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Client Alert

Indonesia's National Energy Policy: A Roadmap to 2060

CLIENT ALERT

I. Introduction

Indonesia has taken a decisive step in shaping its long-term energy future with the issuance of Government Regulation No. 40 of 2025 on National Energy Policy (the "**NEP**" or the "**Regulation**"). Replacing the previous framework set in 2014, the new Regulation extends the country's energy roadmap all the way to 2060, and offers clarity on how the government plans to balance growth, sustainability, and security in the decades ahead.

The NEP outlines the government's ambition to create an energy system that is sustainable, equitable, integrated, efficient, and productive, while remaining firmly aligned with Indonesia's commitment to achieving net zero emissions. As such, it will guide decision-making across electricity, oil and gas, coal, renewables, and other resources, and will serve as the foundation for long-term energy provision and investment strategies.

A key feature of the Regulation is its focus on decarbonisation. By setting explicit measures to reduce greenhouse gas emissions, the NEP signals to industry and investors alike that the government views energy transition not as an option, but as a necessity. This positioning makes the NEP both a policy framework and an investment roadmap, shaping opportunities and responsibilities for years to come.

Please note that this publication is not intended to diminish the importance and essence of other provisions specified in the regulation. There might be certain legal issues that are not covered with the explanations provided hereunder, hence, to get the accurate views and understanding of the current conditions, please contact our legal consultants (the details are provided on the last page).

II. Energy Targets and Energy Mix

A central feature of the NEP is its vision for how Indonesia will use and produce energy between now and 2060. It reflects a broader story of how the country intends to fuel growth, reduce emissions, and adapt to technological change.

On the demand side, the government expects industry to nearly double its energy use, rising from 153.4 million tonnes of oil equivalent ("**TOE**") in 2030 to 274.0 million TOE in 2060. The numbers align with the Government's long-term goal of down-streaming and development of national industries. Commercial activity and households will also consume more energy as the economy expands and living standards improve. The transportation sector, however, tells a different story. Demand here is set to fall from 95.6 million TOE to 80.0 million TOE, a signal that electrification and cleaner mobility solutions are starting to take root.

The mix of energy sources is equally revealing. Renewable options are expected to gain ground, with solar climbing from 1.5 to 12.7 million TOE, biomass from 23.1 to 71.9 million TOE, and biogas from 65.1 to 378.3 million TOE. Hydrogen, once a distant prospect, is projected to reach 35.4 million TOE. Nuclear power will enter the system for the first time, joined by new fuels such as ammonia and dimethyl ether.

Meanwhile, reliance on traditional sources will fall: oil shrinks from 82.1 to 32.0 million TOE, LPG from 11.2 to 0.9 million TOE, and coal from 68.7 to 38.6 million TOE. The gradual pace of coal reduction, however, hints at the government's careful balancing of energy security, entrenched coal infrastructure, and fiscal realities.

By 2060, the government envisions a strikingly different energy landscape. Solar will make up nearly one third of the national mix, nuclear more than 12 percent, and biomass over 13 percent. Coal, which currently dominates, will drop to less than 12 percent, while natural gas will remain a significant transition fuel at 15.4 percent. Smaller but meaningful contributions will come from geothermal, hydropower, wind, and biofuels.

All of this feeds into Indonesia's broader climate ambitions. The NEP sets a decarbonisation roadmap that aims for peak emissions by 2035, followed by a sharp decline toward net zero in 2060. Part of this strategy relies on nature itself, with forests and land use absorbing an estimated 129 million tonnes of CO_2 equivalent to reach net zero emission in 2060. The overall goal is to bring national emissions down from 1,184 million tonnes in 2030 to carbon neutrality three decades later.

III. Direction of National Energy Policy

The NEP sets out four pillars to guide Indonesia's energy future: ensuring availability, making the most of existing resources, prioritizing development, and maintaining reserves. Each pillar is supported by strategies that outline what needs to be done and reveal how the government intends to balance growth, security, and sustainability over the coming decades.

A. Energy Availability Policies

At the foundation of energy planning lies the question of availability. The government aims to secure reliable supplies through an inventory of potential reserves, increased domestic production, and, where necessary, carefully chosen imports from low-carbon sources. Infrastructure reliability is highlighted as a priority, with sustainability measured against environmental capacity to avoid over-exploitation.

Electricity provision will continue to revolve around PT PLN (Persero), which retains its central role as operator. Independent private producers may participate, but always in cooperation with

PLN. To strengthen national resilience, the government also envisions inter-regional connections that link islands and regions.

A significant development appears in the rules on import and export. The Regulation grants PLN and appointed entities exclusive rights to conduct cross-border electricity trade. This effectively introduces a new monopoly, raising important implications for investors and independent producers who may now find entry into cross-border transactions more limited. Imports and exports may also take the form of swaps, allowing energy to be exchanged for other energy sources or even different commodities.

Diversification complements availability. Transport is expected to gradually shift from fossil fuels to electricity, bioenergy, hydrogen, and gas. Households will be steered away from LPG toward biogas, dimethyl ether, and electricity. Coal-fired plants, meanwhile, are expected to convert to gas, hydrogen, or ammonia. These changes highlight the government's intent to smooth the transition across multiple sectors.

To ensure sustainability, energy providers must comply with government-issued benchmarks for energy conservation and report on their practices. This system of accountability, combined with measures to strengthen the energy industry and its infrastructure, places transparency at the core of availability policies.

B. Utilization of Energy Resources Policies

The NEP's utilization policies focus on reducing reliance on non-renewables while scaling up renewables. Non-renewable sources must adopt low-carbon technologies, while renewable resources such as geothermal, hydropower, wind, and ocean currents will play a larger role in electricity generation. Solar, hydrogen, and ammonia will increasingly power industry, households, and transport, while biomass is expected to replace coal and produce biogas. Nuclear is reserved for strategic uses, including re-powering and co-generation.

