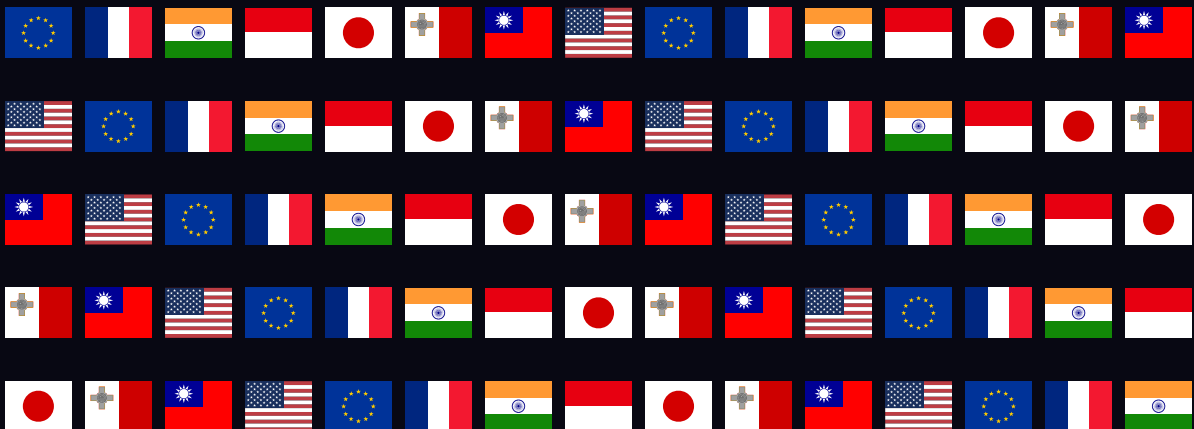


CLIMATE REGULATION

Indonesia



Climate Regulation

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Quick reference guide enabling side-by-side comparison of local insights, including the main climate regulations, policies and authorities; national emission levels, limits and emission reduction projects; emission allowances and trading; energy and non-energy sector regulation; renewable energy consumption, policy and general regulation, including carbon capture and storage; climate matters in M&A transactions; and recent trends.

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Table of contents

MAIN CLIMATE REGULATIONS, POLICIES AND AUTHORITIES

International agreements

International regulations and national regulatory policies

Main national regulatory policies

Main national legislation

National regulatory authorities

GENERAL NATIONAL CLIMATE MATTERS

National emissions and limits

National GHG emission projects

DOMESTIC CLIMATE SECTOR

Domestic climate sector

GENERAL GHG EMISSIONS REGULATION

Regulation of emissions

GHG emission permits or approvals

Oversight of GHG emissions

GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)

Regime

Registration

Obtaining, possessing and using GHG emission allowances

TRADING OF GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)

Emission allowances trading

Trading agreements

SECTORAL REGULATION

Energy sector

Other sectors

RENEWABLE ENERGY AND CARBON CAPTURE

Renewable energy consumption, policy and general regulation

Wind energy

Solar energy

Hydropower, geothermal, wave and tidal energy

Waste-to-energy

Biofuels and biomass

Carbon capture and storage

CLIMATE MATTERS IN TRANSACTIONS

Climate matters in M&A transactions

UPDATE AND TRENDS

Emerging trends

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MAIN CLIMATE REGULATIONS, POLICIES AND AUTHORITIES

International agreements

Do any international agreements or regulations on climate matters apply in your country?

The United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol and Paris Agreement apply in Indonesia. Indonesia ratified the three instruments under Law No. 6 of 1994 regarding the Ratification of the United Nations Framework Convention on Climate Change, dated 1 August 1994 (UNFCCC); Law No. 17 of 2004 regarding the Ratification of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, dated 28 July 2004; and Law No. 16 of 2016 regarding the Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change, dated 24 October 2016. In compliance with its obligation as a Non-Annex I Party, Indonesia also submitted its second Biennial Update Report on 21 December 2018.

Law stated - 23 August 2023

International regulations and national regulatory policies

How are the regulatory policies of your country affected by international regulations on climate matters?

As a party to the UNFCCC, the Kyoto Protocol and Paris Agreement to the UNFCCC, Indonesia has shaped its national regulatory policies based on its international pledge in its Nationally Determined Contribution (NDC) to reduce greenhouse gas (GHG) emissions by 31.89 per cent (unconditionally) to 43.2 per cent (conditionally) below the business-as-usual scenario by 2030. The laws and regulations in Indonesia on climate matters (eg, Presidential Regulation No. 98 of 2021 on Carbon Economic Value (the Carbon Regulation), refer to the UNFCCC, its Conferences of the Parties results, and the NDC as considerations in enacting these regulations.

Indonesia also previously implemented a Reducing Emissions from Deforestation and Forest Degradation (REDD+) Programme with international support.

Law stated - 23 August 2023

Main national regulatory policies

Outline recent government policy on climate matters.

To achieve its NDC target to reduce GHG emissions, the government of Indonesia recently enacted regulations on carbon tax and carbon economic value under Law No. 7 of 2021 regarding harmonised tax (the Harmonized Tax Law) and the Carbon Regulation, and climate change information systems to monitor and report GHG emissions, such as the National Greenhouse Gases Inventory System and the National Registry System on Climate Change Control.

Other existing national regulations and policies for specific sectors, such as the energy, industrial processes and product use, agriculture and forestry, and waste sectors, among others, have also been enacted to govern climate matters in Indonesia.

