



# INDONESIAN RENEWABLE ENERGY POLICY AND INVESTMENT OPPORTUNITIES

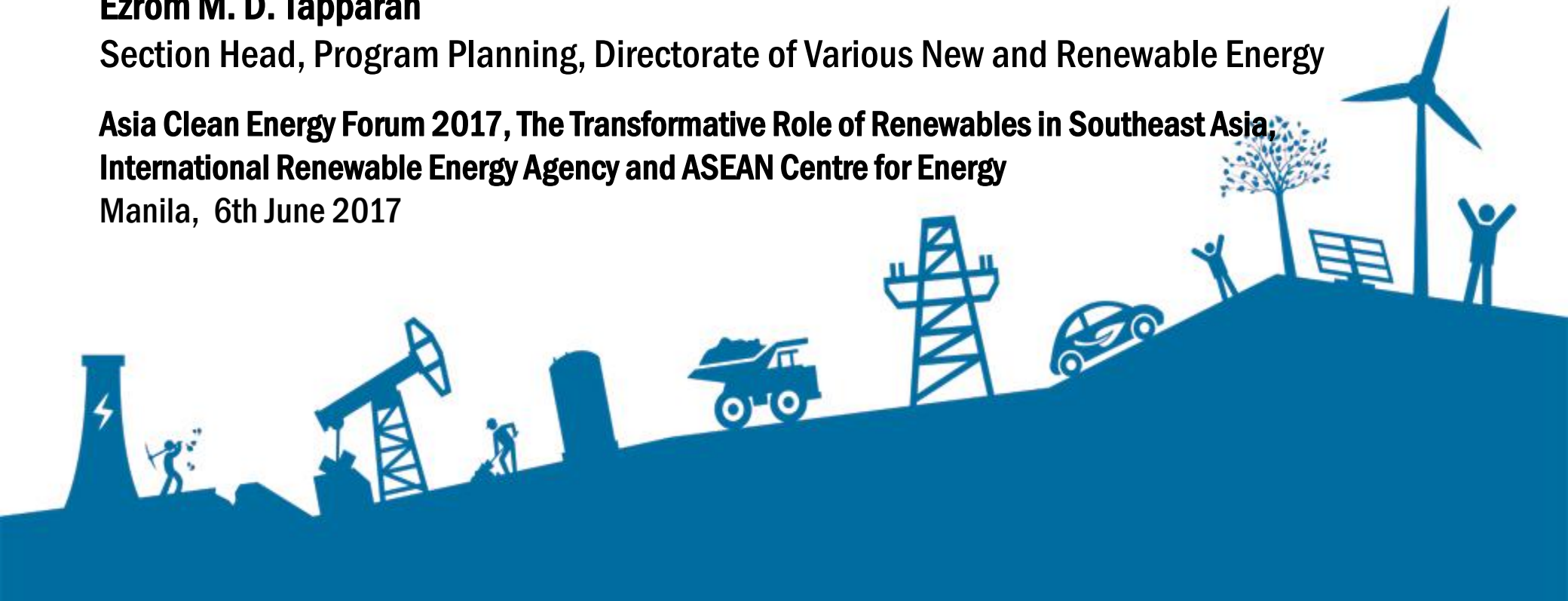
## *Indonesia's New Regulation and Its Impact of Renewable Development*

