

INDONESIAN RENEWABLE ENERGY POLICY AND INVESTMENT OPPORTUNITIES

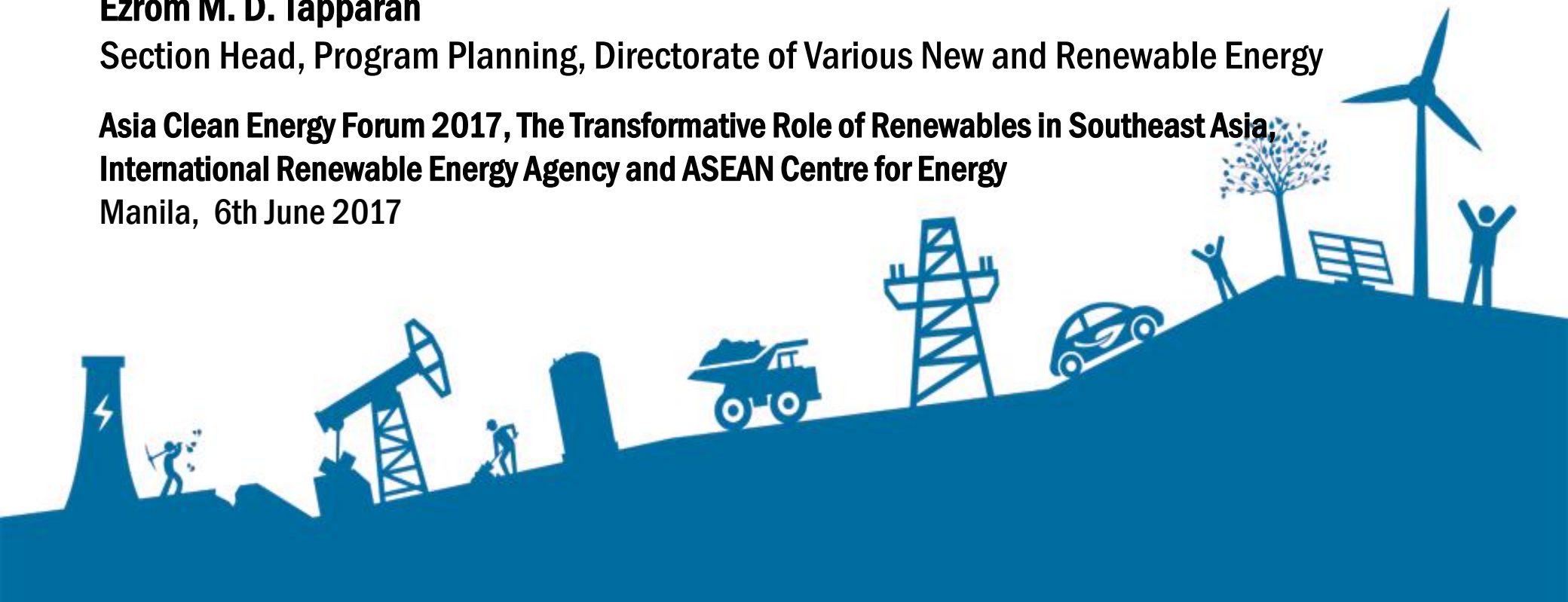
Indonesia's New Regulation and Its Impact of Renewable Development

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Asia Clean Energy Forum 2017, The Transformative Role of Renewables in Southeast Asia,
International Renewable Energy Agency and ASEAN Centre for Energy

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**NATIONAL
ENERGY POLICY**

**NRE TARGET
BY 2025**

**MARKET
OPPORTUNITIES
AND TARIFFS**

**INCENTIVES AND
FACILITIES**

NATIONAL ENERGY POLICY (GOVERNMENT REGULATION NO 79/2014)



