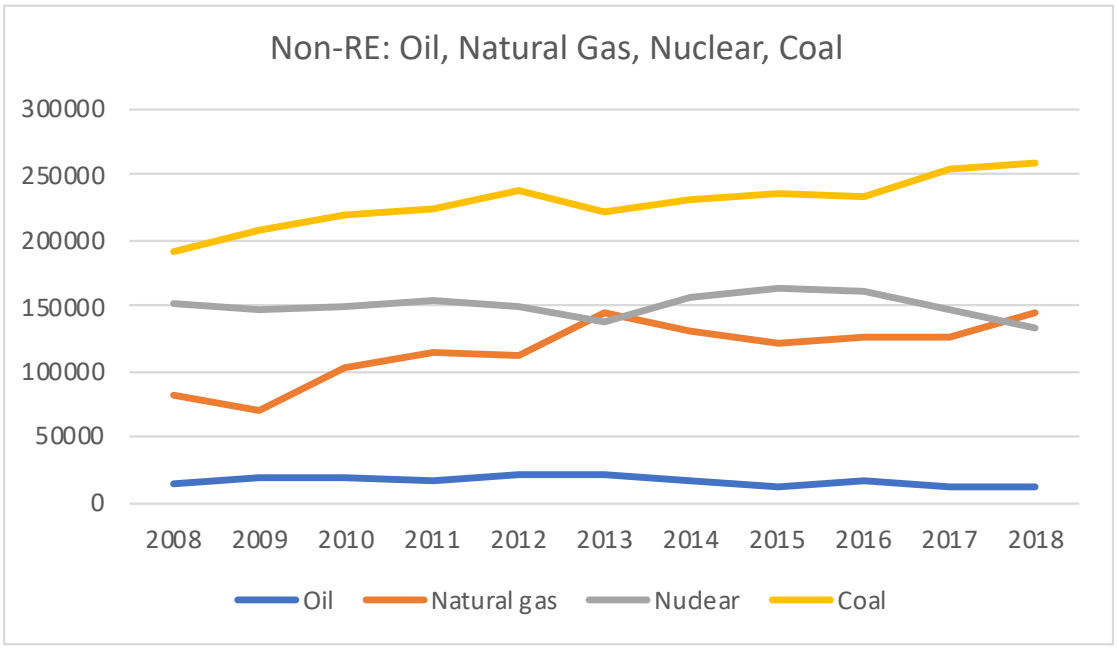
Under Park, nuclear energy was initially supported as clean and cost-efficient energy source.[59] The Park administration also managed to invest into RE, especially solar and combustibles, which yielded moderate results in the country's energy mix, as figure 2 shows. Driven by the fatal accident at the Fukushima nuclear power plant in March 2011, an overwhelming majority of South Koreans supported a nuclear phase-out. But the Park administration proceeded with its plans to construct additional nuclear power plants. The Ministry of Trade, Industry, and Energy (MOTIE) publishes a biannual 'Basic Plan for Long-Term Electricity Supply and Demand'.[60] The plans for 2013 and 2015 still envisaged construction of additional nuclear reactors, altogether 13, to be added to the existing 24. Most of these reactors under construction were later put on halt or cancelled under Moon.[61]

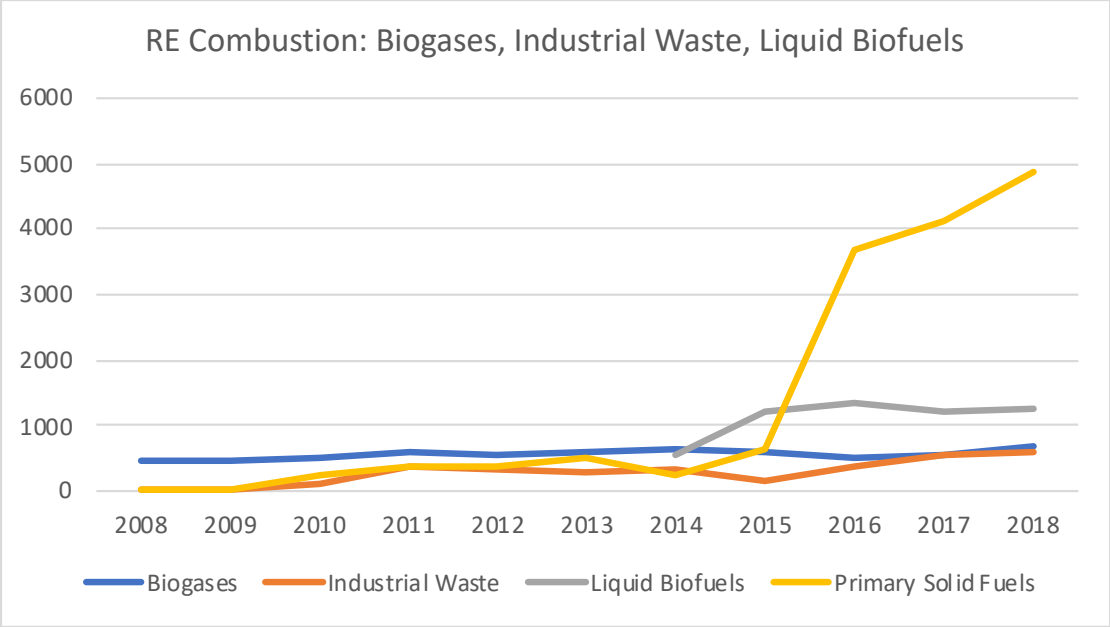
In addition to the backlash against nuclear policy following the Fukushima disaster, health issues resulting from atmospheric pollution and fine dust, which is attributed to the use of coal-fired power plants, increased public support of greener energy policies during Park's administration. Moon was able to capitalize on these public sentiments and advocated RE and nuclear phase-out in his 2017 presidential campaign.[62]

