Energy Transition and Coal Phaseout:

Subnational Cooperation and Progress in Asia-Pacific

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More than 50 government energy and environment supervisors, green finance experts, and civil society members from the Asia-Pacific region convened in Buyeo, South Chungcheong Province, South Korea, September 4-5, 2019, for the "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out." The event was co-hosted by Solutions for Our Climate and the Stanley Center for Peace and Security.

Against a backdrop of calls for coal phaseout and stronger climate action from the United Nations,[1] over the course of two days and seven sessions, participants discussed the drivers of energy transition, coal-to-clean transition policies of national and subnational governments in East Asia and around the world, investments for clean energy, and platforms for future collaboration between governments. The key points of the roundtable discourse:

- **The push by subnational governments for coal phaseout is rooted mostly in addressing air pollution and local opposition to coal power projects.** Appetite for energy transition at the subnational level can be attributed to the acute perception of community concerns with conventional power sources, largely air pollution, in addition to concerns about energy independence.
- **There are often wide gaps between national and subnational ambition to shift to clean energy, which can restrain efforts by substate actors.** Participants revealed that subnational government ambitions for energy transition and phasing out coal power frequently differ from—and often exceed—those of their national governments. This gap can lead to conflicts in energy planning and a lack of resources dedicated to energy transition.
- **Despite such challenges, subnational governments are creatively using their authority to usher in energy transition.** Such solutions include strengthening emissions standards with local ordinances and using their authority to reject coal power projects and permit renewable power development. Some subnational governments are investing in energy efficiency initiatives (e.g., LED streetlight conversion) to reduce the demand for baseload power.
- **Grid infrastructure and storage remain significant technical obstacles for energy transition.** Many participants mentioned that current grid infrastructure and storage technology are inadequate to handle the cost-effective integration of renewables. Complicating this issue is that most grid discussions are held at the national level with limited input from subnational governments.
- **Subnational governments are interested in international financing for renewables projects and capacity building, but investors also need some support processes in place from subnational governments to make these investments.** Many subnational government participants noted that they would like to find international opportunities for project financing and capacity building to more effectively handle the development of renewables in their communities. Meanwhile, investors noted that there need to be basic processes at the subnational level in place to properly scope investment opportunities.
- **To accelerate coal phaseout, governments and civil society need to examine ways to facilitate a just transition.** Phasing out coal power requires governments and civil society to examine ways to look at financial tools such as securitization and retraining programs to secure the livelihoods of workers and communities that have depended on coal power facilities.
- **There are opportunities to increase regional consensus and accelerate energy transition through cross-border collaboration.** Local government representatives expressed their desire for international collaboration to demonstrate larger regional consensus in the Asia-Pacific region with regard to energy transition and to facilitate knowledge and technology transfer.

I. Introduction

While the European Union (EU) and the United States have been retiring their coal power fleets, the Asia-Pacific region has close to 80 percent of the world's new coal power in the pipeline,[2] which, if made operational, would derail efforts to limit global average temperature rise to 1.5°C.[3] Unwittingly, the "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out" was held on the same day the United Nations announced that Asia's growing coal use would negate climate action progress.[4]

Despite the relative lack of national leadership on climate action in the Asia-Pacific region, subnational governments have demonstrated their own ambition for coal phaseout and energy transition. For example, South Chungcheong Province, which has half of South Korea's coal power fleet, became the first Asian jurisdiction to join the Powering Past Coal Alliance, a group of over 90 national and subnational governments and organizations around the world that have agreed to phase out existing coal power and finance. Subsequent to the roundtable, it became the first jurisdiction in East Asia to declare a climate emergency and commit to net-zero emissions by 2050.[5]

The "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out" was designed to facilitate frank discussion on the opportunities and challenges facing subnational governments with regard to energy transition and to identify how civil society, investors, and the larger international community can assist their efforts.