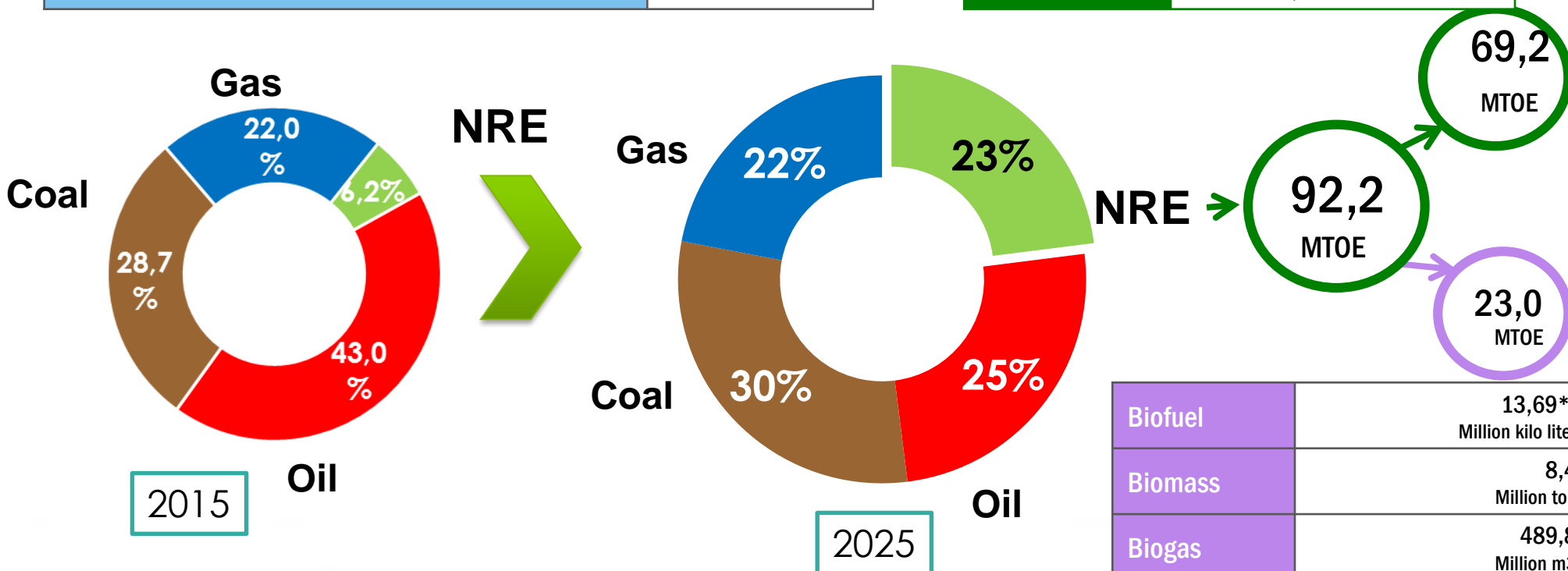
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2025

National Power Plant Capacity	135 GW
NRE Power Plant Capacity	45 GW

**NRE Electricity
45 GW**

1. Geothermal, 7,2 GW
2. Hydro, 17,9 GW
3. Microhydro, 3 GW
4. Bioenergy, 5,5 GW
5. Solar, 6,5 GW
6. Wind, 1,8 GW
7. Other NRE, 3 GW



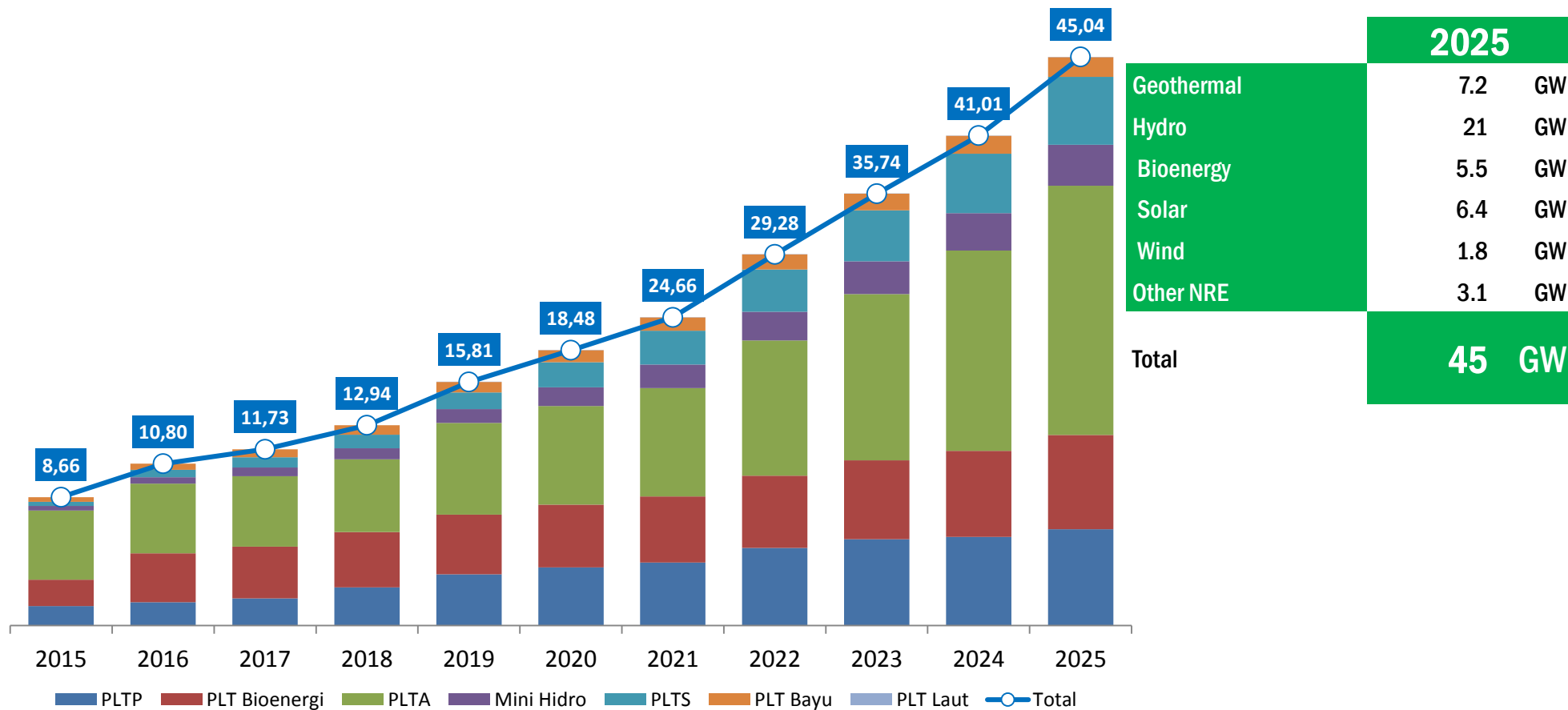
Biofuel	13,69*) Million kilo liter
Biomass	8,4 Million ton
Biogas	489,8 Million m3
CBM	46,0 mmcsfd

