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Policy updates on Presidential Regulation (PR) No. 112 Year 2022 The Acceleration of Renewable Energy Development for Electricity Generation

March 2023

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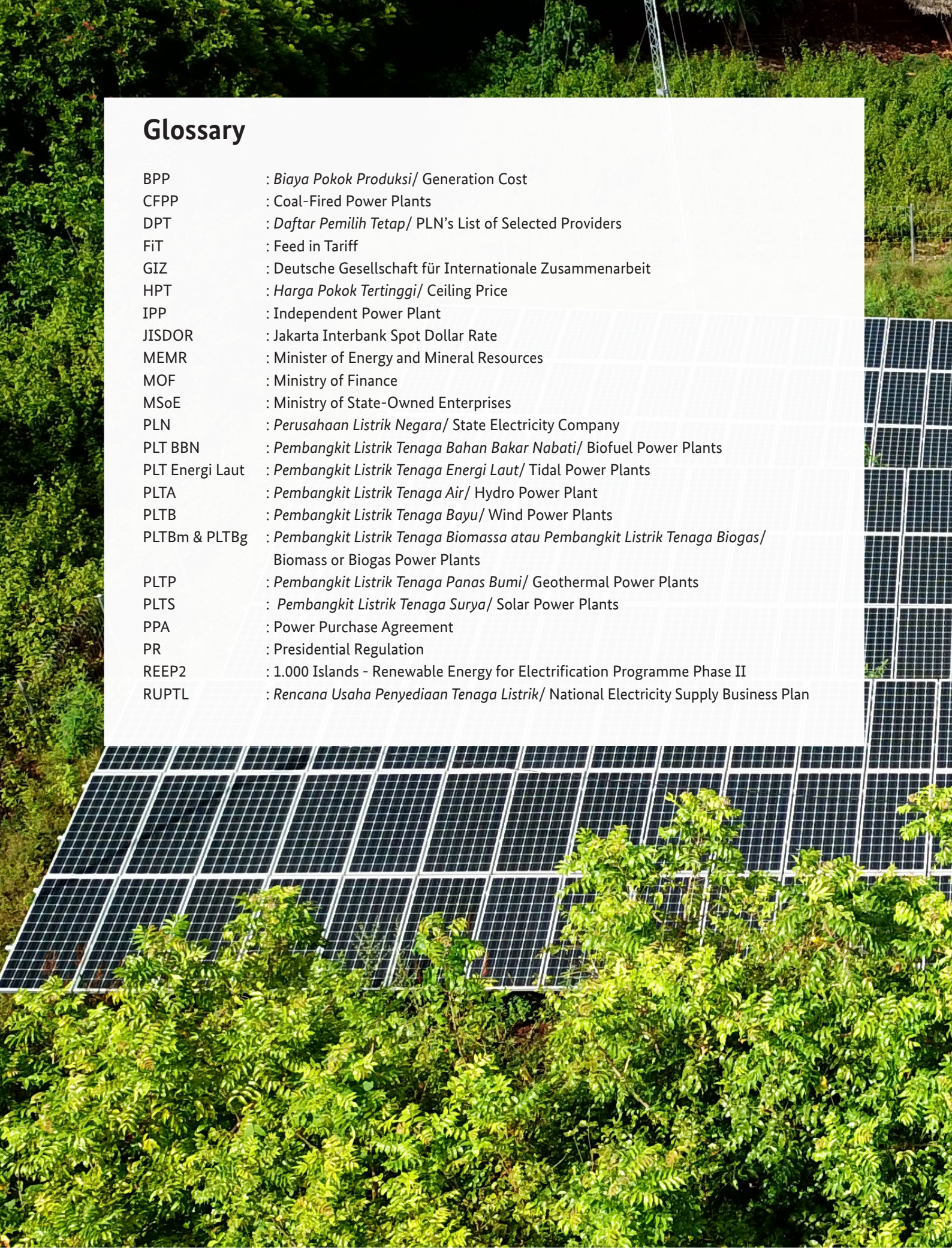

Glossary

BPP	: *Biaya Pokok Produksi*/ Generation Cost
CFPP	: Coal-Fired Power Plants
DPT	: *Daftar Pemilih Tetap*/ PLN's List of Selected Providers
FiT	: Feed in Tariff
GIZ	: Deutsche Gesellschaft für Internationale Zusammenarbeit
HPT	: *Harga Pokok Tertinggi*/ Ceiling Price
IPP	: Independent Power Plant
JISDOR	: Jakarta Interbank Spot Dollar Rate
MEMR	: Minister of Energy and Mineral Resources
MOF	: Ministry of Finance
MSoE	: Ministry of State-Owned Enterprises
PLN	: *Perusahaan Listrik Negara*/ State Electricity Company
PLT BBN	: *Pembangkit Listrik Tenaga Bahan Bakar Nabati*/ Biofuel Power Plants
PLT Energi Laut	: *Pembangkit Listrik Tenaga Energi Laut*/ Tidal Power Plants
PLTA	: *Pembangkit Listrik Tenaga Air*/ Hydro Power Plant
PLTB	: *Pembangkit Listrik Tenaga Bayu*/ Wind Power Plants
PLTBm & PLTBg	: *Pembangkit Listrik Tenaga Biomassa atau Pembangkit Listrik Tenaga Biogas*/ Biomass or Biogas Power Plants
PLTP	: *Pembangkit Listrik Tenaga Panas Bumi*/ Geothermal Power Plants
PLTS	: *Pembangkit Listrik Tenaga Surya*/ Solar Power Plants
PPA	: Power Purchase Agreement
PR	: Presidential Regulation
REEP2	: 1.000 Islands - Renewable Energy for Electrification Programme Phase II
RUPTL	: *Rencana Usaha Penyediaan Tenaga Listrik*/ National Electricity Supply Business Plan

