



Overview on Indonesia Market Readiness

Barcelona PMR Meeting, 30-31 May, 2011

Structure of Presentation



- 1. Policy context: Domestic mitigation objectives and role of market instrument(s)**
 1. Policy context, objectives and envisioned role for new market instruments
 2. Overview of country's GHG emissions
 3. Interest in market-based instrument(s)*
- 2. Organization and consultations**
 1. PMR contact
 2. Partners in the formulation and implementation of the country's Market Readiness Proposal
- 3. Technical building blocks of Market Readiness**
 1. Taking stock of relevant sectors (and/or region) – *1 slide per sector/region*
 2. OPTIONAL – Assessment of readiness of sector(s)/ region(s)
 3. OPTIONAL - System for domestic measurement, reporting and verification (MRV)
 4. OPTIONAL - Institutional/legal components
- 4. Other key relevant initiatives**
- 5. Organization of work and estimated timeline**
- 6. Other relevant information**
- 7. Conclusions – Summary of market readiness priority areas for PMR support**

**For the purpose of the PMR, market instruments refer to domestic instruments (e.g., emissions trading scheme) and, without prejudging the outcomes under the United Nations Framework Convention on Climate Change negotiations, scaled-up market mechanisms.*

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/2)

1.1 Policy context, objectives and envisioned role for new market instruments (1/2)

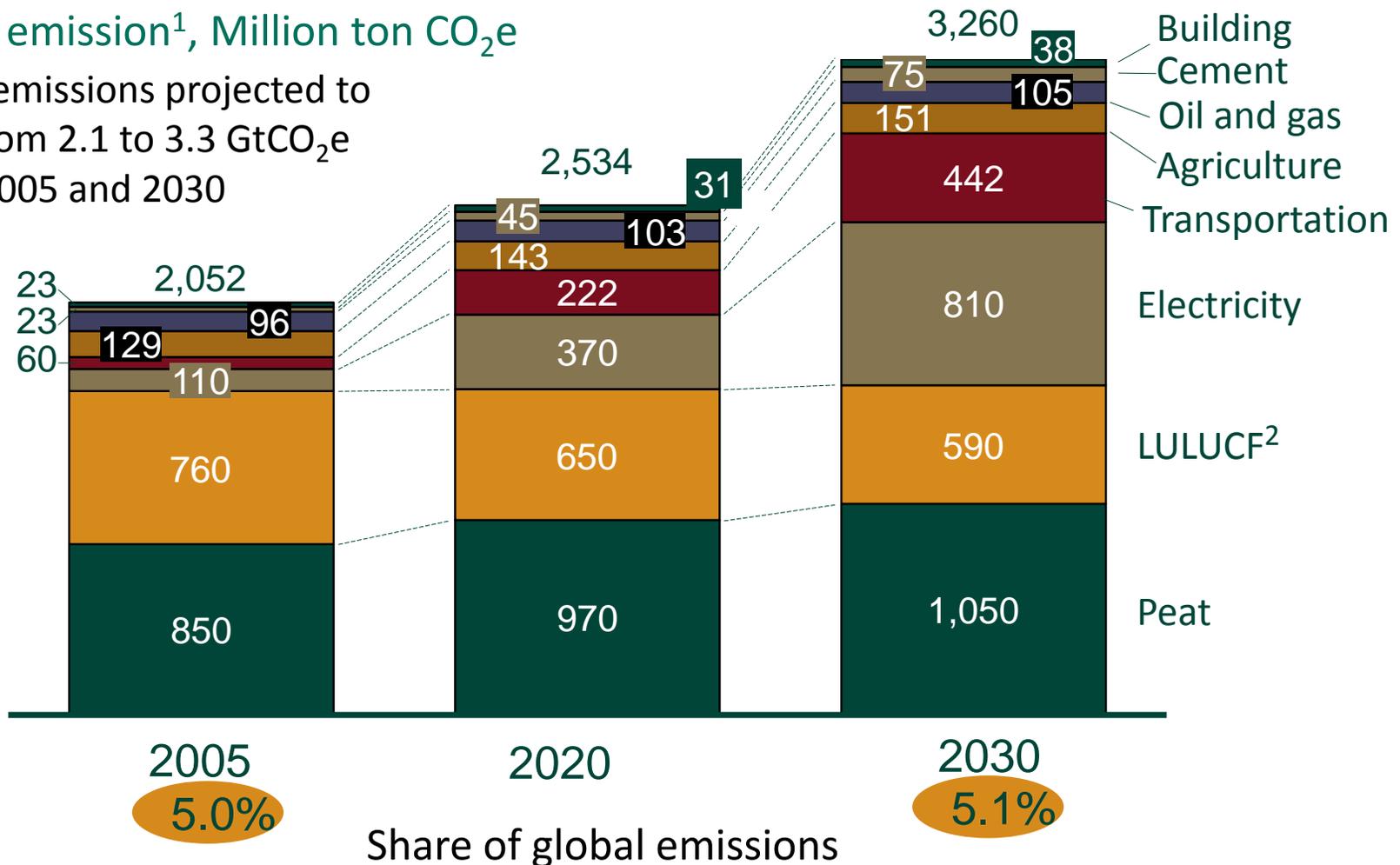
- ◆ Indonesia is the first developing country that announces its voluntary GHG emissions reduction target up to 26 percent by 2020.
- ◆ Further, with international support, Indonesia is confident that it can reduce emissions up to 41 percent.
- ◆ To this end, Indonesia has finalized National Action Plan on GHG Emission Reduction 2010-2020.
- ◆ The plan is aligned with the Medium- and Long-term Development Plan; it provides directives to priority development sectors on key and supporting actions necessary to achieve the emission reduction objectives while maintaining economic growth and improving competitiveness.
- ◆ The action plan would be equipped with a measurable, reportable and verifiable (MRV) system as a part of the national carbon accountancy system.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (2/2)