**Ezrom M. D. Tapparan**

Section Head, Program Planning, Directorate of Various New and Renewable Energy

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

Manila, 6th June 2017





**NATIONAL  
ENERGY POLICY**

**NRE TARGET  
BY 2025**

**MARKET  
OPPORTUNITIES  
AND TARIFFS**

**INCENTIVES AND  
FACILITIES**

# NATIONAL ENERGY POLICY (GOVERNMENT REGULATION NO 79/2014)



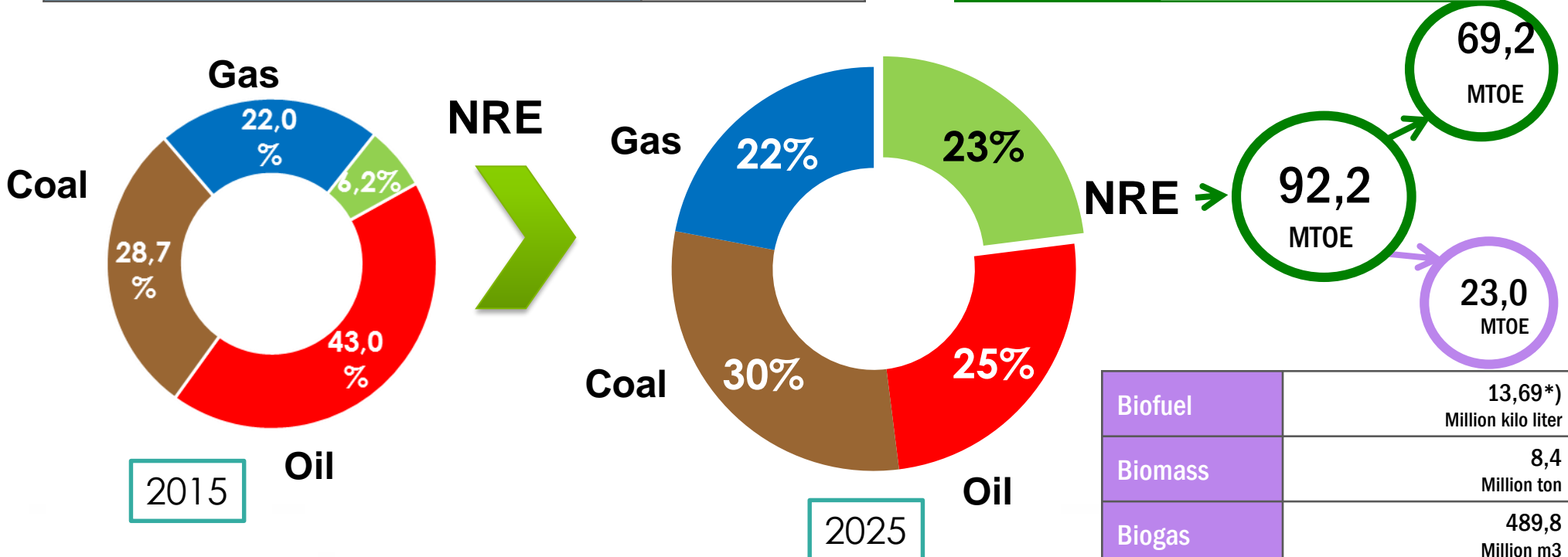
KEMENTERIAN ENERGI & SUMBER DAYA MINERAL

