

REGULATION OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA
NUMBER 40 OF 2025
ON
NATIONAL ENERGY POLICY

BY THE GRACE OF ALMIGHTY GOD

THE PRESIDENT OF THE REPUBLIC OF INDONESIA,

- Having considered :
- a. that in developing the implementation of the national energy policy, there are significant strategic environmental changes, both nationally and globally, including the economic growth target to become a developed country by 2045, innovations in energy technology development, and rapid diversification of new and renewable energy types, which will increase the market share of new and renewable energy in the national primary energy mix, as well as the largest contribution of the energy sector in fulfilling the national commitment to achieve greenhouse gas emission reduction targets and net-zero emissions by 2060;
 - b. that based on the considerations as referred to in paragraph a, it is necessary to update the national energy policy as stipulated in Government Regulation Number 79 of 2014 on National Energy Policy;
 - c. that the draft of national energy policy has been approved by the House of Representatives of the Republic of Indonesia in accordance with the provisions of laws and regulations;
 - d. that based on the considerations as referred to in paragraphs a, b, and c, and to implement the provisions of Article 11 paragraph (2) of Law Number 30 of 2007 on Energy, it is necessary to enact a Government Regulation on National Energy Policy;

- Having regard to :
1. Article 5 paragraph (2) of the 1945 Constitution of the Republic of Indonesia;
 2. Law Number 30 of 2007 on Energy (State Gazette of the Republic of Indonesia Year 2007 Number 96, Supplement to the State Gazette of the Republic of Indonesia Number 4746);

DECIDES:

To issue : GOVERNMENT REGULATION ON NATIONAL ENERGY POLICY.

CHAPTER I

GENERAL PROVISIONS

Article 1

In this Government Regulation:

1. Energy means a capability to conduct work that could be in the form of heat, light, mechanics, chemical, and electromagnetic.
2. Energy Source means a thing that could produce Energy, both directly and through conversion or transform process.
3. Energy Resource means natural resources that could be utilized, as Energy Sources and Energy.
4. New Energy means the Energy coming from New Energy Sources.
5. Renewable Energy means the Energy derived from Renewable Energy Sources.
6. Non-Renewable Energy means Energy derived from non-renewable energy sources.
7. Net Zero Emission (NZE) means a condition where the amount of greenhouse gas emissions produced is balanced by the amount that can be absorbed by the environment and atmosphere in order to keep the global temperature increase from exceeding 1.5°C.
8. Green Economy means a sustainable and socially inclusive system of production, distribution, and consumption.
9. Energy Management means an activity consisting of the supply, enterprise, and utilization of Energy, and the provision of Strategic Reserves and Energy Resources Conservation.
10. Energy Supply means any activity or process aimed to provide Energy, both from domestic and overseas.
11. Energy Utilization means the activity to use Energy, both directly and indirectly from Energy Sources.
12. Energy Independence means the condition of ensuring Energy availability by maximizing self-sufficiency through domestic potential including Energy Sources, technologies, and other components.
13. Energy Resilience means a condition of ensuring the availability of Energy and access of people to Energy at affordable prices in the long term with regard to the protection of the Environment.
14. Energy Sovereignty means the right of the state and the nation to independently determine Energy Management policies to achieve Energy Independence and Energy Resilience.
15. Energy Sector Decarbonization means the process of reducing greenhouse gas emissions from the Energy sector into the atmosphere to achieve a Green Economy and Net Zero Emissions by 2060 through gradual Energy

- transition.
16. Climate Resilience means the ability to anticipate, prepare for, and respond to the impacts, risks and vulnerabilities resulting from climate change on regional areas or community livelihoods.
 17. Circular Economy means a closed circular economic system approach, by maximizing the use and value of materials, components, products, and waste utilization.
 18. Energy Conservation means a systematic, planned, and integrated effort intended to preserve domestic Energy Resources and to improve efficiency in their utilization.
 19. Energy Resource Conservation means the management of Energy Resources that guarantees their utilization and supply while maintaining and enhancing the quality of value and diversity.
 20. Environment means a spatial unit with all objects, power, conditions, and living creatures, including human beings and their behaviors, which influence the sustainable life and well-being of human beings and other living creatures.
 21. Primary Energy means Energy sourced from nature and has not undergone a conversion or transformation process.
 22. Final Energy means Energy Sources and Energy that can be directly consumed by end-users.
 23. Green Energy means Energy Sources and Energy that are clean and environmentally friendly.
 24. Energy Industry all industries engaged in the production and sales of Energy, the manufacture of production equipment, and Energy Utilization including activities of Energy Sources extraction, processing, storage, transmission, and distribution.
 25. Green Energy Industry means an Energy Industry that in its production process prioritizes efforts to efficiently and effectively utilize resources in a sustainable manner, so that it can harmonize industrial development with the preservation of functions of Environment and it can provide benefits to the public.
 26. Energy Intensity means the total amount of Energy consumption in tonnes of oil equivalent (TOE) per unit of gross domestic product in US dollars (USD).
 27. Energy Sector Emission Intensity means the amount of Energy Sector GHG Emissions in tons of carbon dioxide equivalent (CO₂e) per unit of Primary Energy input in tonnes of oil equivalent (TOE).
 28. Energy Reserves means Energy Resources whose location, quantity, and quality are already known.
 29. Strategic Reserves mean Energy Reserves for the future.
 30. Energy Buffer Reserve means the amount of availability of Energy Sources and Energy stored nationally that are needed to meet national Energy demands within a certain period.
 31. Operational Reserve means the amount of availability of Energy Sources and Energy owned by the Energy Suppliers that are needed to meet consumer demands.
 32. Energy Diversification means the diversification of Energy

Source utilization.

33. Greenhouse Gas Emission in the Energy Sector, hereinafter referred to as GHG Emission in the Energy Sector, means emission generated by the production and utilization processes of Energy Sources, especially non-renewable energy sources.
34. Carbon Economic Value, hereinafter abbreviated to CEV, means the value assigned to every unit of greenhouse gas emissions generated from human and economic activities.
35. Electrification means the use or replacement of non-electric Energy utilization into electric Energy.
36. Energy Storage means a series of processes, methods, tools, and/or technologies used to store electric, electrochemical, chemical, mechanical, thermal (heat) Energy, or other Energy that can be utilized at a certain time for various purposes.
37. Energy System means the infrastructure used to extract, transform, transmit, and convert Energy for the purpose of Energy Supply.
38. Sustainable Development means a conscious and planned effort that integrates the Environment, social, and economic aspects into a development strategy to ensure the integrity of the Environment, as well as the safety, capability, prosperity, and quality of life for present and future generations.
39. Electricity Suppliers means a business entity engaged in power generation, both for public and private interests.
40. Electricity System means a system for providing electricity consisting of a collection of power plants and substations connected to one another by transmission networks with load centers or distribution networks.
41. Nuclear Power means energy in any form released in the core transformation process, including energy originating from ionizing radiation sources.
42. Tonnes of Oil Equivalent, hereinafter abbreviated as TOE, means the quantity of energy contained in one tonne of crude oil.
43. Business Entity means a business entity, whether a legal entity or not, that continually carries out a certain type of business/activity, operates, and is domiciled within the territory of the Republic of Indonesia.
44. Energy Supplier means Business Entity, permanent establishments, cooperatives, and/or community-based organizations that are responsible for executing Energy Supply.
45. Energy User means the central government, regional governments, Business Entity, permanent establishments, and communities that carry out Energy Utilization.
46. Energy Source User means the central government, regional governments, Business Entity, permanent establishments, and communities that carry out Energy Sources utilization.
47. Central Government means the President of the Republic of Indonesia who holds the power to govern the Republic of

Indonesia, assisted by the Vice President and ministers as referred to in the Constitution of the Republic of Indonesia of 1945.

48. Regional Government means the head of the region who serves as the element organizing regional governance and leads the implementation of government affairs that fall under the authority of the autonomous region.
49. Minister means the minister administering government affairs in the field of Energy.
50. National Energy Council means a national, independent, and permanent institution responsible for national energy policy.

CHAPTER II

OBJECTIVES AND TARGETS

Divison One Objectives

Article 2

The national energy policy aims to guide the implementation of Energy Management policies that are based on just, sustainable, integrated, efficient, productive, and environmental awareness principles in order to create national Energy Independence, national Energy Resilience, and fulfillment of Indonesia's commitments in the Energy Sector Decarbonization to realize national Climate Resilience and support Green Economic development.

Article 3

The national energy policy is carried out for the period up to 2060.

Article 4

- (1) The national energy policy provides guidance in the formulation of national general plans related to electricity, oil, gas, coal, and other energy.
- (2) The national energy policy serves as a reference in the formulation of national mid-term development plans and strategic plans of ministries/agencies related to national and regional Energy Management.

Article 5

- (1) The national energy policy may be reviewed every five (5) years or sooner than five (5) years if necessary.
- (2) The review as referred to in paragraph (1) is carried out where there is a change in strategic conditions and environment.

Article 6

National Energy Independence, national Energy Resilience, and fulfillment of Indonesia's commitments in Energy Sector Decarbonization as referred to in Article 2, are achieved by

realizing:

- a. Energy Resources as development capital are prioritized to meet domestic Energy demands and Strategic Reserve, in order to secure Energy Supply in the long term;
- b. Energy Resilience with long-term resilient conditions;
- c. Energy Management that relies on Energy Resources and national potential;
- d. rational fulfillment of Energy demands to achieve human development index targets and Green Economy;
- e. Energy availability and fulfillment of domestic Energy Source demands;
- f. optimal, integrated, and sustainable Energy Resources Management;
- g. efficient Energy Supply and Utilization in all sectors;
- h. fair and equitable access to Energy for the community;
- i. acceleration of research, development, assessment, and application of technology through research and innovation of technology, Energy Industry, and the role of Energy services, especially based on the utilization of national Energy Resources;
- j. technology transfer, clearing, and audit, as well as education and training;
- k. Energy Sovereignty with high Energy productivity;
- l. expansion of employment, job opportunity, and business;
- m. preservation of Environmental functions;
- n. optimization of low-carbon technology utilization in the Non-Renewable Energy utilization; and
- o. management of optimal Energy facilities and infrastructure, with minimum stranded asset.

Division Two Targets

Article 7

The targets of the national energy policy in Energy Management, include:

- a. realization of a paradigm that Energy Resources are capital for Sustainable Development;
- b. realization of the optimization of Energy Utilization for national economic development;
- c. fulfillment of national Energy demands fairly and equitably in order to support sustainable economic development;
- d. realization of national Energy Sovereignty, Energy Independence and Energy Resilience;
- e. realization of Energy Sector Decarbonization through Energy transition to support the achievement of reduction target of GHG Emissions in the Energy Sector and Net Zero Emission by 2060 while still prioritizing national Energy Independence and Energy Resilience;
- f. creation of domestic value added; and
- g. realization of labor employment.

Article 8

- (1) In realizing the targets of the national energy policy as

referred to in Article 7, the targets of Final Energy utilization and Primary Energy supply are set by considering the targets for economic growth, population growth, and strategic environmental changes.

- (2) The targets of Final Energy utilization and Primary Energy supply as referred to in paragraph (1) are achieved by prioritizing the security of Energy supply and the affordability of Energy prices, while still considering the fair economic value and the state financial capacity.
- (3) The achievement of targets in Final Energy utilization and Primary Energy supply as referred to in paragraph (2) is carried out through Energy Transition by developing low carbon Energy in a mid-term and long-term period in a gradual, rational, measurable and sustainable manner.

Article 9

- (1) The targets of Final Energy utilization as referred to in Article 8 includes the achievement of Final Energy utilization:
 - a. by 2030 between two hundred fifty-five point one (255.1) million TOE and two hundred ninety-nine point zero (299.0) million TOE;
 - b. by 2040 between three hundred three point nine (303.9) million TOE and three hundred fifty-eight point nine (358.9) million TOE;
 - c. by 2050 between three hundred fifty-four point six (354.6) million TOE and four hundred fourteen point seven (414.7) million TOE; and
 - d. by 2060 between three hundred seventy-eight point five (378.5) million TOE and four hundred thirty-two point eight (432.8) million TOE.
- (2) The achievement of Final Energy utilization as referred to in paragraph (1) is realized through the following stages:
 - a. the achievement of Final Energy utilization in:
 1. industrial sector:
 - a. by 2030 between one hundred twenty-seven point nine (127.9) million TOE and one hundred fifty-three point four (153.4) million TOE;
 - b. by 2040 between one hundred sixty-eight point nine (168.9) million TOE and one hundred ninety-six point six (196.6) million TOE;
 - c. by 2050 between two hundred fifteen point four (215.4) million TOE and two hundred fifty-two point zero (252.0) million TOE; and
 - d. by 2060 between two hundred forty-six point seven (246.7) million TOE and two hundred seventy-four point zero (274.0) million TOE.
 2. transportation sector:
 - a. by 2030 between eighty-seven point zero (87.0) million TOE and ninety-five point six (95.6) million TOE;

- b. by 2040 between eighty-five point eight (85.8) million TOE and ninety-six point eight (96.8) million TOE;
 - c. by 2050 between seventy-nine point six (79.6) million TOE and ninety point one (90.1) million TOE; and
 - d. by 2060 between sixty-four point seven (64.7) million TOE and eighty point zero (80.0) million TOE.
3. commercial sector:
- a. by 2030 between eleven point two (11.2) million TOE and fifteen point six (15.6) million TOE;
 - b. by 2040 between fourteen point eight (14.8) million TOE and twenty point nine (20.9) million TOE;
 - c. by 2050 between eighteen point four (18.4) million TOE and twenty-five point six (25.6) million TOE; and
 - d. by 2060 between twenty point eight (20.8) million TOE and twenty-seven point two (27.2) million TOE.
4. household sector:
- a. by 2030 between twenty-nine point zero (29.0) million TOE and thirty four point three (34.3) million TOE;
 - b. by 2040 between thirty-four point three (34.3) million TOE and forty-four point six (44.6) million TOE;
 - c. by 2050 between forty-one point two (41.2) million TOE and forty-six point nine (46.9) million TOE; and
 - d. by 2060 between forty-six point three (46.3) million TOE and fifty-one point seven (51.7) million TOE.
- b. achievement of Final Energy utilization by energy type of:
- 1. solar:
 - a) by 2030 between one point two (1.2) million TOE and one point five (1.5) million TOE;
 - b) by 2040 between one point eight (1.8) million TOE and one point nine (1.9) million TOE;
 - c) by 2050 between four point three (4.3) million TOE and four point five (4.5) million TOE; and
 - d) by 2060 between eleven point six (11.6) million TOE and twelve point seven (12.7) million TOE.
 - 2. biomass:
 - a) by 2030 between fifteen point eight (15.8) million TOE and twenty-three point one (23.1) million TOE;
 - b) by 2040 between twenty-one point nine