*) exclude biofuel for power plant:: 0,7 million kL at 2025

NRE TARGET BY 2025



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2015

Total Installed Capacity

55 GW

NRE Power Plant Capacity

8.7 GW
(15.7%)

2025

135 GW

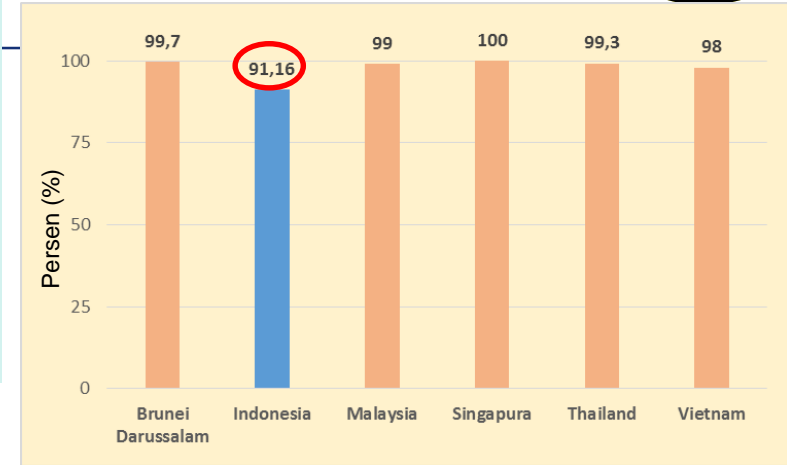
45 GW
(33%)