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 mmscfd

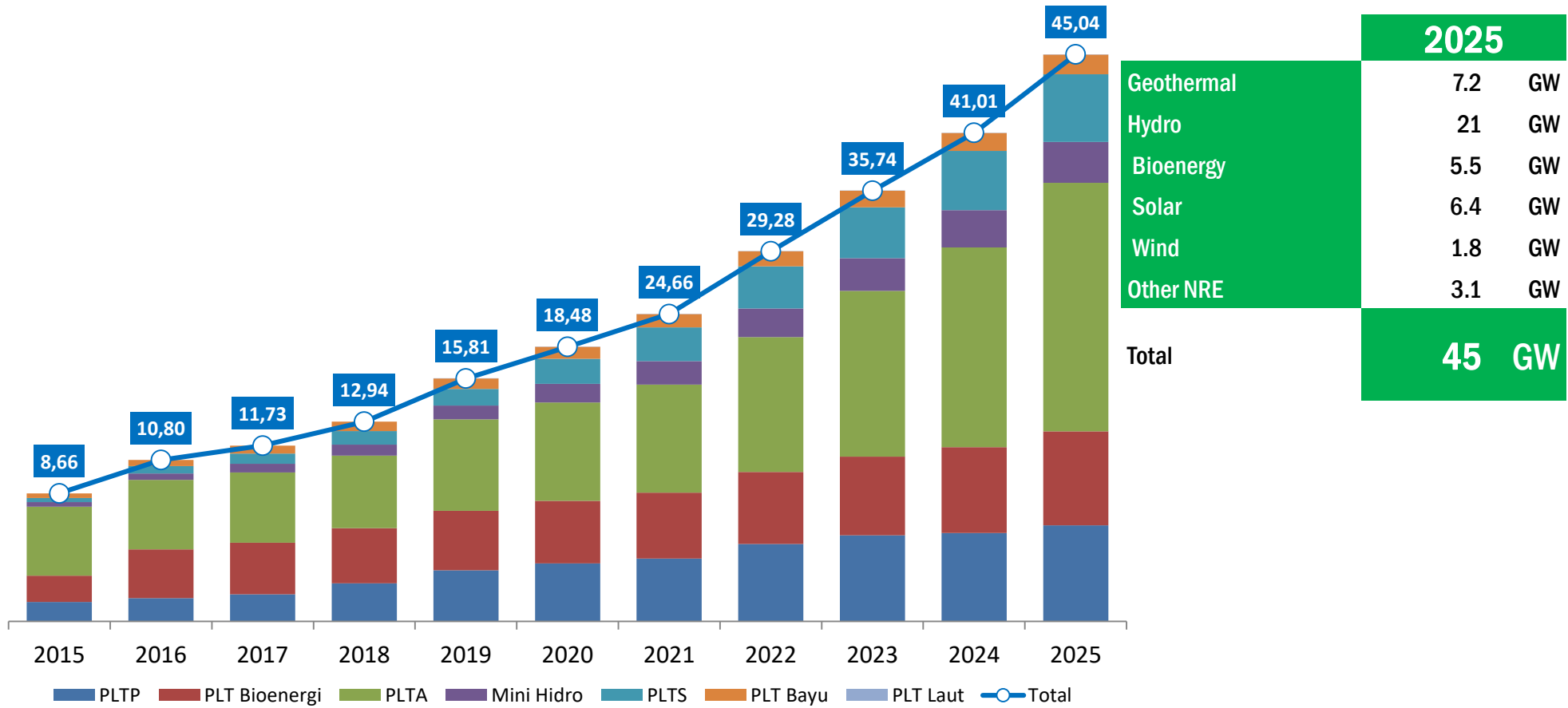
\*) exclude biofuel for power plant:: 0,7 million kL at 2025



# NRE TARGET BY 2025



KEMENTERIAN ENERGI & SUMBER DAYA MINERAL



	2015	2025
Total Installed Capacity	55 GW	135 GW
NRE Power Plant Capacity	8.7 GW (15.7%)	45 GW (33%)