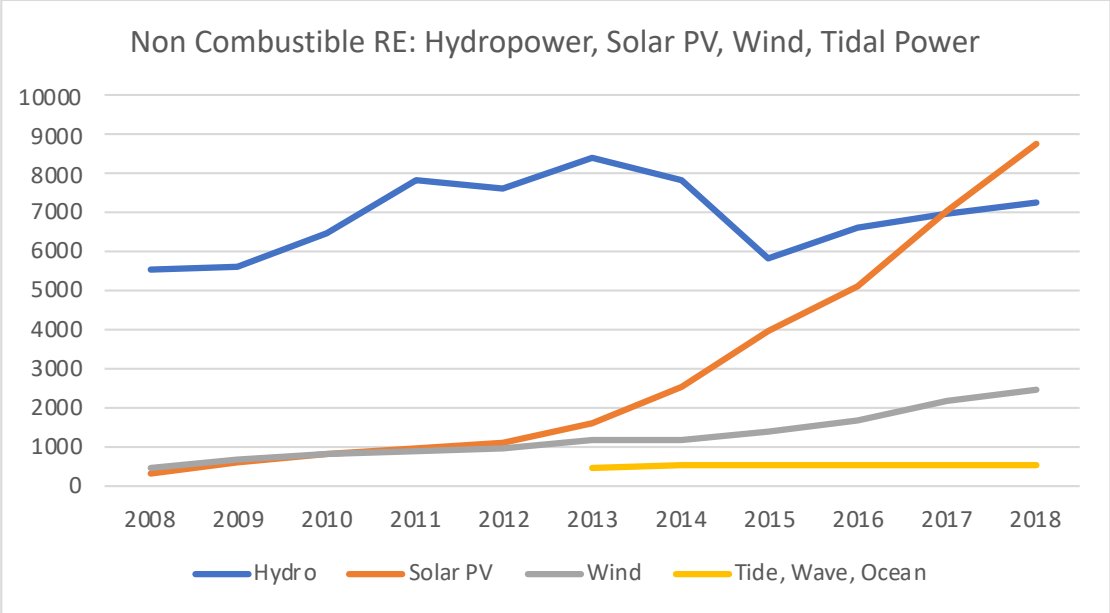
3.3. The Moon administration and energy security

The Moon administration formulated the *Renewable Energy 3020 Plan,* which aims to increase the share of RE to 20 percent by 2030, up from only 2 percent in 2016. The plan further aims to reduce CO_2 emissions by 37 percent.[63] Initial ambitions to swiftly phase-out nuclear energy were retrenched due to high costs. Instead of a complete phase-out by 2048, no new reactors are built, no licenses are renewed, and the remaining 24 reactors will gradually get phased-out until 2080.[64] MOTIE's *8th Plan for Electricity Supply and Demand* from December 2017 projects peak electricity demand by 2030 of 100.5 GW. This number is sought to be further reduced through energy-efficient 4th Industrial Revolution technologies and regulations to promote energy sustainability. In order to carry out the energy transition and to meet the targets set by the 3020 Plan, additional LNG based energy generation facilities with a capacity of 4.3 GW are added to fill the capacity gap until sufficient capacity for wind and solar energy generation is built.[65]

Figure 2: South Korea's Electricity Generation by Source, 2008-2018, Unit: KWh







Source: IEA, visualization by the authors

The measures taken by the Moon administration have shown moderate results in the first two years. Nuclear energy dropped from 161,995 KWh in 2016 to 133,505 KWh in 2018, which was carried mostly by an increase in LNG consumption, from 126,559 KWh in 2016 to 145,593 KWh in 2018. However, coal so far remains the main resource for electricity

generation, and even had a moderate growth, from 234,699 KWh in 2016 to 259,598 KWh in 2018, in response to the reduction in nuclear power. Oil, the overall most important fossil fuel for South Korea, is primarily used for transportation, construction, and industry production, and plays a small role in electricity generation, which was a mere 12,452 KWh in 2018. Combustible RE sources played a niche role in South Korea's overall electricity generation; biogases and industrial waste each remained below 600 KWh throughout the past decade. Liquid biofuels, which were introduced in 2014, did not grow in significance and figured at 1,258 KWh in 2018, below its peak of 1,358 KWh in 2016. In this category, only primary solid fuels underwent significant growth since 2015 at 666 KWh and are the most important RE combustible, at 4,890 KWh for 2018. For non-combustible RE, hydropower has traditionally been the main source, generating 7,285 KWh in 2018. Solar energy underwent tremendous growth since 2012. At 1,103 KWh, it overtook hydropower in 2017, and reached 8,769 KWh in 2018. Wind energy and tidal power generation increased slightly, but play a niche role in the already marginal modern RE category.