This report summarizes the roundtable discourse and synthesizes the potential solutions to common challenges facing subnational governments. The report is organized along the major themes and key points emphasized by participants. While publicly known policies of certain subnational and national governments are mentioned, comments are not attributed to particular participants.

Recommendations included in the report summarize the primary findings of the workshop as interpreted by the organizers. It should not be assumed that every participant subscribes to all of its recommendations, observations, and conclusions.

II. Drivers of Energy Transition: Climate Change, Costs, Air Pollution, Public Opposition, and Energy Independence

The roundtable began with broad discussions on the drivers of energy transition and coal phaseout. Participants from civil society organizations working on climate-change-related issues provided some context on the necessity of energy transition at the substate level:

- **Energy transition and coal phaseout globally are needed to limit the increase in global temperatures to 1.5°C.** To limit temperature increases to 1.5°C above preindustrial levels, a scenario that has garnered international consensus, phaseout of coal power by countries of the Organisation for Economic Co-operation and Development is needed by 2030 and globally by 2050.[6] The current state of coal power and emissions in East Asia, however, is not in alignment with this pathway. Coal power is still rapidly expanding in countries with rising power demand, with South and Southeast Asia accounting for 30 percent of global coal power expansion.[7] Southeast Asia is one of the most vulnerable regions to the effects of climate change, including heat waves, extreme weather events, high risk for crop yield reduction, and other economic damages. Unfortunately, many national governments in the Asia-Pacific region are not taking enough climate and energy action to assure a 1.5°C scenario and avoid these impacts.

Subnational government participants acknowledged the seriousness of climate change but also illuminated that local governments are often more motivated to accelerate energy transition because of other factors:

- **Air pollution from coal power plants is perhaps the biggest driver of energy transition at the subnational level in the Asia-Pacific region.** One subnational government participant stated: "We worry about air pollution and emissions…we care about the environment and the people." Various participants mentioned worsening air quality and particulate matter threatening the lives of their jurisdiction's residents. The World Health Organization's designation of particulate matter as carcinogenic has also been reported to have elevated local government and public concerns about coal power. The reduction of coal power has substantially alleviated air pollution issues for some local governments.

- **Strong resident opposition to operating and proposed coal power projects is another major driver of energy transition.** Various subnational government participants mentioned that residents have protested for better air quality and the reduction of coal power generation. Representatives from subnational governments that have organized consultation workshops on coal power proposals shared that many residents express opposition to such projects. In some cases, strong community opposition has been enough to cancel proposed coal power projects or plans to extend the lifetimes of operating coal power plants.

- **Energy independence is also a concern and driver for energy transition at the subnational level.** A few participants also mentioned the need for an independent and resilient energy source. As one delegate stated, "We do not want to import coal power, [and] domestic coal is limited and does not meet technology requirements." There is some subnational level ambition to use domestically available

> "We worry about air pollution and emissions, so we propose no coal because we care about the environment and the people."

resources, such as agricultural residue, and to take advantage of abundant solar and wind potential.

Civil society experts also pointed out that with the declining cost of renewables, coal power facilities are at risk of becoming stranded assets—that is, not able to deliver a return. They predict that cost improvements to renewables, storage, energy efficiency, and grid technology infrastructure will disrupt the use of coal and gas for electricity and render these fossil-fuel-based generation facilities obsolete.

III. National and Subnational Ambition and Authority over Energy Transition

Many of the Asia-Pacific government participants at the roundtable emphasized that ambition for energy transition at the national and subnational levels differs from—and sometimes exceeds—that of their national counterparts. This divergence poses a challenge for subnational governments, as they may have limited authority or input over centrally planned energy generation and distribution infrastructure, therefore delaying coal phase-out and integration of renewables. But some subnational governments, armed with local support, have successfully countered or influenced central plans.

> "In order to reduce dependence on coal power and to assure alignment with the Paris Agreement, our province has its own aspirations."

