SUSTAIN BRIEF

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Financing Indonesia's Energy Transition in the Ten-Year Electricity Business Plan (RUPTL) and the Strategic Potential of Danantara

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Executive Summary

- Indonesia's Ten-Year Electricity Business Plan (RUPTL) signals the Government's commitment to accelerate Indonesia's energy transition, with the share of renewables reaching 61 percent. In contrast, the share of fossil fuel power plants, including coal and gas, accounts for 24 percent of the total plan.
- The ambitious RUPTL creates a gap in the deployment of renewable energy. Since the current financing support for Indonesia's renewables is far from sufficient, there is a need to develop a financing scheme and explore alternative potential financing sources, such as additional coal production levies and China's energy financing.
- From the additional coal production levies, the Government could generate at least IDR 450 trillion over the first half of RUPTL (2025-2029) and IDR 225 trillion over the second half of RUPTL (2030-2034). By shifting Chinese investments to renewable energy only, the Government could generate IDR 72 trillion over the first half of RUPTL (2025-2029) and another IDR 72 trillion over the second half of RUPTL (2030-2034).
- Danantara, with its strategic potential, can play its role in managing revenue from additional coal production levies and investments, as well as channelling them to accelerate Indonesia's energy transition.

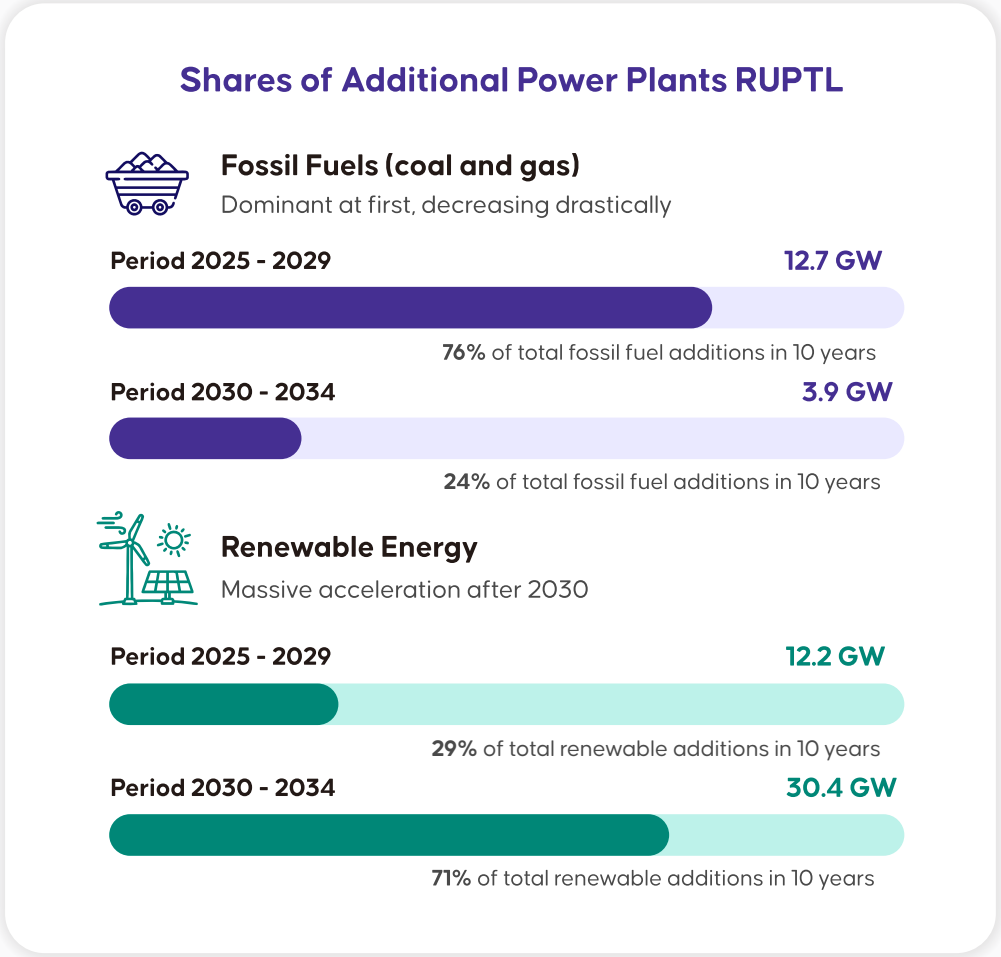
The ambitious RUPTL target and its financing challenges

Indonesia's government has signalled its intention to accelerate the energy transition through several recent commitments and policies. One of those strong signals was conveyed by President Prabowo to the international community at the G20 event last year, indicating that Indonesia is committed to building 75 Gigawatts of renewable energy in the next 15 years and achieving Net-Zero Emissions by 2050, or 10 years

faster than the previous commitment. Subsequently, the long-awaited RUPTL has been released to translate the commitment into the PLN's electricity business plan, which lists the power plants, transmission and distribution grids, and storage facilities planned for construction over the next ten years.

