



2024 CLEAN EDGE ASIA CONFERENCE

Energy Transitions and Equitable Development in Southeast Asia

Report by Gillian Zwicker, Tom Lutken, and Chihiro Aita

By midcentury, the growing economies of the Indo-Pacific will account for over half of global energy consumption and will collectively be the largest energy importers in the world. Rising energy demands from these countries coincides with worldwide efforts to reduce carbon emissions, creating a challenging balancing act between security and sustainability across the region. The emerging and developed economies of Southeast Asia represent a variety of energy demands, resources, political and geographic circumstances, and energy transition pathways, making this region a meaningful forum for policy discussions at a pivotal moment in the international shift towards net-zero emissions.

From 2020–2024, NBR's Clean EDGE Asia program has facilitated critical people-to-people connections and policy discussions among high-level stakeholders from government, business, and the research community to inform recommendations for policy action on energy security and access in the Indo-Pacific.

The 2024 Clean EDGE Asia Conference was held in Jakarta, Indonesia, on January 30–31, 2024, and brought together key stakeholders, technical experts, and policymakers from Southeast Asia, the United States, and across the Indo-Pacific to discuss priorities, lessons learned, and challenges faced during their respective energy transitions. Organized in collaboration with NBR's Clean EDGE Asia Resource Center in Jakarta, the Indonesian Institute for Energy Economics, and with support from the U.S. Department of State, the conference achieved the objective of improving collective understanding and producing actionable policy recommendations to support and accelerate Southeast Asia's equitable energy development. Convened in the wake of the 28th meeting of the Conference of the Parties (COP28) in 2023, and on the eve of Indonesia's national election in February 2024, the conference was conducted amid ongoing momentum for international climate action, and at a moment of national progression in Indonesia.

This event summary highlights the key findings from the conference and presents recommendations for policymakers, industry leaders, and other major stakeholders in international climate and energy communities.

KEYNOTE REMARKS

Priorities from Indonesian and U.S. Governments and Business on Energy Transitions

Arifin Tasrif (Minister, Ministry of Energy and Mineral Resources, Republic of Indonesia) opened the conference with keynote remarks on the country's energy transition and the challenges posed by geopolitical tensions, economic development, and dependence on unstable energy supply chains predicted in 2024.

Yet despite headwinds, Minister Tasrif highlighted the growth of renewable energy around the world and the importance of the [COP 28 commitment](#) to transition away from fossil fuels. The minister reiterated the importance of tailoring energy transition strategies to local conditions to ensure an equitable shift to sustainable energy. Indonesia continues to develop domestic natural gas industries as the country looks to replace its large coal fleet with a lower-emission alternative, which will complement an increasing share of renewable energy on the grid. In closing, Minister Tasrif asserted that there can be no energy security without connectivity, and that there can be no energy transition without international cooperation, both within Southeast Asia and with partners like the United States.



Jason Rebholz (Acting Deputy Chief of Mission, U.S. Embassy Jakarta) shared updates and discussed characteristics of the bilateral relationship between the United States and Indonesia relevant to the energy transition. A/DCM Rebholz highlighted the significance of the [Clean EDGE Asia program](#), exemplified by [NBR's fellowship program](#) and this conference, and the recent elevation of the countries' diplomatic relations to a comprehensive strategic partnership. Indonesia has made significant progress and continues pursuing ambitious plans to reduce its emissions to achieve a clean energy future, Mr. Rebholz said. The United States is supporting those plans through the [Indonesia Just Energy Transition Partnership \(I-JETP\)](#)—an international effort that aims to reduce the country's reliance on coal and increase renewable energy capacity—and agreements on developing sustainable mineral supply chains for batteries and other clean energy technologies. The acting DCM reiterated that continuing international partnerships like the one between Indonesia and the United States are key to accelerating Indonesia's energy transition and energy transitions worldwide.



“Let us also be clear: we seek a clean energy future and energy security. We do not think those concepts are mutually exclusive. To the contrary, a clean energy future is the key to energy security.”