NATIONAL ELECTRIFICATION RATIO

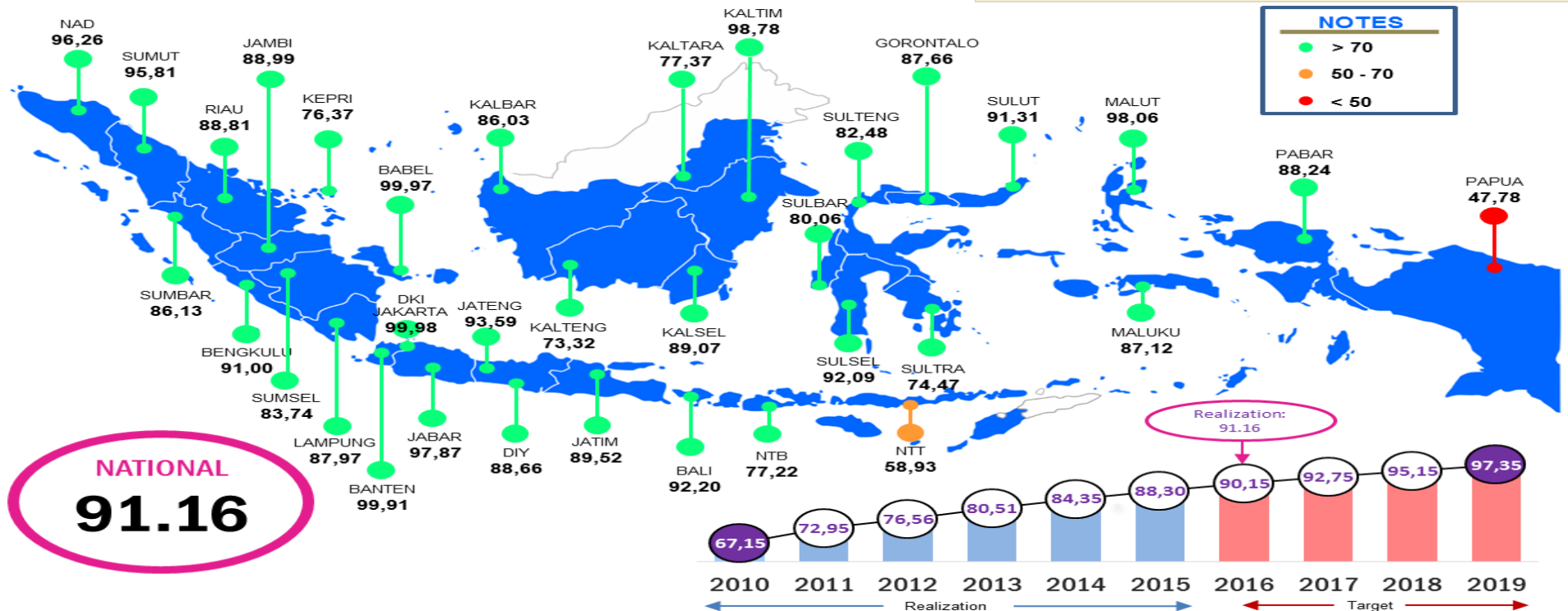


- National electrification ratio was 91.16% in 2016.
- There are 2 provinces (NTT and Papua) having electrification ratio lower than 70%.
- Indonesia's electrification ratio is still low (91.16%) compared to other ASEAN countries.
- Target of electrification ratio: 97.35% by 2019 (RPJM) and 100% by 2024 (RUKN)

ELECTRIFICATION RATIO IN ASEAN COUNTRIES



NATIONAL ELECTRIFICATION RATIO IN 2016 (%)



RENEWABLES POWER GENERATION:

- **Solar PV;**
- **Wind**
- **Hydro;**
- **Biomass;**
- **Biogas;**
- **Municipal Waste; and**
- **Geothermal.**

→ PT PLN (Persero) is obligated to purchase

MARKET OPPORTUNITIES ON RENEWABLE ENERGY IN INDONESIA BASED ON NEW REGULATION



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Minister of EMR Regulation No. 12 Year 2017 concerning the Utilization of Renewable Energy for Electricity Provisioning.

- 1) Renewable-based electricity price is set;
- 2) Especially to meet the needs of electricity in certain areas (the eastern part of Indonesia, rural and outer islands);
- 3) Incentives to boost the economy of renewable-based power generation development;
- 4) To ensure renewable-based power generations (with capacity up to 10 MW) must run - not to apply least cost policy;
- 5) Open the opportunity for B2B co-operation;
- 6) Simplified process;
- 7) Market size for renewable investment is considered big.





No.	Renewable Energy Sources	Method of Appointment	Tariff	
			Regional Grid BPP > National BPP	Regional Grid BPP ≤ National BPP
1.	Solar PV	Auction in capacity quota with minimum 15 MW	Maximum 85% x Regional Grid BPP	100% x Regional Grid BPP
2.	Wind	Auction in capacity quota with minimum 15 MW	Maximum 85% x Regional Grid BPP	100% x Regional Grid BPP
3.	Hydro	Reference Price	Maximum 85% x Regional Grid BPP	100% x Regional Grid BPP
		Direct Selection	Price determined by direct selection process	
		a. Capacity ≤ 10 MW: <i>Capacity Factor</i> minimum 65% b. Capacity > 10 MW: <i>Capacity Factor</i> depends on Regional Grid system requirements		
4.	Biomass	Reference Price (for 10 MW or less)	Maximum 85% x Regional Grid BPP	100% x Regional Grid BPP
		Direct Selection (for more than 10 MW)	Price determined by direct selection process	
5.	Biogas	Reference Price (for 10 MW or less)	Maximum 85% x Regional Grid BPP	100% x Regional Grid BPP
		Direct Selection (for more than 10 MW)	Price determined by direct selection process	
6.	Municipal Waste	Reference Price	Maximum 100% of Local Generation BPP	Mutual agreement between PLN and IPP
7.	Geothermal	Reference Price	Maximum 100% x Regional Grid BPP	Mutual agreement between PLN and IPP