In 2017, South Korea's share of RE in electricity generation stood at 7.6 percent, up from 2.1 percent in 2010. Despite the improvement, the value is significantly below other developed countries such as Germany with 33.6 percent, the UK with 29.7 percent, the US with 17 percent, or Japan with 15.6 percent.[66] In order to meet the 3020 Plan, the Moon administration's strategy is to concentrate on the RE sector, especially biofuels and waste combustion as well as solar and wind energy.[67] In addition to large scale industrial projects, solar energy is to be further expanded in the agricultural sector. Citizen participation in the form of solar energy generation by photovoltaic (PV) installations in urban areas is also planned. In 2017, there were 290,000 urban households with PV units, a number that should grow to 1.56 million by 2030. Following the model of some European countries, households that install PV units benefit from a lucrative, state-subsidised and fixed feed-in tariff for 20 years.[68] In rural areas, farmers can receive soft loans to install larger-scale PV units on their fields.[69] In addition, the government plans to invest into large-scale RE projects, such as on- and offshore wind and solar parks. Operational examples include the floating PV plant in Sangju – with a capacity of 6MW – or the Tamra Offshore Wind Farm off Jeju Island – with a capacity of 30 MW.[70] Combined, these large-scale state-invested projects should have a capacity of 23.8 GW by 2030.[71]

The Moon administration furthermore has the ambitious goal to use the investment-intensive energy transition to realize another election promise: the creation of jobs and a reduction in youth unemployment. The South Korean government's objective to become a global leader in the solar, wind, and smart energy industry and manufacturing PV cells, wind towers, blades, and relevant systems is supposed to create 168,000 jobs by 2022.[72] South Korea's private industry sector will play a key role in the country's energy transition as well. Emerging technologies that can contribute to improved energy efficiency will be in high demand, such as Industry 4.0, smart grids, and energy storage. In 2019, for instance, LG Electronics, Hyundai Heavy Industries, and Samsung Electronics have partnered with KEPCO to form the Korea Smart Grid Association, which will promote R&D and common industry standards.[73]

South Korea's 3020 Plan is ambitious, but broad public support for phasing out nuclear energy and improving air quality by reducing fossil fuel – and especially coal consumption – allows the government to undertake large, cost-intensive projects. The combination with plans to reduce unemployment by creating jobs in the RE industry is a meaningful strategy to purposefully allocate the South Korean taxpayer's money. However, in the first two years since the implementation of the nuclear phase-out, coal consumption has increased – as figure 2 shows – somewhat undermining the goal to reduce fine dust. It remains a challenging objective for the current and future governments to simultaneously reduce coal and nuclear power.

In summary, the question of energy security in South Korea has been and remains until today a very important one. Without any meaningful natural energy resources, the country traditionally had to rely on fossil fuel imports to feed its energy-hungry emerging economy. Energy security was a question of stable energy supply, and in principle that still holds true today. But the Lee and Park administrations made initial attempts to diversify South Korea's energy import markets on the international level and sought to increase the share of RE in the country's overall energy mix, for example through solid combustibles. Moon further capitalised on the Korean population's opposition to nuclear energy and industrial fine dust from coal power plants, and his 3020 Plan doubled down on the country's slowly emerging RE sector – especially through investments in PV and wind energy.

The Moon administration's push for a clean and nuclear-free energy transition broadens the scope of energy security from a mere discussion on supply stability and includes other non-traditional security dimensions such as climate change, public health, and human security into the debate. This is a suitable policy direction, which dovetails with other developed countries' RE policies over the past two decades. South Korea starts from a low baseline, and even the 3020 Plan to reach 20 percent RE in the overall energy generation falls below other OECD countries.

South Korea's strategy to fulfil the 3020 Plan is based on two approaches: to increase electricity generation from RE and to improve energy efficiency through new technologies and systems, such as state-of-the-art energy storage, smart grids, and Industry 4.0. These approaches, however, focus on electricity generation. Oil is still the main energy source for South Korea, and there remains much potential to reduce oil consumption in the mobility sector. Reducing reliance on fossil fuels, especially oil and coal, from international markets would be beneficial from a non-traditional energy security perspective.

4. MARITIME SECURITY: A MIDDLE POWER AMONGST WHALES

Around 90 percent of world trade is conducted over the sea, and maritime security is crucial for the world economy, in addition to the environment, and human and national security.[74] South Korea has a strong stake in maritime security because its economy relies on exports – accounting for 44 percent of GDP in 2018 – which is mostly carried over the ocean.[75] Although South Korea has a land border to its north, its difficult relations with North Korea mean that South Korea is effectively connected to the outside world through the sea. Thus, the South Korean Navy website used to welcome visitors with the headline, 'To the Sea, To the World'.[76]

While the ocean is important to South Korea, South Korea is also an important player in the global maritime sphere. It is often the top ship-building country in the world and received, for example, over 40 percent of global shipbuilding orders in compensated gross tonnage in 2018.[77] In April 1995, the South Korean navy launched the slogan "Preparing for the establishment of an ocean navy".[78] Since Kim Dae-jung announced the development

of a 'strategic mobile fleet' in 2001, the South Korean navy has transformed from "a coastal defence force focused on North Korea to an oceangoing navy with a broader set of capabilities".[79]

South Korea – as a middle power – has an important role to play in the maritime security of Northeast Asia and beyond. South Koreans have traditionally seen themselves as a shrimp that gets crushed when whales fight because they have been victims of major powers' conflicts, but South Korea's power is by no means negligible. With the twelfth largest economy and the tenth most expensive military in the world, South Korea can have a major impact on international relations.[80] As geopolitical competition between the United States and China heats up in Asian waters, South Korea faces a difficult challenge but also has a potential to contribute to peace and prosperity of the world through maritime security governance – thus enhancing its own maritime security.

