



CENTRE FOR  
STRATEGIC AND  
INTERNATIONAL  
STUDIES



## Terms of Reference



2022

South Korea

# RE Invest Indonesia

Renewable Energy  
Investment Forum

**The Second International Virtual Investment Forum to Attract  
South Korean Investment into Indonesia's Renewable Energy Sector**

**Thursday, April 07, 2022**

Supported by



**The Jakarta Post**



## BACKGROUND

Indonesia has reached a new milestone in its journey to achieve net-zero carbon emissions by 2060. To achieve that, as stated in the country's Nationally Determined Contribution (NDC), Indonesia has established the development of clean energy sources as a national policy directive, where collectively, these policies will eventually put Indonesia on the path to decarbonization.

The Ministry of Energy and Mineral Resources (MEMR), through the latest state-owned electricity company PT PLN's 10-year electricity procurement plan (RUPTL), has made new and renewable energy as the priority energy source for new power plants to be built in the next 10 years. From the 40.6 GW new power plant installation targeted in 2021-2030, the RUPTL aims 51.6 percent, or 20.9 GW, to be sourced from new and renewable energy sources. That makes the 2021-2030 RUPTL a green RUPTL.

The 2021–2030 RUPTL, ratified through the Minister of Energy and Mineral Resources Decree no. 188.K/HK.02/MEM.L/2021 dated September 28, 2021, does not approve of any new coal-fired power plants (PLTU) and only allows the completion of plants that are already under construction or have reached their financial close. PLN plans to start replacing its coal-fired and gas-fired power plants with new and renewable energy (EBT) power plants in 2025.<sup>1</sup> The 2021-2030 RUPTL open a huge opportunity for Indonesia's future in harnessing renewable energy and it has appealed foreign countries to invest in developing the sector.

At the same time, South Korea – the world's 13<sup>th</sup> largest greenhouse gas emitter with 1.38 percent of the world's emission<sup>2</sup> – has committed to becoming carbon neutral

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<sup>1</sup> Bloomberg.com, "No New Coal Plants in Indonesia in Another Bid to Cut Emissions", May 27, 2021  
<https://tinyurl.com/4nmms5kf>

<sup>2</sup> The Diplomat, "What did the South Korea Promise at COP 26?" Nov. 12, 2021,  
<https://tinyurl.com/3bs7hfey>

by 2050.<sup>3</sup> During the 26<sup>th</sup> UN Climate Change Conference of Parties (COP 26) in Glasgow, South Korea vowed to reduce emission rate by 40 percent from 2018 levels and agreed to adhering Global Methane Pledge to reduce methane emissions by 30 percent in 2030.<sup>4</sup> South Korean President Moon Jae-In vowed to spend 8 trillion won (US\$7.10 billion) on “Green New Deal” to replace coal dependence with renewables<sup>5</sup>. President Moon has also taken steps to begin decommissioning coal power plants and focusing on construction of coal plants and investing in promoting renewable energy. Moreover, South Korea pledged to apply carbon neutrality law and collaborating with other countries such as Indonesia, to develop and finance renewable energy projects. Therefore, there needs to be a platform to help connect South Korea renewable energy (RE) investors and financiers with the need and opportunity in Indonesia’s renewable energy sector.

**The Second South Korea RE Invest Indonesia** is a multi-stakeholder platform established by Tenggara Strategics, in cooperation with the Embassy of the Republic of Indonesia in Seoul (KBRI Seoul), Indonesia Investment Promotion Center (IIPC) Seoul, and Centre for Strategic and International Studies (CSIS), to bring together the Ministry of Energy and Mineral Resources (MEMR), the Investment Coordinating Board (BKPM), state-owned electricity company PT Perusahaan Listrik Negara (PLN), and energy companies from Indonesia and South Korea. A total of 224 participants from 104 institutions attended the **South Korea RE Invest Indonesia 2021**.