Going forward, we project that the Indonesian government will issue other implementing regulations on climate change (eg, implementing regulations for carbon economic value), which will address carbon market mechanisms, among other topics.

Law stated - 23 August 2023

Main national legislation

Identify the main national laws and regulations on climate matters.

Other than the laws enacted to ratify international climate conventions, Indonesia does not have a main law that specifically regulates climate matters. Indonesia still relies on its environmental laws as the main framework to help mitigate climate change. These include Law No. 32 of 2009 regarding Environmental Protection and Management, as amended by Law No. 6 of 2023 regarding Stipulation of Government Regulation in Lieu of Law No. 2 of 2022 on Job Creation, and Law No. 41 of 1999 regarding Forestry, as amended by Law No. 6 of 2023 regarding Stipulation of Government Regulation in Lieu of Law No. 2 of 2022 on Job Creation, including their implementing Government Regulations (Government Regulation No. 23 of 2021 regarding Organization of Forestry and Government Regulation No. 22 of 2021 regarding Organization of Environmental Protection and Management, respectively). More recently, there has been some interplay with financial service sector laws and regulations, most notably the reforms introduced by Law No. 4 of 2023 regarding Financial Sector Development and Strengthening (Law 4/2023), which clarifies the status of tradeable carbon credit units to be categorized as securities (efek) within the terms of Indonesian capital market law. For completeness, Law 4/2023 also amends the laws on the capital market and the authority of the Indonesian Financial Services Authority (OJK) to integrate carbon trading mechanics into the already existing laws, and to designate OJK as the regulator and supervisor for carbon exchange implementation. There also are other regulations concerning agriculture, peatland, energy, transportation, industry and waste management, among others.

Law stated - 23 August 2023

National regulatory authorities

Identify the national regulatory authorities responsible for climate regulation and its implementation and administration. Outline their areas of competence.

There are three national regulatory authorities responsible for the implementation and monitoring of climate regulations in Indonesia, which are the Minister of Environment and Forestry (MOEF), the Environmental Fund Management Agency (BPD LH) and the Peatland Restoration Agency (BRG).

MOEF is the chief institution responsible for establishing and implementing policies regarding climate change impact control and ozone layer protection. Any matters related to climate change will be governed and supervised by the MOEF; this includes submission of Indonesia's NDC and Biennial Update Report under the UNFCCC.

The BPD LH is a fund management agency under the Ministry of Finance (MOF) and is the government agency responsible for facilitating a funding system for the implementation of GHG reduction projects from the national to sub-national levels. All climate change funding, including the mobilisation and placement of fund resources, will be managed and overseen by the BPD LH.

The BRG is a non-ministerial agency formed in 2016 that reports directly to the President. Its main mission is to maintain and restore peat ecosystems, focusing on sub-national peat projects in Kalimantan, Sumatra and Papua.

In addition to the three above-mentioned government institutions, the MOF governs any climate change matters related to fiscal and tax instructions. The MOF was the government institution that took the lead in pushing for the implementation of a carbon tax in Indonesia. Carbon tax provisions are governed under the Harmonized Tax Law. Carbon emissions having a negative impact on the environment will be subject to a minimum carbon tax of 30 rupiah per kilogram of CO₂e or other equivalent measurement unit (equivalent to around US\$2.1 per tCO₂e).

Law stated - 23 August 2023

GENERAL NATIONAL CLIMATE MATTERS

National emissions and limits

What are the main sources of emissions of greenhouse gases (GHG) (or other regulated emissions) in your country and the quantities of emissions from those sources? Describe any limitation or reduction obligations. Do they apply to private parties in your country?

Based on Indonesia's Third Biennial Update Report (BUR) under the United Nations Framework Convention on Climate Change (Third Biennial Update), the main sources of GHG emissions in Indonesia in 2019 were, by order from highest:

- agriculture, forestry and other land use (AFOLU) sector;
- energy sector;
- waste sector; and
- industrial processes and product use (IPPU) sector.

The AFOLU sector contributed 1,030,154 Gg CO₂e (50.13 per cent), the energy sector contributed 636,453 Gg CO₂e (34.49 per cent), the waste sector contributed 120,333 Gg CO₂e (6.52 per cent), and the IPPU sector contributed 58,128 Gg CO₂e (3.15 per cent). Indonesia's total 2019 GHG emissions were 1,845,067 Gg CO₂e (these data reflect only the GHG emissions for CO₂, CH₄ and N₂O).

As a party to the Paris Agreement, the Indonesian government has an international obligation to reduce its GHG emissions according to its Nationally Determined Contribution (NDC) target. This obligation includes the submission of a progress report on climate change mitigation and adaptation to the United Nations Framework Convention on Climate Change every two years for the BUR.

With the enactment of the Harmonized Tax Law, a cap and tax scheme will be applied to companies in the private sector with carbon emissions. This scheme will first be implemented for coal-fired power plants.

Law stated - 23 August 2023

National GHG emission projects

Describe any major GHG emission reduction projects implemented or to be implemented in your country. Describe any similar projects in other countries involving the participation of government authorities or private parties from your country.

There have been several major GHG emission reduction projects implemented in Indonesia. Under the Kyoto Protocol, there were approximately 47 Clean Development Mechanism (CDM) projects as of 2018 in Indonesia. CDM projects promote carbon emission reduction through the sale of Certified Emission Reduction credits to countries with emission-reduction commitments. Examples of CDM projects implemented in Indonesia include the Bekasi Power Combined Cycle Power Plant Project and the Multi Nitro Indonesia Nitrous Oxide Abatement Project.