BPP = Production Cost of Electricity

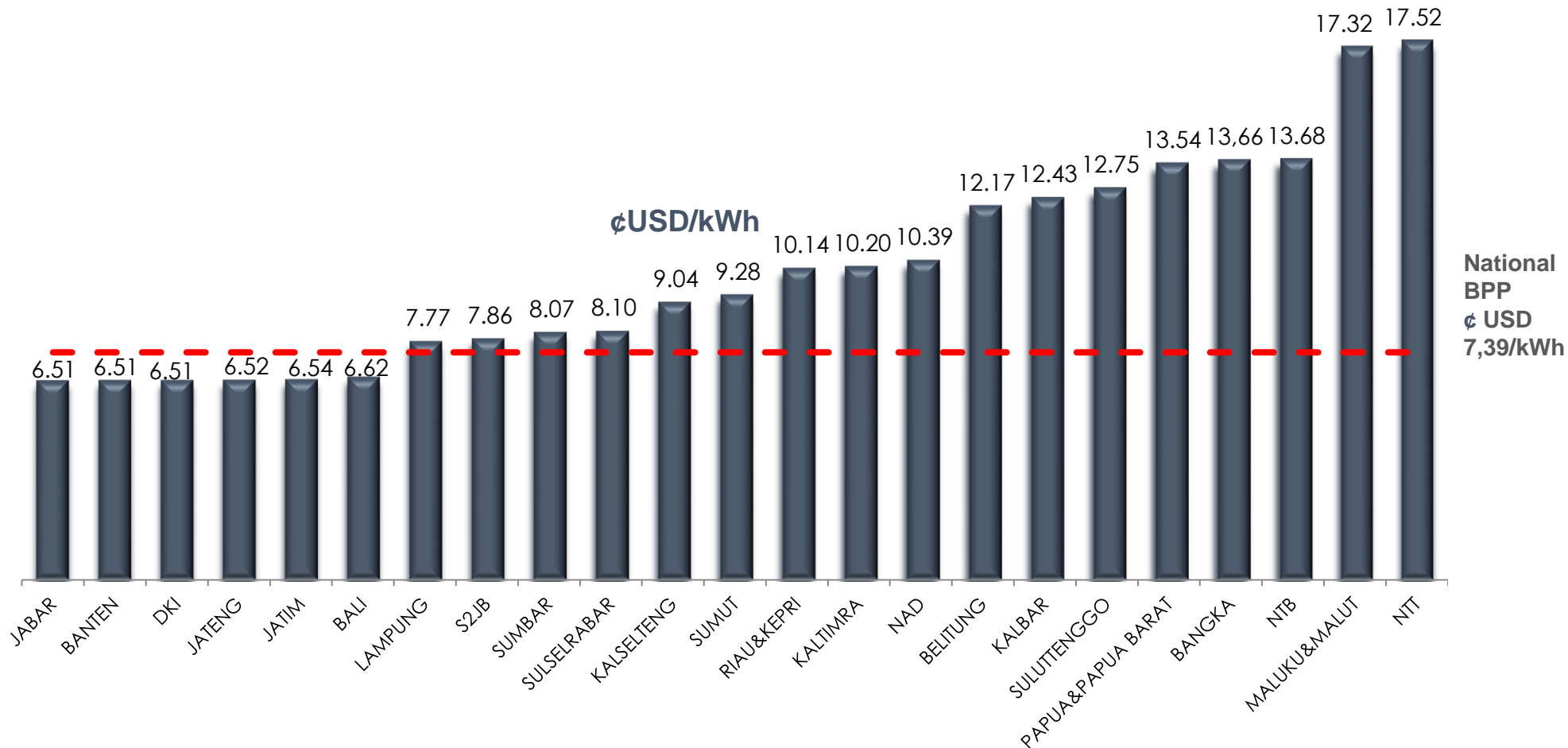
Regional Grid BPP and National BPP will be determined by the Minister based on the proposal of PT PLN (Persero)



- (1) Hydro (for capacity more than 10 MW), Biomass, and Geothermal projects to be awarded on a Build, Own, Operate, and Transfer/BOOT basis.
- (2) Construction of the transmission interconnection between the IPP and the PLN grid may be done through business-to-business basis.
- (3) PLN will conduct the Due Diligence on technical and financial aspects of the IPP.
- (4) PLN may appoint a procurement agent to conduct the Due Diligence.
- (5) The IPP's proposal should be attached with Interconnection Study Document.
- (6) The IPP must meet local content requirements (**Minister of Industry Regulation No. 5/2017**).
- (7) The local content must meet national standards, international standards, or other standards as long as not on the contrary with the ISO or IEC.
- (8) The construction must meet national standards, international standards, or standard applicable in PLN as long as not on the contrary with the ISO or IEC.
- (9) PLN is obligated to:
 - a. publish the conditions of regional grid systems which are ready to be integrated with renewable power
 - b. publish the regional grid system's production cost to the IPPs who are interested in developing renewables
- (10) PLN is obligated to set and publish:
 - a. Standard Bidding Document; and
 - b. Standard of Power Purchase Agreement/PPA (refer to **MEMR No. 10/2017**).
- (11)
 - a. In case of delayed construction, the IPP will get sanctions and/or penalties.
 - b. Rewards, if the construction is finished earlier than the schedule or on PLN request.
 - c. The sanctions and/or penalties and rewards will be stated in PPA.