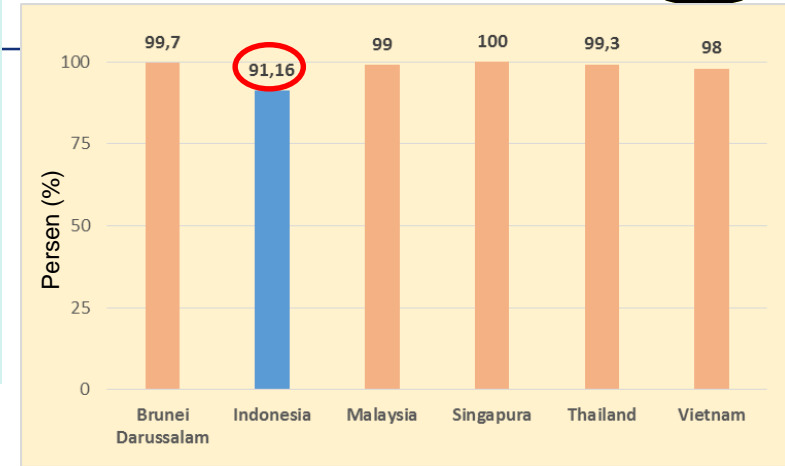


# NATIONAL ELECTRIFICATION RATIO

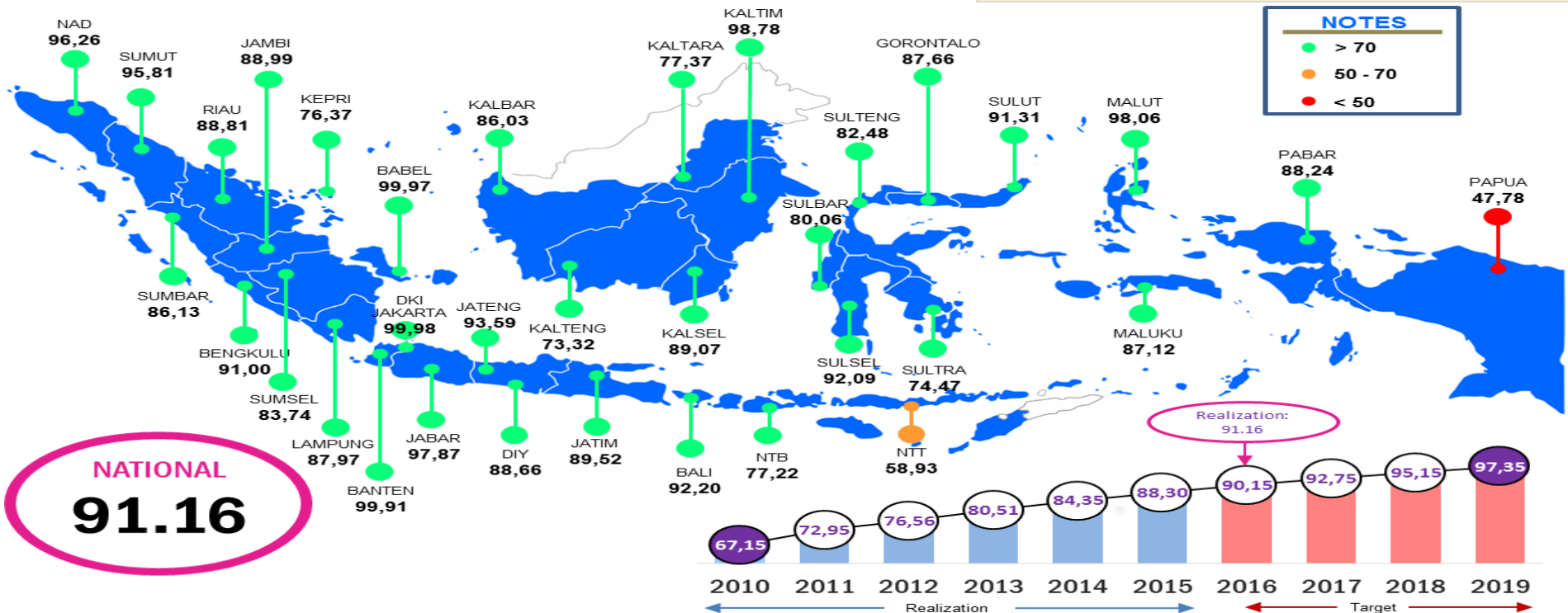


- National electrification ratio was 91.16% in 2016.
- There are 2 provinces (NTT and Papua) having electrification ratio lower than 70%.
- Indonesia's electrification ratio is still low (91.16%) compared to other ASEAN countries.
- Target of electrification ratio: 97.35% by 2019 (RPJM) and 100% by 2024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