As deforestation and forest degradation is the major source of emissions in Indonesia, the government of Indonesia focussed its policy on the implementation of the Reducing Emissions from Deforestation and Forest Degradation (REDD+) Program by establishing the Presidential REDD+ Agency. REDD+ projects in Indonesia also are supported by international funding, including approximately US\$1 billion from the Norwegian government, among others. REDD+ projects include result-based payment for carbon reduction yields (ie, the Bujang Raba Community Payment for Ecosystem Services Project, Project Forest and Climate Change Programme, and the Katingan Peatland Restoration

and Conservation Project).

In the renewable energy sector, the government of Indonesia plans to have at least 23 per cent of its total primary energy supply generated by renewable sources by 2025. The government has released several policies, including the National Energy Policy (KEN) 2014–2050 in support of this goal.

Indonesia will also implement carbon tax policies and carbon trading mechanisms based on the Carbon Regulation and the Harmonized Tax Law.

Law stated - 23 August 2023

DOMESTIC CLIMATE SECTOR

Domestic climate sector

Describe the main commercial aspects of the climate sector in your country, including any related government policies.

The commercial aspects of the climate sector in Indonesia are mostly driven by private sector investment through international voluntary carbon trading schemes, with a compliance carbon trading market in the development pipeline. For example, Verified Carbon Standard issued by Verra, Gold Standard Credits or Voluntary Emission Reductions issued by Gold Standard, and Certified Emissions Reductions issued under the Clean Development Mechanism under the Kyoto Protocol.

There are several ongoing forestry and renewable energy projects that have been registered and verified by Verra. The Sumatra Merang Peatland Project, Rimba Raya Biodiversity Reserve Project, and Katingan Peatland and Restoration and Conservation Project have managed to reduce emissions from the agriculture, forestry and other land use sector and sell their emissions reductions to international stakeholders. In the renewable energy sector, the 55.5MW Natural Gas Power Generation Project at Batu Aji village, in Riau Islands province, the Mobuya Mini Hydro Power Plant 3 × 1,000kW, in North Sulawesi province, the Lahendong Unit 5 and Unit 6 Geothermal Project, and the 50MW Sipansihaporas Hydro Power Plant, in North Sumatra province, among others, have registered their renewable sources.

Other types of sustainable projects (eg, waste collection and waste recycling) are in the process of verifying and validating their plastic credits.

Under the Carbon Regulation, the government intends to create a national carbon market, which will be called a carbon exchange (bursa karbon). The carbon exchange will be an exchange or trade facilitator licensed by the Indonesian Financial Services Authority (OJK). By virtue of Law 4/2023, the authority of the OJK has been expanded to include regulatory and supervisory authority over carbon exchange economic activities. The carbon exchange will be a system that will regulate carbon trading activities and/or record ownership of carbon units. As of this publication, the OJK has enacted a new regulation regarding carbon trading through the carbon exchange and is in the process of determining the entity to be designated to run the carbon exchange.

Both voluntary and compliance markets are contemplated for the purpose of the carbon exchange. To implement the carbon trading compliance market, the government will set emissions ceilings on certain businesses and sectors. Companies that exceed their emissions ceiling will either be taxed or obliged to purchase carbon credits from other business actors, which will commercially affect how companies operate and invest in more environmentally friendly technology. The compliance carbon market is expected to focus initially on coal-fired power plants, with other types of power plants and other sectors such as forestry, land use, and the industrial sector being scrutinized by the regulators for further development.

Law stated - 23 August 2023

GENERAL GHG EMISSIONS REGULATION

Regulation of emissions

Do any obligations for GHG emission limitation, reduction or removal apply to your country and private parties in your country? If so, describe the main obligations.

The Indonesian government recently enacted the Carbon Regulation. The Carbon Regulation acknowledges the term 'Emission Ceiling,' which is defined as the highest emission level approved for every sector and business or activity. The calculation of the Emission Ceiling will be based on the GHG sectoral baseline, sectoral NDC target, inventory of GHG and the target achievement period. In addition, the Harmonized Tax Law imposes a cap and tax scheme.

Notwithstanding the foregoing, the Minister of Environment and Forestry (MOEF) has issued several regulations to control pollution from certain sectors. MOEF Regulation No. 11 of 2021, which concerns emission quality standards for generator sets, does not provide a maximum emission load, but it does require business actors to calculate the emission load using the manual method through laboratory testing. Other industries, such as pulp and paper, and oil and gas, are required to monitor their emissions and input the data to the Information on Continuous Industrial Emission Monitoring System.

Law stated - 23 August 2023

GHG emission permits or approvals

Are there any requirements for obtaining GHG emission permits or approvals? If so, describe the main requirements.

There are no requirements for obtaining GHG emission permits or approvals under the prevailing regulations. Nonetheless, in general, business actors are required to obtain an environmental license issued by the Online Single Submission system. The type of license depends on the risk level of a business activity (ie, low, medium and high risk). See the environment chapter for elaboration.

For specific businesses and sectors, the government will set an emissions ceiling with which such companies will have to comply.

Law stated - 23 August 2023

Oversight of GHG emissions

How are GHG emissions monitored, reported and verified?

GHG emissions are monitored, reported and verified through the National Registration System (SRN), which was first launched in November 2016. The SRN is regulated under MOEF Regulation No. P71/MENLHK/SETJEN/KUM 1 December 2017 of 2017 regarding the Implementation of the National Registry System Controlling Climate Change (MOEF Reg 71/2017) enacted on 31 January 2018. This regulation sets forth that the SRN operates to avoid double counting and to implement the principles under the Paris Agreement.