REGIONAL PLN GRID SYSTEM'S PRODUCTION COST 2016

According to Ministerial Decree Number 1404 K/20/MEM/2017



* Exchange rate assumption = IDR 13,307/USD

ACCELERATION PROGRAM TO ELECTRIFY RURAL, BORDERLINES AND SMALL ISLANDS BASED ON MEMR REGULATION NO. 38/2016



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To provide electricity in certain area upto 50 MW;

- ✓ Undeveloped rural areas
- ✓ Remote areas
- ✓ Borderlines
- ✓ Small islands



Mechanism

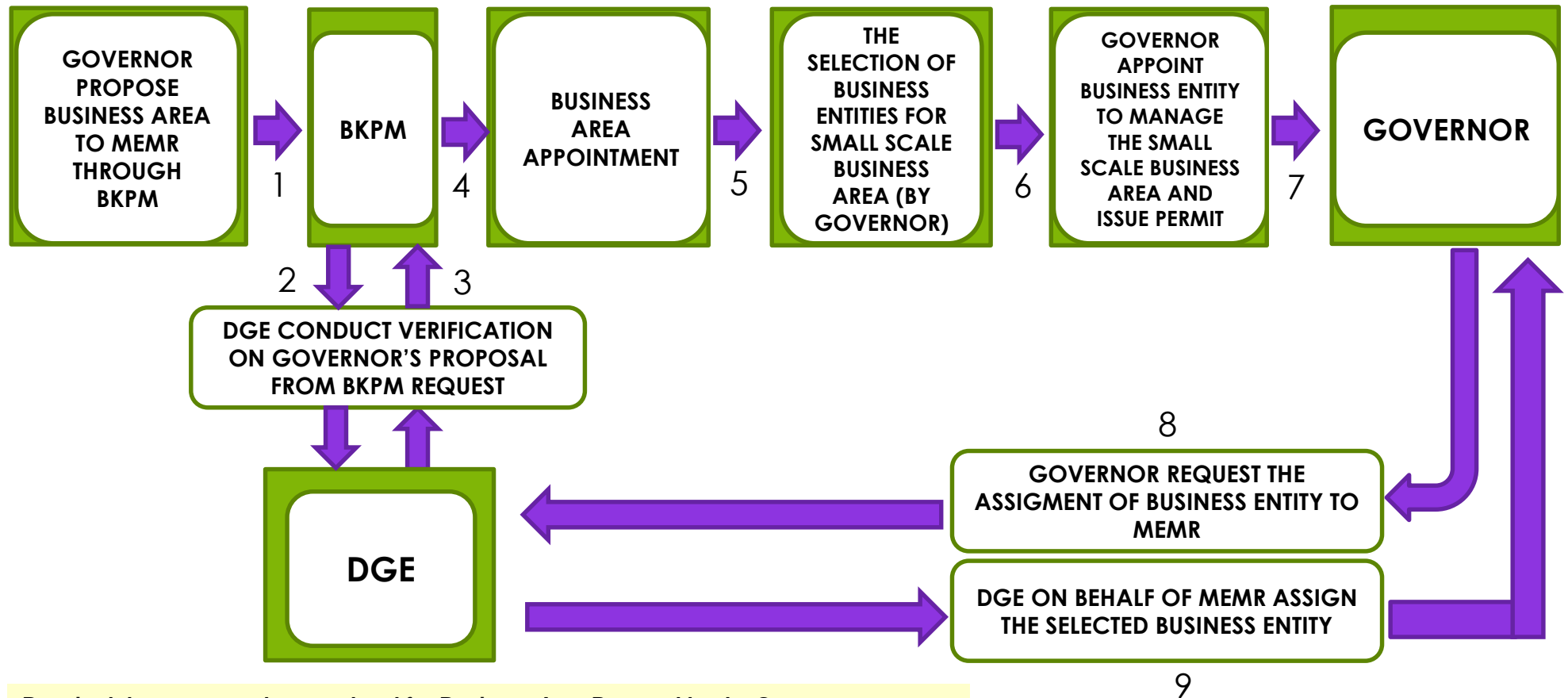
- ✓ Propose Business Area to Non PLN Business Entities
- ✓ Minimum Business Area is 1 (One) District or Equivalent
- ✓ Subsidy can be allocated to Small Scale Electricity Supply Business