1.2 Overview of country's GHG emissions projection

Projected emission¹, Million ton CO₂e

Indonesia emissions projected to increase from 2.1 to 3.3 GtCO₂e between 2005 and 2030

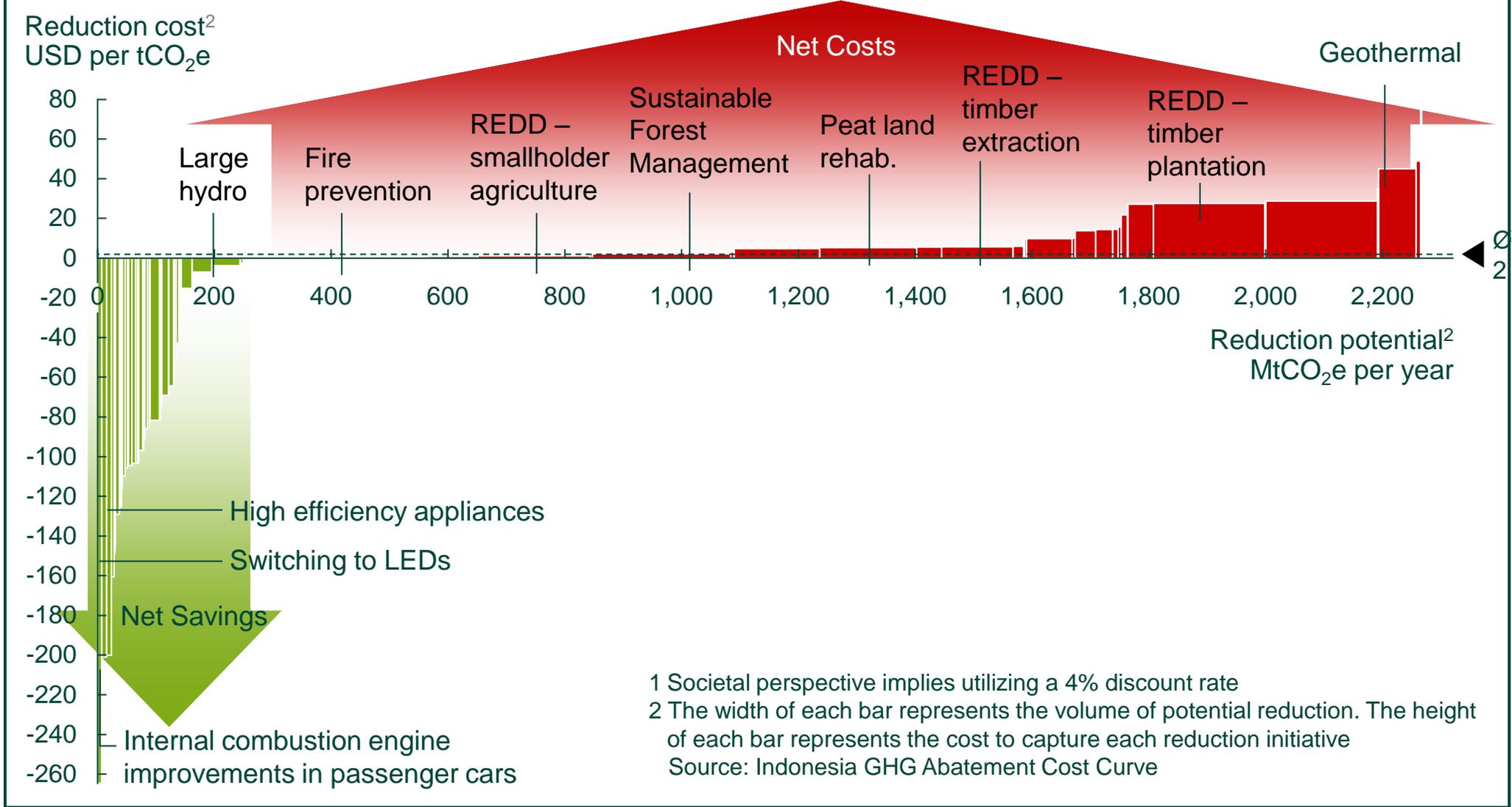


1 Only sector direct emission are included

2 LULUCF emission based on clean emission approximation, including absorption

Societal perspective¹, 2030

1.2.1 Options for Indonesia mitigation actions up to 2030 (1/4)



1.2.2 Policy context, objectives and envisioned role for new market instruments (2/4)

- ◆ Indonesia considers a mix of policy approaches to reducing emissions, ranging from market and non-market based mechanism (ranging from policies and regulation, national budget, private investment, foreign public funding, and philanthropic contribution).
- ◆ Market-based approaches are thought to be more flexible and cost-effective than non-market based mechanism approaches, however, they may not achieve the expected results (emission reduction goals) if not accompanied by fiscal policies.
- ◆ Until now, Indonesia has not fully capitalized on the existing carbon market instruments due to gaps in awareness, knowledge, implementation capacity, and supporting policies as well as the complexity of the market mechanism itself.
- ◆ Barriers to the current market mechanisms include: high transaction costs, long and complex procedures, not attractive for small-scale economic activities, and the low demand for the voluntary carbon market.
- ◆ New market instruments are therefore envisioned to be a flexible mechanism that can scale up emission reduction and stimulate increasing financial flow and access to clean technologies.