- **There are differences in ambition between subnational and national level governments for coal phaseout and expansion of renewables.** As an example, South Chungcheong Province, along with other regions in South Korea, demanded aging coal power plant units in its jurisdiction be shut down two years earlier than closure dates in the central government's plans. Divergence in ambition also differs with regard to renewables expansion. As an example, Kumamoto Prefecture set its 2030 renewables target as a share of electricity generation at 30 percent, exceeding the national Japanese target of 24 percent.[8] One provincial government representative stated, "In order to…assure alignment with the Paris Agreement, our province has its own aspirations."

- **Some subnational governments have limited authority to determine their electricity generation sources, grid infrastructure, and land use.** In some contexts, local governments merely implement centrally determined policies, making it difficult for subnational governments to demand the rejection or shutdown of a coal power plant. In addition, the grid is fully centralized in countries such as South Korea and Indonesia. As one participant stated, national laws take precedence over subnational wants even if those wants reflect a national (public) desire.

- **Divergence in energy transition ambition at the subnational and national levels can affect the pace of subnational energy transition.** In the case of South Australia State in the early 2000s, state and national leadership were aligned on renewables expansion commitment—leading to both strong policy and financial support for renewable development. For many subnational governments, however, it is difficult to achieve this alignment. Often, local governments receive limited national funding for renewable projects, which affects their ability to accelerate energy transition.

- **Subnational governments are making demands of their central governments on what have traditionally been nationally determined energy plans and policies.** South Chungcheong Province has recently made demands for earlier shutdown of coal plants, marking a bold intervention in national-level power planning. Similarly, Long An Province in Vietnam recently rejected a centrally planned coal power plant and instead proposed a natural gas plant in its place. Civil society experts at the roundtable actively encouraged subnational governments to make these interventions, especially as financial institutions often justify their investments in coal power projects with the lack of visible opposition at the local level.

- **Civil society experts strongly encourage involvement of subnational governments in national-level grid discussions.** In addition to getting involved in central discussions on sources of electricity generation, civil society experts emphasized that subnational governments' involvement in grid planning is equally—if not more—important in order to facilitate renewables development. Failure to do so could significantly affect the competitiveness of conventional coal power and renewables. A central government may want to develop new coal power facilities, but subnational governments should investigate whether the distribution planners have enough budget or willingness to provide offtake from new facilities.

- **Land planning conflicts can occur between national agencies, and it is important that subnational governments also partake in and represent their perspective in these discussions.** In several national contexts in East Asia, using agricultural land for renewable installations can be a contentious issue encroaching on the territory of various ministries (e.g., environment, energy, and agriculture). While these may be national-level discussions, subnational governments can also assist by developing local agro-solar models and vocally supporting dual land use to expand available land for the development of renewables.

IV. Levers for Energy Transition at the Subnational Level

Despite differences with their national counterparts in ambition for energy transition, subnational governments across the Asia-Pacific region are employing innovative strategies to accelerate their own energy transition:

- **Rejecting of permits required for coal power facilities.** Some subnational governments are using their licensing authority to reject construction or operation of coal power plants within their boundaries. New Taipei City in Taiwan, for example, said it would not issue a permit for burning coal to the proposed Shen'ao coal power project.

- **Strengthening of emissions standards.** Other subnational governments have set strict emissions standards for boilers and coal power plants within their region, thus increasing the need for utilities and industry to switch to cleaner fuel sources or add pollution control facilities. This alone can increase the costs associated with coal power and can encourage the early closure of coal power plants.

- **Local caps on coal consumption and storage.** By self-governance law, some subnational governments have the authority to control within their boundaries the quality of coal, the amount of coal consumption, and the area where coal is stored for power plants. Through such caps, the Taichung city government in Taiwan has been able to reduce the coal consumption of the 5,500MW Taichung Power Plant from over 18 million tons per year in 2014 to 16 million tons per year in 2019 and is set to limit consumption to 11 million tons per year by 2020. This removal of 7 million tons per year of coal is considered a huge step to improving local air quality.[9]

- **Offices or task forces dedicated to coal phaseout.** South Chungcheong Province in South Korea has a department dedicated to accelerating coal phaseout and issues related to coal power. This has helped to assess community concerns, develop research projects on early coal power shutdown and impacts, and, subsequently, make demands to the central government for early coal power retirement.