The SRN regulates registration and certification for all types of climate change actions (eg, adaptation actions, which include food security, energy independence, water security, health, municipal and rural civilisations, infrastructure, coast and small islands, and ecosystem security, and mitigation actions, which include energy, land use, land use change and forestry, agriculture, industrial process and product use and sewage, among others).

GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)**Regime**

Is there a GHG emission allowance regime (or similar regime) in your country? How does it operate?

The Carbon Regulation aims to govern the procedure for setting the baseline for GHG emissions, which shall be a determining factor to stipulate climate change mitigation targets. The Carbon Regulation introduces the term 'Emission Ceiling', which is the highest emission level for certain sectors. The Emission Ceiling will be determined by the ministry overseeing each sector.

Law stated - 23 August 2023

Registration

Are there any GHG emission allowance registries in your country? How are they administered?

Indonesia has launched the National Registration System (SRN) to register GHG emissions, as regulated under MOEF Reg 71/2017 and further regulated under the Carbon Regulation. This is in line with the principles in the Carbon Regulation, which stipulates that the SRN has the function:

- to act as government recognition for the contribution of carbon economic value to achieve the NDC targets;
- as a data and information system for mitigation actions and implementation of carbon economic value;
- to avoid double counting of mitigation actions; and
- to help trace carbon unit transfers and utilisation. SRN facilitates registration for all sorts of climate change mitigation and action, including REDD+ initiatives.

Project developers shall register their projects with the SRN via the following platform: <https://srn.menlhk.go.id/index.php?r=home%2Findex> . The data will then be validated by the SRN administrator. Following the validation, the administrator shall issue a registry number and the projects shall be verified. The verification process is based on the procedures set out in sectoral regulations and pursuant to ISO standards. In addition, the MOEF may issue certificates of appreciation to verified contributors of climate change projects.

Law stated - 23 August 2023

Obtaining, possessing and using GHG emission allowances

What are the requirements for obtaining GHG emission allowances? How are allowances held, cancelled, surrendered and transferred? Can rights in favour of third parties (eg, a pledge) be created on allowances?

The Carbon Regulation contemplates that certain business sectors that are subject to a regulated emissions ceiling will be required to obtain a GHG emission allowance in the form of a technical approval issued by the relevant sectoral ministry (articles 50(2) and 79(1) of the Carbon Regulation). However, because the Carbon Regulation is only an umbrella regulation with respect to climate change control and emissions reduction, more specific implementing regulations issued by each sectoral ministry will need to be observed. For example, technical approvals in the industrial

sector shall be regulated by the Ministry of Industry, while the Ministry of Energy and Mineral Resources will regulate technical approvals for the oil and gas sector. This requirement has only begun to be regulated, particularly in the coal-fired power plants sector, and more recently introduced for the forestry sector (mangrove and peatlands management). For business sectors not subject to future emissions ceilings, there are no provisions regarding the requirement to obtain a technical approval for the emissions allowance.

Following the legal classification of verified carbon credit units as securities, as discussed above, carbon units will be deemed as moveable goods due to their underlying value and the fact that they can be transferred/endorsed to multiple third parties. Therefore, they can be subject to pledge or fiducia security right in favor of third parties. We also note that until Law 4/2023 provides further clarity regarding the legal classification of carbon units as property under Indonesian law, the prevailing view on this matter is that the receivables deriving from the sale of carbon units can be encumbered with security rights. Such accounts receivable can then be collateralized with either pledge or fiducia security.

Law stated - 23 August 2023

TRADING OF GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)

Emission allowances trading

What GHG emission trading systems or schemes are applied in your country?

The government of Indonesia, under the National Climate Change Committee (NCCC), did at one time plan to launch a Voluntary Carbon Market. In October 2013, the NCCC issued a handbook to introduce a carbon trading market scheme in Indonesia. However, the carbon market was never launched and the NCCC was dissolved in 2015.

Notwithstanding the foregoing, the Carbon Regulation recognises and regulates a carbon market. Domestic and international carbon trading shall be done through emission trades and emission offsets. The Carbon Regulation proposes requirements for both domestic and international carbon trading.

Under the emission trading scheme, trade will be conducted by businesses and activities with emissions either above the regulated emission ceiling or below the regulated GHG emission ceiling.

The GHG emission offset scheme only applies to businesses and activities without any determined emission ceiling that provide a statement of emission reduction using the results of mitigation actions from other businesses and activities. To conduct GHG emission offset, businesses and activities with an emission surplus can sell their excess, and vice versa.

Businesses trading carbon are also obliged under the recently issued Minister of Environment and Forestry Regulation No. 21 of 2022 regarding Implementation of Carbon Economic Value (MOEF Reg 21/2022) to allocate a certain buffer amount, applicable for both domestic and international carbon trading. The purpose of this buffer is to allocate certain carbon units for risk control to achieve Indonesia's NDC target for carbon trading conducted all year long before 2030. The regulated buffer amount is: (1) 0-5 per cent for domestic transfers; (2) 10-20 per cent for foreign transfers; and (3) at least 20 per cent for foreign transfers outside the scope of the NDC (NDC Buffers). NDC Buffers can be returned to parties for trading if the NDC sub-sector target is met for two consecutive years.

Law stated - 23 August 2023

Trading agreements

Are any standard agreements on GHG emissions trading used in your country? If so, describe their main features and provisions.