Looking at the participants’ high level of enthusiasm in the previous South Korea RE Invest Indonesia 2021 as well as suggestions from participants and speakers, Tenggara Strategics in partnership with CSIS and KBRI Seoul will host **the Second**

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<sup>3</sup> Guardian, “South Korea vows to go carbon neutral by 2050 to fight climate emergency”, Oct. 28, 2020, <https://tinyurl.com/ydazfyr4>

<sup>4</sup> Climate Action Tracker, “South Korea,” Nov. 4 2021, <https://tinyurl.com/52hz53t6>

<sup>5</sup> Reuters, “South Korea’s Moon targets carbon neutrality by 2050”, Oct. 28, 2020, <https://tinyurl.com/y9b4s9vo>

**South Korea RE Invest Indonesia in 2022** to maintain the momentum of high interest among RE investors in South Korea to invest in Indonesia, update the investors on the latest development of Indonesia's drive toward renewable energy, and again connect more RE investors and financiers from South Korea with project owners in Indonesia, to help Indonesia's achieve its ambitious targets of investment in renewable energy. The investment forum includes a panel discussion on **coal phase out and RE investment opportunity** in Indonesia, and two sessions on **growing renewable energy** and **solar energy** that South Korean companies have the edge to offer.

## OBJECTIVES

With South Korea RE Invest Indonesia 2022, we aim to facilitate improved understanding on RE market opportunities in Indonesia and build connection and encourage dialogues between Indonesia and South Korean RE key players. We hope the forum could bring real investment from South Korea into Indonesia's RE market.

The **"Second South Korea RE Invest Indonesia 2022"** has the following objectives:

1. Initiating a forum for South Korean RE companies/investors/financiers and Indonesia's RE project developers as well as the government agencies of respective countries to discuss investment plans in renewable energy.
2. Facilitating connection and encouraging dialogues between South Korea RE companies/investors/financiers and Indonesia's RE project developers so that there is an improved understanding on RE market opportunities in Indonesia among South Korea RE companies/investors.
3. Facilitating the mobilization of actual investment from South Korea into Indonesia's RE sector.

## THE SECOND SOUTH KOREA RE INVEST INDONESIA 2022

**DATE** : Thursday, April 7, 2022  
**TIME** : 09:00 am – 12:15 pm Korean Standard Time  
(07:00 am – 10:15 am WIB)  
**MEDIUM** : Live forum via Zoom

### REMARKS

**09:00 – 09:15 KST (07:00 – 07:15 WIB)**

#### Welcome Speech:

- **H.E. Mr. Gandi Sulistiyanto**, Ambassador of the Republic of Indonesia to the Republic of Korea

#### Keynote Speech

- **H.E. Mr. Airlangga Hartarto**, Coordinating Minister for Economic Affairs, the Republic of Indonesia

### SESSION I: Investment Opportunity: Commitment to Replace Coal with RE

**09:15 – 10:15 KST (07:15 – 08:15 WIB)**

When opening Business-20 (B-20) Indonesian Inception Meeting 2022, President Joko “Jokowi” Widodo said that a total of 5.5 gigawatts (GW) capacity of coal-powered power plants (PLTU) are ready for early retirement, as part of the Indonesian commitment to reach net zero carbon emissions in 2060.<sup>6</sup> Indonesia has an ambitious yet promising goal to fully phase out coal power plants by 2056. According to PLN’s 2021-2030, 2025 will see the start the replacement of coal-fired power plants in Indonesia by renewable energy. Under the country’s recent pledge at COP26, Indonesia seeks to retire up to 9.2 gigawatts (GW) of coal-fired power plants by 2030. On top of that, the country also commits to scaling up the deployment of

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<sup>6</sup> Katadata.co.id, “Beralih ke Energi Terbarukan, Jokowi Janji PLTU 5,5 GW Pensiun Dini,” Jan. 28, 2022. <https://tinyurl.com/yckjhsxa>

renewable power generation, scaling up technologies and policies to move from unabated coal power generation, and strengthening domestic and international efforts to support affected parties during the energy transition to renewable energy.<sup>7</sup>

Considering Indonesia's commitment to phasing out coal-fired power plants along with its budding renewable energy sector, this situation provides opportunities for investors to take part in the country's transition to renewable energy. In the near term, the 2021-2030 RUPTL itself offers great opportunity for RE developers and investors. In the RUPTL, PT PLN has targeted 40.6 GW new power plant installations in 2021-2030, of which 20.9 GW or 51.6 percent will be sourced from new and renewable power plants. Many of the renewable projects in the RUPTL are actually to achieve a shorter-term target of 23 percent renewable energy in Indonesia's energy mix in 2025.<sup>8</sup> According to a government estimate, Indonesia requires an investment of US\$70 billion to achieve the target of 23 percent renewable energy by 2025.<sup>9</sup>

In this session, opportunities and challenges presented by the 2021-2030 RUPTL and the longer-term coal phase out will be discussed: What are the opportunities available for South Korean investors? What are considerable threats that could hold Indonesia's RE development? Why should foreign investors consider Indonesia's transition to clean energy in the first place? What are the concerns of South Korea investors over RE investment in Indonesia?