- (21.9) million TOE and twenty-four point seven (24.7) million TOE;
 - c) by 2050 between thirty point three (30.3) million TOE and thirty-five point zero (35.0) million TOE; and
 - d) by 2060 between sixty-seven point five (67.5) million TOE and seventy-one point nine (71.9) million TOE.
3. biogas:
- a) by 2030 between forty-eight point four (48.4) thousand TOE and sixty-five point one (65.1) thousand TOE;
 - b) by 2040 between eighty-seven point five (87.5) thousand TOE and one hundred eighteen point two (118.2) thousand TOE;
 - c) by 2050 between one hundred fifty-eight point four (158.4) thousand TOE and two hundred point seven (200.7) thousand TOE; and
 - d) by 2060 between two hundred eighty-six point seven (286.7) thousand TOE and three hundred seventy-eight point three (378.3) thousand TOE.
4. biofuel:
- a) by 2030 between eighteen point seven (18.7) million TOE twenty-two point seven and (22.7) million TOE;
 - b) by 2040 between twenty-one point nine (21.9) million TOE and twenty-five point two (25.2) million TOE;
 - c) by 2050 between eighteen point seven (18.7) million TOE and twenty-two point one (22.1) million TOE; and
 - d) by 2060 between thirteen point six (13.6) million TOE and nineteen point nine (19.9) million TOE.
5. hydrogen:
- a) by 2030 between zero point seven (0.7) thousand TOE and one point four (1.4) thousand TOE;
 - b) by 2040 between five point four (5.4) million TOE and six point four (6.4) million TOE;
 - c) by 2050 between twenty point four (20.4) million TOE and twenty-three point two (23.2) million TOE; and
 - d) by 2060 between thirty-one point four (31.4) million TOE and thirty-five point four (35.4) million TOE.
6. ammonia:
- a) by 2030 between two point four (2.4) thousand TOE and two point nine (2.9) thousand TOE;
 - b) by 2040 between one (1) million TOE and one point two (1.2) million TOE;

- c) by 2050 between three point five (3.5) million TOE and four point three (4.3) million TOE; and
 - d) by 2060 between three point five (3.5) million TOE and seven point five (7.5) million TOE.
7. dimethyl ether:
- a) by 2030 between zero (0) TOE and six hundred (600) thousand TOE;
 - b) by 2040 between three point zero (3.0) million TOE and three point six (3.6) million TOE;
 - c) by 2050 between three point zero (3.0) million TOE and three point six (3.6) million TOE; and
 - d) by 2060 between three point zero (3.0) million TOE and three point six (3.6) million TOE.
8. oil fuels:
- a) by 2030 between seventy-five point three (75.3) million TOE and eighty-two point one (82.1) million TOE;
 - b) by 2040 between sixty-four point three (64.3) million TOE and seventy-three point five (73.5) million TOE;
 - c) by 2050 between forty-five point eight (45.8) million TOE and fifty-four point seven (54.7) million TOE; and
 - d) by 2060 between twenty-two point eight (22.8) million TOE and thirty-two point zero (32.0) million TOE.
9. natural gas:
- a) by 2030 between eighteen point eight (18.8) million TOE and twenty point one (20.1) million TOE;
 - b) by 2040 between twenty-four point nine (24.9) million TOE and twenty-seven point three (27.3) million TOE;
 - c) by 2050 between forty point four (40.4) million TOE and forty-seven point four (47.4) million TOE; and
 - d) by 2060 between fifty-six point six (56.6) million TOE and seventy-one point one (71.1) million TOE.
10. liquefied petroleum gas LPG:
- a) by 2030 between eleven point zero (11.0) million TOE and eleven point two (11.2) million TOE;
 - b) by 2040 between two point eight (2.8) million TOE and three point zero (3.0) million TOE;
 - c) by 2050 between one point zero (1.0) million TOE and one point one (1.1) million TOE; and

- d) by 2060 between zero point eight (0.8) million TOE and zero point nine (0.9) million TOE.
11. coal:
- a) by 2030 between sixty-seven point two (67.2) million TOE and sixty-eight point seven (68.7) million TOE;
 - b) by 2040 between eighty-three point three (83.3) million TOE and eighty-five point three (85.3) million TOE;
 - c) by 2050 between eighty point three (80.3) million TOE and eighty-one point eight (81.8) million TOE; and
 - d) by 2060 between twenty-five point three (25.3) million TOE and thirty-eight point six (38.6) million TOE.
12. electricity:
- a) by 2030 between forty-six point eight (46.8) million TOE, equivalent to five hundred forty-four terawatt-hours (544 TWh) up to sixty-nine point three (69.3) million TOE, equivalent to eight hundred six terawatt-hours (806 TWh) without accounting the captive power or between sixty point one (60.1) million TOE, equivalent to six hundred ninety-nine terawatt-hours (699 TWh) to eighty-four point five (84.5) million TOE, equivalent to nine hundred eighty-three terawatt-hours (983 TWh) by accounting the captive power;
 - b) by 2040 between seventy-three point five (73.5) million TOE equivalent to eight hundred fifty-five terawatt-hours (855 TWh), and one hundred six point seven (106.7) million TOE, equivalent to one thousand two hundred forty terawatt-hours (1,240 TWh) without accounting the captive power; or between ninety-one point five (91.5) million TOE equivalent to one thousand sixty-four terawatt-hours (1,064 TWh) to one hundred thirty-two point two (132.2) million TOE, equivalent to one thousand five hundred thirty-eight terawatt-hours (1,538 TWh) by accounting the captive power;
 - c) by 2050 between one hundred six point six (106.6) million TOE, equivalent to one thousand two hundred forty terawatt-hours (1,240 TWh) to one hundred thirty-seven point zero (137.0) million TOE, equivalent to one thousand five hundred ninety-three terawatt-hours (1,593 TWh) without accounting for captive power; or between one hundred twenty-nine point two (129.2) million TOE, equivalent to one thousand five

hundred two terawatt-hours (1,502 TWh) to one hundred seventy-four point two (174.2) million TOE, equivalent to two thousand twenty-six terawatt-hours (2,026 TWh) by accounting the captive power; and

- d) by 2060 between one hundred twenty-eight point eight (128.8) million TOE, equivalent to one thousand four hundred ninety-eight terawatt-hours (1,498 TWh) to one hundred fifty-two point one (152.1) million TOE, equivalent to one thousand seven hundred sixty-nine terawatt-hours (1,769 TWh) without accounting the captive power; or between one hundred fifty-five point nine (155.9) million TOE, equivalent to one thousand eight hundred thirteen terawatt-hours (1,813 TWh) to two hundred one point nine (201.9) million TOE, equivalent to two thousand three hundred forty-nine terawatt-hours (2,349 TWh) by accounting the captive power.

Article 10

The targets of Primary Energy supply as referred to in Article 8 include:

- a. the achievement of Primary Energy supply:
 - 1. by 2030 between three hundred sixty-eight (368) million TOE to four hundred fifty-four (454) million TOE with a New and Renewable Energy mix of 19% (nineteen percent) to 23% (twenty-three percent);
 - 2. by 2040 between four hundred sixty-eight (468) million TOE to five hundred ninety-six (596) million TOE, with a New and Renewable Energy mix of 36% (thirty-six percent) to 40% (forty percent);
 - 3. by 2050 between five hundred ninety-five (595) million TOE to seven hundred twelve (712) million TOE, with a New and Renewable Energy mix of 53% (fifty-three percent) to 55% (fifty-five percent); and
 - 4. by 2060 between six hundred sixty-five (665) million TOE to seven hundred seventy-five (775) million TOE, with a New and Renewable Energy mix of 70% (seventy percent) to 72% (seventy-two percent).
- b. the achievement of Primary Energy Intensity:
 - 1. by 2030 between three hundred six point three (306.3) TOE per million USD three hundred fifty-one point eight to (351.8) TOE per million USD (US Dollar);
 - 2. by 2040 between two hundred five point one (205.1) TOE per million USD to two hundred twenty point three (220.3) TOE per million USD (US Dollar);
 - 3. by 2050 between one hundred fifty-one point three (151.3) TOE per million USD to one hundred fifty-seven point four (157.4) TOE per million USD (US Dollar); and
 - 4. by 2060 between ninety-six point one (96.1) TOE per million USD to one hundred fourteen point zero (114.0)

TOE per million USD (US Dollar).

Article 11

In achieving the targets of Final Energy utilization as referred to in Article 9, the detailed targets are set as follows:

- a. the achievement of Final Energy utilization per capita:
 1. by 2030 between zero point nine (0.9)TOE to one point zero (1.0) TOE;
 2. by 2040 between one point zero (1.0) TOE to one point one (1.1) TOE;
 3. by 2050 between one point zero (1.0) TOE to one point two (1.2) TOE; and
 4. by 2060 between one point one (1.1) TOE to one point two (1.2) TOE.
- b. the achievement of Electricity consumption per capita:
 1. by 2030 between two thousand three hundred forty-six kilowatt-hours (2,346 kWh)to three thousand seventy-five kilowatt-hours (3,075 kWh);
 2. by 2040 between three thousand three hundred twenty-eight kilowatt-hours (3,328 kWh) to four thousand eight hundred nine kilowatt-hours (4,809 kWh);
 3. by 2050 between four thousand four hundred forty-four kilowatt-hours (4,444 kWh) to five thousand nine hundred ninety-four kilowatt-hours (5,994 kWh); and
 4. by 2060 between five thousand thirty-eight kilowatt-hours (5,038 kWh) to six thousand five hundred twenty-six kilowatt-hours (6,526 kWh).
- c. the achievement of city gas for household:
 1. by 2030 between one million seven hundred forty-five thousand household connections (1,745,000 SR) to two million twenty-five thousand household connections (2,025,000 SR);
 2. by 2040 between three million forty-five thousand seven hundred ninety-four household connections (3,045,794 SR) to four million thirty-one thousand seventy-four household connections (4,031,074 SR);
 3. by 2050 between four million three hundred forty-five thousand seven hundred ninety-four household connections (4,345,794 SR) to five million six hundred thirty-one thousand five hundred twenty-seven household connections (5,631,527 SR); and
 4. by 2060 between five million six hundred forty-five thousand seven hundred ninety-four household connections (5,645,794 SR) to seven million five hundred sixty-eight thousand three hundred one household connections (7,568,301 SR).

Article 12

In achieving the targets of Primary Energy supply as referred to in Article 10, the detailed targets are set as follows:

- a. the achievement of Primary Energy supply per capita:
 1. by 2030 between one point two (1.2) TOE and one point four (1.4) TOE;

2. by 2040 between one point five (1.5) TOE and one point nine (1.9) TOE;
 3. by 2050 between one point eight (1.8) TOE and two point one (2.1) TOE; and
 4. by 2060 between one point nine (1.9) TOE to two point two (2.2) TOE.
- b. the achievement of optimal national Primary Energy mix to ensure a balance between national Energy supply and demand as well as the reduction of GHG Emissions in the Energy Sector by:
1. maximizing the role of hydro Energy as long as its economic viability is fulfilled:
 - a. by 2030 between 1.8% (one point eight percent) and 2.3% (two point three percent);
 - b. by 2040 between 3.6% (three point six percent) and 3.8% (three point eight percent);
 - c. by 2050 between 4.6% (four point six percent) and 4.9% (four point nine percent); and
 - d. by 2060 between 4.9% (four point nine percent) and 5.1% (five point one percent).
 2. maximizing the role of solar Energy as long as its economic viability is fulfilled:
 - a. by 2030 between 1.3% (one point three percent) and 1.6% (one point six percent);
 - b. by 2040 between 13.1% (thirteen point one percent) and 16.0% (sixteen point zero percent);
 - c. by 2050 between 23.3% (twenty-three point three percent) and 25.3% (twenty-five point three percent); and
 - d. by 2060 between 29.8% (twenty-nine point eight percent) and 32.0% (thirty-two point zero percent).
 3. maximizing the role of wind Energy as long as its economic viability is fulfilled:
 - a. by 2030 between 0.3% (zero point three percent) and 0.5% (zero point five percent);
 - b. by 2040 between 0.9% (zero point nine percent) and 1.1% (one point one percent);
 - c. by 2050 between 1.0% (one point zero percent) and 1.2% (one point two percent); and
 - d. by 2060 between 1.2% (one point two percent) and 1.3% (one point three percent).
 4. maximizing the role of biomass Energy as long as its economic viability is fulfilled:
 - a. by 2030 between 7.2% (seven point two percent) and 9.0% (nine point zero percent);
 - b. by 2040 between 6.5% (six point five percent) and 6.7% (six point seven percent);
 - c. by 2050 between 7.4% (seven point four percent) and 7.6% (seven point six percent); and
 - d. by 2060 between 12.2% (twelve point two percent) and 13.4% (thirteen point four percent).
 5. maximizing the role of geothermal Energy as long as its economic viability is fulfilled:

- a. by 2030 between 3.4% (three point four percent) and 4.0% (four point zero percent);
 - b. by 2040 between 3.8% (three point eight percent) and 4.4% (four point four percent);
 - c. by 2050 between 4.8% (four point eight percent) and 5.1% (five point one percent); and
 - d. by 2060 between 4.9% (four point nine percent) and 5.2% (five point two percent).
6. maximizing the role of biogas Energy as long as its economic viability is fulfilled:
- a. by 2030 between 0.013% (zero point zero one three percent) and 0.014% (zero point zero one four percent);
 - b. by 2040 between 0.019% (zero point zero one nine percent) and 0.020% (zero point zero two zero percent);
 - c. by 2050 between 0.027% (zero point zero two seven percent) and 0.028% (zero point zero two eight percent); and
 - d. by 2060 between 0.043% (zero point zero four three percent) and 0.049% (zero point zero four nine percent).
7. maximizing the role of biofuel Energy as long as its economic viability is fulfilled:
- a. by 2030 between 5.1% (five point one percent) and 5.2% (five point two percent);
 - b. by 2040 between 4.2% (four point two percent) and 4.7% (four point seven percent);
 - c. by 2050 between 3.1% (three point one percent) and 3.2% (three point two percent); and
 - d. by 2060 between 2.1% (two point one percent) and 2.6% (two point six percent).
8. maximizing the role of nuclear Energy as long as its economic viability is fulfilled:
- a. by 2032 between 0.4% (zero point four percent) and 0.5% (zero point five percent);
 - b. by 2040 between 2.8% (two point eight percent) and 3.4% (three point four percent);
 - c. by 2050 between 6.8% (six point eight percent) and 7.0% (seven point zero percent); and
 - d. by 2060 between 11.7% (eleven point seven percent) and 12.1% (twelve point one percent).
9. maximizing the role of other New Energy and Renewable Energy as long as its economic viability is fulfilled:
- a. by 2030 between 0.1% (zero point one percent) and 0.2% (zero point two percent);
 - b. by 2040 between 0.5% (zero point five percent) and 0.6% (zero point six percent);
 - c. by 2050 between 1.2% (one point two percent) and 1.5% (one point five percent); and
 - d. by 2060 between 1.5% (one point five percent) and 1.6% (one point six percent).
10. reducing the role of oil Energy:

- a. by 2030 between 22.4% (twenty two point four percent) and 26.3% (twenty six point three percent);
 - b. by 2040 between 14.3% (fourteen point three percent) and 15.9% (fifteen point nine percent);
 - c. by 2050 between 8.7% (eight point seven percent) and 8.8% (eight point eight percent); and
 - d. by 2060 between 3.9% (three point nine percent) and 4.7% (four point seven percent).
11. reducing the role of coal Energy:
- a. by 2030 between 40.7% (forty point seven percent) and 41.6% (forty one point six percent);
 - b. by 2040 between 28.9% (twenty eight point nine percent) and 31.0% (thirty one point zero percent);
 - c. by 2050 between 19.1% (nineteen point one percent) and 20.9% (twenty point nine percent); and
 - d. by 2060 between 7.8% (seven point eight percent) and 11.9% (eleven point nine percent).
12. utilizing natural gas Energy:
- a. by 2030 between 12.9% (twelve point nine percent) and 14.2% (fourteen point two percent);
 - b. by 2040 between 16.7% (sixteen point seven percent) and 16.8% (sixteen point eight percent);
 - c. by 2050 between 17.1% (seventeen point one percent) and 17.3% (seventeen point three percent); and
 - d. in 2060 between 14.4% (fourteen point four percent) and 15.4% (fifteen point four percent).

Article 13

- (1) In addition to achieving the goals and targets as referred to in Articles 9 through Article 12, the national energy policies also aim to reduce GHG Emissions in the Energy Sector to fulfill Indonesia's commitment to Energy Sector Decarbonization.
- (2) The reduction in GHG Emissions in the Energy Sector as referred to in paragraph (1) is achieved in a gradual, measured, and rational manner through:
 - a. reducing the level of GHG Emissions in the Energy Sector until the peaking of GHG Emissions in the Energy Sector is reached;
 - b. achieving the peaking of GHG Emissions in the Energy Sector as referred to in subparagraph a by 2035;
 - c. reducing GHG Emissions in the Energy Sector massively after the peaking of GHG Emissions in the Energy Sector is reached; and
 - d. achieving Net-Zero Emission by 2060 with the level of GHG Emissions in the Energy Sector at one hundred twenty nine (129) million tons of CO₂e (carbon dioxide equivalents), which will be absorbed by the forestry and other land use sectors.
- (3) The achievement in the reduction of GHG Emissions in the

Energy Sector as referred to in paragraph (1) includes:

- a. the achievement of GHG Emissions in the Energy Sector:
 1. by 2030 between one thousand seventeen (1,017) million tons of CO₂e (carbon dioxide equivalents) and one thousand one hundred eighty four (1,184) million tons of CO₂e (carbon dioxide equivalents);
 2. by 2040 between nine hundred twenty five (925) million tons of CO₂e (carbon dioxide equivalents) and one thousand eighty six (1,086) million tons of CO₂e (carbon dioxide equivalents);
 3. by 2050 between six hundred seventy six (676) million tons of CO₂e (carbon dioxide equivalents) and seven hundred forty four (744) million tons of CO₂e (carbon dioxide equivalents); and
 4. by 2060 a maximum of one hundred twenty nine (129) million tons of CO₂e (carbon dioxide equivalents).
- b. the achievement of GHG Emissions in the Energy Sector per capita:
 1. by 2030 between three point four one (3.41) tons of CO₂e (carbon dioxide equivalents) and three point seven zero (3.70) tons of CO₂e (carbon dioxide equivalents);
 2. by 2040 between two point eight nine (2.89) tons of CO₂e (carbon dioxide equivalents) and three point four zero (3.40) tons of CO₂e (carbon dioxide equivalents);
 3. by 2050 between two (2) tons of CO₂e (carbon dioxide equivalents) and two point two zero (2.20) tons of CO₂e (carbon dioxide equivalents); and
 4. by 2060 a maximum of zero point three six (0.36) tons of CO₂e (carbon dioxide equivalents).
- c. the achievement of Primary Energy emission intensity:
 1. by 2030 between two point six one (2.61) tons of CO₂e (carbon dioxide equivalents) per TOE to two point seven six (2.76) tons of CO₂e (carbon dioxide equivalents) per TOE;
 2. by 2040 between one point eight two (1.82) tons of CO₂e (carbon dioxide equivalents) per TOE to one point nine eight (1.98) tons of CO₂e (carbon dioxide equivalents) per TOE;
 3. by 2050 between one point zero five (1.05) tons of CO₂e (carbon dioxide equivalents) per TOE to one point one four (1.14) tons of CO₂e (carbon dioxide equivalents) per TOE; and
 4. by 2060 between zero point one seven (0.17) tons of CO₂e (carbon dioxide equivalents) per TOE to zero point one nine (0.19) tons of CO₂e (carbon dioxide equivalents) per TOE.

CHAPTER III

NATIONAL ENERGY POLICY DIRECTIONS

Article 14

- (1) The national energy policy directions consist of main policies and supporting policies.
- (2) The main policies as referred to in paragraph (1) include:
 - a. Energy availability for national demands;
 - b. utilization of national Energy Resources;
 - c. Energy development priorities; and
 - d. national Energy Reserve.
- (3) The supporting policies as referred to in paragraph (1) are policies to support the realization of the main policies as referred to in paragraph (2).
- (4) The supporting policies to ensure the availability of Energy for national demands as referred to in paragraph (2) subparagraph a include:
 - a. supply of electricity;
 - b. supply of non-electricity Final Energy;
 - c. export and import of Energy Sources;
 - d. Energy Diversification;
 - e. Energy Resource Conservation and Energy Conservation; and
 - f. Energy Industry, facilities and infrastructure for Energy Provision.
- (5) The supporting policies to realize the utilization of national Energy Resources as referred to in paragraph (2) subparagraph b include:
 - a. Energy Sector Decarbonization and Energy transition;
 - b. facilities and infrastructure for Energy Utilization;
 - c. Energy conversion;
 - d. Energy Utilization equipment industry; and
 - e. Green Energy and Circular Economy.
- (6) The supporting policies to realize Energy development priorities as referred to in paragraph (2) subparagraph c include:
 - a. development of new energy sources;
 - b. development of renewable energy sources; and
 - c. development of non-renewable energy sources.
- (7) The supporting policies to realize the national Energy Reserve as referred to in paragraph (2) subparagraph d include:
 - a. management of Strategic Reserve;
 - b. management of Energy Buffer Reserve;
 - c. management of Operational Reserve; and
 - d. management of Energy Storage.
- (8) In addition to the supporting policies as referred to in paragraphs (4) to (7), the main policies must be supported by:
 - a. funding to achieve Energy Resilience and Energy Sector Decarbonization;
 - b. Energy prices, Energy market, and government support for the Energy sector;

- c. research, development, assessment, and application of Energy technology, and human resource development;
- d. technology clearing and audit;
- e. Environmental protection and management, as well as occupational safety and health;
- f. institution;
- g. Energy cooperation and diplomacy at the international level;
- h. local content and increased added value;
- i. carbon tax and incentives or performance-based payments for efforts to reduce GHG Emissions in the Energy Sector; and
- j. stipulation and mitigation of Energy crisis and/or Energy emergency conditions.

CHAPTER IV

NATIONAL ENERGY POLICY STRATEGIES

Division One Main Policies

Subdivision 1 Energy Availability for National Demands

Article 15

- (1) Energy availability for national demands as referred to in Article 14 paragraph (2) subparagraph a is achieved through the following strategies:
 - a. inventorying potential and/or proven reserves by increasing exploration of renewable Energy Resources and other Energy Resources;
 - b. increasing the production of domestic Energy and Energy Sources and meeting the shortfall through import and/or development of Energy Sources abroad, by prioritizing low-carbon Energy;
 - c. improving the reliability of production, storage, transportation, and distribution systems in Energy Supply;
 - d. controlling the export of Energy Resources and Energy Sources by prioritizing domestic demands and considering long-term demands;
 - e. achieving a balance between the increase rate and production rate of Energy Reserve, especially non-renewable energy sources; and
 - f. ensuring the guaranteed carrying capacity and assimilative capacity of the environment to maintain the sustainable availability of Energy Resources and Energy Sources.
- (2) The realization of the Energy availability for national demands, as referred to in paragraph (1) is carried out by:
 - a. prioritizing low-carbon Energy Supply to realize national Energy Resilience; and

- b. maintaining the reliability of the Energy Supply system.
- (3) Where Energy Supply implementation as referred to in paragraph (2) involves overlapping land uses, priority is given to one having higher national Energy Resilience value and/or higher strategic value.

Subdivision 2
Utilization of National Energy Resources

Article 16

- (1) Utilization of national Energy Resources as referred to in Article 14 paragraph (2) subparagraph b is carried out by the Central Government and/or Regional Government with reference to the following strategies:
- a. the utilization of non-renewable energy sources such as coal, oil fuel, and gas is carried out using low-carbon technology to maintain Energy Resilience;
 - b. the utilization of renewable energy sources such as water flow and waterfalls, geothermal energy, wind, and the movement and differences in ocean temperatures is directed towards electricity;
 - c. the utilization of renewable energy sources, in the form of solar Energy, is directed for electricity, hydrogen production, ammonia, and non-electricity Energy for industry, households, and transportation;
 - d. the utilization of renewable energy sources, in the form of biofuels, is directed towards a mixture and/or replacement for oil fuels, especially for transportation and industry;
 - e. the utilization of renewable energy sources, in the form of biofuels, is carried out by taking into account the balance between Energy Resilience and food resilience;
 - f. the utilization of new energy sources, in the form of nuclear Energy, is directed towards electricity, including re-powering and co-generation, which can produce hydrogen and ammonia;
 - g. the utilization of renewable energy sources, such as biomass and waste, is directed towards partially replacing coal in electricity and producing biogas for transportation and industry;
 - h. the utilization of non-renewable energy sources, in the form of oil, is directed towards limited use for industry, electricity, transportation, and commerce, especially in cases where they cannot yet be replaced by low-carbon Energy;
 - i. the utilization of non-renewable energy sources, in the form of gas, is directed towards electricity, industry, households, and transportation as a transitional step towards greater utilization of New Energy and Renewable Energy;
 - j. the utilization of renewable energy sources, in the form of marine Energy, as an initial step is encouraged

- by building power plants in remote areas having marine Energy potential to replace Non-renewable Energy;
- k. the utilization of non-renewable energy sources, in the form of coal, is directed to be used restrictively in producing liquefied coal, gasified coal, and electricity, as well as for industry, particularly in areas where low-carbon Energy cannot yet be replaced;
 - l. the utilization of renewable energy sources, in the form of solar Energy, is optimized by relying on the domestically produced solar power plant components;
 - m. the utilization of renewable energy sources, in the form of irreplaceable oil fuel, produced using low-carbon technology, primarily for Energy Supply in underdeveloped, frontier, outermost, remote, and small inhabited islands; and
 - n. the utilization of non-renewable energy sources in the form of coal in the future for long-term Strategic Reserve in addition to fulfilling the Energy demands as referred to in point a and point k.
- (2) The utilization of national Energy Resources is prioritized to meet the demands for Energy and raw materials of domestic industry.
 - (3) The prioritization of utilization of national Energy Resources as referred to in paragraph (2) is carried out with a comprehensive consideration of capacity, continuity, economics, occupational safety and health, security, and Environmental impact.
 - (4) The utilization of Energy Resources as referred to in paragraph (3) is pursued through:
 - a. Energy Resources Conservation;
 - b. reduction of GHG Emissions in the Energy Sector; and
 - c. implementation of CEV.

Subdivision 3 Energy Development Priorities

Article 17

- (1) Energy development priorities as referred to in Article 14 paragraph (2) subparagraph c are carried out by considering the balance of the following aspects:
 - a. economic viability;
 - b. affordability;
 - c. security of Energy supply; and
 - d. Environmental preservation.
- (2) Energy development priorities, by considering the balance of the aspects as referred to in paragraph (1), are based on the following principles:
 - a. optimizing/maximizing the utilization of Renewable Energy while taking into account the economic viability and operating in a sustainable manner;
 - b. minimizing the utilization of Non-Renewable Energy;
 - c. utilizing New Energy; and
 - d. utilizing Non-Renewable Energy with low-carbon

- technologies.
- (3) Energy Development priorities as referred to in paragraph(1) and paragraph (2) are carried out through:
 - a. Energy Supply to communities without access to Energy, especially those in underdeveloped, frontier, outermost, remote areas, and small inhabited islands;
 - b. Energy Supply that synergizes the development of local Energy Resources with the development of integrated economic clusters;
 - c. Energy Supply to meet domestic demands;
 - d. Energy Supply that integrates the development of regions with sufficient potential Energy Resources with industrial development to create industrial growth and equitable development;
 - e. regionalization of the national Electricity System to promote equitable electricity supply; and
 - f. Energy development in border areas through regional cooperation.