- **Joint press conferences and seminars with communities affected by coal power.** Several subnational governments mentioned holding press conferences with residents in response to central energy plans for coal power facilities in their local

> "[Our subnational government] will push against the central government—we do have licensing rights for coal power plants. With that permitting authority, we can devise many measures for coal phaseout."

community. By helping to amplify the voices of residents, subnational governments have been able to successfully cancel proposed coal power projects.

- **Industrial renewable energy purchase requirements.** Taiwan's Renewable Energy Development Act has a clause that requires major consumers of electricity, which are often industrial, to power their businesses with a percentage of renewable energy.[10] Taoyuan City has decided to lower its threshold as to what constitutes a major electricity consumer, thereby increasing the number of businesses that must purchase or generate renewable energy.

- **Dedicated offices for renewable energy development.** Taoyuan city government established a Green Energy Promotion Office—a "one-stop shop" for renewable projects that assist businesses with siting and promoting energy policy. The office acts as a single contact for the public and private sectors for developing renewable projects.

- **Leasing of public space for renewables development.** New Taipei City, for example, leases the rooftops of schools, district offices, and other public buildings to solar photovoltaic firms, giving renewable companies additional sites to install their projects while also creating new sources of city revenue.

- **Reducing baseload energy demand via energy efficiency initiatives.** To reduce its reliance on and consumption of baseload coal power, New Taipei City converted 220,000 streetlights to LED using tender-based auctioning, which reduced the city's electricity costs, shortened streetlight repair time, and reduced their failure rate—all without spending city resources.[11] The city also aims to replace all school lights with LED, using private sector support. And the city is pushing rooftop farm projects with public participation for designs to reduce the temperature of buildings and thus electricity consumption.

- **Incentivizing divestment from coal power by adding new government depository criteria.** South Chungcheong Province added new criteria for selecting its depository bank. As there is high competition between banks to become depositories for large amounts of government funds, awarding extra points to banks with less investment in coal power could spur divestment.

> "[As] local government, we do have the power to create our own self-disciplinary principles and regulations."

V. Financing an Energy Transition

In order to facilitate a quicker energy transition in the Asia-Pacific region, investments must also shift away from coal power toward renewables development. While China is the biggest global investor in renewable energy,[12] public financial institutions from China, Japan, and South Korea also remain among the world's top investors in coal power projects,[13] many of which are developed in Vietnam, Bangladesh, and Indonesia. This section examines some of the points addressed during the roundtable with regard to energy transition financing and what subnational governments can do to attract more renewable investments.

Away from Coal

- **Because of the falling cost of renewables, coal power facilities are becoming stranded assets in many parts of Asia—increasing financial risk to developers, investors, and shareholders.** A civil society expert remarked that more than a quarter of China's coal fleet will be stranded by 2024. Concerns about sponsors' ability to recover investments on coal power facilities have led to the cancellation of proposed projects.

- **With greater public concern about its role in exacerbating climate change and air pollution, coal power is increasingly becoming a reputational and litigation risk for banks.** This concern is also playing a role in decisions by global banks (e.g., ING and UBS) to reduce their financing of coal power utilities.
- **Despite these risks, Asian public institutions are continuing to finance coal power projects.** Export credit agencies and development banks from East Asia, such as the Japan Bank for International Cooperation, the Export-Import Bank of China, and the Korea Development Bank are among the top financiers of coal power today.
- **Civil society encourages subnational governments to publicly express their opposition to coal power projects in order to dissuade their continued financing and development.** Asian public financial institutions often argue that the coal power projects they finance have local support—thus it is important for local governments to actively voice their opposition to remove this social license.