The Government and PT PLN (the state-owned electricity company) claimed the 2025-2034 RUPTL to be the greenest, with a composition of 61 percent renewable energy, 15 percent storage, and 24 percent fossil fuel, comprising coal and gas. Compared to the previous 2021-2030 RUPTL, which consisted of 51.6 percent of renewable energy and 48.4 percent of fossil fuels, the new RUPTL is indeed way greener with a significant decrease in the share of fossil fuels. Additionally, the government appears to be ambitious, as the renewable energy target increases to 42.6 Gigawatts in the new RUPTL, nearly double the previous target of 21 Gigawatts.

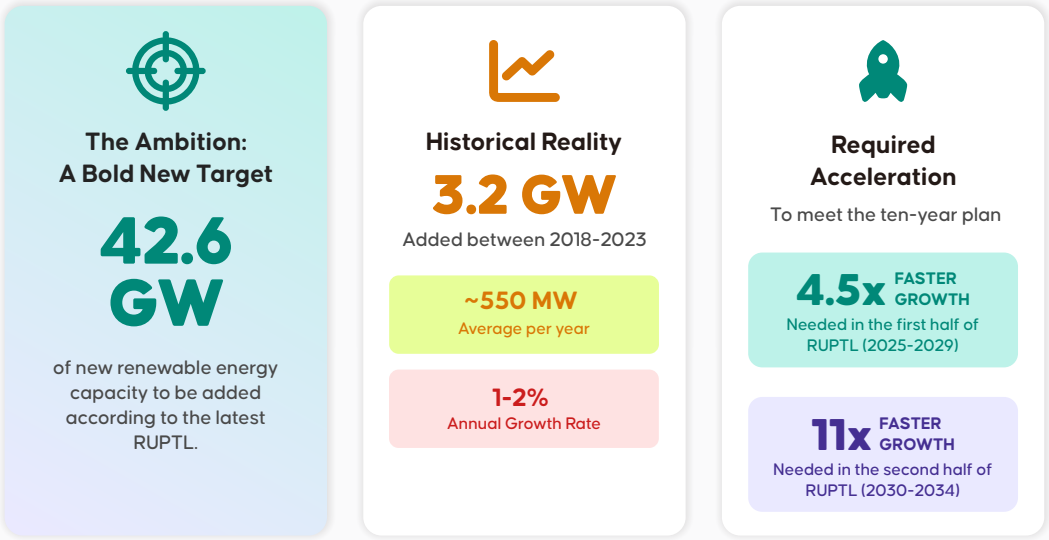
According to this RUPTL, the plan for additional power plant construction is divided into two periods, with the first five years allocated to building 24.9 Gigawatts of power plants and the second five years for 34.3 Gigawatts of power plants. In more detail, the Government and PT PLN allocated a significant share of the fossil fuel target, accounting for 76 percent of the total fossil fuels in the RUPTL, to be constructed within the first half of the ten years. In contrast,renewables are prioritised in second place, with 71 percent of renewables planned to be built over the second half of the ten years, potentially placing a heavy challenge on the next administration.



Source: Press Conference Materials by the Ministry of Energy and Mineral Resources (2025).

RUPTL's Financing Challenge

There is a big challenge to meet the ambitious target for renewable energy in this new RUPTL,as the Government aims for an additional 42.6 Gigawatts of renewable power plants. According to historical trends, Indonesia added only 3.2 Gigawatts of renewables between 2018 and 2023, averaging 550 megawatts per year, with a modest annual increase of just 1-2% in renewable energy capacity. Translated to the RUPTL, the government must significantly increase the speed of renewable energy growth by up to 4.5 times faster in the first half of the ten years and then 11 times faster in the second half of the ten years to achieve the target.