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Highlight 1: Renewable Energy and its Government Support

1. RE Pricing

a. Ceiling Price (HPT)
In PR 112/2022, the tariff uses a fixed USD-based ceiling tariff by considering the location and capacity of the projects.

b. Price based on agreement

2. Procurement Mechanism for RE Power Plants

a. Direct Appointment or

b. Direct Selection,
which are distinguished based on the type of the renewable energy power plants.
PR 112/2022 distinguishes the procurement and pricing mechanisms for:

- Power plants wholly developed by business entities; and
- Power plants wholly or partially developed by central government or regional government (including from grant).

Procurement mechanism and pricing for renewable power plants is illustrated in Table 1 and 2 below.

Table 1: Procurement of renewable energy power plants which are built entirely by business entities

Type of Renewable Power Plant	Capacity	Procurement Mechanism	Pricing	Approval from Minister of Energy and Mineral Resources
Hydro Power Plant / *Pembangkit Listrik Tenaga Air* (PLTA)				
Hydro Power Plants	All capacity	Direct selection	Ceiling Price	X Not required
Hydro Power Plants that utilize hydropower from reservoirs/dams or irrigation channels whose construction is multipurpose of state-owned goods	All capacity	Direct appointment which valid as an assignment for the power purchase	Ceiling Price	X Not required
Hydro Power Plants as a peaker	All capacity	Direct selection	Price based on agreement	√ Required
Expansion of Hydro Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Excess Power from Hydro Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required

Type of Renewable Power Plant	Capacity	Procurement Mechanism	Pricing	Approval from Minister of Energy and Mineral Resources
Photovoltaic Solar or Wind Power Plants / *Pembangkit Listrik Tenaga Surya Fotovoltaik atau Bayu* (PLTS Fotovoltaik and PLTB)				
Photovoltaic Solar or Wind Power Plants (equipped or not equipped with battery facilities or other electrical energy storage facilities, whether the land is provided by the government or using their own land).	All capacity	Direct selection	Ceiling Price	X Not required
Expansion of Photovoltaic Solar or Wind Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Biomass or Biogas Power Plants / *Pembangkit Listrik Tenaga Biomassa atau Pembangkit Listrik Tenaga Biogas* (PLTBm and PLTBg)				
Biomass or Biogas Power Plants	All capacity	Direct selection	Ceiling Price	X Not required
Expansion of Biomass or Biogas Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Excess Power from Biomass or Biogas Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Geothermal Power Plants / *Pembangkit Listrik Tenaga Panas Bumi* (PLTP)				
Geothermal Power Plants	All capacity	Direct appointment *Especially for IPB holders, the direct appointment applies as an assignment for the power purchase*	Ceiling Price	X Not required
Expansion of Geothermal Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Excess Power from Geothermal Power Plants	All capacity	Direct appointment	Ceiling Price	X Not required
Biofuel Power Plants / *Pembangkit Listrik Tenaga Bahan Bakar Nabati* (PLT BBN)				
Biofuel Power Plants	All capacity	Direct selection	Price based on agreement	√ Required
Tidal Power Plants / *Pembangkit Listrik Tenaga Energi Laut* (*PLT Energi Laut*)				
Tidal Power Plants	All capacity	Direct selection	Price based on agreement	√ Required

Table 2: The procurement of renewable energy power plants which are built wholly or partly built by the government or local government including those originating from Grants