4.1. Background

Maritime security traditionally has not been prioritized in South Korea's national security, but its importance is increasing.[81] With North Korea as the main military threat, Seoul's defence policy has historically focused on land-based threats from the north. Maritime security, however, has attracted increasing attention in terms of both the traditional and non-traditional senses over the last decade; i.e., against other states and against non-state actors or even nature. South Korean defence analysts are alarmed by the expansion of Chinese and Japanese navies, and Chinese naval activities in the Yellow Sea (called the West Sea in Korea) have increased rapidly, especially since 2016.[82] The international society worries about Pyongyang's nuclear and missile threats, and good maritime governance is also essential in the prevention of trafficking of WMD.

South Korea's maritime security issues – like those of all other countries – include both traditional and non-traditional security, but it is important to note that these issues are to a certain extent merged. For example, illegal fishing by Chinese ships in the Yellow Sea not only affects the economic security of South Korea's fishing industry but also diplomatic relations between Beijing and Seoul. South Korea's participation in disaster relief and counter-piracy operations is a contribution to the mitigation of non-traditional security problems, but it is also an important endeavour to strengthen its position in global diplomacy

to mitigate traditional security problems Seoul faces, especially in relation to Pyongyang. For example, Seoul's decision to send a naval destroyer to the Strait of Hormuz in 2020 – despite South Korea's heavy reliance on oil imports through these waters – was due to Washington's pressure rather than a genuine necessity to protect merchant ships there.[83]

4.2. South Korea's maritime security since the start of the 21st century

The maritime threats closest to South Korea come from North Korea. The most recent prominent examples include the sinking of the South Korean navy corvette *Cheonan* on 26 March 2010, which killed 46 sailors, and the shelling of the South Korean Yeonpyeong Island on 23 November 2010, which killed four South Koreans. The maritime border between the two Koreas has not been settled, and Pyongyang has disputed the Northern Limit Line (NLL), a de facto maritime boundary unilaterally imposed by the UN Command in South Korea after the Korean War.[84] North Korea has vocally challenged the legitimacy of the NLL since the 1970s and declared its own demarcation line in 1999.[85] As part of this challenge, North Korea launched naval skirmishes against South Korea, for example, in June 1999 and June 2002 near Yeonpyeong Island. Although the casualties from these incidents may seem limited, skirmishes between the two Koreas have a potential to escalate to a major conflict. In his memoir, for example, Former U.S. Secretary of Defense Robert Gates recalls that Lee initially wanted to retaliate against North Korea's shelling of Yeonpyeong Island in 2010 in a "disproportionately aggressive" manner.[86]

China and South Korea have a maritime boundary dispute, and illegal fishing by Chinese ships has been a contentious issue, which has resulted in the deaths of Chinese fishermen and South Korean coast guard personnel. Both China and South Korea are parties to the United Nations Convention on the Law of the Sea (UNCLOS) and claim 200 nautical miles (370 km) of Exclusive Economic Zone (EEZ) from their baselines, but their claims overlap because the Yellow Sea is less than 400 nautical miles wide. Whereas Seoul prefers to use the equidistance line as the basis for their maritime boundary, Beijing argues that its longer coastline and larger population should be considered.[87] South Korea and China also have a dispute over Ieodo (known as Suyanjiao in China), a submerged rock that the two countries consider to belong to their own EEZ. Although Ieodo, as an underwater reef, does not have a territorial status in international law and the two governments agree that they do not have a

territorial dispute, this issue has created tensions between the two states, especially after South Korea began constructing the Ieodo Ocean Research Station, which was completed in 2003.[88] Illegal fishing by Chinese ships in the South Korean EEZ complicates the relations further. South Korea's Fisheries Association estimates that the economic loss for the country from Chinese illegal fishing is 1.3 trillion won per year.[89] South Korea's Coast Guard captured 248 Chinese ships in 2016, 160 in 2017, 136 in 2018, and 115 in 2019 for illegal fishing.[90]

South Korea's maritime problems with Japan are political rather than military or economic in their nature. South Korea and Japan both claim Dokdo (known as Takeshima in Japan), small islets in the Sea of Japan or East Sea, as their territory. South Korea has controlled the islets since 1954 and has held military exercises near the islets, but Japan's protests and territorial claims provoke strong reactions from the South Korean public because of the link between Japan's claims and its colonial rule over Korea.[91] Japan's pacifist constitution and South Korea's effective control of the islets means that the territorial dispute is very unlikely to become militarized, but it still has a significant impact on the international relations of East Asia. Recent relations between South Korea and Japan have been considered to be at their lowest point since their diplomatic normalization in 1965, and the territorial dispute will continue to damage their relations as well as the prospect of US-South Korea-Japan trilateral cooperation in security issues.