## 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)**

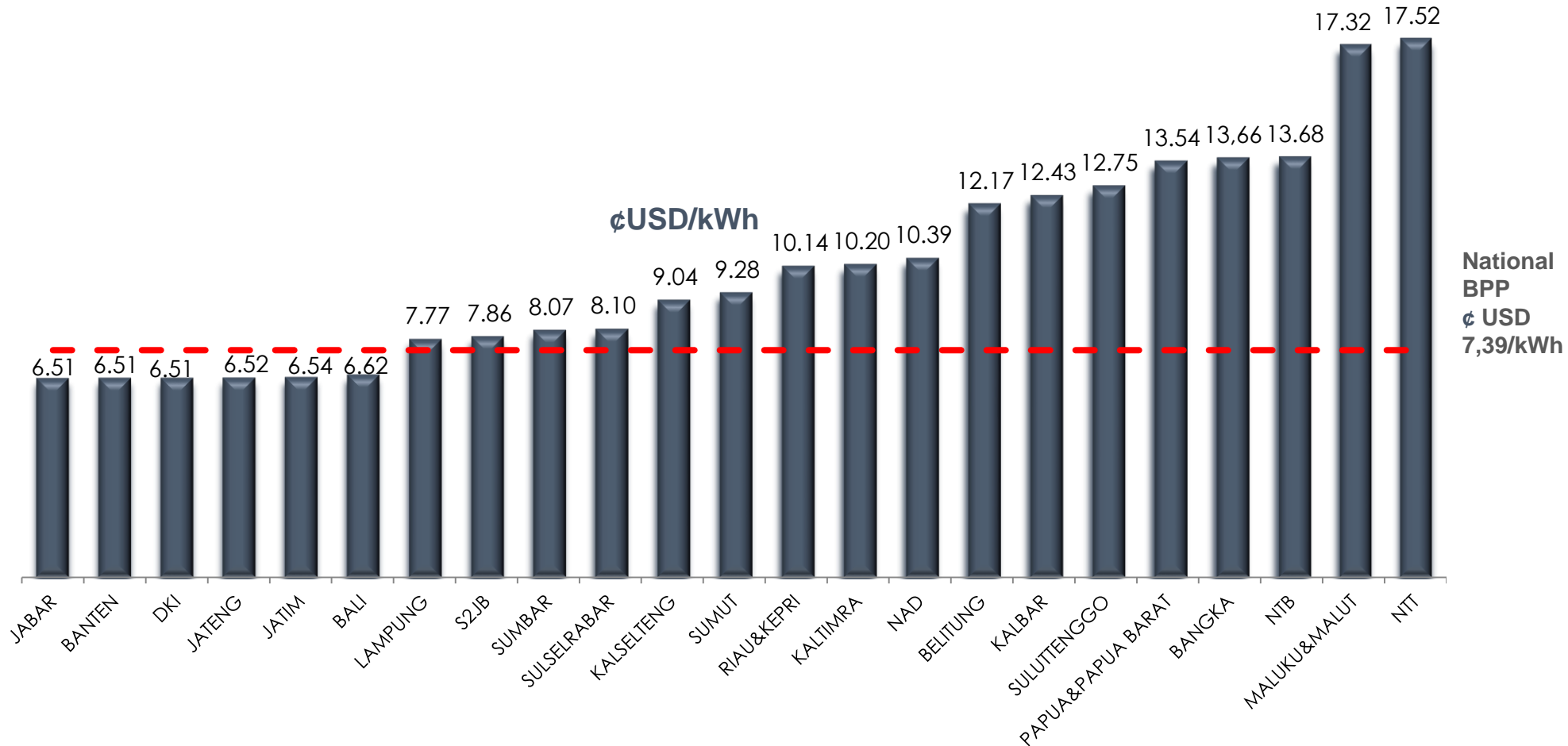




- (1) Hydro (for capacity more than 10 MW), Biomass, and Geothermal projects to be awarded on a Build, Own, Operate, and Transfer/BOOT basis.
- (2) Construction of the transmission interconnection between the IPP and the PLN grid may be done through business-to-business basis.
- (3) PLN will conduct 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



To provide electricity in certain area upto 50 MW;