Subdivision 4
National Energy Reserves

Article 18

- National Energy Reserves as referred to in Article 14 paragraph (2) subparagraph d includes:
- a. Strategic Reserves;
 - b. Energy Buffer Reserves; and
 - c. Operational Reserves.

Article 19

- (1) Strategic Reserves as referred to in Article 18 subparagraph a is regulated and allocated by the Central Government to ensure long-term Energy Resilience.
- (2) Strategic Reserves as referred to in paragraph (1) may be utilized within a predetermined timeframe or at any time needed for national interests.

Article 20

- (1) Energy Buffer Reserves as referred to in Article 18 subparagraph b is supplied to ensure national Energy supply security and Energy Resilience.
- (2) Energy Buffer Reserves as referred to in paragraph (1) must be supplied by the Central Government as a form of its obligation under the following provisions:
 - a. Energy Buffer Reserves are reserves outside the Operational Reserves supplied by Energy Suppliers;
 - b. Energy Buffer Reserves are used to address Energy crises and emergencies; and/or
 - c. Energy Buffer Reserves are supplied gradually according to the state financial capacity.
- (3) The National Energy Council regulates the type, quantity, period, and location of Energy Buffer Reserve.

Article 21

- (1) Operational Reserves as referred to in Article 18 subparagraph c shall be supplied for Final Energy types that are consumed widely and continuously and for which a storage system is available.
- (2) Operational Reserves as referred to in paragraph (1) shall be supplied by the Energy Suppliers to ensure the continuity of Energy supply.
- (3) The supply of Operational Reserves by the Energy Suppliers as referred to in paragraph (2) includes solid fuel, liquid fuel, gas fuel, electricity operations, and/or Energy Storage.
- (4) The type, quantity, period, and location of Operational Reserves are determined in accordance with the provisions of laws and regulations.

Division Two
Supporting Policies in Realizing
Energy Availability for National Demands

Subdivision 1
Electricity Supply

Article 22

- (1) The electricity supply as referred to in Article 14 paragraph (4) subparagraph a is prioritized by utilizing renewable energy sources and local Energy Sources.
- (2) The electricity supply as referred to in paragraph (1) is carried out by the Central Government and Regional Government in accordance with their respective authority.
- (3) The electricity supply by the Central Government and Regional Government in accordance with their respective authority as referred to in paragraph (2) is carried out by state-owned enterprises and regionally-owned enterprises.
- (4) Business Entity, cooperatives, and community-based organizations may participate in the electricity supply as referred to in paragraph (2) based on the electricity production provisions stipulated in accordance with the provisions of laws and regulations.
- (5) The electricity supply by state-owned enterprises and regionally-owned enterprises as referred to in paragraph (3) includes the interconnection of local or inter-regional or inter-island Electricity Systems.
- (6) The electricity supply by Business Entities, cooperatives, and community-based organizations as referred to in paragraph (4) includes the risk allocation regulated in the Power Purchase Agreement between the state-owned electricity company as the buyer and the Business Entity, cooperatives, or community-based organization as the seller.
- (7) The requirements for implementing the electricity supply as referred to in paragraphs (2) to (6) are carried out in accordance with the provisions of laws and regulations.

Article 23

- (1) The interconnection of the Electricity System as referred to in Article 22 paragraph (5) is carried out to increase the efficiency, reliability, and/or penetration of New Energy and Renewable Energy.
- (2) The interconnection of the Electricity System between regions or between islands is carried out after the interconnection of the local Electricity System has been constructed.
- (3) The interconnection of the Electricity System between regions or between islands as referred to in paragraph (2) is planned and constructed based on the result of a feasibility study and the fulfillment of requirements in accordance with the provisions of laws and regulations.

Subdivision 2

Supply of Non-Electricity Final Energy

Article 24

- (1) The supply of non-electricity Final Energy as referred to in Article 14 paragraph (4) subparagraph b is carried out by optimizing/maximizing the utilization of low-carbon Energy Sources and minimizing the utilization of high-carbon Energy Sources.
- (2) The development of infrastructure for the supply of non-electricity Final Energy is carried out by taking into account the achievement of the Energy Sector Decarbonization.
- (3) The supply of non-electricity Final Energy from non-renewable energy sources is carried out using low-carbon technology.
- (4) The planning related to the supply of non-electricity Final Energy and the development of its infrastructure as referred to in paragraphs (1) and (2) is outlined in the national energy general plan and detailed in the regional energy general plan.
- (5) Where the supply security of non-electricity Final Energy supply does not meet a balanced market mechanism, the supply of non-electricity Final Energy is carried out in accordance with the provisions of laws and regulations.

Subdivision 3

Export and Import of Energy Sources

Article 25

- (1) In order to secure long-term Energy Supply, the Central Government may export and import Energy Sources as referred to in Article 14 paragraph (4) subparagraph c.
- (2) The import of Energy Sources in the form of Energy Resources that are available or can be supplied domestically is carried out in a limited and planned manner.

Article 26

- (1) The export of Energy Sources in the form of cross-border electricity may be carried out with the purpose of increasing the efficiency, reliability, and security of Energy Supply by prioritizing the fulfillment of local electricity demands in order to realize national economic improvement.
- (2) The import of Energy Sources in the form of cross-border electricity may be carried out with the purpose of increasing the efficiency, reliability, and supply security of Energy Supply, based on the consideration that the supporting infrastructure is not yet available.
- (3) The export and import of Energy Sources in the form of cross-border electricity are carried out by electricity companies owned by the exporting or importing countries or business entities appointed to represent the exporting or importing countries.

Article 27

- (1) The export and import of Energy Sources as referred to in Articles 25 and 26 may be conducted through swap transactions.
- (2) The provisions on swap transactions as referred to in paragraph (1) are based on a sales and purchase agreement in the following cases:
 - a. swap transactions of Energy Sources for other Energy Sources; or
 - b. swap transactions of Energy Sources for other commodities.

Article 28

- Maintaining national Energy Resilience is carried out through:
- a. reduction of dependence on imported Energy Sources;
 - b. diversification of import sources of a type of Energy Sources with a large volume to avoid dependence on import from a single source or country;
 - c. regulation of the export of coal, gas, biofuels, and electricity through a one-stop service in accordance with the provisions of laws and regulations; and
 - d. prioritization of fulfillment of domestic demands by controlling the export of Energy Sources, especially coal, gas, biofuels, and electricity.

Article 29

The provisions on the export and import of Energy Sources as referred to in Articles 25 to 28 are carried out in accordance with the provisions of laws and regulations.

Article 30

- (1) State revenues from the Energy sector may be utilized:
 - a. to support national Energy Resilience; and
 - b. to develop New Energy and Renewable Energy.
- (2) The utilization as referred to in paragraph (1) is aligned

with the national priorities.

- (3) The utilization of state revenues as referred to in paragraph (1) is in accordance with the provisions of laws and regulations in the financial sector.

Subdivision 4
Energy Diversification

Article 31

- (1) The Central Government and/or Regional Government, in accordance with their respective authority, must implement Energy Diversification as referred to in Article 14 paragraph (4) subparagraph d to improve Energy Resource Conservation, Energy Independence, as well as national and regional Energy Resilience.
- (2) Energy Diversification as referred to in paragraph (1) is carried out through:
 - a. the transition of the supply and utilization of Non-Renewable Energy to various types of new and renewable energy sources;
 - b. the shift of Energy in the transportation sector from oil fuel to the use of electricity, bioenergy, hydrogen, gas, and/or other low-carbon Energy sources;
 - c. the shift from liquefied petroleum gas for household and commercial purposes to use of gas, biogas, dimethyl ether, electricity, and/or other low-carbon Energy;
 - d. the partial shift from coal for steam power plants to the use of gas, hydrogen, ammonia, biomass, and/or other low-carbon Energy;
 - e. the shift from oil and gas fuel to the use of biomass and biogas, electricity, hydrogen, and/or other low-carbon Energy for industry, micro, small, and medium-sized enterprises, commercial, and households; and/or
 - f. the fulfillment of the partial demand of oil and gas fuel from coal liquefaction and gasification produced by low-carbon technologies by taking into account the economic viability.

Subdivision 5
Energy Resource Conservation and Energy Conservation

Article 32

- (1) To implement Energy Resource Conservation as referred to in Article 14 paragraph (4) subparagraph e, Energy Supply prioritizes renewable energy resources in accordance with the provisions of laws and regulations.
- (2) The cross-sectoral Energy Resource Conservation as referred to in paragraph (1) is realized through regional spatial planning arrangements in accordance with the provisions of laws and regulations.
- (3) The arrangements as referred to in paragraph (2) are intended for Energy Resources prioritized to be exploited

and/or supplied.

Article 33

- (1) Energy Conservation as referred to in Article 14 paragraph (4) subparagraph e is carried out at all stages of Energy Management, from upstream to downstream.
- (2) The implementation of Energy Conservation at all stages of Energy Management as referred to in paragraph (1) is aimed at conserving Energy Resources, increasing Energy efficiency, and supporting Energy Sector Decarbonization.

Article 34

- (1) To ensure the availability of sustainable Energy, Energy Suppliers, Energy Source User, and/or Energy User must implement Energy Resource Conservation and Energy Conservation in their Energy Provision and Energy Utilization activities.
- (2) Energy Suppliers, Energy Source User, and/or Energy User as referred to in paragraph (1) may collaborate with Business Entity, business service agencies, and/or technical service units that provide Energy Conservation services.

Article 35

- (1) The Central Government and/or Regional Government, in accordance with their respective authority, establish guidelines for the implementation of Energy Resource Conservation and Energy Conservation policies.
- (2) The guidelines for the implementation of Energy Resource Conservation and Energy Conservation policies as referred to in paragraph (1) at least include obligations regarding Energy management, standardization, labeling, and the use of efficient technologies.

Article 36

- (1) Energy Suppliers must implement the principles as referred to in Article 2 in their business and production activities.
- (2) Energy Suppliers submits an annual Energy management report no later than the first quarter of the following year.
- (3) The Energy management report as referred to in paragraph (2) at least includes annual production, Primary Energy utilization, production efficiency, carbon dioxide emissions, Energy management performance, and Energy audit results.

Article 37

- (1) Energy Source User and/or Energy User whose energy consumption exceeds a certain amount must conduct Energy management.
- (2) Energy Source User and/or Energy User submit an annual Energy management report no later than the first quarter of the following year.
- (3) The Energy management report as referred to in paragraph

at least includes annual Energy consumption, efficiency indicators, Energy management performance, and Energy audit results.

Article 38

The guidelines for the implementation of Energy Resource Conservation and Energy Conservation, annual Energy management report prepared by Energy Suppliers, and Energy management report prepared by Energy Source User and/or Energy User as referred to in Article 35 paragraph (2), Article 36, and Article 37 are carried out in accordance with the provisions of laws and regulations.

Subdivision 6

Energy Industry, Facilities and Infrastructure for Energy Supply

Article 39

- (1) The Central Government and Regional Government encourage the construction and development of sustainable and competitive Energy Industry as referred to in Article 14 paragraph (4) subparagraph f, with the following objectives:
 - a. to accelerate the achievement of Energy Provision and Energy Utilization targets;
 - b. to improve the national and regional economy;
 - c. to expand and increase employment opportunities; and
 - d. to create national and regional Energy Independence and Energy Resilience.
- (2) The development of the Energy Industry as referred to in paragraph (1) is carried out by prioritizing the Green Energy Industry.
- (3) The construction and development of Energy Industry as referred to in paragraph (1) are carried out by:
 - a. increasing the capacity of Energy Industry and the role of domestic Energy services in implementing efficient Energy Utilization and Energy Sector Decarbonization;
 - b. increasing the construction and development of domestic New Energy and Renewable Energy production equipment industry and New Energy and Renewable Energy consuming appliances industry;
 - c. improving human resource capacity and technological mastery in the Energy production equipment industry and Energy consuming appliances industry;
 - d. increasing local content to achieve Independence in the use of technologies and raw materials in the Energy Industry;
 - e. Developing an ecosystem of components and equipments industry for Energy Provision, Energy Storage, and Energy Utilization, including transportation equipment, to support national Energy Independence;

- f. promoting national industry in the supply of equipments and components for the Energy Industry and Energy Utilization;
- g. developing the domestic Energy Industry, including through the purchase of factory licenses; and
- h. creating a conducive investment climate.

Article 40

- (1) In implementing Energy Sector Decarbonization, Non-Renewable Energy-based Energy Industry must:
 - a. meet the New Energy and/or Renewable Energy portfolio standards; and/or
 - b. use technologies to achieve the target of GHG Emission in the Energy Sector.
- (2) Where the Non-Renewable Energy-based Energy Industry as referred to in paragraph (1) does not meet the New Energy and/or Renewable Energy Portfolio Standards, the Energy Industry must obtain a Renewable Energy certificate.

Article 41

- (1) The construction and development of facilities and infrastructure for Energy Supply as referred to in Article 14 paragraph (4) subparagraph f that are aimed to increase the reliability of the production, storage, transportation and distribution systems for Energy Supply are carried out by the Central Government and/or Local Government in accordance with their respective authority.
- (2) The construction and development of Energy Supply facilities and infrastructure as referred to in paragraph (1) are carried out by:
 - a. preparing the construction plan of Energy Supply facilities and infrastructure based on regions with a holistic-thematic, integrative and spatial approach;
 - b. increasing the capacity of the national industry in implementing the development of Energy Supply facilities and infrastructure;
 - c. developing integrated Energy Supply facilities and infrastructure, from Energy Industry to Energy User community;
 - d. increasing cooperation and partnerships in funding and investment for the construction and development of Energy Supply facilities and infrastructure;
 - e. providing information and integrated services to improve the reliability of production, storage, transportation and distribution systems in fulfilling Energy demands; and
 - f. utilizing the potential of local Energy Resources to support the development of industrial facilities and infrastructure and community economy.