Maritime security issues farther away from the Korean Peninsula have become increasingly important to Seoul. Within Asian waters, China's maritime territorial disputes are of grave concern to South Korea, although Seoul does not have its own territorial dispute with Beijing. According to a poll conducted by the Pew Research Center in 2013, 83 percent of South Korean respondents said that they were concerned that territorial disputes between China and its neighbours could lead to a military conflict.[92] China has a dispute with Japan over the Senkaku Islands (called Diaoyu in China), and the United States has a defence obligation over the Japanese-administered Senkaku islands in the East China Sea. China also has conflicting claims with the Philippines, Vietnam, Malaysia, Brunei, and Taiwan in the South China Sea, and US Secretary of State Mike Pompeo declared on 1 March 2019 that "any armed attack on Philippine forces, aircraft, or public vessels in the South China Sea will trigger mutual defence obligations under Article 4 of…[the US-Philippine]… Mutual Defense Treaty".[93] A military conflict in the East China Sea or the South China Sea can create a large disruption for the global economy, and South Korea's mutual defence treaty

with the United States and export dependence on China – 25.1 percent of total export in 2019 – make the maintenance of peace particularly important for Seoul.[94]

Finally, reflecting its increased maritime capacity, South Korea has been contributing to maritime security outside Asia as well. The most notable is the activity of the Cheonghae Unit off the coast of Somalia since 2009. Under the framework of the multinational counter-piracy task force CTF-151, the Cheonghae Unit has protected domestic and foreign vessels and contributed to a decrease in piracy operations. Moreover, the unit contributed to the evacuation of South Korean nationals and foreigners from Libya in March 2011 and August 2014, and from Yemen in April 2015. The unit's activity has expanded over time, and it has, for example, dispatched a destroyer to Ghana in West Africa in response to the kidnapping of three South Korean nationals by pirates.[95] Most recently, South Korea in early 2020 decided to send the naval destroyer from the unit, with a crew of 300, to the Strait of Hormuz in response to US requests. To make this naval deployment less provocative to Iran, however, South Korea decided to keep this mission independent from the US-led coalition in the waters to protect ships – and to pressure Iran – there.[96]

4.3. The Moon administration and maritime security

Overall, there is a significant continuity between the maritime security policy of previous administrations and that of the Moon administration. Geography and an export-focused economy require South Korea to pay close attention to maritime security issues, and the steady increase in South Korea's maritime capacity has led to a growing role for Seoul in this field, as discussed earlier. Furthermore, as in many other policy fields, South Korea's maritime security policy can be characterized as that of a middle power. As China's power rises, and as US-South Korea relations occasionally experience frictions, behavioural approaches usually associated with middle powers also became important for successfully navigating Asian maritime politics.[97] To avoid alienating Beijing or Washington, it is important for Seoul to develop multilateral and institutional frameworks for managing maritime security.[98]

Somewhat similar to the Park administration's position toward the Obama administration's rebalance to the Asia-Pacific, the Moon administration's attitude toward the Trump administration's Indo-Pacific strategy is ambiguous because Seoul does not wish to upset Washington or Beijing. Maritime security is high on the agenda of the regional international

relations because the Indo-Pacific is predominantly in the maritime sphere and also because China has multiple maritime disputes in the region. The Free and Open Indo-Pacific concept is seen as a US effort to contain China, and countries such as South Korea and the members of ASEAN have been more careful with the concept than Japan and Australia.[99] Moon has remarked that the "New Southern Policy, and the U.S. Indo-Pacific strategy can find common ground" in June 2019, but South Korea is still far from fully embracing the US strategy.[100] Aligning itself with Washington or Beijing inevitably creates problems with the other power, but neutrality or distancing from them can lead to punishment by both. Seoul, therefore, has a strong interest in the establishment of a multilateral international cooperation framework where South Korea – along with other middle powers and smaller states – can mitigate the negative consequences of Sino-American competition.

The most important difference between the Moon administration's maritime security policy and those of the previous administrations concerns inter-Korean relations. Reflecting the improved inter-Korean relations after three summits between Moon and Kim Jong-un in 2018, South Korea's 2018 Defense White Paper, the first one under Moon, refrained from referring to North Korea as an enemy.[101] As an annex to the Pyongyang Joint Declaration of September 2018, the two Korean governments signed the Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain. In it, "South and North Korea agreed to completely cease all hostile acts against each other in every domain, including land, air and sea that are the source of military tension and conflict".[102] They "agreed to take military measures to prevent accidental military clashes and ensure safe fishing activities by turning the area around the Northern Limit Line in the West Sea into a maritime peace zone," and the agreement also included the cessation of "all live-fire and maritime manoeuvre exercises within the zone north of Deokjeok-do and south of Cho-do in the West Sea, and within the zone north of Sokcho and south of Tongcheon in the East Sea".[103]

The inter-Korean military cooperation measures are vulnerable to fluctuations in the inter-Korean and US-North Korea relations, but they are still welcome developments. The two Koreas have agreed to similar measures in the past, only to discover their fragility. For instance, in this most recent détente between the two Koreas under Moon, the two sides agreed to restore and implement the "prevention of accidental military clashes in the West Sea" signed during the 2nd Inter-Korean General level Military Talks on 4 June 2004 – that is, during the Roh Moo-hyun administration.[104] The current agreement, however, has already

produced meaningful reductions in military tensions between the two Koreas, and it has led to tangible joint activities. For instance, in November and December 2018 South and North Korea conducted joint surveys of the Han River and Imjin River, which facilitate the prevention of military crashes and pave the way for future inter-Korean cooperation projects.[105]

In conclusion, South Korea's maritime security policy has steadily expanded its geographical scope, and the growing importance of the maritime domain has been acknowledged across administrations. South Korea's maritime security policy, as in many other policy issues, can be characterized by its middle power approach, which emphasizes the importance of multilateral and institutional frameworks. This approach has a geopolitical advantage for Seoul in that it enables South Korea to pursue a positive and proactive stance in the international society against the background of Sino-American competition. As has been the case ever since the nation's division after World War II, however, North Korea will continue to cast a long shadow on the future of South Korea's maritime security policy.