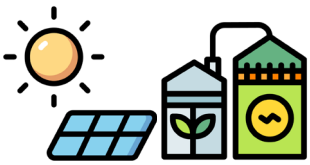
Type of Renewable Power Plant	Capacity	Procurement Mechanism	Pricing	Approval from Minister of Energy and Mineral Resources
Hydro Power Plants	All capacity	Assignment from the Minister to PLN which applies as a direct appointment for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as price approval from the MEMR
Photovoltaic Solar Power Plants	All capacity	Assignment from the Minister to PLN which applies as a direct appointment for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as price approval from the MEMR
Wind Power Plants	All capacity	Assignment from the Minister to PLN which applies as a direct appointment for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as price approval from the MEMR
Biomass Power Plants	All capacity	Assignment from the Minister to PLN which applies as a direct appointment for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as price approval from the MEMR
Biogas Power Plants	All capacity	Assignment from the Minister to PLN which applies as a direct appointment for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as price approval from the MEMR
Geothermal Power Plants	All capacity	Assignment from the Minister to PLN which applies as a **direct appointment** for the purchase of Power Electricity by PLN	Ceiling Price	Assignment from the MEMR to PLN shall apply as **price approval from the MEMR**
Tidal Power Plants	All capacity	Assignment from the Minister to PLN which applies as a **direct appointment** for the purchase of Power Electricity by PLN	Price based on agreement	Assignment from the MEMR to PLN shall apply as **price approval from the MEMR**
Biofuels Power Plants	All capacity	Assignment from the Minister to PLN which applies as a **direct appointment** for the purchase of Power Electricity by PLN	Price based on agreement	Assignment from the MEMR to PLN shall apply as **price approval from the MEMR**

3. RE Procurement mechanism: Transitional Provision

i. Procurements conducted by PLN for electricity purchase from renewable power plants that are at the stage of price proposal submission prior to the issuance of PR 112/2022, the electricity purchase and its price are carried out in accordance with the prevailing regulations before this PR 112/2022 is issue (**Article 36 PR 112/2022**).
ii. PLN's DPT that has been determined prior to the issuance of this PR 112/2022 is still valid.
iii. At the time of PR 112/2022 shall become effective, any implementation regulations regarding Renewable Energy for Power Supply are still valid so long as the provisions are not in contrary to PR 112/2022 (**Article 41 PR 112/2022**).
iv. PR 112/2022 does not explicitly revoke MEMR Regulation No. 50 of 2017 on the Utilization of Renewable Energy Sources for Electricity Supply as lastly amended by MEMR Reg 4/2020 (**MEMR Reg 4/2020**). This means that MEMR Reg. 4/2020 is still valid so long as the provisions are not in contrary to PR 112/2022, e.g., price and procurement mechanism for waste-to-energy power plant projects are not regulated in PR 112/2022 and therefore, they will still need to follow MEMR Reg. 4/2020 and the relevant presidential regulation.

Solar PV, Biogas, and Biomass Power Plant

At the time this PR 112/2022 is issued, IPP that: (i) has completed its procurement, (ii) has agreed price with PLN, and (iii) has not obtained an approval from MEMR, the electricity purchase price is carried out in accordance with the procurement result.



Geothermal Power Plants (PLTP)

- Prior to the issuance of this PR 112/2022, business entities that have obtained: (i) electricity purchase price approval and/or assignment to purchase electricity from MEMR but have not signed PPA and (ii) geothermal steam price approval from MEMR but have not signed steam purchase agreement, the electricity and geothermal steam purchase and its price must be in accordance with the previous regulations before this PR (**Article 31 PR 112/2022**).
- Prior to the issuance of this PR, business entities that: (i) have obtain geothermal license (IPB) and (ii) have not obtained price approval from MEMR, the electricity purchase and its price must be in accordance with this PR (**Article 32 PR 112/2022**).
- Based on **Article 33 (1) and (3) PR 112/2022,** the electricity purchase price and geothermal steam purchase price that are being negotiated when this PR is issued may continue its negotiation and the price must be agreed within 6 months after the PR issuance. Otherwise, the price must be agreed pursuant to the renegotiation mechanisms in the PPA or steam purchase agreement. However, pursuant to **Article 33 (2) PR 112/2022**, if the agreed price is:

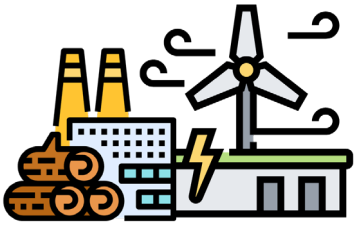
  (i) equal or lower than the electricity purchase price or geothermal steam purchase price set out in PR 112/2022, the amendment of PPA or steam purchase agreement can be signed without obtaining an approval from MEMR; or
  (ii) higher than the electricity purchase price or geothermal steam purchase price set out in PR 112/2022, the agreed price must obtain a price approval from MEMR before the PPA or steam purchase agreement is signed.

Hydro Power Plants

- Prior to the issuance of PR 112/2022, business entities that: (i) have been determined as a developer for hydro power plants or developer candidate and (ii) have not signed PPA with PLN, the electricity purchase is conducted based on direct appointment which must be carried out within 12 months since the issuance of PR and the purchase price must comply with PR 112/2022. If the electricity purchase cannot be conducted due to the unreadiness of the business entity, MEMR will revoke the determination of the business entity as developer.
- At the time this PR 112/2022 is issued, IPP that: (i) has completed its procurement, (ii) has agreed price with PLN, and (iii) has not obtained an approval from MEMR, the electricity purchase price is carried out in accordance with the procurement result.
- Business entities that have been determined as a partner for state-owned goods utilization for hydro power plants by the ministry that carries out government affairs in the field of water resources, the electricity purchase and its price are carried out in accordance with this PR 112/2022.