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



## Mechanism

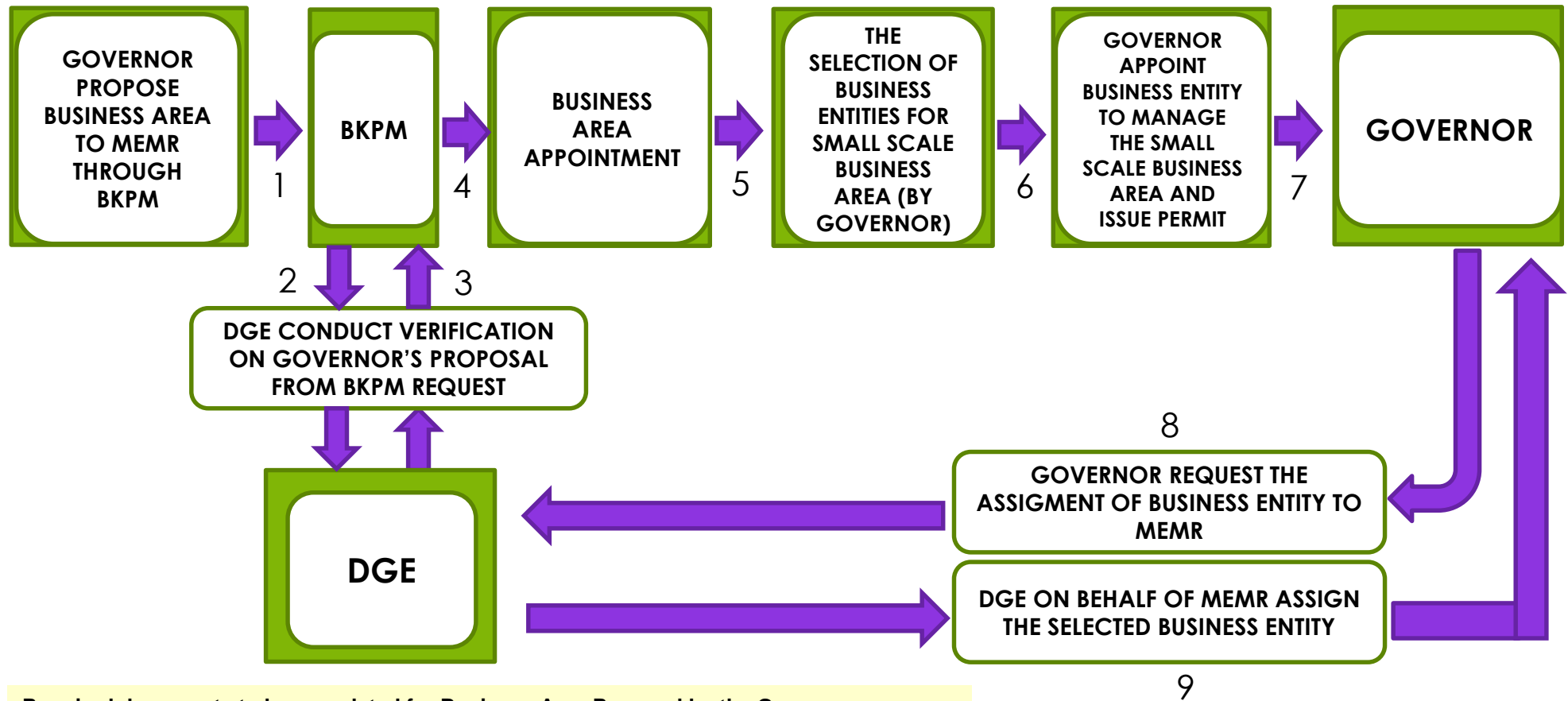
- ✓ Propose Business Area to Non PLN Business Entities
- ✓ Minimum Business Area is 1 (One) District or Equivalent
- ✓ Subsidy can be allocated to Small Scale Electricity Supply Business