Jason Rebholz, Acting Deputy Chief of Mission, U.S. Embassy Jakarta

“In the JETP policy plan, Indonesia set forward ambitious climate targets. These targets include achieving net-zero emissions in the on-grid power sector by 2050. They include reducing CO₂ emissions by 18% and reaching 44% renewables of total energy generation by 2030. I applaud Indonesia for these ambitions. None of these goals are easy. None can be achieved by pursuing business as usual. They require innovation, risk taking, and collaboration.”

Jason Rebolz, Acting Deputy Chief of Mission, U.S. Embassy Jakarta

Kate Rebolz (Chargé d'affaires, U.S. Mission to ASEAN) outlined the United States' broader mission throughout Southeast Asia, emphasizing that the mission's partnership with ASEAN is stable and enduring. As one of the fastest-growing regions in the world, and one of the most vulnerable to climate change, Southeast Asia will face exceptional challenges over the next several decades. The United States is dedicated to supporting regional energy transitions as part of the global effort to mitigate the effects of climate change. The diversity of countries in ASEAN, while presenting challenges, also provides opportunities for strength through regional cooperation. In addition to the JETP program, Ms. Rebolz highlighted initiatives like the [Smart Power Program](#), which will build on previous USAID support for renewable energy in ASEAN; the U.S. ASEAN Climate Solutions Hub, supporting more ambitious nationally determined contributions (NDCs) for Southeast Asian countries' Paris Agreement goals; and the Net Zero World initiative and Japan-U.S.-Mekong Power Partnership.



Hendra Iswahyudi (Director, New, Renewable Energy, and Energy Conservation, Ministry of Energy and Mineral Resources, Republic of Indonesia) spoke about Indonesia's outlook for new and renewable energy. With a current 12.8 gigawatts of renewable energy capacity in the country, by 2060 Indonesia hopes to increase this to 471 gigawatts, including 60 gigawatts of storage. Using all energy types to help reduce emissions, Mr. Iswahyudi also emphasized that Indonesia's challenge to connect its many islands could give the country valuable experience in interconnected energy systems and position the country as an energy trade hub for the wider Southeast Asian region.

Jodi Mahardi (Deputy Coordinating Minister, Coordinating Ministry for Maritime and Investment Affairs, Republic of Indonesia) declared that all scenarios in reaching net-zero emissions will require carbon capture and sequestration (CCS). He also made a timely announcement that Indonesia had just become the first country in Asia to have a complete legal framework for CCS, in addition to its official ambitions to become a regional CCS hub. Both developments will allow it to address emissions from existing infrastructure.



Dadan Kusdiana (Secretary General, Ministry of Energy and Mineral Resources, Republic of Indonesia) graciously concluded the final in-region Clean EDGE Asia Conference. Mr. Kusdiana highlighted the role of international partnerships for Indonesia's energy future, including engaging with the U.S. Department of the Treasury and co-hosting the Asia Zero Emission Community initiative with Japan. He also addressed Indonesia's climate and energy development, commenting on the importance of gender empowerment and "not leaving anyone behind in the energy transition."



KEYNOTE REMARKS

Energy Transition Priorities from the EU, Indonesian Nonprofit Sector, and Private Sector

Eloïse O’Carroll (European Union Delegation to Indonesia) participated in the conference amid ongoing consultations with the JETP Secretariat to discuss financing needs and opportunities in Indonesia.

She stressed the role of the JETP in accelerating emissions-peaking, phasing out coal sources, and adding more renewables to the electricity grid—all “just” ways to ensure that nobody is left behind.



Dino Patti Djalal (Foreign Policy Community of Indonesia) highlighted fear as a tool for climate awareness and action among the Indonesian public in a keynote discussion with moderator **Lydia Ruddy** (AmCham Indonesia). He provided a realist outlook on the slowly shifting political priorities of the Indonesian government on climate change that have been increasingly pushed to the fore by Indonesia’s younger generation. Although Indonesia has installed its 2060 net-zero goals, political enthusiasm for addressing climate change is still lukewarm. In response, Mr. Djalal has workshopped a new term in Indonesian Bahasa to describe climate change: “neraka bocor” or “hell leaking.” Additionally, the Foreign Policy Community of Indonesia and the younger members that drive it have discovered ways to initiate climate conversations using “fear” as a motivator and discussing the graphic state of environmental affairs (e.g., dead corals, deforestation, and air pollution) in a world that has failed to contain global temperature rise within 1.5 degrees Celsius.