Division Three
Supporting Policies in Realizing
the Utilization of National Energy Resources

Subdivision 1
Energy Sector Decarbonization and Energy Transition

Article 42

- (1) Energy Sector Decarbonization and Energy transition strategies as referred to in Article 14 paragraph (5) subparagraph a are carried out by:
 - a. ensuring the comprehensive readiness of the national Energy Sector Decarbonization;
 - b. incorporating and/or integrating the Energy transition program; and
 - c. maintaining the security of the national Energy supply.
- (2) The implementation of the Energy transition program as referred to in paragraph (1) subparagraph b includes:
 - a. construction of facilities and infrastructure for the provision of New Energy and Renewable Energy, including the construction of New Energy and Renewable Energy-based power plants;
 - b. conversion of non-renewable to New Energy and Renewable Energy system, including Non-Renewable Energy-based power plants to New Energy and Renewable Energy-based power plants;
 - c. utilization of advanced low-carbon technology in the Energy System, including in Non-Renewable Energy-based power plants;
 - d. carbon sequestration, storage, and utilization;
 - e. gradual retirement of the operational period of coal-fired power plants; and/or
 - f. prohibition of the development of new coal-fired power plants, by referring to national Energy Resilience conditions and fulfilment of the reduction targets of GHG Emissions in the Energy Sector in accordance with the provisions of laws and regulations.
- (3) Where the availability of New Energy and Renewable Energy is not sufficient to meet the demand of the local Energy System, the Energy transition program as referred to in paragraph (2) subparagraphs a and b can be carried out in Non-Renewable Energy-based System by utilizing low carbon technology.

Article 43

In addition to the Energy transition program as referred to in Article 42 paragraph (2), the Energy transition program for the electricity sector is carried out through greater penetration of New Energy and/or Renewable Energy by:

- a. maintaining system reliability; and
- b. utilizing reliable technology for receiving New Energy and/or Renewable Energy.

Article 44

- (1) In order to encourage the Energy transition, the Central Government and Regional Government set the target of Energy Sector Decarbonization, at least in the form of:
 - a. Primary Energy mix;
 - b. Energy Sector Emission Intensity; and
 - c. reduction target of GHG Emissions in the Energy Sector.
- (2) The determined targets as referred to in paragraph (1) are stated in the national energy general plan or regional energy general plan.
- (3) Energy Suppliers and Energy User in preparing business plans must refer to the target determination stated in the national energy general plan or regional energy general plan as referred to in paragraph (2).

Subdivision 2

Energy Utilization Facilities and Infrastructure

Article 45

- (1) The construction and development of Energy Utilization facilities and infrastructure as referred to in Article 14 paragraph (5) subparagraph b that are aimed to increase public access to Energy are carried out by the Central Government and/or Local Government in accordance with their respective authority.
- (2) The construction and development of Energy Utilization facilities and infrastructure as referred to in paragraph (1) are carried out by:
 - a. preparing a regional construction plan for Energy Utilization facilities and infrastructure using a holistic-thematic, integrative, and spatial approach;
 - b. enhancing the capacity of the national industry to develop Energy Utilization facilities and infrastructure;
 - c. developing integrated Energy Utilization facilities and infrastructure, starting from Energy Industry to Energy User community;
 - d. enhancing cooperation and partnerships in funding and investment for the construction and development of Energy Utilization facilities and infrastructure;
 - e. providing information and services to ease the public access in fulfilling Energy demands; and
 - f. utilizing the potential of local Energy Resources to support the development of industrial facilities and infrastructure and community economy.

Subdivision 3

Energy Conversion

Article 46

- (1) The Central Government and Local Government encourage Energy conversion measures as referred to in Article 14 paragraph (5) subparagraph c for the diversity of Final

Energy.

- (2) Energy conversion as referred to in paragraph (1) is carried out for all types of energy, by taking into account efficiency, low carbon, and environmentally-friendly aspects.
- (3) Encouraging the Energy conversion measures as referred to in paragraph (1) is carried out by maximizing the utilization of domestic raw material sources.

Article 47

Energy Sources resulting from Energy conversion are prioritized to support the national Energy Independence and Energy Resilience.

Subdivision 4

Energy-Consuming Appliances Industry

Article 48

- (1) The Central Government and Local Government encourage the development of the energy-consuming appliances industry as referred to in Article 14 paragraph (5) subparagraph d to meet the local content requirements.
- (2) The development of the Energy-consuming appliances industry as referred to in paragraph (1) comes from the downstreaming of research and innovation results as well as from domestic industry and is carried out in accordance with the provisions of laws and regulations.

Article 49

- (1) The Energy-consuming appliances industry as referred to in Article 48 must:
 - a. be oriented towards efficient technology; and
 - b. fulfill the minimum Energy performance standards set by the Government.
- (2) The minimum energy performance standards as referred to in paragraph (1) subparagraph b is carried out in accordance with the provisions of laws and regulations.

Subdivision 5

Green Energy and Circular Economy

Article 50

The Central Government and/or Local Government increase the provision and utilization of Green Energy as referred to in Article 14 paragraph (5) subparagraph e to support the realization of Green Economy.

Article 51

- Increasing the provision and utilization of Green Energy as referred to in Article 50 is carried out by:
- a. increasing the economic growth that takes into account the availability of Energy Resources and maintaining a sustainable Energy System balance;
 - b. implementing CEV in accordance with the provisions of laws and regulations;

- c. providing and strengthening the implementation of Energy Sector Decarbonization program;
- d. strengthening cooperation with other countries in developing innovative and affordable Green Energy infrastructure;
- e. accelerating Electrification, especially in underdeveloped, frontier, outermost, remote, and small inhabited islands;
- f. ensuring a secured supply as well as affordable and just price for Energy; and/or
- g. expanding Green Energy business types and transforming expertise and skills.

Article 52

- (1) The Central Government and/or Regional Government encourage the development of Circular Economy as referred to in Article 14 paragraph (5) subparagraph e in national Energy Management by taking into account economic, social, and environmental aspects.
- (2) The development of Circular Economy as referred to in paragraph (1) is carried out at least by:
 - a. minimizing waste production;
 - b. reusing waste in the production process;
 - c. reducing the use of Energy Sources, land, buildings, and materials in the production process;
 - d. reusing waste for other purposes; and/or
 - e. recycling materials having economic benefits.

Division Four

Supporting Policies in Realizing Energy Development Priorities

Subdivision 1

New Energy Sources Development

Article 53

- (1) The Central Government and Local Government encourage the development of new energy sources as referred to in Article 14 paragraph (6) subparagraph a, primarily to achieve the target of Energy Sector Decarbonization.
- (2) In order to encourage the development of new energy sources as referred to in paragraph (1), the Central Government and Local Government carry out:
 - a. identification and inventory of new energy sources, including their type, location, capacity, and economic viability;
 - b. determination of plans for developing new energy sources;
 - c. land allocation; and
 - d. providing of necessary support.
- (3) The development of new energy sources as referred to in paragraphs (1) and (2) is carried out in accordance with the provisions of laws and regulation.

Article 54

- (1) The development of new energy sources in the form of

hydrogen and ammonia as well as other New Energy sources is intended as fuel and to be stored.

- (2) The hydrogen and ammonia as referred to in paragraph (1) are primarily derived from renewable energy sources to produce green hydrogen using efficient technology.
- (3) Where hydrogen and ammonia cannot be produced as referred to in paragraph (2), hydrogen and ammonia may be produced from new energy sources or non-renewable energy sources by using low-carbon technology.

Article 55

- (1) The development of new energy sources such as nuclear is intended as Nuclear Power plants and/or in the form of heat for co-generation.
- (2) Nuclear Power plants as referred to in paragraph (1) are constructed and operated in accordance with the requirements on safety, security, safeguards, secured nuclear fuel supply, and radioactive waste management.
- (3) The location of Nuclear Power plants construction as referred to in paragraph (2) within a region is selected with a minimum consideration that the location is not prone to geological disasters, not densely populated, and not functioning as a food barn.
- (4) To ensure a secured supply of nuclear fuel as referred to in paragraph (2), national reserves of radioactive mineral resources are needed.
- (5) The construction and operation of Nuclear Power plants as referred to in paragraph (2) must be approved by the nuclear energy supervisory body.
- (6) The approval as referred to in paragraph (5) is carried out for implementing supervision to ensure the safety and security of the construction and operation of Nuclear Power plants.
- (7) The construction and operation of Nuclear power plants as referred to in paragraph (2) are based on the recommendations from the nuclear energy program implementing organization.
- (8) The construction and operation as well as safety supervision of Nuclear Power plants as referred to in paragraphs (2) to (7) are carried out in accordance with the provisions of laws and regulations.
- (9) Further provisions regarding the development of nuclear for co-generation as referred to in paragraph (1) are regulated in a Presidential Regulation.
- (10) Further provisions regarding the nuclear energy program implementing organization as referred to in paragraph (7) are regulated in a Presidential Regulation.

Renewable Energy Sources Development

Article 56

- (1) The Central Government and Local Government maximize the development of renewable energy sources as referred to in Article 14 paragraph (6) subparagraph b for the Energy supply in a region.
- (2) In order to maximize the development of renewable energy sources as referred to in paragraph (1), the Central Government and Local Government carry out:
 - a. inventory of renewable energy resources, including their type, location, capacity or reserve, and economic viability;
 - b. establishment of a renewable energy sources development plan;
 - c. land allocation; and
 - d. provision of necessary support.
- (3) In addition to the Central Government and Local Government as referred to in paragraph (1), Business Entity and permanent establishments that produce Non-Renewable Energy must participate in reducing GHG Emissions in the Energy Sector and/or developing renewable energy sources.
- (4) The development of renewable energy sources as referred to in paragraphs (1) to (3) is carried out in accordance with the provisions of laws and regulations.

Article 57

Electricity Suppliers must maximize electricity production from renewable energy sources.

Subdivision 3

Non-Renewable Energy Sources Development

Article 58

- (1) The development of non-renewable energy sources as referred to in Article 14 paragraph (6) subparagraph c is carried out to meet the demands that cannot be replaced by new and/or renewable energy sources.
- (2) The development of non-renewable energy sources as referred to in paragraph (1) is carried out by using low-carbon technology in the following activities:
 - a. exploration;
 - b. mining/exploitation; and/or
 - c. processing/extraction.
- (3) Low-carbon technology as referred to in paragraph (2) is technology that produces low greenhouse gas emissions, including:
 - a. efficient technology;
 - b. technology that uses Renewable Energy or low-carbon Energy;
 - c. technology that is equipped with carbon capture and storage technology or carbon capture, utilization, and storage; and

- d. other low-carbon technologies.
- (4) The implementation of activities using carbon capture and storage technology or carbon capture, utilization, and storage as referred to in paragraph (3) subparagraph c is carried out in accordance with the provisions of laws and regulations.
- (5) In order to develop non-renewable energy sources as referred to in paragraph (1), the Central Government and Local Government carry out:
 - a. identification and inventory of non-renewable energy resources, including their type, location, capacity or reserves, and economic viability;
 - b. establishment of non-renewable energy sources development plans;
 - c. land allocation; and
 - d. providing of necessary support.
- (6) The establishment of non-renewable energy sources development plans as referred to in paragraph (5) subparagraph b is aligned with the targets of new and renewable energy sources development planning.
- (7) The development of non-renewable energy sources as referred to in paragraphs (1) to (6) is carried out in accordance with the provisions of laws and regulations.

Division Five

Supporting Policies for Realizing National Energy Reserve

Subdivision 1

Strategic Reserve Management

Article 59

- (1) Strategic Reserve Management as referred to in Article 14 paragraph (7) subparagraph a consists of Non-Renewable Energy, New Energy, and Renewable Energy, as well as other minerals that exist beneath the earth's surface and may serve as Energy Sources.
- (2) Strategic Reserve Management as referred to in paragraph is carried out in accordance with the provisions of laws and regulation.

Subdivision 2

Energy Buffer Reserve Management

Article 60

- (1) Energy Buffer Reserve Management as referred to in Article 14 paragraph (7) subparagraph b, includes:
 - a. procurement of stock;
 - b. provisions of infrastructure;
 - c. maintenance;
 - d. utilization; and
 - e. recovery.
- (2) The type of Energy Buffer Reserve as referred to in Article 20 paragraph (3) is determined by considering:
 - a. strategic role in national consumption;

- b. sources of acquisition originating from imports;
 - c. role as national development capital;
 - d. national Energy balance; and/or
 - e. Energy Sources ready to be transformed or utilized.
- (3) The amount of the Energy Buffer Reserve as referred to in Article 20 paragraph (3) is determined by considering the amount of consumption per energy type, the amount of imports per energy type, and the state's financial capacity.
 - (4) The Energy Buffer Reserve period as referred to in Article 20 paragraph (3) is determined by considering the amount of energy buffer reserve that must be fulfilled and the state financial capability.
 - (5) The location of the Energy Buffer Reserve as referred to in Article 20 paragraph (3) is determined by considering the fulfillment of technical and economic feasibility requirements, as well as ease of utilization.
 - (6) Provisions regarding the Energy Buffer Reserve are carried out in accordance with the provisions of laws and regulations.

Subdivision 3 Operational Reserve Management

Article 61

- (1) Operational Reserve Management as referred to in Article 14 paragraph (7) subparagraph c is to secure Energy availability from possible short-term supply disruptions.
- (2) Operational Reserve as referred to in paragraph (1) are stored in storage locations that meet the requirements in accordance with the provisions of laws and regulations.
- (3) Operational Reserve Storage as referred to in paragraph (2) shall be distributed proportionally across all regions based on their respective consumption.
- (4) Operational Reserve Management as referred to in paragraph (1) is carried out by state-owned and private Energy Suppliers in accordance with the provisions of laws and regulations.