1.2. Indonesia emission reduction strategies (3/4)

Market and non-market approaches to climate change mitigation

Market

Compliance market
(CDM)

Voluntary market
(VCM)

Future carbon
markets

Non-market

National budget

Private investment

Foreign public funding

Policies (e.g fiscal, banking incentives
and disincentives)

Philanthropic contribution (companies,
NGOs)

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (4/4)

1.3 Interest in market-based instrument(s) (1/2)

- ◆ Indonesia finds its interest in scaled-up market mechanisms for reasons that such mechanisms could cover wider emissions reduction potential, generate a larger volume of credits, more flexible mechanism, and reduce transaction costs
- ◆ Bilateral, regional, and multilateral market mechanisms are also of Indonesia's interest as alternative sources of financing to support low-carbon development strategy.
- ◆ Unilateral (domestic) market mechanism is also considered.
- ◆ 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.

2. Organization and consultations (1/3)

2.1 PMR contact point

- ◆ The National Council on Climate Change (NCCC) will be responsible for leading/coordinating market-readiness activities with PMR support throughout stages, from introduction until implementation. There will be inter-agency technical committee established to support NCCC in the project development and implementation.
- ◆ NCCC is also tasked to explore opportunities from new market initiatives, e.g. bilateral offset mechanism and regional carbon market.
- ◆ At the moment, NCCC Executive Chair is the Head of Indonesia's Designated National Authority (DNA) for CDM and NCCC hosts the DNA secretariat.