Power Plants financed or built wholly or partially by central or regional government

- At the time this PR 112/2022 is issued, for hydro, photovoltaic solar, and wind power plants that have been built with funding partially or wholly from the central or regional government (including from grants) and have not signed PPA, the electricity purchase price is carried out in accordance with PR 112/2022.
- At the time this PR 112/2022 is issued, for biogas and biomass power plants that have been built partially or wholly by the government (including from grants), the electricity purchase price is carried out in accordance with PR 112/2022 by considering the location factor.



4. Compensation to PLN

In the event that the purchase of RE electricity causes an increase in BPP, PT PLN must be compensated for all costs that have been incurred and payments are made under the provisions of the legislation.

5. Government Support

In developing renewable energy power plants, business entities may receive incentives and support:

i. Fiscal incentives: (i) income tax facilities, (ii) import facilities in a form of import duties and/or tax exemption, (iii) land and building tax facilities, (iv) geothermal development support, and/or (v) financing and/or guarantee facilities support through state-owned enterprises assigned by the government;
ii. Non-fiscal incentives given by central and/or regional governments; and/or
iii. Support given by various ministries, head of agencies, or regional governments

Highlight 2:
National Electricity Supply Business Plan (RUPTL)

Pursuant to Article 2(2) PR 112/2022, RUPTL prepared by PLN is stipulated by MEMR only after coordinating with MSoE and MOF, by considering:

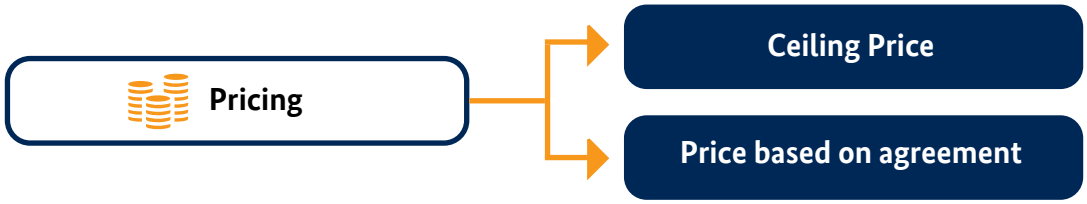
i. Aspects of the balance between supply and demand;
ii. Capability of electricity system; and
iii. Capacity of state financial.

Highlight 3:
Energy Transition

i. The Minister of Energy and Mineral Resources **(MEMR) prepares a roadmap to accelerate the early termination of coal-fired power plants (CFPP)** after coordinating with the Minister of Finance and the Minister of SOEs
ii. Development of new CFPPs is **prohibited, with certain exemptions**
iii. PR 112/2022 mandates PLN to accelerate the early termination of: (i) its own CFPPs; and/or (ii) CFPP PPA developed by IPPs, by considering the electricity supply and demand. Such CFPP may be replaced by renewable energy power plants if needed by considering the electricity supply and demand.
iv. PR 112/2022 also provides that the Government may give fiscal support through funding and financing, including blended finance sourced from state budget and/or other legitimate sources that are aimed to accelerate energy transition

Comments on PR No. 112/2022

1. Renewable Energy and its Government Support



1.1 Renewable Energy Pricing

Ceiling Price (HPT)

Referring to **Article 6(1) of PR 112/2022**, the purchase price of power based on ceiling price is carried out with the following requirements:

i. Negotiation with the upper limit of ceiling price as stated in Appendix I of PR 112/2022;
ii. Without escalation during the period of PPA; and
iii. Valid as the price approval from the MEMR.

However, pursuant to **Article 6(2) of PR 112/2022**, the purchase price of power based on ceiling price from geothermal power plants is carried out with the following requirements:

i. Negotiation with the upper limit of ceiling price as stated in Appendix I of PR 112/2022;
ii. Applies as the base price;
iii. Escalation provisions apply for a period time of PPA or steam purchase agreement; and
iv. Valid as the price approval from the Minister.

Price Based on Agreement

Based on **Article 6(3) of PR 112/2022,** the purchase price based on agreement is carried out through the negotiation and must obtain price approval from the Minister.

Ceiling Price (HPT)	Price based on agreement
Renewable energy power plants built entirely by business entities (all capacities)	
Hydro power plants	Hydro power plants as a peaker
Geothermal power plants	Biofuels power plant
Photovoltaic solar or wind power plants	Tidal power plants
Biomass or biogas power plants	
Hydro power plants that utilize hydropower from reservoirs/dams or irrigation channels whose construction is multipurpose of state-owned goods	
Expansion of geothermal, hydro, photovoltaic solar, wind, biomass, or biogas power plants	
Excess Power from geothermal, hydro, biomass, or biogas power plants	

Ceiling Price (HPT)	Price based on agreement
Renewable energy power plants built wholly or partially by central or local governments (including from grants) (all capacities)	
Hydro power plants	Tidal power plants
Photovoltaic solar power plants	Biofuels power plants
Wind power plants	
Biomass power plants	
Biogas power plants	
Geothermal power plants	