Besides the speed, another challenge for the Government with this RUPTL is that this ambitious renewable energy capacity target requires an unprecedented financing scale. However, on the investment side, Indonesia's energy financing remains concentrated in oil, gas, and coal mining, resulting in an energy expansion still dominated by fossil fuels. Investment in renewables, meanwhile, has stagnated over the past seven years. IEEFA analysed that Indonesia attracted only USD 1.5 billion in renewable energy investment in 2023, which translated into 574 megawatts of additional renewable capacity. Meanwhile, to meet its 2034 renewable energy target in RUPTL, Indonesia needs to secure an estimated IDR 1, 682.4 trillion (USD 105.2 billion) over the next ten years, or approximately USD 10.5 billion annually, a figure far exceeding the current investment scale.

The economic conditions during the first year of Prabowo's administration, with limited fiscal space and competing budgetary priorities, can be a significant challenge to this imperative in accelerating Indonesia's energy transition over the next decade. Reflecting on these situations, as the energy transition requires substantial financing, notably to support the RUPTL needs in renewable energy deployment, as well as to strengthen the distribution and transmission grid, the government needs to explore some alternative financing sources and schemes that could generate enough fiscal space and financing for the energy transition.

Financing Opportunities for the Energy Transition in RUPTL

- **Additional Coal Production Levies** (Domestic Potential)

  Indonesia is one of the world's largest coal exporters, with the main markets being Asian countries, especially China, India, Japan, and South Korea. In 2024, Indonesia's coal production reached 836 million tons, exceeding the government's target of 710 million tons. In fact, Indonesia's coal production has increased in recent years, even surpassing the set target, particularly since the spike in international coal prices in 2022.

  With the current super-normal profits from the coal sector, businesses and investors are hesitant to switch to renewable energy, as they are earning super-normal revenues. Hence, to accelerate the energy transition and signal the market, the government should provide disincentives for coal production, thereby shifting financing and investment from the coal mining sector to renewable energy as part of the RUPTL target. In practice, this policy can be implemented by increasing coal royalties or production levies, which could increase state revenue on coal production to later finance renewables during this limited fiscal space situation.

  According to SUSTAIN's analysis, the Government could generate additional state revenues ranging from USD 5.63 billion (IDR 90 trillion) at minimum to USD 23.58 billion (IDR 377 trillion) at maximum per year through increased coal production levies. Accumulated, this additional revenue could help fund the financing needed for the additional renewable energy capacity, as well as the transmission and distribution grid in the RUPTL from 2025 to 2034.

- **Redirecting China's Energy Financing** (Foreign Potential)

  Over the past decade, China has provided and mobilised climate-related finance between 2013 and 2022 to support climate actions in developing countries, which account for 6.1% of the total climate finance contributions from developed nations over the same period. This number positions China among the top five climate financiers through bilateral and multilateral channels between 2013 and 2018.

  During the 76th Session of the United Nations General Assembly in 2021, President Xi Jinping strengthened China's commitment and pledged to increase its support for other developing countries in transitioning to green and low-carbon energy, while also committing to ending the construction of new coal-fired power plants abroad. The Belt and Road Initiative (BRI), launched by the China's government in 2013, has become the world's largest infrastructure development scheme. President Xi Jinping has also addressed these concerns by committing to environmental sustainability, as exemplified by China's ambition to establish a "green BRI."

  Indonesia is the largest recipient of BRI investments in Southeast Asia. Several studies indicate that despite entering the Indonesia's energy market later than Japan and Korea, China has rapidly secured a significant role in the country's energy infrastructure boom. Between 2006 and 2022, China's investments in Indonesia reached approximately USD 35 billion, with a quarter of these funds directed to the energy sector. However, 86% of these energy investments have been channelled into fossil fuel industries.