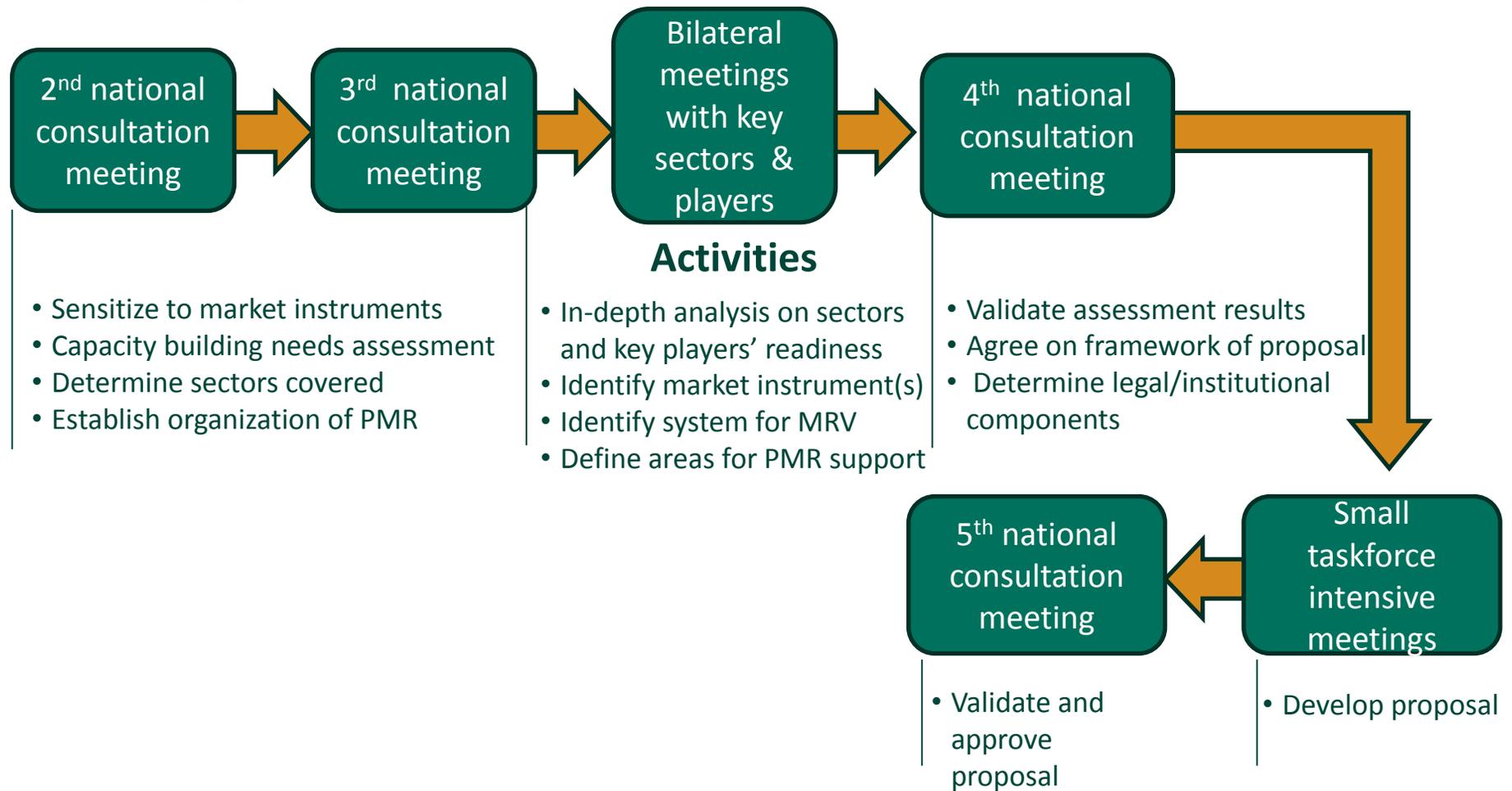
2. Organization and consultations (2/3)