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



KEMENTERIAN ENERGI  
& SUMBER DAYA MINERAL



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

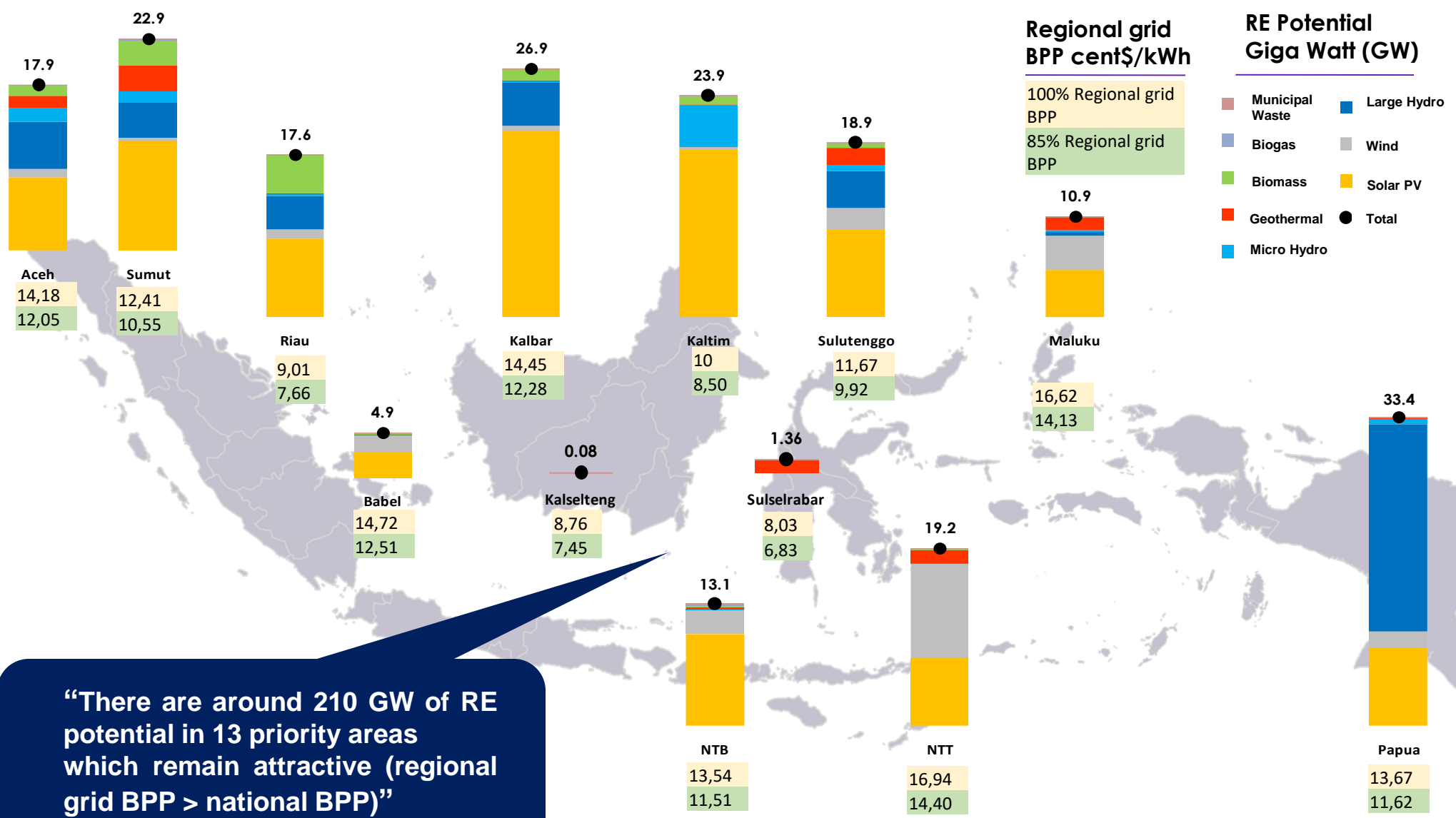
- Business Area, minimum area is 1 (one) district or equivalent;
- Renewable Energy Resource(s) Analysis;
- Electricity Demand and Supply Analysis;
- Number of Household to be electrified;
- Ability to Pay and Willingness to Pay from the local consumer;
- Cost estimation of material, services, and transportation

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



“There are around 210 GW of RE potential in 13 priority areas which remain attractive (regional grid BPP > national BPP)”



## 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

Jalan Pegangsaan Timur No. 1 Menteng, Jakarta Pusat 10320; Telp/Faks : 021-31924540