Toward Clean Energy

- **Subnational governments identified storage, grid infrastructure, capacity building for renewables development across industry and government, and energy efficiency as areas requiring investment.** Among these, storage and grid infrastructure were perhaps most frequently mentioned by subnational government participants as areas in need of investment. South Australia State is an example of a jurisdiction with increasing investment in storage technology.
- **There is high interest from subnational governments in Southeast Asia to learn about how to access Green Climate Fund (GCF) resources.** The GCF is seen as an attractive partner for clean energy investment because of its concessional funding and grants, which can go toward technical assistance and readiness programs. Given the high interest, the GCF and project development facilities may need to engage more at the subnational level.
- **A wide range of international investment vehicles is available to fund clean energy transitions in the Southeast and East Asian regions.** These include Climate Action 100, the Southeast Asia Clean Energy Facility, Southeast Asia Energy Transition Partnership, Seed Capital Assistance Facility, and Climate Bonds Initiative.
- **Practical ways subnational governments can attract more private investment into renewables include (1) development of a two-page capacity report, that is, an overview of what projects are feasible in their locality** (e.g., a map of potential sites or areas of high opposition), (2) inviting investors for field visits, and (3) publication of success stories of clean energy development to instill confidence in policymakers and investors.
- **Civil society experts and investors strongly urged subnational governments to develop green bonds and green investment vehicles to provide developers with clean energy loans and grants.** This point was strongly made by multiple participants and was identified as a potential point of collaboration between the GCF and subnational governments. The GCF could support readiness programs for subnational governments' green bond programs.
- **Investors and civil society experts also encouraged clear and consistent policies to attract renewables investments.** Frequent policy changes make investment decisions on infrastructure with 20-to-30-year life spans difficult. However, participants from subnational governments mentioned that policy consistency is difficult with changes in administrations and ruling party changes.

> "We need support from the financial sector [for] renewables. Shifting the [support] ensures the planning and project become reality."

> "The concern is how to upgrade storage to make renewables more scalable."

VI. Planning Coal Phaseout and a Just Transition

Perhaps the most challenging question facing subnational governments and civil society is: How do we plan a just energy transition? That is, how do we take care of the utility owners, plant workers, local residents, and businesses impacted by the shift from coal power to renewables? Participants shared various concerns and current solutions being implemented in countries undergoing coal phaseout:

- **Subnational governments planning early retirement of operating coal power are concerned with how local communities will be affected by plant closures and how to minimize such impacts.** One subnational government participant noted, "To actually propose shutdown of [coal power plants], it's not just about the shutdown but the follow-up measures." This participant expressed concern over the impacts of plant closures on workers and the loss of economic benefits for those nearby coal power plants (e.g., income for local businesses, compensation from the utility owner, and tax revenue) and noted that their government plans to commission research on these effects.

- **Securitization is a financial tool that can accelerate plant closure and help maintain the livelihoods of impacted communities.** Utilities often resist early closure of their facilities because they must recoup remaining capital costs they have invested. Securitization—which has thus far mostly been discussed in the United States—allows ratepayers to pay bondholders through a surcharge, which issues bonds at a far lower rate than the utility's interest rate. This refinancing allows for the easier recovery of capital costs for the utility, and the savings can be used to assist communities impacted by the plant closure (e.g., through worker retraining programs).

> "It's not just about the shutdown but the follow-up measures—new types of business and new opportunities. What's next?"

- **To ensure a just transition from coal power, governments must work with local communities to assess impacts and identify new sources of economic development.** In Germany, the government established a coal exit commission, which has discussed the impacts of coal mine and power plant closures site by site. The commission is in the process of identifying specific areas for new economic development in order to sustain the livelihoods of plant workers and local business owners.