There are no standard agreements on GHG emissions trading used in Indonesia. For voluntary carbon trading schemes

by the private sector, the arrangement is a business-to-business agreement and there are no standardised agreements required by applicable laws and regulations. Companies will want to remain alert for upcoming policies and regulations from the Indonesian Financial Services Authority (OJK) with respect to the carbon exchange that is currently under development.

Law stated - 23 August 2023

SECTORAL REGULATION

Energy sector

Give details of (non-renewable) energy production and consumption in your country. Describe any regulations on GHG emissions. Describe any obligations on the state and private persons for minimising energy consumption and improving energy efficiency. Describe the main features of any scheme for registration of energy savings and for trade of related accounting units or credits.

Indonesia's energy mix consists of approximately 66 per cent fossil fuels: refined petroleum, coal, gas and other non-renewable energy sources. Energy is consumed to meet the demands of the transportation, industry, household and commercial sectors. The energy sector is the second-highest source of GHG emissions in Indonesia.

The general national strategy to minimise energy consumption is governed under the National Energy Policy (KEN) 2014–2050 under Government Regulation No. 79 of 2014 regarding National Energy Policy (NEP). Under the NEP, the government aims to have at least 23 per cent of electricity in Indonesia come from renewable energy sources by 2025, with that figure to increase to 31 per cent by 2050. There is no specific GHG emissions limitation to minimise energy consumption. Nevertheless, the government aims to impose a carbon tax and emissions ceiling through the Harmonized Tax Law and Carbon Regulation, respectively.

Law stated - 23 August 2023

Other sectors

Describe, in general terms, any regulation on GHG emissions in connection with other sectors.

The general regulations on GHG emissions in connection with other sectors include:

- Minister of Environment and Forestry Regulation No. 21 of 2022 regarding Implementation of Carbon Economic Value;
- Minister of Environment and Forestry Regulation No. 7 of 2023 regarding Carbon Trading Procedures in the Forestry Sector;
- Minister of Energy and Mineral Resources Regulation No. 16 of 2022 regarding Implementation Procedures for Carbon Economic Value in the Power Plant Sub-Sector;
- Presidential Regulation No. 18 of 2020 regarding National Mid-Term Development Plan 2020–2024 (PR 18/2020), which sets out Indonesia's GHG emissions targets in several key sectors, including forestry, peatland, agriculture, energy, transportation, industry, and waste management.

In general, we note that there is a lack of sectoral regulation governing GHG emissions in specific sectors. Nonetheless, for the energy sector, the government has issued the National Energy Policy (KEN) 2014–2050 and Minister of Energy and Mineral Resources (MEMR) Regulation No. 22 of 2019 regarding Procedure for the Implementation of GHG Inventory and Mitigation in the Field of Energy. This MEMR Regulation concerns inventory, reporting, action plans and

stakeholders for the mitigation of GHG emissions in the energy sector.

Law stated - 23 August 2023

RENEWABLE ENERGY AND CARBON CAPTURE

Renewable energy consumption, policy and general regulation

Give details of the production and consumption of renewable energy in your country. What is the policy on renewable energy? Describe any obligations on the state and private parties for renewable energy production or use. Describe the main provisions of any scheme for registration of renewable energy production and use and for trade of related accounting units or credits.

Until mid-2020, the share of renewable energy in Indonesia's total primary energy supply had only reached 10.9 per cent. Coal-fired power plants still dominate the supply of electrical energy in Indonesia, while renewable energy power plants account for 14.69 per cent of the total national installed power generation capacity. Hydropower and geothermal power account for a majority of the renewable energy mix.

PR 18/2020 includes targets and strategies to strengthen economic resilience and strengthen infrastructure to support economic development, which includes a discussion on energy. Pursuant to the National Mid-Term Development Plan, the government plans to reach a renewable energy share of 23 per cent by 2025, a goal also outlined in Indonesia's Nationally Determined Contribution (NDC). To achieve energy efficiency, the government plans to increase the efficiency of energy and electric power utilisation by:

- developing an energy service company;
- expanding, rehabilitating and increasing the capacity of the transmission and distribution system;
- developing information management and data control systems;
- developing and utilising smart grid technology; and
- utilising high-efficiency and low-emission or HELE technology.

To express its commitment on renewable energy, Indonesia released the National Energy Policy (KEN) 2014–2050, which is a guideline to provide direction for national energy management to achieve national energy independence and security, supporting sustainable national development. Based on the KEN, the government plans to maximise the use of renewable energy, minimise the use of petroleum, optimise the use of natural gas and new energy (such as coal bed methane, liquified coal, gasified coal, hydrogen and nuclear), and use coal as a mainstay of national energy supply.

In the electricity sector, PT Perusahaan Listrik Negara (PLN), the Indonesian state-owned electricity enterprise, which has a monopoly on electricity distribution in Indonesia, recently introduced the Renewable Energy Certificate Program, aiming to increase awareness of renewable energy. Power producers will receive a certificate for every one megawatt-hour of renewable energy-based electricity they produce. Such certificates are tradeable and can be used by companies to offset their carbon footprint.

In addition, the government has enacted Presidential Regulation No. 112 of 2022 regarding the Acceleration of Renewable Energy Development for Electricity Generation (PR 112/2022), which also includes a mandatory phasing out of coal-fired power plants (CFPPs) and provisions on greater incentives for renewable energy projects. For example, for renewable project tenders, PR 112/2022 exempts (1) multifunctional hydro plants, (2) geothermal power plants, (3) expansion projects for geothermal, hydro, solar PV, wind, biomass and biogas power plants, and (4) excess power from geothermal, hydro, biomass and biogas power plants from the requirement to be listed in PLN's List of Selected Providers (Daftar Penyedia Terpilih (DPT)).