- PR 112/2022 only sets out ceiling price and purchase price based on agreement which are distinguished based on the types of renewable energy power plant and by also considering the power plant capacity where the ceiling price for smaller scale projects is higher than larger scale projects.
- **The purchase price mechanisms set out under PR 112/2022 are generally the same with MEMR Reg 4/2021** because both regulations use a certain cap for the purchase price, **but the cap reference is different.** MEMR Reg 4/2021 refers to BPP while PR 112/2022 refers to the ceiling price.
- PR 112/2022 indicates that the ceiling tariff is a **fixed tariff without escalation**, **except for geothermal power plants** where escalation is allowed, and the ceiling tariff will be deemed as the base-tariff before escalation.
- In the initial drafts of this presidential regulation**, there were proposals to have a feed-in-tariff (FIT) concept instead of a ceiling tariff for small scale renewable energy projects** (e.g., below 5 MW or 1 MW). However, **FIT is finally not used in PR 112/2022.**

Comment 1: Ceiling Price vs Generation Cost (BPP)

Pursuant to Appendix of Minister of Energy and Mineral Decree No 169.K/HK.02/MEM.M/2021 on BPP PLN for 2020 (MEMR Decree 169/2021), the 2020 average national BPP of PLN is at US$7.05 cents/kWh.

It remains to be seen as to whether the level of the cap tariff is higher enough to incentivize and expedite renewable projects development in Indonesia.

First Period

The ceiling tariff for the first-period staging (year 1-10) is generally **higher than the 2020 average national BPP** (in particular for **smaller scale projects**).

Note:
However, several ceiling prices for the first-period staging (in particular for **eastern Indonesia**) are **still lower than the 2020 average national BPP.**
For example in **Raja Ampat, West Papua**, based on Appendix of MEMR Decree 169/2021, the 2020 BPP was **US$ 19.25 cents/kWh**. For comparison, it is **lower** than the ceiling price from Hydropower that Utilizes Power from Water Streams/Falls, particularly in West Papua . After the calculation, the ceiling price for it is at **US$ 11.23 cents/kWh x 1.5** (the factor F for West Papua) **= US$ 16.84 cents/kWh.**

Second Period
The second staging tariff (year 11 onward) is generally **lower than the 2020 average national BPP** of PLN

Smaller scale and larger scale projects
Further, **the ceiling tariff for smaller scale projects is higher than larger scale projects**.

Comment 2: Location Factor Consideration

The renewable energy pricing considers location factor. It varies depending on the location factor (F) ranging from 1.00 up to 1.50, in which locations outside Java, Madura, and Bali will have location factor above 1.00 for the first stage period (from year 1-10), while ceiling price for the second stage period (i.e., year 11 onwards does not consider the location factor). Excess power for certain power plants such as hydro, biogas, and biomass also does not consider the location factor.

Comment 3: The purchase price will be applied since COD

The tariff will be applied since the commercial operation date. A query remains whether this means that PLN will not be allowed to pay any electricity produced before the commercial operation, e.g., during the commissioning.

Comment 4: Staging for ceiling price

Ceiling tariff applies staging tariff (first stage from year 1-10, and ceiling price for the second stage from year 11 onwards) by considering the location of the projects. PR 112/2022 also provides different term for the applicability of staging tariff, e.g.:

(i) biomass with 25-year period,
(ii) biogas with 20-year period;
(iii) others with 30-year period.

It remains to be seen whether the time period will be mandatory or merely a maximum period that will apply to future PPAs.

Comment 5: USD vs Rupiah Based Tariff

- The ceiling price set out under PR 112/2022 is quoted in USD but payment for electricity purchase transactions will still be done using Indonesian rupiah at the Jakarta Interbank Spot Dollar Rate (JISDOR) exchange rate at the time agreed upon in the PPA.

A query remains whether it is now allowed for the PPAs to have a USD tariff instead of a Rupiah tariff which is indexed to USD/IDR exchange rate as generally applicable in existing renewable PPAs, or a rupiah tariff, so far the entire tariff is still below the ceiling tariff.

Comment 6: Implication of ceiling price to tariff mechanism under renewable PPAs

The tariff under PR 112/2022 is a single fixed ceiling tariff (except for geothermal projects where the escalation is still allowed). **This results to queries as to whether PPAs will still be allowed to:**

i. divide tariff components into fixed tariff (Component A and E) and variable tariffs (Components B, C and D);
ii. provide escalation to Components B and D which usually are indexed against Indonesian or US Consumer Price Index; and
iii. include a separate compensation for the fuel price (Component C), or fuel component will need to be deemed as part of the single tariff.

If the PPA is allowed to apply same tariff components (i.e., divided to Components A, B, C, D and E), then another query remains on how to determine the percentage of each Components A, B, C, and D as there are no guidelines on these percentage division under PR 112/2022. Indeed, given the concept of ceiling tariffs and the fact that escalation is prohibited (save for geothermal projects), it is unlikely that PLN can continue to use the usual tariff components as discussed above since there is now a one-size-fit-all price ceiling that will cap or even eliminate any possibilities for variable tariffs.