Subdivision 4 Energy Storage Management

Article 62

- (1) Energy Storage Management as referred to in Article 14 paragraph (7) subparagraph d resulting from the production of New Energy, Renewable Energy, and Non-Renewable Energy is carried out to maintain system reliability and ensure continuity of Energy supply.
- (2) Energy Storage Management as referred to in paragraph (1) is carried out in a reliable, secure, and environmentally-friendly Energy Storage system.
- (3) Energy Storage Management as referred to in paragraph (1) and paragraph (2) is carried out in accordance with the provisions of laws and regulations.

Division Six
Other Supporting Policies to Realize the Main Policy

Subdivision 1
Funding to Realize Energy Resilience and
Energy Sector Decarbonization

Article 63

- (1) Funding aimed to realize Energy Resilience and Energy Sector Decarbonization as referred to in Article 14 paragraph (8) subparagraph a is derived from:
 - a. state budget;
 - b. local budget; and/or
 - c. other legitimate sources in accordance with the provisions of laws and regulations.
- (2) Funding from the state budget and local budget as referred to in paragraph (1) subparagraphs a and b is carried out in accordance with the state and regional financial capacity.

Article 64

- (1) Funding aimed to realize Energy Resilience and Energy Sector Decarbonization as referred to in Article 63 paragraph (1) is allocated for:
 - a. providing low-carbon Energy from domestic Energy Sources and technology;
 - b. research, innovation, and implementation, to commercialization stage to support the Energy transition;
 - c. providing low-carbon Energy facilities and infrastructure in all regions in an equitable and just manner;
 - d. repurposing Non-Renewable Energy facilities and infrastructure into low-carbon Energy facilities and infrastructure;
 - e. converting equipment from Non-Renewable Energy-sourced to low-carbon Energy-sourced;
 - f. exploration activities to increase national Energy Resources and national Energy Reserve; and/or
 - g. other activities that support national Energy Resilience and Energy Sector Decarbonization.
- (2) Funding for Energy Sector Decarbonization as referred to in paragraph (1) is intended to achieve low-carbon development targets.
- (3) Funding management in order to realize Energy Resilience and Energy Sector Decarbonization is carried out in accordance with the provisions of laws and regulations.

Subdivision 2
Energy Price, Energy Market, and Government Support
for Energi Sector

Article 65

- (1) Energy price as referred to in Article 14 paragraph (8) subparagraph b is determined based on just economic viability while still considering the sustainability principle.
- (2) Energy price for New Energy, Renewable Energy, and Non-Renewable Energy is determined based on:
 - a. agreement between the parties by taking into account the economic viability and a reasonable rate of return for the Business Entity; or
 - b. stipulation by the Central Government in the form of the highest reasonable Energy benchmark price with a reasonable rate of return for the Business Entity as developer and just price for Business Entity as buyer.
- (3) The stipulation of Energy prices for New Energy, Renewable Energy, and Non-Renewable Energy as referred to in paragraph (2) is carried out in accordance with the provisions of laws and regulations.

Article 66

- (1) The Central Government regulates the Energy market as referred to in Article 14 paragraph (8) subparagraph b, including the electricity minimum quota.
- (2) The Central Government creates an electricity market at least by:
 - a. setting specific Energy prices for power plant;
 - b. stipulating progressive electricity tariffs;
 - c. implementing the highest benchmark mechanism for New Energy and Renewable Energy pricing; and
 - d. improving geothermal Energy Management through risk-sharing between electricity provision business license holders having the business areas and geothermal developers.
- (4) The development of the Energy market ecosystem and the Electricity market is carried out in accordance with the provisions of laws and regulations.

Article 67

- (1) The Central Government and Local Government, in accordance with their respective authority, may provide support for the Energy sector as referred to in Article 14 paragraph (8) subparagraph b in the form of incentives and other supports to Energy Suppliers and Energy User in the provision, management, utilization, and development of New Energy, Renewable Energy, and Non-Renewable Energy.
- (2) The incentives and other support as referred to in paragraph (1) are supplied for a specific period until economic viability is achieved in accordance with the provisions of laws and regulations.
- (3) The incentives and other support as referred to in

paragraph (1) are intended to encourage:

- a. Energy Source diversification;
- b. New Energy, Renewable Energy, and Non-Renewable Energy development;
- c. Energy efficiency and Conservation;
- d. development and application of low-carbon technology; and/or
- e. Energy Provision and Energy Utilization in underdeveloped, frontier, outermost, remote, and small inhabited islands.

Article 68

- (1) The incentives as referred to in Article 67 paragraph (1) include:
 - a. fiscal incentives; and/or
 - b. non-fiscal incentives, based on the state and regional financial capacity in accordance with the provisions of laws and regulations.
- (2) The fiscal and non-fiscal incentives as referred to in paragraph (1) are given to Energy Suppliers who develops core technology in New Energy and Renewable Energy development activities.
- (3) The Central Government or Local Government may provide fiscal and/or non-fiscal incentives as referred to in paragraph (1) to Energy Suppliers and Energy User who fulfill their Energy Conservation obligations in the provision, exploitation, and utilization of New Energy, Renewable Energy, and Non-Renewable Energy.
- (4) The Central Government or Local Government may provide disincentives to Energy Suppliers and Energy User who do not fulfill their Energy Conservation obligations in the provision, exploitation, and utilization of New Energy, Renewable Energy, and Non-Renewable Energy.
- (5) Providing of incentives and disincentives by the Central Government and Local Government is carried out in accordance with the provisions of laws and regulations.

Article 69

- (1) The Central Government or Local Government in accordance with their respective authority may provide support in the form of subsidies for targeted low-income consumers in accordance with the state or regional financial capacity.
- (2) The provision of subsidies as referred to in paragraph (1) will be gradually reduced for oil fuel, liquefied petroleum gas, electricity, and/or other energy sources until the public's purchasing power is reached.
- (3) The provision of subsidies as referred to in paragraph (1) and paragraph (2) will be carried out in accordance with the provisions of laws and regulations.

Article 70

- (1) Other support to Energy Suppliers and Energy User as

referred to in Article 67 may be supplied in accordance with the state financial capacity in the form of:

- a. financing to state-owned enterprises and Business Entity; and/or
 - b. guarantees and/or compensation to state-owned enterprises.
- (2) Providing of other supports as referred to in paragraph (1) is carried out in accordance with the provisions of laws and regulations.

Subdivision 3

Research, Development, Assessment, and Application of Energy Technology, and Human Resources Development

Article 71

- (1) Research, development, assessment, and application of Energy technology as referred to in Article 14 paragraph (8) subparagraph c are directed towards mapping, exploration, and identification of the entire supply chain in the development, provision, and utilization of New Energy and Renewable Energy.
- (2) Research, development, assessment, and application of Energy technology, in the form of conversion, distribution, and Energy Utilization processes are directed to improve and develop the national Energy Industry.
- (3) Human resources development as referred to in Article 14 paragraph (8) subparagraph c is directed to improve the quality of competencies and skills in the development, provision, and utilization of New Energy and Renewable Energy, as well as improve and develop the national Energy Industry.

Article 72

The Central Government and/or Local Government strengthen and encourage the creation of a climate conducive to the utilization of research, development, assessment, and application of Energy technology, and the development of human resources as referred to in Article 71 by:

- a. preparing and improving human resources capabilities in research, development, assessment, and application of Energy technology;
- b. conducting research, development, assessment, and application of Energy technology based on an efficient, independent, and sustainable Circular Economy;
- c. strengthening the ecosystem and infrastructure for research, development, assessment, and application of Energy technology to meet global standards in accordance with the provisions of laws and regulations;
- d. increasing the mobility of Energy researchers through collaborative schemes between research institutions and higher education institutions, the community, as well as national and international industries; and/or
- e. facilitating the commercialization of the result of research, development, assessment, and application of Energy

technology, as well as technology transfer through collaboration with Business Entity.

Article 73

Funding and/or financing for research, development, assessment, and application of Energy technology, and human resources development as referred to in Articles 71 and 72 is facilitated by the Central Government or Local Government in accordance with their respective authority, and/or Business Entity.

Subdivision 4

Technology Clearing and Audit

Article 74

- (1) The Central Government conducts technology clearing and audit as referred to in Article 14 paragraph (8) subparagraph d to ensure the benefits of technology applications in resolving Energy issues and the Energy transition process.
- (2) Technology clearing as referred to in paragraph (1) is conducted through the screening or selection of imported and/or new technologies to ensure their benefits and alignment with national interests.
- (3) Technology screening or selection as referred to in paragraph (2) is conducted through an assessment of technological readiness, benefits, impacts, and policy implications.
- (4) Technology audit as referred to in paragraph (1) is conducted by obtaining objective information on the condition of technological assets to enable a more targeted and measurable technological control, development, and empowerment.

Article 75

- (1) Technology clearing and audit as referred to in Article 74 paragraph (1) are applied to strategic technologies.
- (2) The objects and implementation of technology clearing and audit as referred to in paragraph (1) are carried out in accordance with the provisions of laws and regulations.

Subdivision 5

Environmental Protection and Management, and
Occupational Safety and Health

Article 76

- (1) National Energy Management activities are carried out by taking into account the Environmental protection and management, as well as occupational safety and health as referred to in Article 14 paragraph (8) subparagraph e.
- (2) National Energy Management activities as referred to in paragraph (1) are carried out by:
 - a. preventing, mitigating, and remediating impacts, as well as providing fair compensation to affected parties;

and

- b. utilizing low-carbon and environmentally-friendly technology.
- (3) The implementation of Environmental protection and management, occupational safety and health in national Energy Management activities as referred to in paragraph (1) and paragraph (2) is carried out in accordance with the provisions of laws and regulations.

Article 77

- (1) Every energy installation business is responsible for the Environmental protection and management, occupational safety and health, including losses resulting from accidents.
- (2) Environmental protection and management, occupational safety and health, including losses resulting from accidents as referred to in paragraph (1) are carried out in accordance with the provisions of laws and regulations.
- (3) Where the energy installation business as referred to in paragraph (1) is a nuclear energy business, the nuclear energy business shall meet safety, security, and safeguard requirements as well as establish a nuclear radiation preparedness and emergency program.
- (4) The safety, security, and safeguard requirements, as well as the establishment of a nuclear radiation preparedness and emergency program as referred to in paragraph (3) are carried out in accordance with the provisions of laws and regulations.

Subdivision 6

Institutional Affairs

Article 78

- (1) The Central Government and/or Local Government, in accordance with their respective authority, strengthen institutions as referred to in Article 14 paragraph (8) subparagraph f to support the achievement of the objectives, targets, and strategies of national energy policy.
- (2) The institutional strengthening as referred to in paragraph (1) is carried out by:
- a. perfecting the institutional system and bureaucratic services of the Central Government and Local Government, as well as improving cross-sectoral coordination among ministries/institutions in the Energy sector;
 - b. enhancing cooperation and coordination among organizations and institutions in the energy sector to accelerate the mastery and application of Energy technology;
 - c. enhancing cooperation and coordination among organizations and institutions in the energy sector to accelerate the empowerment of ready-to-work human resources in the Energy sector;
 - d. providing funding support for strengthening the role

- of energy sector organizations and institutions at the central and regional levels, including for the National Energy Council;
- e. ensuring accountability and transparency as well as the institutional role by integrating the functions and authorities of institutions at the central and regional levels;
 - f. increasing the capability of human resources within Energy institutions at the central and regional levels in sustainable Energy Management;
 - g. strengthening the capacity of provincial-level energy organizations responsible for the planning, development, and Energy Management in the region; and/or
 - h. increasing the capacity and role of Local Government in the implementation of the national energy policy, the national energy general plan, and the regional energy general plan, as well as Energy Management in their respective regions.
- (3) The Central Government and/or Local Government, in accordance with their respective authority, is responsible for handling and overcoming issues related to Energy Management, which include:
- a. monitoring and anticipating Energi crisis and/or Energy emergency conditions; providing job opportunities arising from the implementation of the Energy transition;
 - b. implementing product standardization and utilizing the results of innovations in the Energy sector;
 - c. resolving land acquisition and overlapping for the development and construction of Energy Industry facilities and infrastructure; and
 - d. other Energy Management issues.

Article 79

- (1) The Central Government synergizes with Bank Indonesia and the Financial Services Authority in encouraging financial sector institutions to support funding for realizing national Energy Resilience and Energy Sector Decarbonization as referred to in Article 63.
- (2) The Central Government encourages Business Entity and other parties to provide funding for realizing national Energy Resilience and Energy Sector Decarbonization as referred to in Article 63.

Subdivision 7

International Energy Cooperation and Diplomacy

Article 80

- (1) The Central Government strengthens Indonesia's energy position in the implementation of the Energy Sector Decarbonization policy to realize a just Energy transition through international Energy cooperation and diplomacy as referred to in Article 14 paragraph (8) subparagraph g.

- (2) The international Energy cooperation and diplomacy as referred to in paragraph (1) are intended to:
 - a. strengthen the basis for determining and implementing accommodative and responsive policies and regulations, including carbon trading and incentives or performance-based payments from greenhouse gas emissions reduction efforts;
 - b. focus on human resource improvement, development and technology transfer, and their commercial implementation; and/or
 - c. prioritize the fulfilment of domestic Energy demands and support Energy Resilience in the regions that is mutually beneficial.
- (3) The implementation of international Energy cooperation and diplomacy as referred to in paragraph (1) is carried out in accordance with the provisions of laws and regulations.

Article 81

- (1) The Central Government carries out the national Energy strategy in implementing the Energy Sector Decarbonization policy as referred to in Article 80 paragraph (1) by referring to the reference of relevant institutions within the United Nations to ensure just treatment in the implementation of international commitments.
- (2) The Central Government conveys facts regarding the development of the Energy sector that is less aligned with the Energy Sector Decarbonization policy as referred to in paragraph (1) to all relevant stakeholders needed to support the national economy, Energy Resilience, and Energy Independence, in line with the Sustainable Development goals.