SMALL SCALE BUSINESS AREA APPOINTMENT MECHANISM (MEMR REGULATION NO. 38/2016)



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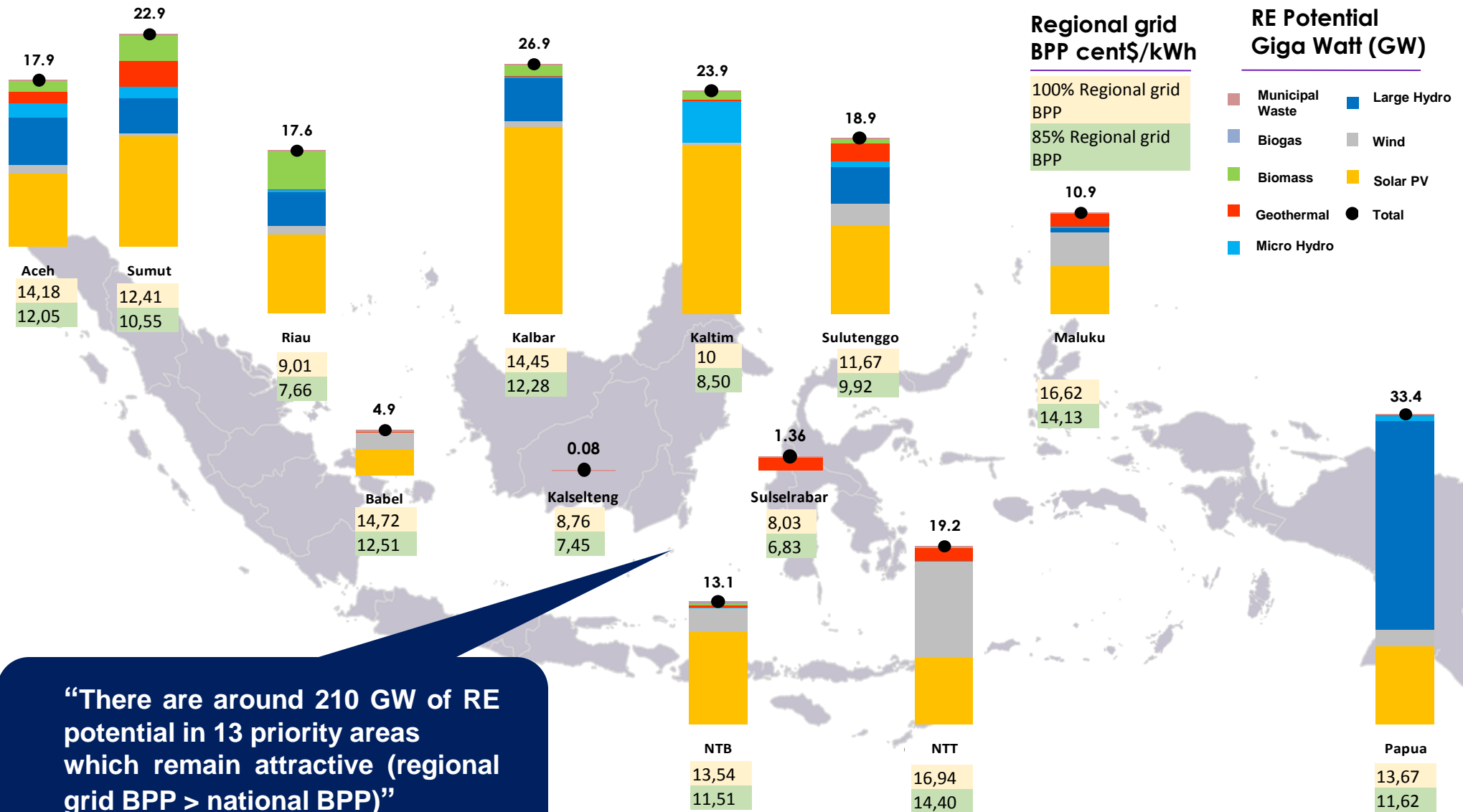
Required documents to be completed for Business Area Proposal by the Governor:

- Business Area, minimum area is 1 (one) district or equivalent;
- Renewable Energy Resource(s) Analysis;
- Electricity Demand and Supply Analysis;
- Number of Household to be electrified;
- Ability to Pay and Willingness to Pay from the local consumer;
- Cost estimation of material, services, and transportation

MEMR : Minister of Energy and Mineral Resources
DGE : Director General of Electricity
BKPM : Investment Coordinating Board

Indonesia RE Investment Opportunities remain attractive

A huge potential of RE is available in 13 priority areas



FINANCIAL INCENTIVES

- **Provide loan interest at below-market rates**

FISCAL INCENTIVES

- **Tax Holiday**
- **Tax Allowance**
- **Import Duty and VAT Exemption**

Incentive and Facilities

TAX ALLOWANCE

Gov't Regulation No.9/2016

30 % of investment value
Reduction of corporate net income tax for 6 years, 5% each year.