2.2 Preliminary consultation activities that have been done



2.3 Partners in the formulation and implementation of the country's Market Readiness Proposal (1/2)

Planned engagement process upon approval of PMR grant for proposal development



2. Organization and consultations (3/3)

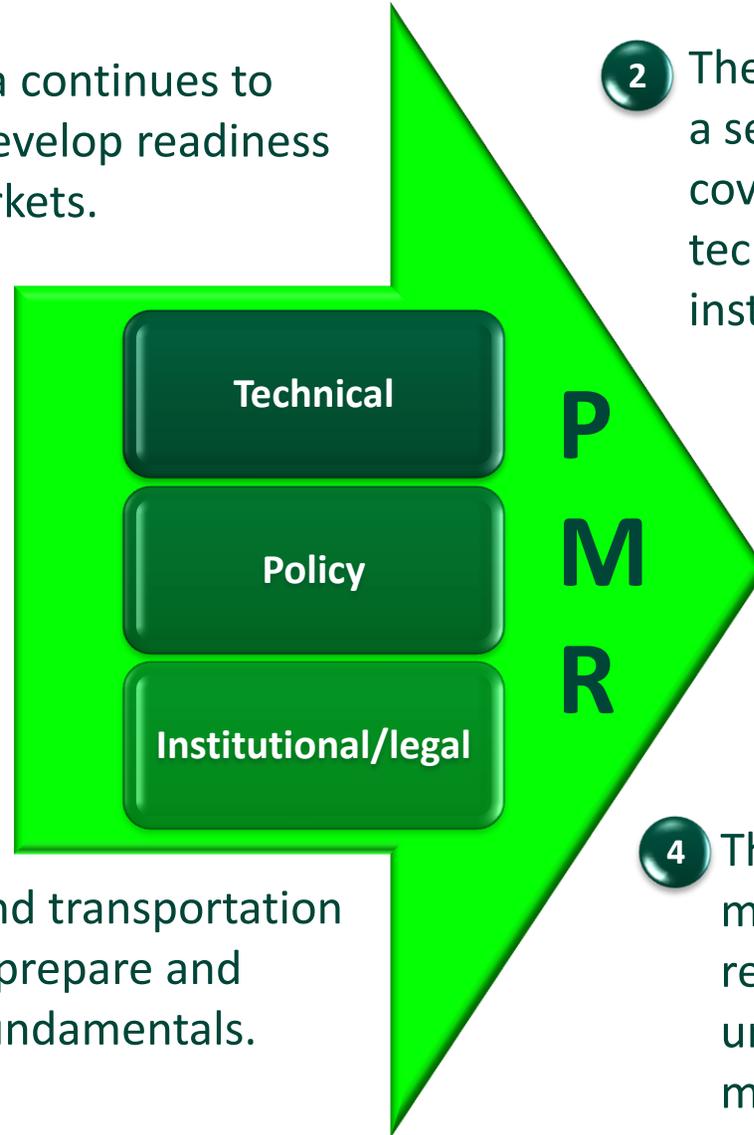
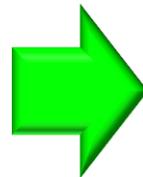
2.3 Partners in the formulation and implementation of the country's Market Readiness Proposal (2/2)

Planned engagement process

- ◆ A series of country consultation and bilateral meetings will be undertaken
- ◆ Key sectors: Energy, Industry, Environment, Finance, Trade, Agriculture, Transportation, Development Planning, Public Works
- ◆ Other key players: business associations, NGOs, and industry representatives

3. Building blocks of market-readiness at Indonesia

1 With PMR support Indonesia continues to prepare building blocks to develop readiness for next possible carbon markets.



2 The proposal will comprise a series of activities covering readiness on technical, policy, and institutional/legal elements



3 Focus on energy, industry, and transportation sectors with an objective to prepare and strengthen carbon market fundamentals.