Soichiro Shibata (Monitor Deloitte) offered a private sector perspective on Indonesia as it undergoes energy transitions. On the basis of information about foreign companies investing in Indonesia, economic growth appears to have cooled slightly compared to the rapid growth from ten years ago. As Indonesia seeks to complement its large industrial sector by building domestic downstream value across its economy, the question is how to turn a boom in energy transition interest in the country into sustainable growth in the long term. The world needs Indonesia for the energy transition, and Indonesia needs foreign investment to meet its transition needs. How can stakeholders best capitalize on these mutual interests over the coming decades?



PANELS

Southeast Asia in the Energy Transition

Moderated by Clara Gillispie (The National Bureau of Asian Research)

Recent developments in Southeast Asia make the current discussion on energy transitions very timely. Indonesia's 2022 G-20 presidency, Vietnam's publication of its 8th Power Development Plan, ASEAN's growing ambitions to reach net zero [by 2050](#), and commensurate investment from international partners via the United States' JETP program, Japan's Green Transformation Policy, and South Korea's New Southern Policy have all helped build momentum. In the first session of the conference, panelists discussed the state of play of energy transitions and security trends in Southeast Asia at a pivotal moment in energy development.

Southeast Asia and Indonesia are still heavily reliant on fossil fuels today. **Hakimul Batih** (The Organisation for Co-operation and Economic Development) emphasized that Southeast Asia's energy still largely comes from fossil fuels, which [accounted for over 80% of energy supply in 2020](#). Therefore, the transition to renewables offers energy security benefits, in addition to decarbonizing local economies. With half of the region's oil being imported, decreasing dependence on oil will accelerate progress toward decarbonization and energy independence goals. Mr. Batih emphasized the importance of investing in people, arguing that individual decision makers play a bigger role in keeping outdated, carbon-intense energy systems in Indonesia than do the limits on technology. To attract renewable investment while also ensuring equitable transitions, human capital should be front and center in policy design and execution.

For an effective and equitable transition, all countries need improved data collection and sharing. **Siripha Junlakarn** (Energy Research Institute, Chulalongkorn University) discussed her organization's work mapping Thailand's energy trends as the country works toward peak CO₂ emissions by 2025 and carbon neutrality by 2050. Modeling of energy usage and emissions timelines can be a powerful tool for governments in planning an affordable energy transition, but such models are only as reliable as the quality of data input. Dr. Junlakarn said that Thailand's power sector has reliable data, but it must expand the scope to capture information from both the transportation and industrial sectors for a complete picture. Finally, end-use data from the consumer side can help model behaviors and inform better energy efficiency policy.

An ASEAN regional power grid is an achievable goal and would accelerate regional progress toward net zero. **Lixia Yao** (Energy Studies Institute, National University of Singapore) argued that the most actionable step to improving renewable energy usage across ASEAN was to allow power trade between the region's countries. Many have differing and complimentary renewable energy resources, including wind, hydroelectric, and solar PV. Dr. Yao also emphasized the high percentage of coal usage in Southeast Asia and noted that natural gas could play an important transitional role as a baseload fuel to compliment the growing share of renewables, especially since the region still possesses reserves of natural gas. With every ASEAN country working toward lower emissions in the coming years, increasing the small but exigent bilateral energy trade, such as Singapore has with Laos and other neighbors, in the region to encompass more markets could help all countries decarbonize sooner.