Wind energy

Describe, in general terms, any regulation of wind energy.

Wind power plants generating power supply for the public interest are considered a high-risk business pursuant to the recent risk-based licensing categories under Government Regulation No. 5 of 2021 regarding Risk-Based Licensing (GR 5/2021) and it is necessary to obtain a business licence for electricity supply for public purpose. The term 'business licence' replaces the previously applicable business licence for power supply business activities. Power producers apply to the Minister of Energy and Mineral Resources (MEMR) for a business licence online via the Online Single Submission system.

The prerequisites for a power producer to obtain a business licence for power supply for public purpose include the fulfilment of several administrative, environmental and technical commitments, as follows.

- Feasibility study of the power generation business that contains, among other things:
 - financial feasibility study;
 - operational feasibility study;
 - network interconnection study;
 - installation location;
 - one-line diagram;
 - type and capacity of the business envisaged;
 - construction schedule; and
 - operational schedule prepared by a certified business entity.
- Signed power purchase agreement (PPA) between the power producer and the proposed electricity buyer, which in this case is PLN, with the electricity tariff or pricing provision having been approved by the MEMR or the governor of the relevant region pursuant to its authority. PLN controls the transmission, distribution and sale of electric power in all regions in Indonesia. Therefore, any independent power producer (IPP) will be required to enter into a PPA with PLN.
- Other prerequisites include fulfilment of principal commitments for any facilities and infrastructure projects, such as spatial utilisation confirmation, environmental impact assessment (AMDAL), building approval (this is the Indonesian term for a building permit), Functional-Worthiness Certificate (this is the Indonesian term for a certificate of occupancy) and other applicable permits; hiring qualified technical personnel who possess the required competence certificates to operate the plant and the machinery and equipment therein before the commencement of the plant's operation; and procuring and installing equipment conforming to mandatory National Indonesian Standard requirements, if any and as applicable, before the commencement of the plant's operation.

The government of Indonesia's support for the development of renewable energy power plants is further refined under MEMR Regulation No. 50 of 2017 regarding Utilisation of Renewable Energy Resources for the Provision of Electricity, as amended by MEMR Regulation No. 53 of 2018 and, most recently, by MEMR Regulation No. 4 of 2020 (MEMR Regulation 4/2020) (altogether, MEMR Regulation 50/2017 as amended). Under the regulation, there is a specific mandate for PLN to purchase electricity generated from renewable energy.

In general, the purchase of power generated from renewables by PLN can be done through a direct selection offer or direct appointment by PLN. Direct selection typically involves a qualification process in which a minimum of two pre-selected developers submit bids to be evaluated by PLN, with the winning bidder executing a PPA with PLN. Direct

appointment, which follows a qualification and evaluation process similar to that for direct selection, except that there only needs to be only one bidder, is also possible under article 4(1a) of MEMR Regulation 50/2017 as amended in the following limited circumstances:

- if the local electricity system suffers a crisis or emergency situation;
- for the purchase of excess electricity, including purchasing electricity through cooperation with the holder of an electricity supply distribution, sale or integrated electricity supply business license covering a specified business area;
- for increased generation capacity at the location of an operating power plant (ie, expansion projects); or
- for the purchase of electricity from a renewable power plant in the event there is only one IPP candidate for the relevant area.

It is worth noting that the more recent MEMR Regulation 4/2020 (as part of the revision of MEMR Regulation 50/2017 as amended) removed the requirement to deliver renewable energy projects to the government as build-own-operate-transfer (BOOT), and now permits projects that are designated on a build-own-operate basis, in addition to BOOT projects.

The electricity tariff is determined by benchmarking the local electricity generation basic cost (BPP) in the region where the electricity is generated against the national average BPP. BPP is PLN's average electricity generation cost as determined annually by the MEMR based on PLN's own recommendation. An exemption to this tariff regime applies only for entities that have been appointed as winners of capacity quotas for renewable energy projects that obtained approval for a specified electricity price from the MEMR prior to the issuance of MEMR Reg. 50/2017 as amended.

MEMR Regulation 50/2017 as amended stipulates that the calculation of the electricity tariff for power generated from renewables is as follows:

- if the local BPP is greater than the national BPP from the previous year, the tariff shall be set at a maximum 85 per cent of the local BPP; or
- if the local BPP is equal to or lower than the national BPP from the previous year, PLN and the relevant IPP can determine the tariff based on a mutual agreement.

At present, the applicable BPP refers to MEMR Decree No. 169.K/HK.02/MEM.M/2021 regarding PLN Electricity Generation Basic Cost for 2020, which sets the national BPP at 1,027.7 rupiah/kWh, while local BPPs range from 848.71 rupiah/kWh to 2,805.50 rupiah/kWh.

A renewable energy power plant can also obtain other incentives as governed under Presidential Regulation No. 4 of 2016 regarding Acceleration of Electrical Infrastructure Development, as amended by Presidential Regulation No. 14 of 2017, in the form of fiscal incentives, ease of licensing, determination of purchase price for each type of renewable energy, establishment of an independent business entity to supply power to PLN and provision of subsidies.

Notwithstanding the foregoing, different rules apply for windmill plants that generate power for private use.

Law stated - 23 August 2023

Solar energy

Describe, in general terms, any regulation of solar energy.