- **Coal phaseout efforts will need to be coupled with just transition research.** As various actors grapple with coal phaseout, research on just transition measures will need to grow as well. The Powering Past Coal Alliance, a coalition of national and subnational governments, businesses, and organizations advancing coal-to-clean-energy transition, has a Just Transition Taskforce consisting of academic institutions and nongovernment organizations around the world studying and sharing best practices.

VII. Opportunities for International Collaboration

Participants from subnational governments expressed their interest in developing regional and global partnerships with other substate and national governments, civil society, and investors to accelerate their energy transitions:

- **For some subnational governments, international collaboration is about building consensus.** Several government participants emphasized that they hope to see a regional shift away from coal power in East Asia to make bolder proposals on energy transition, describing this as their primary motivation for participating in such events as the "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out."

- **Possible avenues for global climate action and energy transition coalition for subnational governments include** the Powering Past Coal Alliance (accessible via United Kingdom embassies), the Under2 Coalition, the Global Covenant of Mayors for Climate & Energy, the International Conference for Climate Action (hosted by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety; the State of Baden-Württemberg; and the City of Heidelberg), and the East Asian Climate & Environment Alliance (accessible via South Chungcheong Province).

- **Many subnational governments in the Asia-Pacific region are interested in bilateral initiatives for storage technology transfer to address the variable outputs of renewables.** Enhanced storage technology, as one participant mentioned, is "to ensure that solar power can be cost-effectively integrated into the grid and that the system is stable."

- **Furthermore, subnational governments are seeking to build local capacity around renewables and grid management.** Various subnational government participants expressed a desire to engage in international cooperation projects on building local capacity across government and industry for the design, operations, and management of renewables and the grid. For subnational governments, this may include education on land, power market, and grid policy for their own energy departments.

- **Representatives from the EU and UK encouraged subnational governments to contact their respective embassies about bilateral cooperation opportunities.** The EU and its member countries currently operate various programs to facilitate technical assistance and readiness programs around renewables, such as the International Urban Cooperation European Union – Asia, and the Support for the Implementation of the Paris Agreement (Germany). The UK also provides technical assistance for energy transition through the World Bank's Energy Sector Management Assistance Program as well as bilateral projects via the Powering Past Coal Alliance.

"I realized that in different parts of the world, we have a lot of solutions—but we need to transfer the knowledge around."

VIII. Conclusion: Tasks for Subnational Governments, Civil Society, Investors, and the International Community

Subnational governments in the Asia-Pacific region are in various stages of energy transition and are approaching coal phaseout and renewables development under different national contexts. The unifying factor among local governments present at the roundtable, however, is an ambition for energy transition that exceeds that of their national counterparts. To realize energy transition, that ambition must be coupled with action from not only government but also civil society, investors, and the larger international community.

Subnational Governments

Subnational governments have a range of levers for accelerating energy transition. Currently, subnational governments in the Asia-Pacific region are successfully employing various strategies, including strengthening local emissions standards, establishing dedicated task forces to address coal power and renewables, and launching energy efficiency initiatives to usher in coal phaseout. Nongovernmental participants encouraged local governments to actively speak out against coal power projects, issue green bonds, and engage with private investors, clean energy investment vehicles, embassies for bilateral initiatives, and other subnational governments to coordinate joint action on renewables and grid infrastructure.

Civil Society

Subnational government participants remarked that they need support from civil society to increase the citizen and industry awareness of the negative impacts of climate change

and coal power. Having public support for energy transition is a major driver for government action, and environmental and health organizations can play a key role in this area. Civil society organizations, as demonstrated at the "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out," can also serve as liaisons between governments, investors, and the international community.

Investors

Based on the discussions held, it is clear that there is a significant level of interest in renewables development at the substate level. Many subnational government participants commented that they need investors to make renewables more scalable and cost competitive, and grid infrastructure and storage technology were identified as high-priority investment areas. Outreach by investors at the national and subnational levels will be critical to ushering in energy transition.