Development Financing

Moderated by **Angga Antagia** (US-ASEAN Business Council)

To meet the Paris Agreement goals of net-zero emissions by midcentury, countries in Southeast Asia and across the Indo-Pacific will require significant investments to fund equitable regional energy transitions, with the International Renewable Energy Agency estimating a cumulative \$5 trillion by 2050 needed just for Southeast Asia. While national and multilateral banks will be key facilitators of this funding, significant volumes of private capital must be mobilized to finance the massive infrastructure developments required for new energy systems. The second session of the conference examined the role that multilateral financial institutions can play in accelerating transitions, as well as some of the barriers to investment.

The Asian Development Bank (ADB) is leading a pilot project to finance early retirement of the Cirebon 1 coal-fired power plant in West Java. **Lazeena Rahman** (ADB) outlined the process that the multilateral institution is utilizing to work with Indonesia's state-owned power company, PLN, and Indonesia's national sovereign fund to pay for the early retirement of one of the country's largest coal-fired plants. With an average age of only twelve years, the coal fleet in Indonesia is the largest in the region, and the country must start decommissioning plants earlier than initially planned to meet its NDCs. Though the Cirebon 1 project is only a pilot program, Ms. Rahman emphasized the important lessons that have been learned thus far and the potential to replicate similar coal-retirement investment plans elsewhere. One of the key observations from the Cirebon 1 program has been of the importance of incorporating energy security and grid impact studies, as well as principles of equity and a just transition, when working to retire these large centers of energy and jobs within the economy.

Japan's experience in cooperative financing via the Japan Bank for International Cooperation (JBIC) offers insight into best practices for collaborative funding. **Yoshio Ohkawa** (JBIC) cited the bank's history of working in Indonesia, the recipient of the largest portion of JBIC financing in Asia and soon to be the largest recipient in the world. In addition to the use of natural gas as a bridge fuel, Mr. Ohkawa noted the importance that JBIC sees for developing value chains for hydrogen and ammonia as part of the carbon-neutrality pathway. This is especially the case for Indonesia, which has significant experience with traditional fossil fuels and is looking to retain key parts of the clean energy value chain during the transition.



Pathways to Net Zero: The Role of Fossil Fuels in the Indo-Pacific

Moderated by Eniya Listiani Dewi (National Research and Innovation Agency, Republic of Indonesia)

The release of greenhouse gases from the burning of fossil fuels is the primary driver of climate change, making fossil fuel phasedown imperative as countries seek to decarbonize their economies. However, existing infrastructure, economic dependencies, and energy resource insecurity prompted by tumultuous geopolitical dynamics have made it difficult for developed and developing nations alike to decrease their fossil fuel consumption and production. The third session of the conference dissected the complex role that fossil fuels continue to play in the Indo-Pacific amid national and regional energy transitions.

With its own oil and gas production falling, and imports rising, Southeast Asia must assess how oil and gas can coexist with decarbonization goals during the transition. **Vandana Hari** (Vanda Insights) reiterated the fact that fossil fuels account for approximately 80% of primary energy in Southeast Asia, and that regional governments are acutely aware of the energy trilemma of security, sustainability, and affordability. This balancing act is especially important given the need for continued economic growth, which remains the primary goal in most ASEAN countries. Ms. Hari proposed that, in addition to continued green energy investment, it will be important to decarbonize fossil fuels as much as possible via technologies like CCS, on top of the reductions to be gained by directly replacing coal with natural gas.

In the near term, natural gas can play a role as a transition fuel, especially in a coal-intensive region like Southeast Asia. **Paul Everingham** (Asia Natural Gas and Energy Association) spoke about the role for natural gas in the energy transition, despite pushes for more aggressive reductions or removal of all fossil energy sources worldwide. He noted the ways that natural gas can facilitate renewable electricity as a baseload source of power, allowing energy growth to occur without building new coal plants. The Asia Natural Gas and Energy Association is also interested in decarbonizing natural gas and establishing a capture and storage framework for CO₂, which would be especially beneficial if paired with a carbon-pricing mechanism. Mr. Everingham further noted that Asia cannot decarbonize on its own and would benefit from support from Australia and the United States through traditional energy exports and new technologies.