5. TRADE SECURITY: ENSURING ECONOMIC SURVIVAL

South Korea is a trade-dependent economy. Its trade-to-GDP ratio is the second highest among the top 15 world economies, at 83 percent in 2018.[106] South Korea's exports of goods and services-to-GDP ratio is also the second highest among the biggest economies in the world – at 44 percent that same year as mentioned above.[107] Simply put, few major economies are as dependent on trade, and especially exports, as South Korea. For South Korea, trade security, understood as protecting and expanding transnational trade flows, is a matter of economic survival central to its national security.

While there have been repeated calls to reduce South Korea's dependence on trade over the years, the fact remains that South Korea grew out of poverty thanks to exports, and has remained a competitive exporter once it became rich. Consumption has grown dramatically as South Koreans have become richer. Other sectors such as tourism, culture or healthcare provide a growing number of jobs and are ever-larger contributors to GDP growth. But a soon-to-be shrinking population, and the subsequent expected decrease in consumption and the services sector, suggests that trade will continue to be central to South Korea's economic growth for decades to come.[108] This will only exacerbate the need to strengthen trade security.

In line with past South Korean governments, the Moon administration has thus prioritized trade security as an area to focus on. This has come against a backdrop of trade tensions that has disrupted global trade. In 2019, global trade declined for the first time since the Global Financial Crisis. Forecasts suggest that the COVID-19 pandemic will result in a decline in global trade several times bigger than during this crisis.[109] If anything, trade security will become an even more important issue for the Moon administration during its last year and a half in power.

5.1 Background

In recent years, the multilateral trade regime has been suffering. Donald Trump came to power in 2017 with an 'America First' approach to global trade. In his view, the United States was not benefiting from the global trade system as much as it should. In particular, Trump set his sights on China. There has been an ongoing and unresolved trade war between Washington and Beijing that has had very negative effects on global trade – leading to the 2019 decline. But the Trump administration is also involved in trade spats with allies including Canada, the EU and Japan, as well as South Korea.[110] Regardless of who wins the upcoming US presidential election, trade tensions between the United States and China are unlikely to simply go away. And even trade relations between Washington and other countries are unlikely to go back to 'normal' quickly.

One of the biggest casualties of Trump's views about trade has been the World Trade Organization (WTO). The WTO had already proved unable to drive trade multilateralism since the early 2000s. But its dispute-settlement mechanism was working well. Even trade superpowers China, the EU and the United States respected its decisions. However, the Trump administration has refused to appoint new members to its Appellate body. As a result, this body became de facto defunct in December 2019.[111] South Korea has joined China and the EU in setting up an interim appellate body. But the United States, and Japan, are not part of it.[112] Therefore, dispute settlement is (temporarily) gone. It may be restored if Joe Biden wins the upcoming US election. But there is no guarantee that a future US president would not revert to Trump's approach to the WTO.

The COVID-19 pandemic is a further blow to global trade. Even when the post-pandemic recovery in trade begins, it will come against the backdrop of growing calls to increase onshore production and move manufacturing away from China – South Korea's largest trading partner.[113] The expectation from the WTO is that global trade will not reach pre-pandemic trends until 2021 or, possibly, 2022.[114] This is yet another blow to global trade, especially if Trump remains in power post-November election.

Closer to home, South Korea has been suffering from China's economic slowdown and a trade dispute with Japan. Chinese economic growth has been gradually slowing down in recent years,[115] as is normal for more mature economies. This will continue to have a knock-on effect on South Korea. Exports to China declined by 15.9 percent in 2019.[116] Meanwhile, in August 2019 Tokyo withdrew South Korea from its whitelist of most-favoured trade partners. This followed from a ruling by the Supreme Court of South Korea that ten World War II forced labour victims could claim compensation from Japanese firms. Seoul reciprocated Tokyo's decision shortly afterwards, removing Japan from its own whitelist.[117] South Korean exports to Japan went down by 6.9 percent in 2019.[118] It was projected to grow before the trade dispute. Even if the trade dispute is solved, it has already impacted South Korea's trade trend with its neighbour.

5.2. Trade security in post-democratisation South Korea

The Moon administration's approach to trade security is not new, even if the background is different considering that trade multilateralism is at its lowest point since the launch of the WTO in 1995. Liberal and conservative politicians, policy-makers and bureaucrats, and large conglomerates are all supportive of free trade. South Korean trade unions, moreover, are not opposed to free trade in the way that unions elsewhere are.[119] This consensus is logical considering the trade-dependent and export-oriented nature of the South Korean economy. The earliest indication of this consensus following South Korea's transition to democracy and the end of the Cold War was that Seoul was a founding member of the WTO.[120]

South Korea's trade security strategy focusing on support for multilateralism but, crucially, involving a push for bilateral and regional trade agreements that can be traced back to

two events: the Asian Financial Crisis (AFC) and the failure of the Doha Round of trade negotiations. The AFC showed South Korean elites how vulnerable the country was to external economic shocks. One of the results was a retreat from financial liberalisation, which Seoul had pursued aggressively in the early 1990s.[121] But one of the other results was that Seoul took a strategic approach to trade. Thus, the Ministry of Foreign Affairs (MOFA) received competences over trade, becoming MOFAT. MOFAT was in place between 1998 and 2013,[122] which allowed to closely align trade with South Korea's overall foreign policy.