International Community

Finally, the international community and stakeholders interested in curbing rising emissions and facilitating energy transition in the Asia-Pacific region should not overlook subnational governments for cooperation opportunities. While traditionally engagement between governments has been nation to nation, city- and provincial-level governments are now using levers to facilitate energy transition plans that surpass the ambition of their national counterparts and are conducting their own foreign affairs, making them key actors to engage to curb climate change.

Local governments can incubate innovative policy ideas that eventually spread across regions and even influence national policy. Examples of this trend for energy transition are emerging in the Asia-Pacific region in the form of rejection of new coal power projects and early retirement of aging coal power plants. The discussions at the "Asia-Pacific Roundtable on Energy Transition & Coal Phase-out" thus illustrate that subnational governments can play a critical role in the larger region's transition away from coal power and that international stakeholders can help to bridge their technology and capacity gaps for an accelerated energy transition.

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Participant List

Organizers

Joojin Kim, Managing Director, Solutions for Our Climate

Rei Tang, Program Officer, Stanley Center for Peace and Security

Rapporteur

Jessica Yun, International Communications Officer, Solutions for Our Climate

Participants

Andrew Affleck, Founder and Managing Partner, Armstrong Asset Management

Melissa Brown, Director, Energy Finance Studies, Asia, Institute for Energy Economics and Financial Analysis

Hui-Lin Chao, Researcher, Air Clean Taiwan

Chung-Yi Chen, Section Chief of Environmental Protection Bureau, Air Quality and Noise Control Section, Taichung City Government, Taiwan

Mo Yeon Cho, Team Leader, Energy Division, South Chungcheong Provincial Government, South Korea

Gunho Choi, Director, Energy Division, South Chungcheong Provincial Government, South Korea

I-Chun Chu, Chief Secretary, Environmental Protection Department, New Taipei City Government, Taiwan

Doyoung Chung, Climate and Environment Policy Division, South Chungcheong Provincial Government, South Korea

Mark Conway, Associate Program Officer, Stanley Center for Peace and Security

Samuel Crafter, Director, Woods Street Partners

Thái Quốc Cuòng, Vice Director, Long An Provincial Industrial Promotion and Development Consultancy

Pablo Gándara, Team Leader IUC Asia, European Union International Urban Cooperation (IUC) Project

Carolina Gómez, Advisor, Environment and Climate Change Division, Ministry of Energy, Government of Chile

Kimiko Hirata, International Director, Kiko Network

Le Van Hoang, Vice Director of Department of Industry and Trade, Province of Bạc Liêu, Vietnam

Duong Van Hoang Hoanh, Vice Director, Long An Provincial Department of Industry and Trade

Manpyo Hong, Director, International Trade Division, South Chungcheong Provincial Government, South Korea

Sunman Hong, Team Leader, Climate and Environment Policy Division, South Chungcheong Provincial Government, South Korea

Sang-Yeong Hwang, Director, Climate and Environment Policy Division, South Chungcheong Provincial Government, South Korea

Hidetoshi Kanaga, Deputy Director, Energy Policy Division, Kumamoto Prefectural Goverment, Japan

Haina Kang, Climate Change and Energy Policy Officer, British Embassy, Seoul, South Korea

Junjie Kang, Senior Analyst, Climate Change and Energy, Natural Resources Defense Council

Katsuya Koseki, Shizuoka Prefecture, Seoul Office

Yu-Hsin Kuo, Director-General, Taoyuan City Government, Taiwan

Ohkeum Lee, Korea Programme Director, European Climate Foundation

Soyoung Lee, Secretary, Air Quality Improvement Committee, National Council on Climate and Air Quality, South Korea

Sunmi Lee, Policy Officer, Political Section, Delegation of the European Union to South Korea

Unwoo Lee, Team Leader, Climate and Environment Policy Division, South Chungcheong Provincial Government, South Korea