Comment 7: Ceiling price for solar power plants whose land is provided by the government

PR 112/2022 includes ceiling price for photovoltaic solar power plants whose land is provided by the government – with 5% lower tariff compared to ceiling price applicable for photovoltaic solar power plants where the land is not provided by the Government. This seems to indicate that the Government considers land price to be around 5% of the total tariff stipulation.

Comment 8: Price for battery or energy storage system

The ceiling tariff for battery or energy storage system is maximum 60% of the electricity purchase for solar or wind projects. If it is higher, then a price approval from MEMR is required.

Comment 9: Price for transmission facilities

The purchase price is the price at the meeting point between the electrical equipment at the power plant installation and the electrical equipment at the distribution installation (plant busbar). It excludes transmission facilities, the tariff of which will be set based on mutual agreement between the parties in the amount of maximum 30% of electricity purchase price. If it is higher, then a price approval from MEMR is required.

Comment 10: Annual evaluation for the ceiling price

The ceiling price will be evaluated annually by MEMR by:

i. considering the recent average contract value of PLN and
ii. coordinating with Ministry of Finance (MOF) and Ministry of State-Owned Enterprises (MSoE) (if such evaluation causes changes on the ceiling price, such changes will be stipulated under MEMR regulation).

Comment 11: Inconsistencies between the pricing mechanisms in PR 112/2022 and NRE Bill

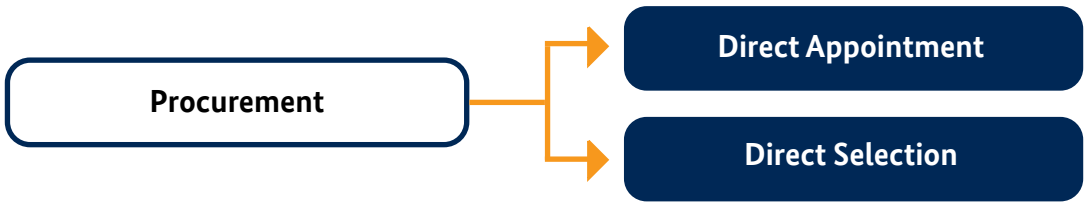
PR 112/2022 includes ceiling price for photovoltaic solar power plants whose land is provided by the government – with 5% lower tariff compared to ceiling price applicable for photovoltaic solar power plants where the land is not provided by the Government. This seems to indicate that the Government considers land price to be around 5% of the total tariff stipulation.

Determination of Electricity Purchase Price from Renewable Energy under Article 54(3) of NRE Bill

a) Agreed price between parties, based on types, characteristics, technology, locations, and/or installed capacity of the renewable energy power plants;
b) Biofuel market index price; dan/atau
c) Reverse auction.

Note:
If the pricing mechanisms under the NRE Bill is not adjusted to be consistent with PR 112/2022 once the NRE Bill is issued, PR 112/2022 may need to be amended to comply with NRE Bill.

1.2 Renewable Energy Procurement Mechanism



The process of purchasing electricity through a direct selection is conducted **through bids of the lowest price based on the ceiling price.** Similar to under Minister of Energy and Mineral Resources (**MEMR**) Regulation No. 50 of 2017 on the Utilization of Renewable Energy Sources for Electricity Supply as lastly amended by MEMR Reg 4/2020 (**MEMR Reg 4/2020**), the direct selection must be conducted for maximum 180 calendar days, starting from documents submission to power purchase agreement (**PPA**) signing including document evaluation and purchase price negotiation.

Direct Appointment
Similar to MEMR Reg 4/2020, the direct appointment is conducted for 90 calendar days maximum, starting from document submission to PPA including document evaluation. The document evaluation consists of assessment of: (i) administration; (ii) technical; and (iii) finance.

Both direct selection and direct appointment **processes start with an initial selection of business entities,** which is **similar to PQ process** conducted by PLN. The results of the initial selection are stipulated in PLN's List of Selected Providers ("**DPT**"). PR 112/2022 now provides that the **DPT will be published every three months.** The initial selection stage is exempted for

(i) Multi-Functioned Hydro Plants;
(ii) Geothermal Projects;
(iii) Expansion Projects; and
(iv) Excess Power.