The Doha Round of trade negotiations was launched in 2001 with the aim of lowering barriers to global trade in areas such as services, agriculture, rules of origin, or dispute settlement. It quickly became clear that negotiations were not moving forward. They eventually stalled in 2008.[123] Indeed, the United States and the EU shifted their focus towards bilateral and regional FTAs to a large extent because of slow progress with the Doha Round.[124] This signalled to South Korea that it should do the same, since both of them had been strong proponents of WTO negotiations.

Another factor behind South Korea's move towards bilateralism and regionalism was the fear of being 'sandwiched' between low-cost China and high-tech Japan. This has been a long-standing concern among South Korean elites. But it became more real when China started to negotiate admission to the WTO in the 1990s, which it joined in 2001.[125] Today, South Korea competes at the frontier technology, including with Japan, but the fear remains.

South Korea launched FTA negotiations with Chile in 1999. It was an eye-opener. What were supposed to be short and easy negotiations with a complementary economy dragged on for four years. The bilateral FTA was only singed in 2003, entering into force one year later.[126] As of August 2020, South Korea has 15 FTAs in effect.[127] This includes the 'big three': China, the EU and the United States. South Korean FTA negotiators have become known for their tough approach to negotiations.[128] With trade security at stake, Seoul has not hesitated to try to drive a hard bargain while also seeking to clinch the deals it needs.

Table 2: List of South Korean FTAs

Date (in effect)	Country/bloc
April 2004	Chile
March 2006	Singapore
September 2006	EFTA
June 2007	ASEAN
January 2010	India
July 2011	European Union
August 2011	Peru
March 2012	United States
May 2013	Turkey
December 2014	Australia
January 2015	Canada
July 2015	Colombia
December 2015	China
December 2015	New Zealand
December 2015	Vietnam

Source: MOTIE

The focus on bilateralism and regionalism, as well as the aggressive approach towards FTA negotiations, were enshrined in the FTA Roadmap published by the Roh administration in September 2003. The roadmap established both economic and political factors as valid reasons to pursue FTAs. This approach has remained remarkably stable all the way to the Moon administration. Even when the authority over trade negotiations moved to the Ministry of Trade, Industry and Energy (MOTIE) in 2013, the approach did not change.

5.3. The Moon administration and trade security

The Moon administration has followed a four-pronged strategy to strengthen South Korea's trade security. Seoul has focused on mitigating the effects of slowing – and even declining – global trade due to US-led trade frictions and the weakening of multilateralism. South

Korea has also prioritized addressing the decline in exports to China and Japan through diversification in trade relations.

The first strategy has been to placate the Trump administration by renegotiating the bilateral South Korea-US trade agreement (KORUS). South Korea was the first country to renegotiate its FTA with the United States following from Trump's election. In April 2017, Trump threatened to terminate KORUS unless it was renegotiated.[129] Renegotiation was wrapped up in March 2018, and the revised agreement was signed in September of that year. The National Assembly ratified the deal two months later, in December.[130] The changes to the deal were essentially tweaks. The most notable changes give US producers of cars and medicines easier access to the South Korean market, while imposing 'voluntary' export restraints on South Korean steel exports.[131] Thanks to the renegotiated agreement, Trump is not threatening to terminate the agreement with Seoul anymore.

The second strategy has been to launch or continue negotiation of bilateral and regional free trade agreements (FTAs). These agreements would reduce tariff and non-tariff barriers for South Korean exporters. The Moon administration has followed from where the Lee and Park administrations left and supported East Asian regionalism through Regional Comprehensive Economic Partnership (RCEP) negotiations. RCEP involves South Korea along with ASEAN, Australia, China, India, Japan and New Zealand.[132] Negotiations were launched in 2011, and moved slowly for years. But they accelerated in response to Trump-led trade tensions. The expectation is that the deal will be signed by the end of 2020, perhaps without India after it left negotiations in November 2019.[133] RCEP is expected to accelerate East Asian trade integration.

Also with regards to regionalism, the Moon administration has debated whether to join Asia-Pacific trade integration by joining the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).[134] Signed in March 2018 and in effect since December of that year, CPTPP replaced TPP after Trump withdrew the United States from it. There have been domestic discussions in South Korea on whether to join since the Barack Obama administration pulled its weight behind TPP negotiations in 2008. But Seoul has bilateral trade deals with all TPP/CPTPP members except Japan and Mexico.[135] Thus, South Korean policy-makers decided against joining the deal. Particularly since TPP/CPTPP could widen South Korea's bilateral trade deficit with Japan. The Moon administration has followed the same logic.

