

Energy Efficiency Roles in Current and Future Indonesia Carbon Market

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Structure of Presentation



- **1. Indonesia mitigation strategy**
- 2. Indonesia carbon market current condition
- 3. Energy efficiencies in carbon market
- 4. Moving forward



Indonesia mitigation objectives and role of market instrument(s)

Societal perspective¹, 2030





Indonesia emission reduction strategies

Market and non-market approaches to climate change mitigation



Where are the energy efficiencies projects?



Energy policies implementation in some major countries

		Clean Energy	Energy Efficiency		Transport		
Country	Carbon Pricing	Renewables Target	Appliance and Building Standards*	Energy Efficiency Obligation [#]	Vehicle Performance Standards	Per cent of Global Emissions+	
Australia 1	🤲 🔶	•			-	1.5	
Brazil		•				2.7	
Canada		•	•		•	2.0	
China		•	•		•	19.1	
European Union	•	•	•		•	13.4	
India	coal tax				-	4.9	
Indonesia		•	•			1.5	
Japan	pilot 🔴					3.6	
Mexico		•			-	1.7	
Russian Federatior	า	•				5.2	
South Africa		•	•	•		1.1	
Republic of Korea	pilot 🔵	•				1.5	
United States						18.3	
Key:	State-bas National a Planned r	ed action action nationally			Тс	otal: 76.5%	

* Includes residential and commercial buildings. # Includes energy efficiency trading markets.

+ 2005, excluding land use, land use change and forestry.



Clean energy investment in some major countries





Indonesia CDM current condition: the projects

✓ 166 Indonesian projects are in UNFCCC pipeline

✓ 70 Projects are Registered





Indonesia CDM current condition: registered projects

CER percentage of registered projects

- ✓ Total CER expected until 2012: 27,386,113 CERs; mostly from geothermal
- ✓ Energy efficiencies projects only has a very small amount of CERs





Indonesia CDM current condition: issued CER

No.	Title	Province / State	Туре	Sub-type	CERs	Expected CERs	Issuance success
1	CDM SOLAR COOKER PROJECT Aceh 1	Aceh	Solar	Solar cooking	1,077	6,060	18%
2	Methane Capture and Combustion from Swine Manure Treatment Project at PT Indotirta Suaka Bulan Farm in Indonesia	Riau	Methane avoidance	Manure	42,716	221,485	19%
3	Indocement Alternative Fuels Project	West Java & South Kalimantan	Biomass energy	Agricultural residues: other kinds	80,967	258,308	31%
4	Indocement Blended Cement Project	West Java & South Kalimantan	Cement	Clinker replacement	93,973	859,707	11%
5	Darajat Unit III Geothermal Project	West Java	Geothermal	Geothermal electricity	1,329,960	1,390,111	96%
6	Tambun LPG Associated Gas Recovery and Utilization Project	West Java	Fugitive	Oil field flaring reduction	1,400,377	975,626	144%
7	MEN-Tangerang 13.6MW Natural Gas Co- generation Project	Banten	EE supply side	Cogeneration	17,154	21,836	79%
8	Emission reductions through partial substitution of fossil fuel with alternative fuels in the 2 cement plants of PT Holcim	West Java & Central Java	Biomass energy	Agricultural residues: other kinds	12,335	106,284	12%
9	4MW Biomass Power Plants Using Waste Wood Chips & Sawdust in Central Java	Central Java	Biomass energy	Forest residues: sawmill waste	10,982	14,322	77%
10	Gianyar Waste Recovery Project	Bali	Methane avoidance	Composting	2,110	6,713	31%
11	Methane Recovery in Wastewater Treatment, Project AIN07-W-05, Sumatera	North Sumatra	Methane avoidance	Waste water	8,859	19,160	46%
12	BAJ Gunung Agung Factory tapioca starch wastewater biogas extraction and utilization	Lampung	Methane avoidance	Waste water	6,858	30,779	22%
Total						3,910,392	77%



Indonesia voluntary carbon market condition



- VCM (voluntary carbon market) is a carbon market not constituted by compliance to reduce emission but by the voluntary intention of the buyer to reduce its carbon footprint
- NCCC is conducting study to portray the voluntary carbon market situation in Indonesia
- More than 20 Indonesian projects in VCM pipeline and all uses Voluntary Carbon Standard (VCS) methodologies.
- Total VER that already issued are more than 2,000,000 tVER.
- Energy efficiencies are more easy to enter voluntary carbon market.



3 possible scenarios post 2012 from climate negotiation

Scenarios 1

Ideal scenario

KP2:

- Continuation of CDM and JI
- Deep cut
- Linking between 1st
 Commitment Period and 2nd

Commitment Period

 No lack between 1st and 2nd commitment

Scenarios 2

Non ideal scenario

LCA scenario:

- New market mechanism based on NAMA's crediting, REDD
- PoA the only CDM that can be continued
- Some possibilities of linkages between 1st and 2nd
 - commitment
- 3-5 years of lack between 1st and 2nd commitment

Scenarios 3

Chaos scenario

- No commitment for using the multilateral market on the near future
- The developed country will used bilateral and regional market to fulfill their target
- More than 5 years lack for the multilateral carbon market



What Indonesia will do?

- Indonesia finds that whatever the scenario will be, it is very important to prepare market readiness.
- Indonesia will explore any relevant experiences as to carbon market development initiatives, such as EU and New Zealand ETS, domestic market in Japan and Korea and in other countries.
- Market readiness activities would go along with the UNFCCC progress especially on legally binding commitment of developed countries to reducing emissions and market mechanisms for mitigation.
- However, no decisions are made yet as to the type of market mechanism Indonesia intends to prioritize.
- At this point, strengthening carbon market fundamentals while participating in shaping the global market would best suit Indonesia.
- Some carbon market initiatives that already done are:
 - Partnership for Market Readiness (10 donor countries with World bank as a coordinator/operator)
 - Carbon market regional initiatives (with Australia, Asia Pacific, Japan, etc)
 - Bilateral offset credit mechanism discussion (Japan proposal)
 - Capacity building for new possibilities carbon market (with IGES).



Building blocks of market-readiness at Indonesia (PMR proposal)







Terima kasih Thank you



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