Subdivision 8

Local Content and Value-Added Improvement

Article 82

- (1) Business Entity, in carrying out Energy business activities, shall prioritize the local content and value-added improvement as referred to in Article 14 paragraph (8) subparagraph h.
- (2) The local content as referred to in paragraph (1) consists of:
 - a. domestic technology and engineering design;
 - b. domestic material components;
 - c. other domestic components related to Energy business;
 - e. Indonesian manpower; and/or
 - f. domestic funding sources.
- (3) The value-added improvement as referred to in paragraph (1) consists of:
 - a. product value improvement;
 - b. benefit value improvement; and/or
 - c. economic value improvement.

- (4) The prioritization of local content and value-added improvement as referred to in paragraphs (1) to (2) is carried out in accordance with the provisions of laws and regulations.

Subdivision 9

Carbon Tax and Incentives or Performance-Based Payments from Reduction Efforts of the Greenhouse Gas Emissions in the Energy Sector

Article 83

- (1) The Central Government may impose carbon tax as referred to in Article 14 paragraph (8) subparagraph i upon the utilization of Non-Renewable Energy, which is carried out gradually while considering social, economic, and Environmental impacts.
- (2) The imposition of the carbon tax as referred to in paragraph (1) is carried out in accordance with the provisions of laws and regulations in the field of taxation.

Article 84

- (1) The Central Government, Local Government, or Business Entity may obtain incentives or performance-based payments from Reduction Efforts of the GHG Emissions in the Energy Sector as referred to in Article 14 paragraph (8) subparagraph i in Energy Provision and Energy Utilization activities through the CEV mechanism.
- (2) The provision of incentives or performance-based payments from Reduction Efforts of the GHG Emissions in the Energy Sector as referred to in paragraph (1) is carried out in accordance with the provisions of laws and regulations.

Subdivision 10

Determination and Mitigation of Energy Crisis and/or Energy Emergency Conditions

Article 85

- (1) Where there is an Energy crisis and/or Energy emergency, the Central Government stipulates the Energy crisis and/or Energy emergency as referred to in Article 14 paragraph (8) subparagraph j.
- (2) To follow up on the stipulation of the Energy crisis and/or Energy emergency as referred to in paragraph (1), the National Energy Council determines the mitigation measures for the Energy crisis and/or Energy emergency.
- (3) The Central Government, Local Government, Business Entity, other related parties, and the public shall carry out counter-measures based on the mitigation measures as referred to in paragraph (2).
- (4) The stipulation, mitigation measures, and counter-measures for the energy crisis and/or energy emergency as referred to in paragraphs (1) to (3) are carried out in accordance with the provisions of laws and regulations.

CHAPTER V
NATIONAL ENERGY GENERAL PLAN
AND REGIONAL ENERGY GENERAL PLAN

Article 86

- (1) The national energy general plan is formulated by the Central Government based on the national energy policy.
- (2) The national energy general plan as referred to in paragraph (1) is formulated:
 - a. for a ten (10) year period and may be reviewed every five (5) years or at any time deemed necessary by taking into account the strategic environmental changes; and
 - b. by taking into account the regional energy general plan and the realization of the previous period.
- (3) The national energy general plan contains at least:
 - a. national Energy demands and Energy Supply plan, including Energy demands, Energy Resources potential, Energy Supply, Energy supply strategies, decarbonization strategies and targets, Energy indicators, as well as investment outlook and financing strategies; and
 - b. energy demands and Energy Supply plan per region, along with indicators.
- (4) The region as referred to in paragraph (3) subparagraph b consists of seven (7) regions, namely:
 - a. Sumatera;
 - b. Java-Bali;
 - c. Kalimantan;
 - d. Sulawesi;
 - e. Nusa Tenggara;
 - f. Maluku; and
 - g. Papua.

Article 87

- (1) The regional energy general plan is formulated by the Provincial Government by taking into account the strategic environmental conditions and changes.
- (2) The regional energy general plan as referred to in paragraph (1) is formulated by referring to the national Energy general plan.

Article 88

The guidelines for the formulation of the national energy general plan and regional energy general plan as referred to in Article 86 and Article 87 are carried out in accordance with the provisions of laws and regulations.

CHAPTER VI
GUIDANCE AND SUPERVISION

Article 89

- (1) The National Energy Council provides guidance on the formulation of the national energy general plan and regional energy general plan, as well as supervision on the implementation of cross-sectoral policies in the Energy sector.
- (2) In providing guidance and supervision as referred to in paragraph (1), ministries, non-ministerial government institutions, Local Government, and other parties must provide the necessary data and information to the National Energy Council.
- (3) The procedures for implementing the guidance and supervision as referred to in paragraph (1) are carried out in accordance with the provisions of laws and regulations.

Article 90

- (1) The Central Government and/or Local Government, in accordance with their respective authority, carry out guidance and supervision in Energy Management.
- (2) The guidance and supervision as referred to in paragraph (1) include at least:
 - a. granting of business licenses;
 - b. business of Energy Supply, Energy Storage, and Energy Utilization;
 - c. implementation of Energy Sector Decarbonization;
 - d. implementation of Energy Conservation and Energy efficiency;
 - e. implementation of occupational safety and health;
 - f. supervision of safety and security in the development, operation, and termination of Energy facilities and infrastructure operation;
 - g. environmental protection and the application of good engineering practice;
 - h. management of Energy data and information; and
 - i. reporting by Energy Suppliers and Energy User.
- (3) In carrying out the guidance and supervision as referred to in paragraph (2), the Central Government and/or Local Government, in accordance with their respective authority, may cooperate with other parties.
- (4) The guidance and supervision of Energy Management as referred to in paragraph (1) are carried out in accordance with the provisions of laws and regulations.

CHAPTER VII
CLOSING PROVISIONS

Article 91

Upon the entry into force of this Government Regulation, all implementing regulations of Government Regulation Number 79 of 2014 on National Energy Policy (State Gazette of the Republic of Indonesia Year 2014 Number 300, Supplement to the State

Gazette of the Republic of Indonesia Number 5609) are declared to remain effective to the extent not contrary to the provisions of this Government Regulation.

Article 92

Upon the entry into force of this Government Regulation, Government Regulation Number 79 of 2014 on National Energy Policy (State Gazette of the Republic of Indonesia Year 2014 Number 300, Supplement to the State Gazette of the Republic of Indonesia Number 5609) is repealed and declared ineffective.

Article 93

This Government Regulation shall enter into force on the date of its promulgation.

In order to make this Government Regulation known to the public, it is hereby ordered that it be promulgated by its publication in the State Gazette of the Republic of Indonesia.

Issued in Jakarta
on 15 September 2025

PRESIDENT OF THE REPUBLIC OF
INDONESIA,

signed

PRABOWO SUBIANTO

Promulgated in Jakarta
on 15 September 2025

MINISTER OF STATE SECRETARIAT
THE REPUBLIC OF INDONESIA,

signed

PRASETYO HADI

STATE GAZETTE OF THE REPUBLIC OF INDONESIA YEAR 2025 NUMBER 149

Prepared and issued as an official translation

Jakarta, 7 May 2026
DIRECTOR GENERAL OF LEGISLATION
FOR THE MINISTER OF LAW
OF THE REPUBLIC OF INDONESIA,


DHAHANA PUTRA

Official Translation Notice:

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ELUCIDATION
OF
GOVERNMENT REGULATION OF THE REPUBLIC OF INDONESIA
NUMBER 40 OF 2025
ON
NATIONAL ENERGY POLICY

I. GENERAL

Energy plays a crucial and strategic role for achieving social, economic, and Environmental objectives in sustainable national development. However, currently, the majority of the supply is still fulfilled by Non-Renewable Energy, such as oil, natural gas, and coal, which are non-renewable energy sources.

Energy demands are projected to continue increasing in line with the growth rate of the population and the growth rate of the high economy. The increase is primarily driven by the industrial sector to achieve Indonesia's target of becoming a developed country by 2045 and realizing Net Zero Emission by 2060 or sooner. Thus, to enhance national Energy Sovereignty, Energy Resilience, and Energy Independence in the future, it is necessary to implement Energy Management. The Energy Management strives to increase Energy supply from more efficient, cleaner, and low carbon New Energy, Renewable Energy, and Non-Renewable Energy Sources.

Energy Management, particularly the Energy Resources management, has not been carried out optimally to fulfill domestic Energy demands. Currently, reliable energy supply and affordable Energy prices for public necessities, electricity generation, transportation, and industry have not been optimally fulfilled. Furthermore, a portion of Primary Energy is still allocated for export to generate state foreign exchange earnings and revenue sources for the state budget. Consequently, domestic Energy demands, both for fuel and industrial raw materials, have not been optimally fulfilled as mandated by the provisions of Article 33 of the 1945 Constitution of the Republic of Indonesia.

The existing Energi Management paradigm positions Energi Resources as an export commodity to generate foreign exchange. This situation leads to an unreliable energi Energi supply, less optimal value-added improvement, and the loss of opportunities for creating new jobs, thereby becoming one of significant barriers to economic growth.

Therefore, the Energy Management policy paradigm demands to be shifted to position Energy as a capital for sustainable national development. This shifted paradigm is expected to ensure the optimal utilization of Energy

Resources for domestic demands, both as raw materials and Energy Sources, especially for national industries. This will effectively position energy as capital for Sustainable Development and provide economic added value and a multiplier effect. Guaranteeing the domestic Energy supply will allow industries to thrive, creating new jobs and increasing state revenue. A portion of this state revenue from the Energy sector can then be utilized, particularly to support the strengthening of the Energy Resilience and Energy Sector Decarbonization funds.

The use of the Energy Resilience and Energy Sector Decarbonization funds will drive energy sector development and support the Energy Transition toward Net Zero Emission (NZE) by 2060. This will be achieved through measures such as prospecting for and increasing Non-Renewable Energy reserves, enhancing the potential and development of New Energy and Renewable Energy, environmental restoration, Energy Resource Conservation, and Energy efficiency.

The Energy Transition and the Energy Sector Decarbonization will be crucial in sustainable Energy Management. This is considering that in recent developments, global and Indonesia attention has increasingly focused on the global issue of climate change, resulting from the increasing concentration of greenhouse gas emissions in the atmosphere, where the Energy sector is one of the main contributors of greenhouse gas emissions. In supporting the Paris Agreement, the Government has submitted Indonesia's commitment in climate change mitigation actions by setting a target for reducing GHG Emissions in the Energy Sector by 2030 against the impacts of climate change, and has committed to achieving Net Zero Emission by 2060 or sooner.

The current and future challenges and issues faced by the Energy sector include:

1. inefficient Energy Utilization;
2. inefficient Energy subsidies;
3. Energy prices which have not yet reached economic value.
4. Energy investment that has not yet developed optimally and investor's low interest;
5. high dependence on Non-Renewable Energy that does not balance with increased reserve provision;
6. limitations in Energy infrastructure;
7. development of Energy infrastructure that has not yet been supported by a strong and independent national industry;
8. budgetary constraints;
9. weak prioritization of domestic technological products;
10. high dependence on technology imports that has not yet been supported by an adaptive and innovative national industry;
11. research, development, assessment, and application of technology through research and technological innovation that has not yet been well-integrated, and a lack of commercialization of technological innovation results;
12. absence of established priorities for Energy development;
13. low public access to Energy;
14. Energy Management that has not yet fully implemented just and sustainable principles; and
15. value-added of Energy Management that is not yet optimal.

Considering the current energy conditions and the number of challenges faced by the Energy sector, the Government demands to update the national energy policy to regulate and align energy policy with relevant cross-sectoral policies, aiming to anticipate various changes in the strategic environment and achieve strategic goals in the Energy sector. Appropriate Energy Management, both on the supply side management and the demand

side management, is necessary to realize Energy Management based on just, sustainable, integrated, efficient, productive, and environmental awareness principles in order to achieve national Energy Independence, Energy Resilience, and fulfill Indonesia's commitment to Energy Sector Decarbonization to realize national Climate Resilience and support Green Economic development. The national energy policy is aimed to fulfill Energy demands in just and equitable manner to support sustainable economic development through energy transition towards Net Zero Emission by 2060, while prioritizing national Energy Resilience and Energy Independence.

The update of the national energy policy is formulated as a guideline to direct Energy Management in order to realize national Energy Resilience and Energy Independence and fulfill the Energy Sector Decarbonization targets for climate change control and supporting Green Economy development.

The national energy policy regulates the following:

1. objectives and targets;
2. direction of the national energy policy;
3. strategy of the national energy policy;
4. national energy general plan and regional energy general plan;
5. guidance and supervision.

II. ARTICLE BY ARTICLE

Article 1

Self-explanatory.

Article 2

Self-explanatory.

Article 3

The period up to the year 2060 is based on the Long Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR) 2050 document submitted to the UNFCCC in 2021 regarding Indonesia's commitment to achieving the Net Zero Emission target by 2060 or sooner.

Article 4

Self-explanatory.

Article 5

Paragraph (1)

Self-explanatory.

Paragraph (2)

The term "changes in strategic conditions and environment" means changes in national economic growth, national population growth, the state financial capacity, technological advancements, and/or changes in Central Government policy.

Article 6

Subparagraph a

Self-explanatory.

Subparagraph b

The term "Energy Resilience with long-term resilient conditions" means the projected condition of guaranteed Energy availability and public access to Energy at affordable prices in the long term, while still paying attention to the protection of the Environment, using an approach based on the Energy Resilience index with resilient conditions in accordance with the provisions of laws and

- regulations in the Energy sector.
- Subparagraph c
Self-explanatory.
- Subparagraph d
Self-explanatory.
- Subparagraph e
Self-explanatory.
- Subparagraph f
Self-explanatory.
- Subparagraph g
Sufficiently clear
- Subparagraph h
Self-explanatory.
- Subparagraph i
Self-explanatory.
- Subparagraph j
The term “technology clearing” means a mechanism for conducting verification to ensure that the technology is safely viable for domestic use.
- Subparagraph k
Self-explanatory.
- Subparagraph l
Self-explanatory.
- Subparagraph m
Self-explanatory.
- Subparagraph n
Self-explanatory.
- Subparagraph o
The term “facilities” means the main facilities needed in Energy Provision or Energy Utilization.
The term “infrastructure” means the supporting facilities needed in Energy Provision or Energy Utilization.
The term “stranded asset” means an asset that is not utilized, resulting in an unexpected or premature decline in value, devaluation, or conversion that becomes the liability of the asset manager.