The first focal area should be the electric power sector, for both increasing renewable energy and working toward decarbonizing existing fossil fuels. **Aang Darmawan** (Energy Transition Partnership, United Nations Office for Project Services) focused on the key next steps for reducing Indonesia's emissions, with a focus on the electric power sector. While this raises the issue of how to decarbonize using renewables like wind and solar for uses outside the power sector, progress on technologies like hydrogen and CCS could offer answers. The best options to use CCS and hydrogen are in Indonesia's power sector; Mr. Darmawan highlighted the work his office does in harmonizing the various energy, electricity, and national planning laws to work with one another in support of energy transitions.



New Energy Technologies: Hydrogen

Moderated by Saifuddin Suaib (HDF Energy)

As countries throughout the Indo-Pacific strive to transition to low- and zero-carbon economies, hydrogen has emerged as a critical element of decarbonization strategies for various sectors such as industry, transportation, and power generation. Its ability to store—and transport—energy has the potential to dramatically accelerate renewable energy integration. While conventional hydrogen production methods rely on fossil fuels, “clean” hydrogen is produced through carbon-free processes like electrolysis, utilizing renewable energy or nuclear resources. The fourth session of the conference focused on the potential role for hydrogen during energy transitions in the region.

Hydrogen is an emerging technology everywhere, including in Southeast Asia, but regional countries have plans to use it in their energy transition. **Zainal Arifin** (PT PLN - Persero) pointed out that even though only a small fraction of global hydrogen production today is done with renewable energy (between 1% and 2%, according to the IEA), progress continues. With a range of uses beyond the energy sector, including feedstocks for steel and cement production, it is important to understand what future demand will be, as hydrogen generation facilities are very expensive. If countries overbuild their renewable energy capacity, hydrogen could help with variability—storing renewable energy until demand requires it—and while generation costs remain high, could facilitate decarbonization in industry and transportation sectors. While these initiatives are new and contain great promise, hydrogen development still has significant challenges to overcome. Nonetheless, Mr. Arifin estimates that it could be competitive in the region by 2030.

In Vietnam, estimating hydrogen demand in the iron and steel sector can give insight into the potential uses for this alternative energy source. **Ngoan Thi Nghiem** (GIZ, Vietnam) focused her remarks on the potential of hydrogen to decarbonize the rapidly growing iron and steel industry in her country. Vietnam’s steel production rose from 3 million tonnes in 2010 to 24 million tonnes in 2020 and now represents 7%–8% of the nation’s emissions. If the national goals for hydrogen in the sector of 500,000 tonnes per year in 2050 are met, this would reduce CO₂ emissions for Vietnam by 150 million tonnes by that year. However, Ms. Ngoan noted that her study was only on end-use for hydrogen. Only if that hydrogen were produced via renewable sources, or if the CO₂ were captured from its production, would these reductions be truly impactful. Vietnam will need technical and financial support from partner countries to realize the benefits of hydrogen in its decarbonization plans.

Recent legislation has brought hydrogen to the forefront in Indonesia, establishing a national hydrogen strategy in December 2023. A representative of Indonesia’s Ministry of Energy and Mineral Resources outlined the national hydrogen strategy, citing three main components. First, Indonesia will seek to reduce fossil fuel consumption and utilization. Second, it will prioritize domestic hydrogen markets, supporting both supply of and demand for the new fuel. Third, Indonesia will export hydrogen and its derivatives to the global market. The representative noted that hurdles remain, including the transport of the hydrogen after it is made and establishment of safety standards for global markets. However, the representative pointed to the February 7 launch of Indonesia’s first hydrogen development station as a sign that the government is serious about positioning the country as a key player in the global hydrogen supply chain of the future.



New Energy Technologies: CCS and SMRs

Moderated by Alloysius Joko Purwanto (Economic Research Institute for ASEAN and East Asia)

As countries seek to decrease economy-wide greenhouse gas emissions while simultaneously meeting the demands of increasing energy consumption, CCS, small modular reactors (SMRs), and other innovative energy transition technologies will play important roles in near-term efforts to transition to net-zero emissions, while also enabling economic development. As Indonesia leans on coal or natural gas to produce hydrogen, CCS becomes ever more critically important in supporting overarching decarbonization goals.