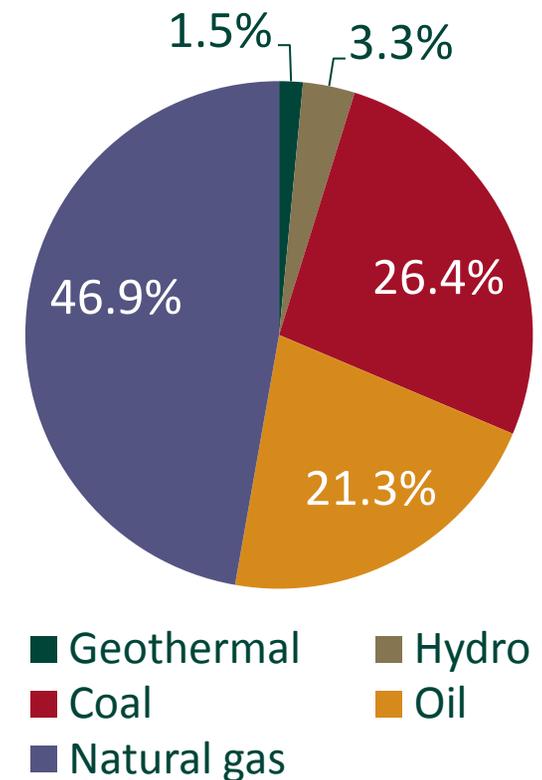
4 The next possible carbon markets include domestic, regional, and global market under or outside UNFCCC mechanisms.

3. Technical building blocks of market-readiness (1/2)

3.1 Taking stock of relevant sectors (and/or regions) – Energy Sector (1/2)

- ◆ Over-reliance on fossil fuel supply (about 95 percent)
- ◆ Share of total emissions: 21 percent
- ◆ Emission reduction target 2020: 30 million tCO₂e
- ◆ Reduction through the development of new renewable energy sources and implementation of energy conservation
- ◆ Ministry of Energy launched 'REFF-Burn' (Reducing Emissions from Fossil Fuel Burning) Program:
 - Pre-combustion: energy efficiency (demand side) & renewable energy (geothermal, hydro, etc)
 - During combustion: fuel switch, co-generation, energy efficiency (supply side), clean coal, flared gas reduction
 - Post-combustion: carbon capture storage, utilization
- ◆ The REFF-Burn is designed to fit market instrument(s)

National energy mix (2010)

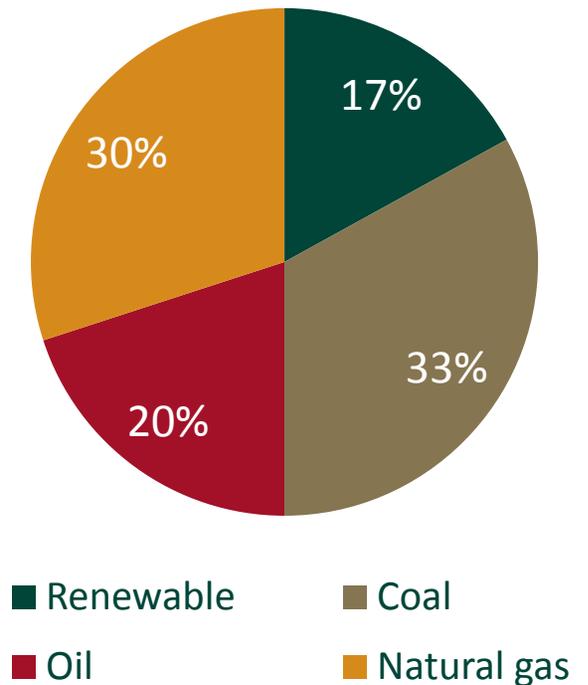


Source: Ministry of Energy, 2011

3.1 Taking stock of relevant sectors (and/or regions) – Energy Sector (2/2)

- ◆ Key barriers to implementation of clean energy initiatives (e.g. REFF-Burn): regulatory uncertainty, synchronization, lack of incentive, heavy fossil fuel subsidy
- ◆ Policy relevance to market instrument development and implementation:
 - Fiscal policies: tax differentiation/tax holidays, depreciation, import tax breaks, etc
 - Regulations: mandatory for energy efficiency implementation, etc

National energy mix objectives (2025)¹



¹ Presidential Decree No. 5/2006
Source: Ministry of Energy, 2011

3. Technical building blocks of market-readiness (2/2)

3.1 Taking stock of relevant sectors (and/or regions) – Manufacturing Sector (1/2)

- ◆ Emissions from fossil fuels (non-forestry emissions) grow at 6 percent per year
- ◆ Manufacturing sector was responsible for 40 percent of Indonesia's 2005 fossil-fuel emissions (incl. electricity use within the sector)
- ◆ Opportunity to address sector emissions in a comprehensive manner with potential for carbon market finance and other forms of assistance
- ◆ Key barriers to implementation of energy efficiency and emission reduction: lack of awareness and incentive, lack of institutional capacity to implement and enforce, lack of access to financing