Article 7
Self-explanatory.

Article 8
Self-explanatory.

Article 9
Paragraph (1)
The calculation of Final Energy excludes electricity consumption in the industrial sector from captive power.
Paragraph (2)
Subparagraph a
Point 1
The calculation of final Energy excludes electricity consumption in the industrial sector from captive power.
Point 2
Self-explanatory.
Point 3
Self-explanatory.

Point 4
Self-explanatory.

Subparagraph b

Point 1
Self-explanatory.

Point 2
Self-explanatory.

Point 3
Self-explanatory.

Point 4
Self-explanatory.

Point 5
Self-explanatory.

Point 6
Self-explanatory.

Point 7
Self-explanatory.

Point 8
Self-explanatory.

Point 9
Self-explanatory.

Point 10.
The calculation of the achievement of Final Energy utilization for the energy type of liquefied petroleum gas has taken into account the substitution of liquefied petroleum gas with dimethyl ether.

Point 11
Self-explanatory.

Point 12
Self-explanatory.

Article 10

Subparagraph a

The calculation of Primary Energy supply includes the production of ammonia, hydrogen, and the use of gas for dimethyl ether production.

Subparagraph b

The calculation of Primary Energy Intensity includes the production of hydrogen, dimethyl ether, and ammonia.

Article 11

Subparagraph a

The calculation of Final Energy per capita excludes electricity consumption in the industrial sector from captive power.

Subparagraph b

The calculation of electricity consumption per capita includes electricity consumption in the industrial sector from captive power.

Subparagraph c

Self-explanatory.

Article 12

Subparagraph a

Self-explanatory.

Subparagraph b

Point 1

The calculation of the Primary Energy mix includes the use of hydro Energy for green hydrogen production.

Point 2

Self-explanatory.

Point 3

Self-explanatory.

Point 4

Self-explanatory.

Point 5

Self-explanatory.

Point 6

Self-explanatory.

Point 7

Self-explanatory.

Point 8

Self-explanatory.

Point 9

The term “other New Energy and Renewable Energy” means among others, ocean Energy and methanol.

Point 10

Sufficiently clear

Point 11

Sufficiently clear

Point 12

Sufficiently clear

Article 13

Paragraph (1)

Self-explanatory.

Paragraph (2)

Subparagraph a

Self-explanatory.

Subparagraph b

Self-explanatory.

Subparagraph c

Self-explanatory.

Subparagraph d

The term “the level of GHG Emissions in the Energy Sector at one hundred twenty-nine (129) million tons of CO₂e (carbon dioxide equivalent)” means that there are still residual greenhouse gas emissions generated from the Energy sector in the form of:

- a. residual carbon dioxide emissions that cannot be reduced by low-carbon technology and carbon capture and storage or carbon capture utilization and storage technology;
- b. carbon dioxide emissions from Energy consumption per Energy User sector, such as transportation, industry, households, commercial, and electricity generation; and
- c. fugitive emissions from production and fuel supply activities, such as oil and gas exploitation and oil and gas processing at refineries, by considering that the forestry sector has achieved carbon net sink by 2030.

Paragraph (3)
Self-explanatory.

Article 14
Self-explanatory.

Article 15

Paragraph (1)

Subparagraph a

The term “other Energy Resources” means other Energy sources discovered in the future

Subparagraph b

The term “development of Energy Sources abroad” refers to an effort to obtain business opportunities for Energy Sources whose energy reserves are located outside the territory of the Unitary State of the Republic of Indonesia, which can be carried out through cooperation with other countries in accordance with the provisions of laws and regulations.

Subparagraph c

Self-explanatory.

Subparagraph d

Self-explanatory.

Subparagraph e

Self-explanatory.

Subparagraph f

Self-explanatory.

Paragraph (2)

Self-explanatory.

Paragraph (3)

Self-explanatory.

Article 16

Paragraph (1):

Subparagraph a

Self-explanatory.

Subparagraph b

Self-explanatory.

Subparagraph c

Self-explanatory.

Subparagraph d

Self-explanatory.

Subparagraph e

Self-explanatory.

Subparagraph f

The term “re-powering” means the process of renewing the main power in a more efficient power plant system, resulting in the increase of cleaner electricity production, for example by replacing coal boilers with nuclear reactors or geothermal systems.

Subparagraph g

Sufficiently clear

Subparagraph h

Self-explanatory.

Subparagraph i

Self-explanatory.

- Subparagraph j
Sufficiently clear
- Subparagraph k
Self-explanatory.
- Subparagraph l
Self-explanatory.
- Subparagraph m
Self-explanatory.
- Subparagraph n
Self-explanatory.
- Paragraph (2)
Self-explanatory.
- Paragraph (3)
Self-explanatory.
- Paragraph (4)
Self-explanatory.

Article 17

- Paragraph (1)
Self-explanatory.
- Paragraph (2)
 - Subparagraph a
Self-explanatory.
 - Subparagraph b
Self-explanatory.
 - Subparagraph c
Examples of New Energy include nuclear, hydrogen, and ammonia.
 - Subparagraph d
Self-explanatory.
- Paragraph (3):
 - Subparagraph a
Self-explanatory.
 - Subparagraph b
Self-explanatory.
 - Subparagraph c
Self-explanatory.
 - Subparagraph d
Self-explanatory.
 - Subparagraph e
The regionalization of the national Electricity System aims to maximize the utilization of local Energy Sources.
 - Subparagraph f
Regional cooperation includes, among others, the ASEAN Power Grid cooperation.

Article 18

- Self-explanatory.

Article 19

- Self-explanatory.

Article 20

- Self-explanatory.

Article 21
Self-explanatory.

Article 22
Self-explanatory.

Article 23
Self-explanatory.

Article 24
Self-explanatory.

Article 25
Self-explanatory.

Article 26
Self-explanatory.

Article 27
Self-explanatory.

Article 28
Self-explanatory.

Article 29
Self-explanatory.

Article 30
Self-explanatory.

Article 31
Paragraph (1)
Self-explanatory.
Paragraph (2)
Subparagraph a
Sufficiently clear
Subparagraph b
Self-explanatory.
Subparagraph c
The term “dimethyl ether” means an organic compound with the chemical formula of CH_3OCH_3 , which can be produced from the processing of natural gas, coal, biomass, and other hydrocarbons used for fuel.
Subparagraph d
Self-explanatory.
Subparagraph e
Self-explanatory.
Subparagraph f
Self-explanatory.

Article 32
Self-explanatory.

Article 33
Self-explanatory.

Article 34
Self-explanatory.

Article 35
Self-explanatory.

Article 36
Self-explanatory.

Article 37
Self-explanatory.

Article 38
Self-explanatory.

Article 39
Self-explanatory.

Article 40
Paragraph (1)
Subparagraph a
The term “New Energy and/or Renewable Energy portfolio standards” means the minimum standard applied to Business Entity generating electricity from non-renewable energy sources to provide electricity from new energy sources and/or renewable energy sources.
The minimum standard applied to Business Entity generating electricity from non-renewable energy sources to provide electricity from new energy sources and/or renewable energy sources is implemented in accordance with the provisions of laws and regulations.
Subparagraph b
Self-explanatory.
Paragraph (2)
The term “Renewable Energy certificate” means a certificate proving that electricity production in watt-hours are from Renewable Energy-based power plants.

Article 41
Self-explanatory.

Article 42
Self-explanatory.

Article 43
Self-explanatory.

Article 44
Self-explanatory.

Article 45
Self-explanatory.

Article 46
Self-explanatory.

Article 47

Self-explanatory.

Article 48

Self-explanatory.

Article 49

Paragraph (1)

Subparagraph a

Self-explanatory.

Subparagraph b

Fulfilment of minimum Energy performance standards, including through an Energy-saving labelling.

Paragraph (2)

Self-explanatory.

Article 50

Self-explanatory.

Article 51

Self-explanatory.

Article 52

Self-explanatory.

Article 53

Self-explanatory.

Article 54

Self-explanatory.

Article 55

Paragraph (1)

Self-explanatory.

Paragraph (2)

The term “safeguards” means any action aimed at ensuring that the utilization of nuclear materials is only for peaceful purposes.

Paragraph (3)

Self-explanatory.

Paragraph (4)

Self-explanatory.

Paragraph (5)

Self-explanatory.

Article 56

Paragraph (1)

Self-explanatory.

Paragraph (2)

Self-explanatory.

Paragraph (3)

The term “participate in developing renewable energy sources” means Business Entity forming new entities to develop renewable energy sources in accordance with the provisions of laws and regulations.

Paragraph (4)

Self-explanatory.

Article 57
Self-explanatory.

Article 58
Self-explanatory.

Article 59
Paragraph (1)
Strategic Reserves are included within the national mining area,
and their utilization is in accordance with the provisions of laws
and regulations.
Paragraph (2)
Self-explanatory.

Article 60
Self-explanatory.

Article 61
Self-explanatory.

Article 62
Self-explanatory.

Article 63
Paragraph (1)
Subparagraph a
Self-explanatory.
Subparagraph a
Self-explanatory.
Subparagraph c
The term “other legitimate sources” means funds obtained
from Business Entity, philanthropists, international
organizations, and development partner donor countries.
Paragraph (2)
Self-explanatory.

Article 64
Self-explanatory.

Article 65
Paragraph (1)
The term “just economic viability” means a value/cost reflecting
the cost of energy production, including environmental costs and
conservation costs, as well as profit reviewed based on the
community's capacity and stipulated by the Government.
The term “sustainable principle” means the Energy Management
principle that must guarantee the Energy Provision and Energy
Utilization for the present and future generations.
Paragraph (2)
Self-explanatory.
Paragraph (3)
Self-explanatory.

Article 66
Paragraph (1)

The term "Energy market" means an Energy market that specifically supports the creation of a new energy market ecosystem in the development of New Energy and Renewable Energy, including the electricity market from New Energy and Renewable Energy-based power plants. For example, the implementation of a certain minimum quota of electricity in certain electricity business areas for electricity production sourced from geothermal-based power plants.

Paragraph (2)
Self-explanatory.

Paragraph (3)
Self-explanatory.

Article 67
Self-explanatory.

Article 68

Paragraph (1)

Subparagraph a

The term "fiscal incentives" means the granting of tax relief (income tax, land and building tax), customs, levies, non-tax state revenue, and/or relief from fees and charges in various forms, in accordance with the provisions of laws and regulations in the fields of taxation, customs, and non-tax state revenue.

Subparagraph b

The term "non-fiscal incentives" means providing of compensation, subsidies, ease of licensing related to land procurement and infrastructure, utilization of forest areas, and utilization of water both as a medium and as a Renewable Energy Source.

Paragraph (2)
Self-explanatory.

Paragraph (3)
Self-explanatory.

Paragraph (4)
Self-explanatory.

Paragraph (5)
Self-explanatory.

Article 69
Self-explanatory.

Article 70

Paragraph (1)

Subparagraph a

Financing to state-owned enterprises and Business Entity is carried out for the purpose of Central Government assignment.

Subparagraph b

The Government may provide guarantees for financing efforts carried out by state-owned enterprises for assignment purposes.

Compensation given to state-owned enterprises for the purpose of assignment causes an increase in the basic cost of energy production, including the fuel cost component, the

compensation is given for the incurred costs, including an expected margin within a reasonable level and the payment is made in accordance with the state financial capacity.

Paragraph (2)
Self-explanatory.

Article 71
Self-explanatory.

Article 72
Self-explanatory.

Article 73
Self-explanatory.

Article 74
Self-explanatory.

Article 75
Self-explanatory.

Article 76
Self-explanatory.

Article 77
Self-explanatory.

Article 78
Self-explanatory.

Article 79
Paragraph (1)
Self-explanatory.
Paragraph (2)
The term “other parties” means philanthropists, international organizations, and development partner donor countries.

Article 80
Self-explanatory.

Article 81
Self-explanatory.

Article 82
Paragraph (1)
Self-explanatory.
Paragraph (2)
Self-explanatory.
Paragraph (3)
The value-added improvement, particularly for domestic mineral products, is carried out to support the Energy transition enabling to provide optimal economic benefits for the state and support the availability of a mineral supply chain for the supply and development of the domestic battery industry, by considering the comparative advantages of mineral resources and the continuation of mining operations, including nickel, manganese,

and cobalt (NMC) and lithium into batteries.

Paragraph (4)
Self-explanatory.

Article 83

Paragraph (1)
Self-explanatory.

Paragraph (2)
The imposition of a carbon tax is carried out in accordance with the provisions of laws and regulations regarding the harmonization of tax regulations. The imposition of a carbon tax includes, among others, the imposition of a carbon tax on the transportation, industry including electricity generation, and commercial sectors.

Article 84

Paragraph (1)
Self-explanatory.

Paragraph (2)
The Central Government or provincial Government within the international scope, obtain incentives or performance-based payments from international parties.

Article 85

Self-explanatory.

Article 86

Self-explanatory.

Article 87

Self-explanatory.

Article 88

Self-explanatory.

Article 89

Paragraph (1)
The term “cross-sectoral policy in the Energy sector” means an Energy policy instrument issued and/or implemented by:
a. ministries serving as the members of the National Energy Council;
b. related ministries/non-ministerial government institutions;
and
c. Local Government.

Paragraph (2)
Self-explanatory.

Paragraph (3)
Self-explanatory.

Article 90

Paragraph (1)
Self-explanatory.

Paragraph (2)
Self-explanatory.

Paragraph (3)

The term “other parties” means philanthropists international organizations, and development partner donor countries.

Paragraph (4)

Self-explanatory.

Article 91

Self-explanatory.

Article 92

Self-explanatory.

Article 93

Self-explanatory.

SUPPLEMENT TO THE STATE GAZETTE OF THE REPUBLIC OF INDONESIA
NUMBER 7136