



Kementerian Energi dan Sumber Daya Mineral

INDONESIA POLICY FOR LOW EMISSION DEVELOPMENT # #GHG TARGET AND ACHIEVEMENTS ENERGY SECTOR

#Energi Berkeadilan

UNFCCC MEETING MISSION 2020

Jakarta, 19 February 2019



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Kementerian Energi dan Sumber Daya Mineral



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Kementerian ESDM

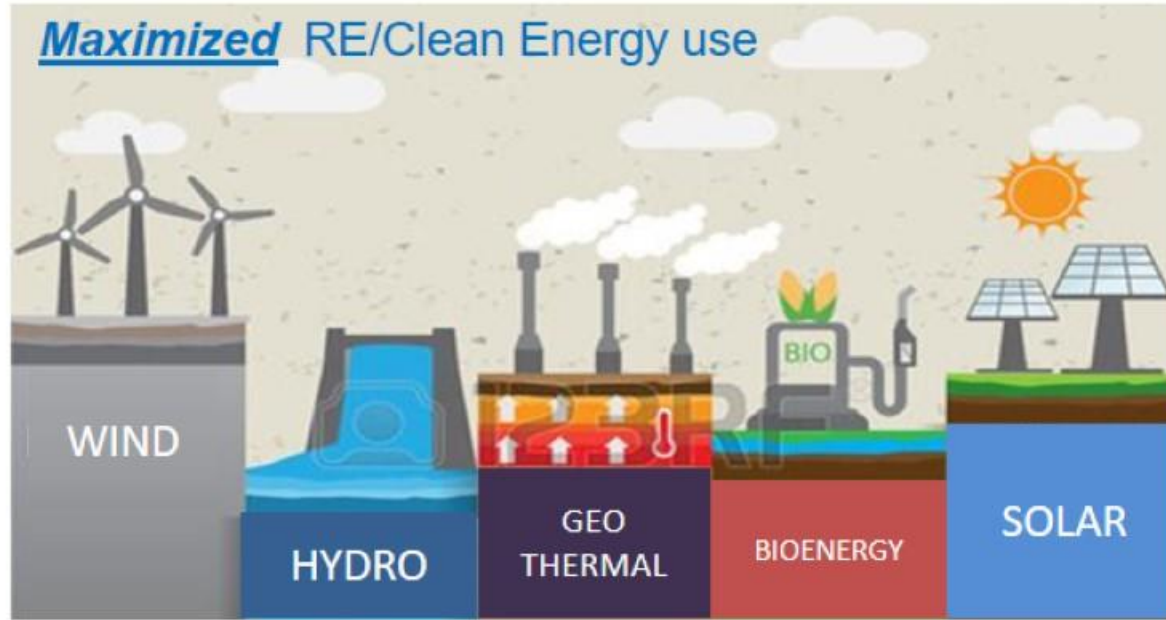
NDC Indonesia

No	Sector	GHG Emission 2010 (Million Ton CO2e)	GHG Emission 2030 (Million Ton CO2e)			Reduction (million Ton CO2e)	
			BaU	CM1	CM2	CM1	CM2
1	Energy*	453.2	1,669	1,335	1,271	314	398
2	Waste	88	296	285	270	11	26
3	IPPU	36	69.6	66.85	66.35	2.75	3.25
4	Agriculture	110.5	119.66	110.39	115.86	9	4
5	Forest**	647	714	217	64	497	650
	TOTAL	1,334	2,869	2,034	1,787	834	1,081

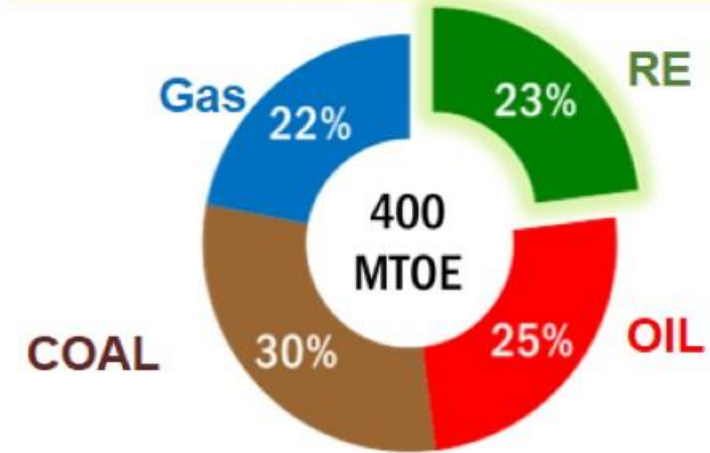
i 38% emission reduction from energy sector



National Energy Policy (RE Target)