3.1 Taking stock of relevant sectors (and/or regions) – Manufacturing Sector (2/2)

For large, concentrated industries*

Sub-sector	No. of firms	Priority	Potential for carbon finance	Regulatory options	Fiscal incentives
Cement	18	High	Co-firing w/ biomass, blended cement, Mol plan implementation	Grinding equipment motor	Encourage sectoral market instrument, faster depreciation/tax breaks
Steel rolling	51	Medium	Mol plan implementation, Ecotec options	Arc furnaces, voluntary agreement	Tax breaks, soft financing for capital stock improvement
Iron and steel	16	Medium	Alternative fuels, heat recovery, Mol plan impl.	Furnace & drive efficiency	Access to int'l finance to lower cost of capital
Pulp	9	Medium	Co-firing w/ biomass, heat recovery, co-generation		Direct grant program
Ceramic	30	High	Process optimization, thermal efficiency	Kilns, spray dryers	Gov finance of ESCOs, penalties for underperforming firms, low interest loan
Fertilizer	15	High	Optimize process control, heat recovery	High efficiency process equipment	Direct grant program, finance of ESCOs, low interest loan

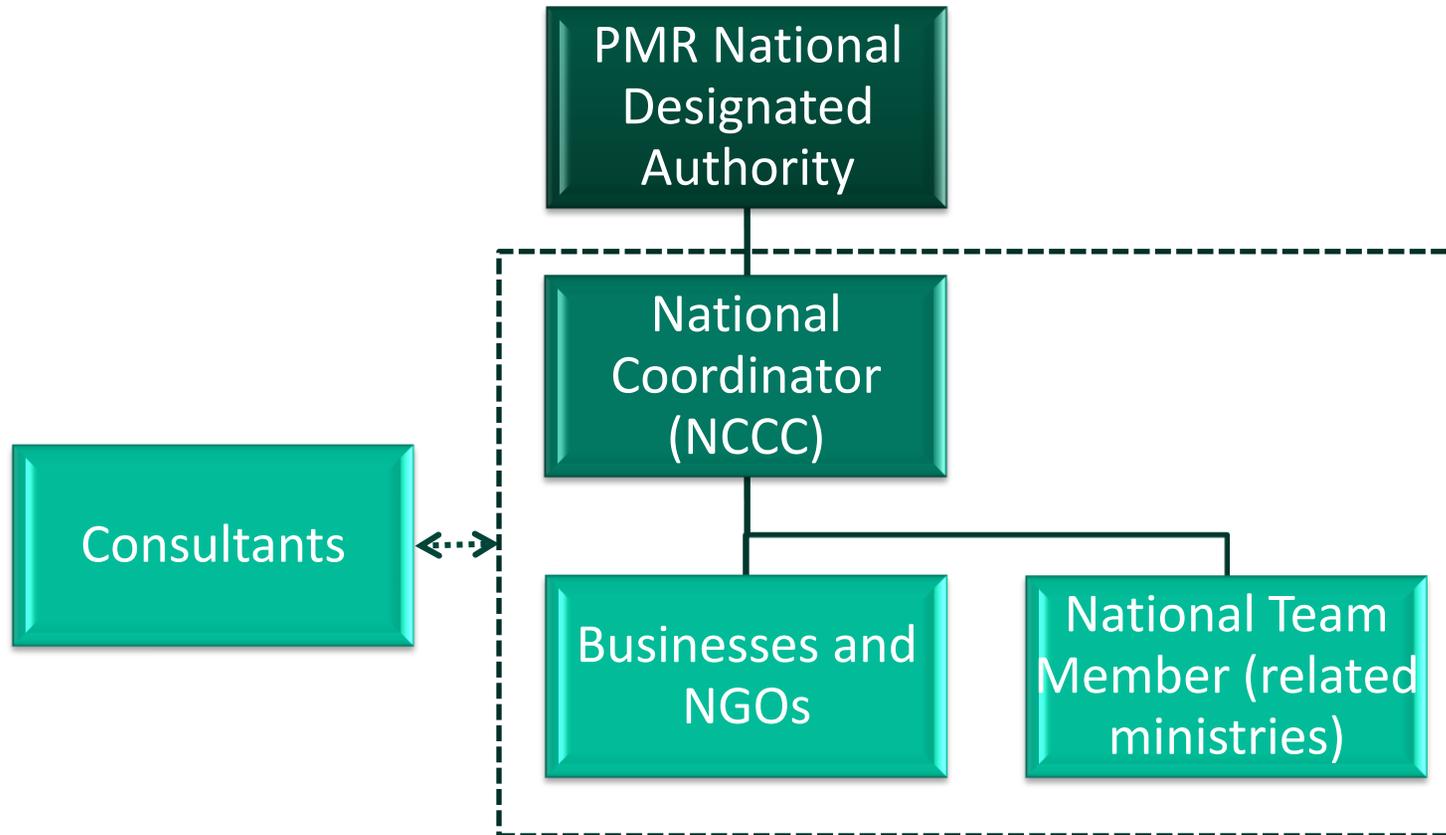
* Data is also available for textiles, many firms, less concentrated target and other industries, smaller firms
Source: Low Carbon Development Options for Indonesia, 2009