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<sup>7</sup> UKCOP26.org, "Global coal to clean power transition statement", Nov. 4, 2021  
<https://tinyurl.com/cmmjcxft>

<sup>8</sup> CNNIndonesia.com, "Target Energi Terbarukan 14,5 Persen Belum Tercapai Tahun Ini," Jan. 26, 2022.  
<https://tinyurl.com/3247s3zj>

<sup>9</sup> Ministry of Foreign Affairs of the Republic of Indonesia, "Boosting Investment in the New and Renewable Energy Sector, the Ministry of Foreign Affairs and the Ministry of Energy and Mineral Resources Holds an International Webinar." Nov. 30, 2021, <https://tinyurl.com/yc5ubvv6>

## Speakers

1. **Mr. Dadan Kusdiana**, Director General of New, Renewable Energy and Energy Conservation (EBTKE)
2. **Mr. Nurul Ichwan**, Deputy Investment Minister/BKPM for Investment Planning
3. **Mr. Darmawan Prasodjo**, CEO of PT PLN
4. **Mr. Minh Kim**, General Manager, Overseas Project Department, Korea Midland Power Co., LTD (KOMIPO)

**Moderator: Mr. Yose Rizal Damuri**, Executive Director of the Centre for Strategic and International Studies (CSIS)

## **SESSION II: Growing Renewable Energy: Areas of Mutual Interest to Indonesia and South Korea**

**10:15 – 11:15 KST (08:15 – 09:15 WIB)**

The global commitment to tone down the usage of fossil fuels in the COP26 will put the renewable energy sector in a more upbeat position. Despite the similar shared goal, however, there are different preferences upon which type of renewable energy are chosen.

For instance, South Korea has a more varied view on its renewable energy preferences. Furthermore, the country has started its renewable transition earlier. In July 2020, South Korea announced its Green New Deal, a development strategy to speed up the post-pandemic recovery and empower its net-zero transition. However, unlike Indonesia, most of Korean renewable energy financing and developments major in photovoltaic, hydro and wind power, and fuel cells to replace their coal plants capacity by 2029. For the last eight years, South Korean renewable energy investment has peaked around Hydrogen Economy Roadmap, which revolves around energy storage and photovoltaic; as the country believes they are more reliable and acceptable in moving towards carbon neutrality by 2050. Lately,

South Korean investment in hydro power projects abroad has also increased significantly though it still lags behind the fast-progressing fuel cell and photovoltaic sectors.

On the other hand, following the plan to retire coal-powered plants in 2030, Indonesia already has several energy alternatives up its sleeve. In the case of Indonesia, Geothermal is one of the most preferred renewable choices. With an installed capacity totalling 2,130.7 megawatts, geothermal power plants are the second-largest renewable energy source after hydro energy, according to the Ministry of Energy and Mineral Resources' *Handbook of Energy & Economic Statistics of Indonesia 2020*.<sup>10</sup> Compared to other renewable energy sources, the Indonesian government believes that geothermal has some edges, namely stable and continuous supply and relative competitive production cost.<sup>11</sup> However, building geothermal plants take time and requires a great amount of investment within the range of billions of US dollars. To date, however, geothermal potential utilization remains low with uneven distribution, as geothermal electricity production is concentrated in West Java with an installed capacity of around 1,248 MW, 59 percent of the country's total installed capacity.

The different preferences and perceptions that these two governments have towards renewable energy, regardless of their similar goal present an interesting discussion for the public. This session will delve into why the more economically developed South Korean government mainly opts for different alternative than its Indonesian counterpart, while simultaneously learning from case studies based on Indonesian geothermal and South Korean Hydrogen Economy Roadmap. Finally, by convening renewable energy players from Indonesia and South Korea, the second session aims to discuss how can governments, renewable energy stakeholders and financiers position themselves to attract and form an investment ecosystem for their preferred sectors.