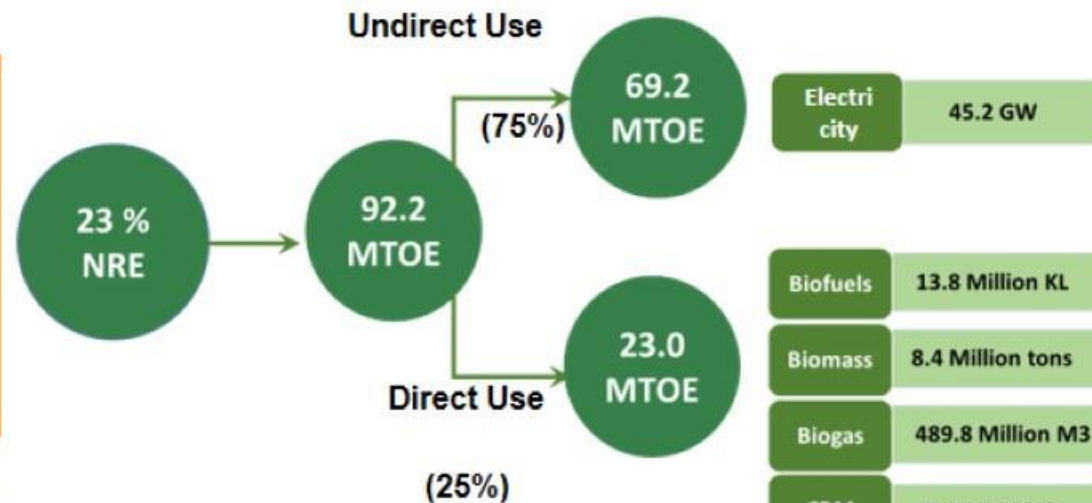


PRIMARY ENERGY MIX TARGET IN 2025



Policy:

- Gov. Reg 79/2014, Energy Policy
- Presidential Reg. 22/2017, RUEN



1. Geothermal, 7,2 GW
 2. Hydro, 17,9 GW
 3. Minihydro, 3 GW
 4. Biomass/g, 5,5 GW
 5. Solar, 6,5 GW
 6. Wind, 1,8 GW
 7. Other RE, 3,1 GW



NDC Projection for Energy Sector

Sub Sectors	GHG Emission Reduction Target (Million Tons of CO ₂ e)			
	2017	2020	2025	2030
RE	9,39 (20,8%)	28,79 (34,8%)	108,69 (55,5%)	170,42 (54,3%)
EE	20,78 (46,0%)	33,01 (39,9%)	57,27 (29,9%)	96,33 (30,7%)
Clean Coal	3,02 (6,7%)	8,19 (9,9%)	15,74 (8,0%)	31,80 (10,1%)
Fuel Switching	10,02 (22,2%)	10,02 (12,1%)	10,02 (5,1%)	10,02 (3,2%)
Post Mining Reclamation	1,94 (3,3%)	2,72 (3,3%)	4,08 (2,1%)	5,46 (1,7%)
Total	45,14	82,74	195,80	314,03

Progress achievement: 44,9 Million Ton CO₂e in 2017, updated January 2019



Energy Sector Mitigation Actions (Presidential Regulation 61)

RE&EE Sector

- Geothermal
- Solar
- Minihydro
- Microhydro
- Wind
- Hybrid
- Biomassa
- Biogas
- Biodiesel

- Mandatory for Energy Managemment
- EE Partnership
- Standard & Label for appliances
- Presidential Instruction No. 13 year 2011 for Energy & Water saving
- PV & Retrofit Street Lighting



OIL & GAS Sector

- Kerosene to LPG for cooking
- Natural Gas for Transportation
- Natural Gas for Household



ELECTRICITY Sector

- ✓ Hydro PP
- ✓ *Clean Coal Technology* for power generation
- ✓ *Waste Heat Recovery* for electricity generation
- ✓ *Coogeneration*



Sektor MINERBA

Post Mining Reclamation



Identification of Additional Mitigation Activities to Support NDCs

RE&EE Sector



- Biomassa from palm oil (DME, substitute LPG)
- Biomassa – Coal dual fuel for Coal Power Plant
- Hydrocarbon Refrigerant for cooling in Unitary Split AC and Chiller
- *Green building*
- EV...?

Sektor MIGAS



- Pembagian Converter Kit untuk Nelayan
- Gas Flare pada industri Migas
- Penggantian Premium dengan Pertamina
- Gas Metana pada sektor hulu
- Kebijakan substitusi RON 88 dengan RON 90 dan 92

MINERAL AND COAL Sector



- Fuel saving (mining management)

ELECTRICITY Sector



- Grid & Distribution maintenance (PLN)
- Cap and Trade Policy

Terima Kasih & Follow Kami