Yongho Lee, International Trade Division, South Chungcheong Provincial Government, South Korea

Alvin Lin, Climate and Energy Policy Director, China Program, Natural Resources Defense Council

Yenchi Lin, Officer, Environmental Protection Department, New Taipei City Government, Taiwan

Jhih-Ye Lyu, Section Head, Public Utilities Section, Department of Economic Development, Taoyuan City Government, Taiwan

David Markey, Head of Business Environment and Climate Diplomacy, British Embassy, Seoul, South Korea

You Me, Energy Division, South Chungcheong Provincial Government, South Korea

Steffen Menzel, Team Lead, Sino-German Cooperation on NDC Implementation, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Khanh Nguy, Executive Director, Green Innovation and Development Centre, Vietnam

Jeehye Park, Director, Solutions for Our Climate

Leo Hyung-kun Park, Financial Institutions Senior Specialist—Private Sector Facility, Green Climate Fund

Sunyoung Park, Climate and Environment Policy Division, South Chungcheong Provincial Government, South Korea

Paola Andrea Yanguas Parra, Decarbonisation Strategies Team Lead, Climate Policy Team, Climate Analytics

Keith Porter, President and Chief Executive Officer, Stanley Center for Peace and Security

Athena Ronquillo-Ballesteros, Asia Climate Finance Director, Growald Family Fund

Yonghyun Sung, Assistant Director, International Trade Division, South Chungcheong Provincial Government, South Korea

Rie Tawaramoto, Section Chief, Energy, Land and Water Resources Coordination Division, Nara Prefecture, Japan

Bambang Tirtoyuliono, Head, Department of Energy and Mineral Resources of West Java Province, Indonesia

Thuy Thanh Trúc Trần, Official, Environment Management Office, Ministry of Natural Resources and Environment of Vietnam

Fabby Tumiwa, Executive Director, Institute for Essential Services Reform

Lu Thanh Tung, Vice Director of Department of Nature Resources and Environment, Province of Bạc Liêu, Vietnam

Daniel Wetzel, Division Manager, China Power Reform, Rocky Mountain Institute

Iman Wilman, Assistant, Department of Energy and Mineral Resources of West Java Province, Indonesia

Huang-Sheng Wu, Director General of Information Bureau, Taichung City Government, Taiwan

Sejong Youn, Director, Solutions for Our Climate

Jia-Yin Zhong, Taichung City Government, Taiwan

Pelin Zorlu, Senior Associate, E3G Third Generation Environmentalism

Stanley Center Staff

Cayte Connell, Operations Specialist, Stanley Center for Peace and Security

Affiliations are listed for identification purposes only. Participants attended as individuals rather than as representatives of their governments or organizations.

This report summarizes the primary findings of the roundtable as interpreted by the rapporteur, Jessica Yun, and the organizers, Joojin Kim and Rei Tang. Participants neither reviewed nor approved this publication. Therefore, it should not be assumed that every participant subscribes to all of its recommendations, observations, and conclusions. Sidebar quotes shared in this publication are taken from the roundtable discussion.

Cover photos: Power plant chimneys stand behind a coal-burning neighborhood covered in a thick haze on the outskirts of Ulaanbaatar, Mongolia, January 2017. (REUTERS/B. Rentsendorj) Inset: A worker checks a panel at a high-concentration photovoltaic solar energy power plant in Lujhu Township of Kaohsiung County, southern Taiwan. (REUTERS/Nicky Loh)

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Founded in 2016, Solutions for Our Climate (SFOC) is an independent policy research and advocacy organization based in Seoul working to align Korea and Asia's emissions trajectory with the Paris Agreement's target of 1.5 degrees Celsius. Leveraging its core competencies of research, litigation, and advocacy, SFOC aims to accelerate Asia's coal power phase-out and energy transition toward 100% renewables. To learn more, please visit forourclimate.org.

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3/20