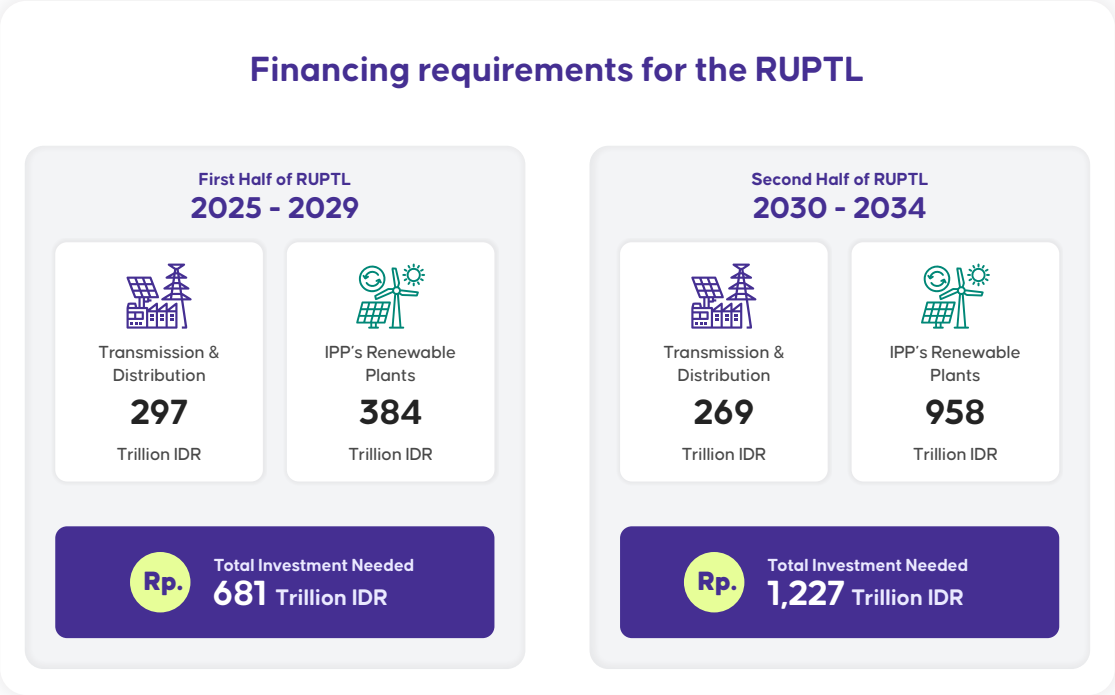
The Government should view China's shift towards sustainable financing, including its intention to green the BRI, as a strategic opportunity to scale up Indonesia's renewable energy deployment. According to SUSTAIN's analysis, China's financing for Indonesia's energy sector is estimated to range between USD 490 million and USD 900 million annually. By strategically redirecting China's investments based on historical patterns, these funds are a crucial source of financing for Indonesia's renewable energy transition in RUPTL, particularly the one that will be built by the Independent Power Producers (IPPs) sector.

Key Findings: Financing Needs vs. Financing Potential Opportunities

Labelling the new RUPTL as greener, the Government and PT PLN aim to boost renewable energy growth, as well as transmission and distribution infrastructure, to support the addition of new renewable capacity. According to the Ministry of Energy and Mineral Resources (MEMR)and PT PLN, during the dissemination, the RUPTL aims to build 42.6 Gigawatts of renewable energy and implement a smart grid to increase the penetration of renewables.

To do so, the Government and PT PLN require a significant amount of investment to achieve the RUPTL target, which is IDR 1, 682 trillion for renewable additional power plants and IDR 565 trillion for transmission and distribution infrastructure. From that figures, Independent Power Producers (IPPs) are expected to take a role in building most of the additional renewable energy capacity to be built in the next 10 years, which is translated to IDR 1, 341. 8 trillion financing needed, and with a composition of 29 percent of renewables development to be carried out in the first half of ten years and 71 percent to be carried out in the second half of ten years.

The following are the financing requirements for the RUPTL in the next 10 years, which the government has divided into two periods.



Source: Press Conference Materials by the Ministry of Energy and Mineral Resources (2025).

Considering the substantial amount of financing required and the limited fiscal space, the government could generate additional state revenues by increasing coal production levies and redirecting Chinese financing for RUPTL needs.

The first is increasing the coal production levies. According to SUSTAIN's analysis, using the least scenario of the October 2023 Reference Coal Price could generate additional state revenues of USD 5.63 billion (IDR 90 trillion) per year. From this, the Government could generate at least IDR 450 trillion over the first half of the decade (2025-2029). For the second half of ten years (2030-2034), assuming that the global coal demand will decrease and Indonesia will implement fiscal policy to accelerate the energy transition, the Indonesia's coal production will remain half of the current output, meaning that the revenue that the Government can generate from increasing coal production levies only reached IDR 225 trillion. However, by the time the renewable energy market and policy is expected to be significantly improved.