Solar power plants are also considered a high-risk business and therefore a business license is required to commence

operations.

The prerequisites to obtaining a business licence for a solar power plant are the same as to obtain a business licence for a windmill plant. The applicable electricity tariff for solar power plants is also the same as for windmill plants.

Law stated - 23 August 2023

Hydropower, geothermal, wave and tidal energy

Describe, in general terms, any regulation of hydropower, geothermal, wave or tidal energy.

Hydropower, geothermal, wave and tidal energy power plants are also considered high-risk businesses and therefore require a business licence to commence operations.

The prerequisites to obtain a business licence for hydropower, geothermal, wave and tidal energy power plants are the same prerequisites to obtain a business licence for windmill plants. Wave and tidal energy power plants may be required to obtain additional permits (eg, water location permit).

The applicable electricity tariff for hydropower, geothermal, wave and tidal energy power plants is the same as for windmill plants.

Law stated - 23 August 2023

Waste-to-energy

Describe, in general terms, any regulation of production of energy based on waste.

Waste-to-energy power plants are also considered a high-risk business and therefore a business licence is required to commence operations.

The prerequisites for obtaining a business licence for a waste-to-energy power plant are the same as for a windmill plant. The applicable electricity tariff for waste-to-energy plants is also the same as for windmill plants, except that the electricity tariff for waste-to-energy plants can also refer to the fixed tariff regime under Presidential Regulation No. 35 of 2018 regarding Acceleration of the Establishment of Sustainable Waste-Based Power Plants (PR 35/2018).

PLN's purchase price for electricity generated from a WTE plant with:

- a capacity of up to 20MW and connected to a high, medium and low-voltage network is US\$13.35 cent/kWh; and
- a capacity above 20MW and connected to a high and medium-voltage network is $14.54 - (0.076 \times (\text{electricity generated by the WTE and sold to PLN}))$.

The above purchase prices are non-negotiable tariffs and without any price escalation adjustment. The tariffs under PR 35/2018 are relatively higher than the tariffs set out in MEMR 50/2017.

For waste-to-energy projects, in addition to electricity sales, the power producer can obtain a tipping fee, which is compensation paid by the regional government to the party handling the waste management activities. PR 35/2018 governs that the tipping fee should not exceed 500,000 rupiah per ton.

PR 35/2018 is part of the government of Indonesia's effort to accelerate the development of WTE projects in the country, with a focus on 12 cities (DKI Jakarta, Tangerang, South Tangerang, Bekasi, Bandung, Semarang, Surakarta, Surabaya, Makassar, Denpasar, Palembang and Manado).

In addition to PR 35/2018, the central government may provide additional state budget to regional governments to

support the development of waste-to-energy projects to cover waste management services at a maximum 500,000 rupiah per ton of waste. This support is stipulated under Minister of Environment and Forestry (MOEF) Regulation No. P.24/MENLHK/SETJEN/KUM.1/5/2019 of 2019 regarding Waste Processing Service Fee Assistance in the Context of Accelerating the Construction of Waste Processing Installations for the Production of Electric Power Based on Environmentally Friendly Technology and MOF Regulation No. 26/PMK.07/2021 regarding Funding Support from the State Budget for Waste Management in the Regions.

Law stated - 23 August 2023

Biofuels and biomass

Describe, in general terms, any regulation of biofuel for transport uses and any regulation of biomass for generation of heat and power.

By virtue of MEMR Regulation No. 32 of 2008, as last amended by MEMR Regulation No. 12 of 2015 regarding the Supply, Utilization, and Trade of Biofuel as Other Fuel Sources, the government has imposed an obligation gradually to increase the percentage of biofuel utilisation in multiple sectors against the total needs. The affected sectors include the power plant, industrial and commercial sectors, as well as public and non-public transportation. For instance, the regulation provides that by January 2025, 30 per cent of the power plant sector must utilise biodiesel (B100) as fuel. Similar obligations are provided for the utilisation of bioethanol and vegetable oil.

The business of biofuel and biomass plants falls under the organic chemical industry from agriculture sources and is considered a high-risk business pursuant to GR 5/2021. It requires a business licence obtained from the OSS system and the business actor must fulfil certain administrative and technical requirements, among others:

- having a biofuel resource;
- data on specification and quality standard for the biofuel;
- trademark and trade name;
- statement letter on occupational safety and health and environmental management;
- statement letter on compliance with the laws and regulations;
- statement letter on willingness to be examined by the relevant authorities; and
- document on list of beneficial ownership.

Biofuel plants are also required to guarantee a sustainable supply to the domestic market, and utilise domestic raw materials, technology and manpower. Other primary requirements include fulfilment of principal commitments for any facilities and infrastructure project (such as spatial utilisation confirmation, AMDAL, building approval, Functional-Worthiness Certificate and other applicable permits).

The market index price of biodiesel fuel is determined monthly by the MEMR after carrying out a verification as stipulated in MEMR Regulation No. 24 of 2021 regarding the Supply and Utilization of Biodiesel Types of Biofuels in the Financing Framework of the Oil Palm Plantation Fund Management Agency, along with MEMR Decree No. 0219 K/12/MEM/2010 of 2010 regarding Market Index Prices of Oil Fuels and Market Index Prices of Biofuels Mixed Into Certain Types of Fuel Oil (as amended by MEMR Decree No. 3053 K/12/MEM/2011 of 2011).