It takes a village to develop CCS. **Belladonna Troxylon Maulianda** (Indonesia Carbon Capture and Storage Center) described Indonesia's great potential as a carbon storage destination due to its reservoirs of oil and gas that are increasingly becoming depleted, in addition to its collection of high-emitting facilities like smelters and coal-fired power plants. Indonesia is ready and open to become a CCS hub for the region with its abundant storage capacity, strategic location, downstream industries, and emitter-storage site mapping. However, collective partnership is required to develop a comprehensive hub in Southeast Asia, and bilateral relationships with countries like the United States, including cross-border CCS operation agreements, are essential. NBR's 2020–21 Clean EDGE Asia Fellow **Han Phoumin** (Economic Research Institute for ASEAN and East Asia) noted the strength of Indonesia's carbon storage business, but also acknowledged the difficulties of achieving a commercially viable value chain that would first require capture and transportation demonstrations, as well as commercial regulations, to ensure that the CCS supply chain is manageable over the long term.

Nuclear technology is the key to the energy transition. On SMRs, **Rohadi Awaludin** (National Research and Innovation Agency, Republic of Indonesia) showed strong optimism for their role in Indonesia as a reliable, affordable, and abundant energy source with the capacity to be integrated with renewable energy. According to Dr. Awaludin, Indonesia has two types of reactors: (1) commercial reactors that must be constructed by a company rather than the government, although the government does support the process; and (2) noncommercial reactors that can be designed and deployed directly by the government.



Critical Mineral Supply Chains

Moderated by Bill Rising (Freeport-McMoRan)

A win-win situation would involve overseas companies seeking Indonesia's mineral resources and investing in local upstream and downstream benefits. Critical minerals are a vital, but potentially limiting, resource in the global energy transition, as they make up essential components in renewable energy technologies like solar panels, electric vehicle batteries, and electricity infrastructure. Indonesia is endowed with significant deposits of several of these minerals. However, as **Satya Widya Yudha** (National Energy Council, Republic of Indonesia) stressed in his remarks, the country has a growing appetite to improve its downstream policies and avoid the oil and gas scenario that has led to mainly extraction, rather than refining, of its critical minerals. For instance, the government has been tasked with encouraging smelting companies to invest in Indonesia to support its human capital with increased jobs. Integrating the country within the regional critical mineral supply chain can be a win-win situation for both Indonesia and overseas investors, as it will simultaneously strengthen the domestic economy while helping diversify and de-risk the supply chain.

Restructuring critical mineral supply chains in order for local communities to experience the benefits of providing the resources. NBR 2021–22 Clean EDGE Asia Fellow **Niharika Tagotra** (World Resources Institute, India) highlighted the modern issues with critical minerals from the perspective of developing countries. First, the mineral resources are finite, but current global policies still operate under the enabling assumption that dependence on similar sets of minerals will continue, without stopping to reinstate a new system that prioritizes the diversification away from the same set of minerals. Second, current conversations around critical minerals are dominated by Western voices that prioritize access to resources and affordability, focusing on financing for just the production and extraction of the minerals that are overwhelmingly located in developing countries, without integrating local community needs and environmental health concerns into the overall supply chain process. Finally, the critical mineral economy is far from established and thus requires continued scrutiny. For example, how are the minerals themselves being extracted? What are the ESG norms around their extraction and processing? Standardizing transparency in critical mineral production and manufacturing was heavily debated during the discussion. One policy suggestion for strengthening transparency measures in the industry's mineral supply chains included following the model for the EU's Carbon Border Adjustment Mechanism, where industries are responsible for tracking their products' supply chains.