## Speakers

1. **Dr. Kwanyoung Kim**, Director, Green Technology Partnership Initiative (GTPI)
2. **Mr. Prijandaru Effendi**, Chairman of the Indonesian Geothermal Association
3. **Ms. Jinny Lee**, Director, Asia Division III & Global PPP Unit, EDCF Operations Dept. 1, Korea Exim Bank
4. **Mr. Ahmad Yuniarto**, CEO of Pertamina Geothermal Energy

**Moderator: Mr. Riyadi Suparno**, Executive Director Tenggara Strategics

## **SESSION III: Solar Energy**

**11:15 - 12:15 KST (09:15 - 10:15 WIB)**

Indonesia has a vast potential for generating and balancing solar photovoltaic (PV) energy to meet future energy needs at a competitive cost with solar energy identified as an energy source whose technical, environmental and economic potential far exceeds Indonesia's present and future energy requirements and is far larger than all other renewable energy resources combined. Solar irradiation is available at a stable level all year long, offering an energy potential of more than 200 gigawatts (GW).

In the 2021-2030 RUPTL, PLN relies so much on solar to meet the 2025 renewable energy target of 23 percent in the country's energy mix. In the five-year period of 2021 to 2025, PLN plans to generate a total of 3,910 megawatts peak (MWp) from solar energy or 36.7 percent of 10,640 MW of electricity from all renewable energy plants. PLN plans to build solar panels in remote islands not connected to grids, work together with independent power producers to build floating solar panels on

lakes, existing dams as well as encourage the people and businesses to build more rooftop solar PVs.<sup>10</sup> Moreover, the government's latest regulation on rooftop solar PV increases net metering/electricity exporting to PLN from 65 percent to 100 percent. All these developments open more investment opportunities for investors/financiers to invest in solar PVs.

This session will convene stakeholders and industry players from Indonesia and South Korea to address the most pressing issues around developing and investing in Indonesia's solar energy sector, discuss how collaborations between local stakeholders and potential investors could raise the standards of solar projects so that they are investment-worthy, and tackle the problems that have been hindering investment realization into the promising sector.

### **Speakers**

1. **Mr. Wiluyo Kusdiharto**, Director of Mega Project and New and Renewable Energy, PLN
2. **Mr. Fabby Tumiwa**, Chairman of the Indonesian Solar Energy Association (AESI)
3. **Mr. Eka Satria**, CEO of Medco Power
4. **Mr. Byeongwoo Jeon**, Managing Director KEPCO KDN

**Moderator: Mr. Oktoviano Gandhi**, CEO of Alva Energy

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<sup>10</sup> PLN's 2021-2022 RUPTL. <https://tinyurl.com/bdey4j6y>

## ABOUT US

### Tenggara Strategics

Tenggara Strategics is a business and investment research and advisory institution established by the Centre for Strategic and International Studies (CSIS), *The Jakarta Post* and Universitas Prasetiya Mulya. Combining the capabilities of these three institutions, we aim to provide the business community with the most reliable and comprehensive business intelligence related to areas that will help business leaders in making strategic decisions. Tenggara Strategics offers daily media monitoring, strategic briefings and tailored research services to our clients to help them make strategic decisions.

### Centre for Strategic and International Studies

Founded in 1971, the Centre for Strategic and International Studies (CSIS) has won recognition as an important research and policy institution both within Indonesia and internationally. Its development over more than three decades is entwined with the history of Indonesia itself. In addition to its core studies in domestic economic and political developments, CSIS has also progressively developed a more international orientation through organizing bilateral conferences involving various countries.

### Embassy of Republic of Indonesia in Seoul

Embassy of Republic of Indonesia in Seoul (KBRI Seoul) represents Indonesia's interest in Republic of Korea since the opening of bilateral diplomatic relations in September 1973. Bilateral relations and cooperation between the two countries entered a new phase through the establishment of Special Strategic Partnership in 2017 with focus on cooperation in four areas, namely: defense and foreign relations, bilateral trade and infrastructure development, people-to-people exchanges, and regional and global cooperation.