The Moon administration has also launched several bilateral FTA negotiations with countries and regions located away from South Korea's immediate neighbourhood. This includes an FTA with Central America, in force since November 2019; negotiations with Mercosur since May 2018; and a continuation agreement with the United Kingdom signed in August 2019 that will enter into force following Brexit.[136] The Moon administration has taken a tough stance in these negotiations, aware that it has the upper hand. Most notably, the United Kingdom has had to make concessions to clinch the deal compared to the provisions included in the EU-South Korea FTA of which London was part.[137]

The third strategy has involved the prioritisation of two geographically proximate regions with which there is potential to boost trade: Southeast Asia plus India and Russia plus Central Asia. The New Southern Policy aims, among others at strengthening economic links with ASEAN and India.[138] South Korean firms want to benefit from the growing middle class in the region. They also want to diversify their production base away from China. In 2019, the Moon administration launched negotiations with Malaysia and the Philippines, and also concluded a feasibility study with Cambodia.[139] The focus on the region is not new. South Korea already has an FTA with ASEAN and deeper agreements with Singapore and Vietnam. Seoul also has a partnership agreement with India, albeit very shallow.[140] The Moon administration has repackaged South Korea's interest in the region to make clear that it is central to the future of the country's trade security.

In the case of Russia and Central Asia, the Moon administration's interest relates both to the potential to boost trade with the region and to the goal of eventually integrating North Korea into Eurasian economic flows. The Northern Economic Cooperation would link South Korea with Russia and Central Asia trough North Korea.[141] In June 2019, Seoul and Moscow launched FTA negotiations.[142] The Moon administration has also continued negotiations with the Eurasian Economic Union launched only a few weeks before Moon's election.[143] Kazakhstan is the main target, since Seoul has separate negotiations with Russia. Diversification of oil and gas supplies is as much of a goal as boosting exports to the region, since South Korea is highly dependent on imports from the Persian Gulf.[144]

The fourth strategy by the Moon administration has focused on supporting efforts to salvage trade multilateralism. This has involved continuing to use the WTO's dispute-settlement mechanism for as long as possible.[145] It has also involved support for the alternative interim appellate body first promoted by the EU. More generally, the Moon administration has

expressed its support for trade multilateralism in public.[146] In other words, Seoul believes that multilateralism continues to be necessary to underpin its trade security.

If anything, the current era of trade tensions and protectionism has led the Moon administration, and South Korea more generally, to double down on bilateralism and regionalism as a necessary supplement to (stalling) multilateralism to guarantee trade security. From Seoul's perspective, economic survival runs through trade. This view is very likely to survive the Moon administration. It has underpinned Seoul's trade policy for decades, since the 1990s all the way to 2020.

6. CONCLUSIONS

This report sets out to analyse South Korea's positioning in non-traditional security. Since the end of the Cold War, non-traditional threats have become more central to the national security of countries everywhere across the world. South Korea is no exception. However, most existing analyses of South Korea's security tend to focus on traditional issues and great power politics, most notably North Korea's military capabilities or Sino-American rivalry and the threat that each of them poses to South Korea. This report helps to address this imbalance in our understanding of threats to South Korean national security. The report analyses non-traditional security by focusing on four key domains: cyber, energy, maritime and trade.

There are three key findings coming out of this report. Firstly, South Korea's level of attention towards non-traditional security has increased dramatically with the current and two previous administrations. Certainly, trade security has been a concern for South Korea for even longer. But in the cyber, energy and maritime domains, South Korean governments before the Lee administration came to power paid limited attention to them. Having said that, South Korea has sought to quickly build up its capabilities to address these security threats – as has been the case with regards to trade dating back to the late 1990s. As of 2020, South Korea is investing more heavily in beefing up its domestic capabilities to address non-traditional security threats.

Secondly, there is a high degree of continuity and incrementalism across administrations. For the most part, non-traditional security threats are not politicized in South Korea. There has been a consensus in the need to address them among the current and previous two administrations, in spite of their ideological differences. And it should also be noted that there are no substantial gains from politicizing the government's cyber, energy, maritime or trade security policies. Continuity and incrementalism, therefore, define South Korea's approach to non-traditional security. In the long run, this should be beneficial insofar it will prevent policy swings that would undermine the development of a coherent long-term strategy.

Thirdly, South Korea cannot escape geography when it comes to non-traditional security threats. North Korea is the main cyber threat to South Korea. China also is a cyber threat, and poses a risk to South Korea in the maritime and trade domains. When it comes to energy, inter-Korean tensions prevent South Korea from getting easy access to a potential solution in the form of easier access to Russian oil and gas. And Japan presents challenges for South Korea in the maritime and trade areas. Perhaps it is unsurprising that geography matters also when it comes to non-traditional security domains. Nevertheless, it is a reminder that South Korea's geographical location determines the types of security threats and the types of issues that Seoul needs to prioritize.

The Moon administration's approach to non-traditional security therefore addresses long-standing threats that South Korea will continue to face in years to come. His policies can help to manage these threats and to mitigate their worst effects. But these issues are not going to be solved in the near term. In any case, building on the policies and strategies of previous administrations, Moon is helping to strengthen South Korea's national security and laying the groundwork for future administrations to continue to do the same. By pursuing a long-term approach that commands the support of both liberals and conservatives, Seoul can build the country's resilience and ensure that non-traditional security threats do not undermine South Korean democracy, prosperity and autonomy.

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BEYOND TRADITIONAL SECURITY

SOUTH KOREA'S POSITIONING TOWARDS THE CYBER, ENERGY, MARITIME AND TRADE SECURITY DOMAINS

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