Balancing geopolitical supply chain risks with environmental supply chain risks. **Laura Schwartz** (Verisk Maplecroft) provided a macro perspective on critical mineral market developments in the Asia-Pacific, observing that resource nationalism has cooled off as governments try to add value to their economies

through their domestic mineral supply. But more importantly, the region's emerging markets (e.g., Mongolia, India, and Indonesia) are both high-potential suppliers and consumers of critical minerals for clean energy technology manufacturing. In the latter role, they add to the highly strained global competition for resources. Even as Western countries seek to diversify and expand their mineral supply chains, they are likely to run into environmental supply chain risks for the extraction of minerals (e.g., water pollution, biodiversity, and indigenous people's rights) as an alternative challenge to existing geopolitical supply chain risks.



Ensuring a Just Energy Transition

Moderated by Saifuddin Suaib (HDF Energy)

While the Indonesia JETP has been “a victim of its own great branding,” facing public pressure and high expectations from local stakeholders, the partnership has made great strides in further enabling the country’s energy transition. **Jennifer Hengstenberg** (U.S. Embassy Jakarta) explained the complex and fraught, yet ultimately rewarding, nature of the JETP process in Indonesia. Ms. Hengstenberg underscored that there is no better country to work with on energy transitions than Indonesia, a country that is still heavily reliant on fossil fuels. Yet multilateral partnerships like the JETP (involving the G-7 member countries, the EU, Denmark, and Norway) have layered challenges, particularly when measuring reality up to the expectations that were initially outlined for the JETP. For example, the estimates for peaking power sector emissions in Indonesia were off target upon re-examination, which has led to delays and calls for further detailed assessments of the domestic power sector. Coal also remains a huge part of Indonesia’s government budget and national policy, prompting lengthy negotiations between JETP secretariat members, state-owned energy enterprises like PLN, and the Indonesian government.

The importance of comprehensive, empirical data in monitoring a “just” energy transition. **Moekti Handajani Soejachmoen** (Indonesia Research Institute for Decarbonization) touched on how monitoring data across different sectors for achieving a “just” energy transition is challenging and uncharted territory that is not discussed enough. For example, data that seems negative for a “just” energy transition on paper, such as the number of formal workers at a local coal-fired power plant, may have to be weighed against the fact that those same formal workers are benefiting an informal local community group by providing jobs and income. Questions like “What is the labor impact on the just energy transition?” need to be asked more frequently.

The conundrum of fossil fuel subsidies. **Mirza Sadaqat Huda** (ISEAS–Yusof Ishak Institute) raised the problem of the double-edged nature of fossil fuel subsidies in the context of a “just” energy transition. On the one hand, fossil fuel subsidies will slow down transitions by making them more affordable, while, on the other hand, they support vulnerable, low-income communities that deserve access to energy, in whatever form that may be. A “just” energy transition will require taking a step back, maintaining a flexible mindset and making intentional decisions in ensuring net-positive impacts for both human and environmental elements.



A Call to Action

Moderated by Tom Cutler (Cutler International LLC)

Catalyzing public and private partnerships between the United States and Indonesia under the Indo-Pacific Economic Framework (IPEF). **Christopher Feather** (Trade and Commerce, U.S. Embassy Jakarta) voiced the U.S. Department of Commerce’s enthusiasm for future investments and trade partnerships with Indonesia and the region for clean energy technology. He specifically highlighted the IPEF’s Pillar 3 (Clean Economy) and the U.S. Clean Energy Working Group in Indonesia (established by U.S. Embassy Jakarta in March 2023 in partnership with Indonesia’s Ministry of Energy and Mineral Resources) as strong foundations for future cooperation.

Powering people-to-people connections. **Meredith Miller** (DGA-Albright Stonebridge Group) stated that transforming the global political economy in achieving the energy transition would require mobilizing public support. Ms. Miller discussed the need to increase public awareness about climate change and the clean energy transition, which would require broadening stakeholder engagement in policymaking communities (e.g., NBR, IIEE, and WRI) and continuing to host public, big-picture conversations like the Clean EDGE Asia Conference. This includes having targeted panel discussions on topics that require more attention. **Andhika Prastawa** (The Indonesian Institute for Energy Economics) added in his remarks that “energy efficiency and conservation” tend to be left out of mainstream discourse. He stressed the need to have such topics incorporated in discussions across different economic sectors.



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Sharing Ideas and Networking



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