5. Other key relevant initiatives

- ◆ Common perception and vision building on future carbon markets.
- ◆ Data collection in sectors for scoping of PMR activities.
- ◆ Overall assessment of readiness of sectors.
- ◆ Definition of system for domestic MRV.
- ◆ Capacity building to implement market readiness activities.

6. Organization of work and estimated timeline (1/3)

6.1 Overview of organizational structure for Preparation Phase to conduct the scoping of market readiness activities



6. Organization of work and estimated timeline (2/3)

6.1 Overview of organization of work/tasks envisioned for Preparation Phase to conduct the scoping of market readiness activities

No	Description of task	Lead organization	Involved partners
I	Mobilization		
1.1	Develop ToR for consultants	NCCC	WB
1.2	Procure consultants	NCCC	WB
II	Sensitizing to market readiness		
2.1	Identify key findings from existing studies/reports	NCCC	Consultant Team (CT)
2.2	Conduct 2nd country consultation meeting - share findings, identification of knowledge gaps	NCCC	Sector Agencies (SA), CT
2.3	Conduct 3rd country consultation meeting - capacity building needs assessment - determine sectors & establish organization of PMR	NCCC	SA, CT
III	Overall sectors assessment	NCCC/RS	Relevant Sector (RS), CT
3.1	Develop ToR for sector assessment		
3.2	Implement in-depth sectors assessment		
IV	Validation of sector readiness		
4.1	Develop a framework for PMR proposal (through workshop)	NCCC	RS, CT
4.2	Conduct 4th country consultation meeting - validate sector assessment results, identify coherence - agreement on framework for proposal	NCCC	SA, CT
V	Development and approval of PMR proposal	NCCC	RS, CT
5.1	Develop proposal and engage sectors in process		
5.2	Conduct 5th country consultation meeting - validate and approve proposal		

6. Organization of work and estimated timeline (3/3)

6.2 Overview of estimated timeline for formulation of Market Readiness Proposal

Activities	Weeks																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mobilization	█	█																										
Sensitizing to market readiness			█	█	█																							
Country consultation meetings					▲	—						▲					▲				▲							▲
Overall sectors assessment					█	█	█	█	█	█	█	█	█															
Validation of sector readiness											█	█	█	█	█	█	█	█	█									
Proposal framework development																	█	█	█	█								
Development of proposal																					█	█	█	█				
Validation of proposal																								█	█	█	█	
Submission of proposal																												█

7. Other relevant information

- ◆ 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.

8. Conclusions – Summary of market readiness priority areas for PMR support

- ◆ International support such as PMR is expected to assist Indonesia in accelerating its efforts to achieve emissions reduction objectives while maintaining economic growth through market readiness
- ◆ Priority areas for PMR support is development of carbon market fundamentals:
 - MRV system
 - Institutional development
 - Political support
 - Capacity building
 - Participation of private sector.



Terima kasih
Thank you