145 business segments
Eligible for tax allowance, expanded from 129 segments in the previous regulation.

Under **certain requirements**

among others: investment value or export orientation, manpower absorption, local content.

IMPORT DUTY FACILITY

MoF Regulation
No.176/PMK.011/2009 jo. MoF
Regulation No.
76/PMK.011/2012 jo. MoF
Regulation 188/PMK.010/2015

Import duty on Machineries and Equipments, goods, and raw materials for production

- Exemption of import duty on machineries and equipments
- **2 years** exemption of import duty on raw materials
- Additional 2 years import duty exemption for raw materials if company using locally-produced machineries and equipments (min 30%)

MoF Regulation No.
66/PMK.010/2015

Import duty on Capital Goods for Development and Expansion of Power Generation Industries for Public Purpose.

TAX HOLIDAY

MoF Regulation No.159/PMK.010/2015

5-15 years
Tax relief facility, starting from the commencement of commercial production. Can be extended for Max. 20 years under certain consideration.

IDR **1** trillion
Minimum **investment** plan (USD 80 million). Or Minimum IDR 500 Billion if introduce new technology

Max.100%

10-100% Reduction of corporate income tax for Pioneer Industry. Max. 50% for industry that implement high technology with investment plan IDR 500 M – less than 1 Trillion.

Pioneer Industry:

1. Upstream metal;
2. Oil refinery;
3. Basic organic-chemical from oil and gas;
4. Machinery industry that manufacture industrial machine;
5. Processing industry based on commodity from agriculture, forestry and fishery;
6. Telecommunication, information and communication;
7. Sea transport;
8. Processing industry as main industry located in Special Economic Zone (SEZ); and or

9. Infrastructure (economical, non-PPP scheme)

Investment Incentives For Electricity Sector

TAX ALLOWANCE

Based on Government Regulation No. 9/2016, MoF Regulation No. 89/PMK.010/2015 and Chairman of BKPM Regulation No. 18/2015, investment in new and renewable energy as Power Producer (KBLI 35101), with the product coverage: the conversion of new energy (hydrogen, CBM, liquefied coal or gasified coal) and renewable energy (hydro, solar, wind, or marine energy) into power, is eligible for income tax facilities of:

- a. A reduction in net income of up to 30% of the amount invested, pro-rated at 5% for six years of the commercial production, provided that the assets invested are not transferred out within six years.
- b. Acceleration of depreciation & amortization for building and non-building.
- c. A reduction of income tax on dividends paid to non-residents to 10% or lower rate according to double taxation avoidance agreement.
- d. Extension of tax losses carry forwards for 5 years and up to 10 years (if it meets certain criteria).for 5 years and up to 10 years (if meet certain criteria).

* Tax Allowance application is submitted to OSS-BKPM and will be processed in 25 days.

TAX HOLIDAY

Based on Government Regulation No. 94/2010, MoF Regulation No. 159/PMK.011/2015, and Chairman of BKPM Regulation No. 18/2015, corporate income tax exemption for the period of 5 to 15 years from the start of commercial production is granted for company with minimum investment project value of IDR 1 Trillion (approx. USD 69 Million) in 9 priority "pioneer industries" including infrastructure not under PPP scheme, for example renewable energy power plant.

* Tax Holiday application is submitted to OSS-BKPM and will be processed in 45 days.

IMPORT DUTY EXEMPTION

Based on Minister of Finance (MoF) Regulation No. 66/PMK.010/2015, all green-field or expansion investment of power plant for public usage (not including transmission, distribution and supporting services) are granted import duty exemption on imported machineries and equipment (for 2 years) for the company usage during construction period, provided that they are not or inadequately produced in Indonesia.

* Import Duty Exemption application is submitted to OSS-BKPM and will be processed in 5 days.

Closing



Electricity supply should be efficient in order not burden electricity subsidy and the consumers gain a better electricity tariff



Electricity subsidy in national budget is gradually reduced, to get more fair and equitable development



RE investment remains attractive, partially in the 13 priority areas (regional grid BPP > national BPP)



There are around 210 GW of RE potential in the 13 priority areas



Attractive RE investment are indicated by the interest of investors, on going technical studies and signed PPAs

Thank You



Go Green Indonesia ! GREEN ENERGY, FUTURE ENERGY

MINISTRY OF ENERGY AND MINERAL RESOURCES OF THE REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF NEW, RENEWABLE ENERGY AND ENERGY CONSERVATION

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