Table 3: Procurement for Business Entities vs RE Plants built wholly or partially by central or local governments (including from grants)

Direct Appointment	Direct Selection
Renewable energy power plants built entirely by business entities (all capacities)	
Hydro power plants that utilize hydropower from reservoirs/ dams or irrigation channels whose construction is multipurpose of state-owned goods **Direct appointment which is valid as an assignment for the power purchase*	Hydro power plants
Geothermal power plants **Especially for IPB holders, the direct appointment applies as an assignment for the power purchase*	Photovoltaic solar or wind power plants **equipped or not equipped with battery facilities or other electrical energy storage facilities, whether the land is provided by the government or using their own land*
Expansion of geothermal, hydro, photovoltaic solar, wind, biomass, or biogas power plants	Biomass power plants or biogas power plants

Direct Appointment	Direct Selection
Excess Power from geothermal, hydro, biomass, or biogas power plants	Hydro power plants as a peaker
	Biofuels power plants
	Tidal power plants
Renewable energy power plants built wholly or partially by central or local governments (including from grants)	
The electricity from all renewable energy power plants are purchased based on an assignment from MEMR to PLN which serves as: (i) a direct appointment to PLN to purchase electricity and (ii) a price approval from MEMR	N/A

Notes:
There were multiple earlier versions of the draft regulation where it was originally proposed **that small scale solar, wind, biomass, or biogas power plants can be procured through a direct appointment, e.g., below 5 MW or below 1 MW, to** expedite the procurement process for small scale projects. **However, PR 112/2022 does not distinguish the procurement methods based on plant capacities – so effectively no changes to the procurement mechanism as per the previous regulations.**

Comment 1: Procurement based on RUPTL vs Quota Capacity

- PR 112/2022 specifies that hydro power plants (including peaker), solar, wind, biofuels, or tidal, are procured based on capacity quota. MEMR determines the capacity quota
- Under MEMR Reg 4/2020, PLN had the authority to determine capacity quota. PLN used to simply refer to its RUPTL when determining the capacity quota.
- It remains to be seen whether MEMR will issue a separate capacity quota or the capacity quota determined by MEMR can still simply refer to the RUPTL

Notes:
As a reference, the authority of MEMR to determine capacity quota was also given in MEMR Regulation No. 19 of 2016 on Electricity Purchase from Solar Power Plants by PLN (**MEMR Reg 19/2016**), the regulation for procurement for electricity purchase from solar power plants prior to MEMR Reg 50/2017. **MEMR Reg 19/2016 set out the minimum total capacity quota that can be offered by MEMR which was 5,000 MW per region and the capacity quota must be offered in stages.** The first stage of capacity quota was already determined in Appendix I of MEMR Reg 19/2016.

Comment 2: Direct appointment if there is only one bidder

- **PR 112/2022 now states that if there still only one bidder after a direct selection and a re-direct selection,** PLN can do a direct appointment with the tariff based on negotiation taking into account the applicable ceiling price.
- This provision was not stipulated in MEMR Reg 4/2020

Comment 3: Clarification on procurement for geothermal projects

It was not clear from MEMR Reg 4/2020 whether PLN can do a direct appointment for procurement of geothermal projects, or the same direct selection method is needed. **PR 112/2022 now clearly states that direct appointment is used for electricity purchase from geothermal projects.**

Article 11(1) of MEMR Reg 4/2020 provided that electricity purchase from geothermal projects by **PLN may only be conducted from independent power producers that own a geothermal working area with proven reserve after exploration.**

Under **Article 19(1)(d) of PR 112/2022**, **purchase price by for geothermal power plants from electricity generation business license holders in conducted to electricity generation business license holders that have a commitment of geothermal steam supply for the continuity of geothermal power plants during the PPA period**.

This clause seems to indicate that PLN is now allowed to purchase power from non-holders of a geothermal working area provided such developers own electricity related licenses, which then opens broader possible cooperation schemes for geothermal projects that have unique legal structures.

Comment 4: Different capacity factor for hydro power plants

Under **Article 18 of PR 112/2022**, hydro power plants that utilize power from the flow or river waterfall with generating capacity:

a. up to 5 MW must be capable to operate with a capacity factor of at least 60% (sixty percent); or
b. more than 5 MW must operate with capacity factor in accordance with the system requirements.
Hydro power plants that utilize hydropower from reservoirs/dams or irrigation channels whose construction is multipurpose must operate in accordance with the readiness of the generator and/or system requirements.

Notes:
PR 112/2022 changes the capacity factor requirement for hydro power plants:

- Under MEMR Reg 4/2020, the capacity factor requirement applied for hydro plants using river water below and above 10 MW, but PR 112/2022 changes such application to hydro plants below and above 5 MW
- Under PR 112/2022, the capacity factor requirement for hydro plants using river water up to 5 MW is at least 60%
- For hydro plants using multipurpose reservoirs/dams/irrigation channels, PR 112/2022 no longer requires a minimum capacity factor. It only must operate in accordance with the readiness of the generator and/or system requirements.

1.3 Compensation to PLN

PR 112/2022 stipulates that if electricity purchase from renewable energy power plants by PLN causes an increase in PLN's BPP, PLN must be compensated for all costs incurred and the payment is carried out according to the state's capability in accordance with the prevailing laws and regulations.

The qualification on the state's capability for compensation to PLN may create uncertainty.