The second is China's financing. According to the BRI Investment Report 2024, Indonesia is the largest recipient of BRI investments, having received approximately USD 9.3 billion in 2024 alone. From that number, China's energy-related engagement in Indonesia totalled roughly USD 900 million in 2024, with 43.75% allocated to coal and 56.25% to renewable energy sources. Therefore, by shifting USD 900 million of China's investments to renewable energy only, Indonesia could generate IDR 72 trillion over the first half of the decade (2025-2029) and another IDR 72 trillion over the second half of the decade (2030-2034) assuming that the China's financing for energy sector through BRI scheme remains the same.

The following is a calculation of the RUPTL funding needs, along with the amount that can be funded from the two alternative financing sources explained previously.

Financing RUPTL Needs using alternative sources of financing (trillion IDR)

Potential financing from alternative sources	2025 - 2029	2030 - 2034
China's financing in Indonesia's energy sector only (in trillion IDR)	72	72
Additional Coal Production Levies*	450	225
Total potential financing that can be derived from China's financing and Additional Coal Production Levies	**522**	**297**
RUPTL needs on transmission, distribution, and IPPs' renewable share	**2025 - 2029**	**2030 - 2034**
Total Investment for Transmission and Distribution (in trillion IDR)	297	269
Investment for IPP's Renewables Power Plants (in trillion IDR)	384	958
Total investment needed in RUPTL for transmission, distribution, and IPPs' renewable share (in trillion IDR)	**681**	**1227**
The percentage of RUPTL needs (for transmission, distribution, and IPPs' renewable share) **which can be covered by potential financing**	**77%**	**24%**

Source: calculated from various sources.

*Scenario: Reference Coal Price in October 2023, with 100% coal production in 2025-2029, and 50% coal production in 2030-2034, as coal production in Indonesia will decrease due to the expected decrease of global demand.
*USD 1 = IDR 16,000

With the remaining financing gap in the RUPTL, in which **the alternative financing resources could only cover 77 percent in the first half of ten years, and 24 percent in the second half of ten years**, which is a significant gap, the fulfillment of the RUPTL target must be accompanied by improvements in sectoral policies and fiscal policies that support Indonesia's energy transition. To achieve this, the government should focus on policies that aim to accelerate the maturity of the renewable energy industry in Indonesia, including its supply chain, encompassing the renewable energy manufacturing industry and the transfer of technology.

The Strategic Role of Danantara

In February 2025, President Prabowo Subianto established the so-called Badan Pengelola Investasi Daya Anagata Nusantara (Danantara Indonesia) as a strategic investment management body to consolidate and manage national investments. Danantara will commit to improving asset efficiency, attracting global investment, and enhancing Indonesia's competitiveness in key sectors, thereby fostering equitable prosperity for all Indonesians.

As Indonesia must urgently transition from fossil fuels to renewable energy, Danantara has the potential to play a significant role in attracting and managing financing to accelerate Indonesia's energy transition. This is the role of Danantara to enhance the country's strategic agenda, aiming to achieve sustainable energy sufficiency and contribute to economic growth through renewable energy development.

In doing so, Danantara can manage funds from domestic and foreign investors, including China,and direct them toward renewable energy development. Additionally, Danantara can play a crucial role in attracting foreign investment for renewable energy projects in Indonesia by sending a strong signal that Indonesia is indeed shifting toward renewable energy with full government support. In this case, Danantara can follow the example of Temasek in Singapore, which has a sustainable investment portfolio that is expected to reach USD 32.6 billion by 2024, or approximately 11 per cent of the total investment portfolio.

Additionally, Danantara can manage finances derived from extractive activity levies, such as coal mining production levies. This levy can be one source of funds for renewable energy infrastructure projects in the RUPTL. In this case, Indonesia can also follow the example of Norway, which has the Norwegian Sovereign Wealth Fund to manage funds obtained from additional production taxes on its fossil fuel industry, specifically the special petroleum tax on oil and gas.

Policy Recommendations

Recommendation #1: Danantara to manage alternative sources of financing, both from additional coal production levy and China's and other international financing, and direct it towards energy transition in RUPTL 2025-2034

Recommendation #2: The Ministry of Energy and Mineral Resources and the Ministry of Finance should reform sectoral and fiscal policies respectively to accelerate the energy transition, thereby translating President Prabowo's commitment at the G20 event in 2024 into implementation. It includes developing the renewable energy's supply chain industry and shifting the power sector from coal to renewable energy as a part of green industrial policy.