The use of biomass as a renewable energy source for power generation is regulated by Government Regulation No. 79 of 2014 regarding the National Energy Policy, and more specifically under MEMR Regulation 50/2017 as amended. The applicable electricity tariff for biomass used for power plants is the same as for windmill plants.

In addition, power plants using renewable resources and biofuel plants are considered pioneer industries and may be entitled to tax holidays pursuant to Minister of Finance Regulation No. 130/PMK.010/2020 regarding Corporate Tax

Reduction Facilities.

Law stated - 23 August 2023

Carbon capture and storage

Describe, in general terms, any policy on and regulation of carbon capture and storage.

The currently regulated carbon capture and storage activities are those arising from forestry business activities under Law No. 41 of 1999, as last amended by Law No. 6 of 2023, regarding Forestry (the Forestry Law) and its implementing regulations, namely Government Regulation No. 23 of 2021, MOEF Regulation No. 21 of 2022, MOEF Regulation No. 7 of 2023, and other MOEF regulations.

There are minimum regulations for carbon capture and trade in the context of non-forestry sectors such as energy, waste and industrial processes. It is expected that the Carbon Regulation will serve as the primary framework for carbon trading in multiple sectors.

Under the Forestry Law and MOEF regulations, carbon 'storage and sequestration' are categorised as environmental service businesses that may be done in both protected forest and productive forest areas with a forestry utilisation business licence (PBPH). Under a PBPH granted by the MOEF, concession holders may be able to conduct various forestry-type business activities aside from carbon capture and storage, such as timber extraction and natural tourism, in accordance with the MOEF stipulation. This is in contrast with the previous licensing regime, where one forestry business license was exclusive to a single type of forestry business (ie, one licence for timber extraction, one licence for carbon storage or capture). The current PBPH licensing mechanism is an effort by the government to streamline licensing in the forestry sector and induce the conventional logging industry also to conduct carbon capture or storage, trade or ecosystem restoration and other environmentally beneficial services. This supports the government's commitment as a party to the Paris Agreement.

Under the current regulations, PBPH holders will be obliged to make a non-tax revenue payment to the government for the grant of their PBPH licence, along with provisional payments of fees depending on their yield. We also note that the government is increasing tax imposition, particularly value added tax, in the Harmonized Tax Law, which will impact future carbon credit transactions arising from carbon capture or storage business activities. It is also expected that in the near future, certain businesses related to peatland and mangrove management will be subject to a certain emissions ceiling contemplated by the government under MOEF Regulation No. 7 of 2023.

Law stated - 23 August 2023

CLIMATE MATTERS IN TRANSACTIONS

Climate matters in M&A transactions

What are the main climate matters and regulations to consider in M&A transactions and other transactions?

There are no universal climate change matters and regulations that apply generally to all business actors in the context of M&A transactions and the company or compliance due diligence process customarily involved in such transactions. For certain carbon trading actors, particularly within the context of the compliance market, a business actor/entity's compliance with its emissions ceiling stipulated by the government will affect its compliance with its emissions obligations. The NDC Buffers will also determine the compliance of companies that trade carbon credits through compliance market or voluntary market schemes.

Aside from carbon trading-related activities, climate change-related matters to be considered in connection with an

M&A transaction will be those intertwined with a target company's environmental licensing and compliance. For example, whether an industrial company has duly complied with the gas emissions requirement stipulated in its environmental approval. Different companies may be subject to different assessments in an M&A due diligence, depending on the nature of their business and the sector in which they operate.

Law stated - 23 August 2023

UPDATE AND TRENDS

Emerging trends

Are there any emerging trends or hot topics that may affect climate regulation in your country in the foreseeable future?









The Harmonized Tax Law mandated that the carbon tax for coal-fired power plants would enter into force by 1 April 2022, and the full imposition of the carbon tax would begin in 2025. However, the carbon tax for coal-fired power plants has been postponed several times and is now planned to be introduced in 2025. To implement the carbon tax, the Harmonized Tax Law requires the Ministry of Finance to prepare regulations on (1) procedures for the calculation, collection, payment or deposit, reporting and mechanisms for the imposition of carbon tax; and (2) procedures for the deduction of carbon tax or other treatments for carbon tax, or both.

Specific for carbon trading, the Minister of Environment and Forestry enacted a carbon trading regulation specifically for the forestry sector, which, among other things, regulates that the trading of carbon can only be done by forestry utilisation business licence holders and other forest rights holders. It also regulates the imposition of an emissions ceiling on peatland and mangrove management companies, and introduces a maximum quota for international carbon trading. In addition to the regulations for the forestry sector and coal-fired power plants, the Indonesian government, through the relevant ministries, is preparing carbon-related regulations in other specific fields.

In addition, the Indonesian Financial Services Authority (OJK) is expected to finalise the framework and institutions to run and administer the first carbon exchange in Indonesia by virtue of its framework regulation, namely, OJK Regulation No. 14 of 2023 regarding Carbon Trading through Carbon Exchange, which entered into force on 2 August 2023. This regulation reaffirms the status of carbon units as securities and sets forth the requirements, operational and internal controls, and licensing and reporting obligations for the entity that will administer the carbon exchange.

Law stated - 23 August 2023

Jurisdictions

	European Union	Allen & Overy LLP
	France	Huglo Lepage Avocats
	India	Shardul Amarchand Mangaldas & Co
	Indonesia	SSEK Law Firm
	Japan	Anderson Mōri & Tomotsune
	Malta	Camilleri Preziosi
	Taiwan	Lee and Li Attorneys at Law
	USA	Beveridge & Diamond PC