However, this clause **should not eliminate PLN's right to receive compensation for costs and reasonable margin as a stated-owned enterprise** who carries out public service obligation as **mandated under Article 66 Law No. 19 of 2003 on Stated-Owned Enterprise as lastly amended by Law No. 11 of 2020 (Law 19/2003).**

Article 66(4) Law 19/2003: if the assignment from the government to SOE is financially not feasible, the central government must provide compensation on all the costs incurred by the SOE, including the expected margin so long as it is reasonable pursuant to the assignment given.

Notes:

- It is noted that compensation is also stipulated in **Article 54(4) NRE Bill:**
  "If electricity price sourced from renewable energy in the context of assignment is higher than BPP of electricity state-owned enterprise, the central government ensures the budget's readiness to perform its obligation to provide compensation in the form of return in differences between RE price and local BPP to electricity state-owned enterprise including compensation on the reasonable margin in accordance with the assignment given"
- The compensation stipulated in the NRE Bill is similar to Law 19/2003 because it states that the compensation includes reasonable margin pursuant to the assignment, which is not stated in PR 112/2022.

1.4 Government Support

In developing renewable energy power plants, business entities may receive incentives and support:

a. **Fiscal incentives**: (i) income tax facilities, (ii) import facilities in a form of import duties and/or tax exemption, (iii) land and building tax facilities, (iv) geothermal development support, and/or (v) financing and/or guarantee facilities support through state-owned enterprises assigned by the government;
b. **Non-fiscal incentives** given by central and/or regional governments; and/or
c. **Support** given by various ministries, head of agencies, or regional governments

Additional Government Support for Geothermal Power Plant Projects

Pursuant to **Article 27 (1) of PR 112/2022**, in purchasing electricity from geothermal power plants, the government can provide support in the implementation of geothermal development in the form of:

a. assignment of additional geothermal data and information, which is given to public service agencies or state-owned enterprises in accordance with geothermal related regulations;
b. assignment of preliminary survey and exploration, which is given to business entities in accordance with geothermal related regulations;
c. risk coverage (derisking), which is given to geothermal license holders, geothermal power holders, and contract holders; and
d. financing facilities, which are given to geothermal license holders, geothermal power holders, and contract holders

Support for Local Content Requirement:

Based on **Article 23 (9) of PR 112/2022**, Minister of Industry to provide support relating to local content requirement to business entities by, among others:

i. the creation of supply capabilities which include aspects of quality, cost, reasonable delivery and increasing the deepening of industrial structure;
ii. Determining import quota for renewable power plant components by referring to domestic/national capacity of supply capability;
iii. Domestic component level verification of components Renewable Energy power plants; and
iv. Preparation of road map of development of electricity supporting industry.

Such support will be regulated further in a Minister of Industry regulation.

PR 112/2022 mandates several ministries to provide support on issues that may hamper renewable energy development project such as TKDN and particularly for geothermal projects, high exploration risks.

2. RUPTL

Preparation of the RUPTL

where the RUPTL prepared by PLN is stipulated by MEMR only after coordinating with MsoE and MOF by considering:

i. the balance between supply and demand,
ii. the readiness of the electricity system, and
iii. the state finance capability.

Road map on CFFP early termination and energy transition

- MEMR must prepare a road map on the early retirement of CFPP after coordinating with MsoE and MOF
- CFPP that: (i) is owned by PLN and terminated early and/or the CFPP PPA developed by IPP or (ii) and is owned by PLN and terminated early and/or the CFPP PPA developed by IPP which will be replaced by renewable energy power plants, are determined by MEMR after obtaining a written approval from MSoE and MOF

Annual evaluation of the ceiling price

the MEMR evaluates the ceiling price annually by:

i. considering the recent average contract value of PLN and
ii. coordinating with MOF and MSoE.

PR 112/2022 emphasizes on the coordination between MsoE, MOF and MEMR in relation to renewable energy development and energy transition. This is important as these three ministries play a pivotal role in the electricity sector, particularly in terms of providing compensation and subsidies.

3. Energy Transition

3.1 Energy Transition Roadmap

PR 112/ 2022 mandates the MEMR to prepare a road map on the acceleration of early retirement of coal-fired power plants (CFPP) after coordinating with MOF and MSoE, which will stipulate:

(i) reduction of CFPP's GHG emission;
(ii) strategies to accelerate the early retirement of CFPP; and
(iii) harmonization with other various policies.

3.2 CFPP Early Retirement Program

No development of new CFPP, except:

a. a CFPP that has been included in the RUPTL prior to the issuance of PR 112/2022; or
b. a CFPP that fulfills the following requirements:
   integrated with industries that are built to increase the added value of natural resources or included in the **National Strategy Projects** that have a major contribution to job creation and national economic growth;
   committed to reducing GHG emissions by at least 35% within a period of 10 years since project operation, compared to the average CFPP emission in Indonesia in 2021 through technology development, carbon offsets, and/or renewable energy mix; and
   which operates until **maximum 2050**.

> **Note:**
> **There was a discussion previously to apply the above prohibition to PLN only. However, the general wording under PR 112/2022 above indicates that the prohibition will also apply to private sectors owning a business area (*wilayah usaha*)**

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