Oil and coal are not eliminated entirely but reserved for specific functions. Oil will serve remote and sparsely populated areas using low-carbon technology, while coal is earmarked for long-term reserves and specialized processes like liquefaction or gasification. Solar development, in contrast, must emphasize domestic components, signaling opportunities for local manufacturers and potential challenges for foreign suppliers.

Supporting this shift is a national decarbonisation framework. It includes infrastructure conversion, deployment of carbon capture and storage, gradual decommissioning of coal facilities, and a moratorium on new coal-fired plants. Both national and regional governments will set measurable targets for energy intensity, the energy mix, and emissions reduction.

C. Energy Development Policies

Energy development priorities balance affordability, security, and environmental sustainability. The principles emphasize prioritizing new and renewable energy while utilizing non-renewables with low-carbon technology. Key strategies include expanding energy access in remote areas, aligning local resources with economic clusters, prioritizing domestic use, and fostering regional cooperation.

The government will also support new energy sources such as ammonia, hydrogen, and nuclear. Nuclear development, in particular, will be strictly regulated, built in geologically safe and sparsely populated areas, and kept away from food estates. Operation and safety oversight will rest with the government, with further co-generation rules to be issued under a presidential regulation.

Renewable energy will be maximized under government frameworks. Companies in non-renewable sectors are expected to contribute to carbon reduction or invest in renewable

infrastructure. Non-renewables, meanwhile, must rely on low-carbon technologies in exploration and production, supported by incentives for CCS and CCUS adoption.

D. Energy Reserves Policies

Energy reserves are structured in three tiers. Strategic reserves, controlled by the government, secure the country's long-term needs. Supporting reserves, managed by the National Energy Council, provide a buffer during crises and emergencies. Operational reserves, maintained by providers, ensure day-to-day continuity of supply.

The framework takes into account consumption rates, import reliance, fiscal capacity, and feasibility of locations. The aim is to build a layered security system that protects consumers from shortages while also supporting national resilience in the face of disruptions.

E. Supporting Policies

Finally, the NEP introduces a range of supporting measures designed to make the broader framework work in practice. Financing will come from state and regional budgets, supplemented by lawful alternative sources, to support infrastructure, research, and exploration.

Energy prices may be determined by agreement but may be subject to government ceilings. Progressive tariffs, fiscal incentives, and household subsidies are also part of the system, although subsidies will be gradually reduced. State-owned enterprises may receive guarantees or compensation to safeguard their roles in energy provision.

The Regulation also emphasizes research and innovation, international cooperation, and technology audits to keep the transition on track. Broader measures cover health, safety, and environmental standards, bureaucratic reform, mobilization of private finance, prioritization of local content, and performance-based mechanisms such as a carbon tax. To prevent crises, the Regulation calls for cooperation among government, businesses, and the public, to highlight that energy security is a shared responsibility.

IV. Implications, Opportunities, and the Road Ahead

Aside from being a national blueprint, the NEP is also a signal to the market about where Indonesia intends to steer its energy economy. Whether the targets are ultimately feasible or realistic enough to achieve carbon neutrality by 2060 is a matter for technical experts and policymakers to debate. What is clear, however, is that the Regulation creates both opportunities and challenges for businesses, investors, and professionals, and these will shape the industry over the next three decades.

One of the clearest signals lies in renewable energy. With solar, biomass, and nuclear projected to dominate the energy mix by 2060, these sectors are set to attract significant investment. Solar in particular, expected to account for nearly one-third of the national energy portfolio, is poised to become a magnet for capital, technology, and talent. Local manufacturing requirements for solar components create opportunities for domestic industry but may also force foreign investors to rethink supply chain strategies.

Nuclear development marks another important shift. Though it will be carefully regulated and limited to safe locations, its planned role in re-powering and co-generation suggests space for specialized investment in technology and infrastructure. Hydrogen and ammonia, both identified as future fuels, are likely to draw interest from global players eager to integrate Indonesia into wider clean-energy supply chains.

These shifts also point to the need for a more sophisticated regulatory framework. Provisions on PLN's monopoly in cross-border electricity trade, requirements for domestic content, and evolving

carbon taxation will require clarifications and implementing regulations. The industry can expect an evolving legal landscape, where gaps will need to be filled through secondary legislation, ministerial decrees, or even future presidential regulations. For energy companies, staying ahead of these developments will be essential to manage compliance risks and secure opportunities.

As renewables expand, the sector is also likely to absorb top technical and managerial talent. Careers that once centred on oil and coal may increasingly gravitate toward solar, hydrogen, and nuclear projects, shifting the talent market and creating new competition for skilled professionals.

For investors, the NEP sets a long-term direction that reduces uncertainty. Clear decarbonisation milestones, such as peak emissions by 2035 and net zero by 2060, give financiers a policy anchor for structuring green investments. At the same time, slower reductions in coal highlight that the government is mindful of energy security and fiscal constraints, which may temper the pace of transition in certain sectors.

Taken together, the NEP is likely to transform Indonesia's energy sector into one of the most dynamic investment arenas in the country. It signals strong government support for renewables, introduces space for new technologies, and sets clear long-term targets that will guide financing decisions. Yet it also brings regulatory complexity, monopoly rights, and compliance challenges that businesses will need to navigate. For companies, the message is clear: those that adapt early, align with policy priorities, and commit to innovation will be best positioned to thrive in Indonesia's energy landscape through 2060.

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We hope that the information provided in this publication has been helpful and insightful. For any further inquiries, please do not hesitate to contact our legal consultants.

Thank you.

We will continue to follow the developments of this topic. Should you have any queries on this topic, please contact our consultants

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