



# India's Market Readiness Proposals (MRP)

**Country:** India

**Responsible agency:** MoEFCC, GOI

**Date of submission:** 28th February, 2017

# OUTLINE OF PRESENTATION

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## 1. Overview

- India's developmental and climate objectives
- Summary of Building Blocks
- Objectives and focus of Building Blocks

## 2. Comments/Suggestions received and action taken

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# OVERVIEW

# INDIA'S DEVELOPMENT AND CLIMATE OBJECTIVE (1/2)

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- ◆ India is one of the largest emerging economies with a population of over one billion grappling with several economic and developmental challenges.
- ◆ Despite these challenges, India has consistently shown leadership in global efforts to limit climate change.
- ◆ India has put forth a very ambitious Nationally Determined Contribution (NDC)
  - Reduce the emissions intensity of its GDP by 33-35% by 2030 from 2005 levels.
  - Achieve 40% cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030.\*
  - Create an additional carbon sink of 2.5-3 billion tons of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030.
- ◆ To achieve this, India needs ambitious and aggressive domestic policies that facilitate a shift into low carbon societies but at the same time ensure India's developmental priorities are met.
- ◆ This requires multiple policy instruments which can push large scale transformative change.

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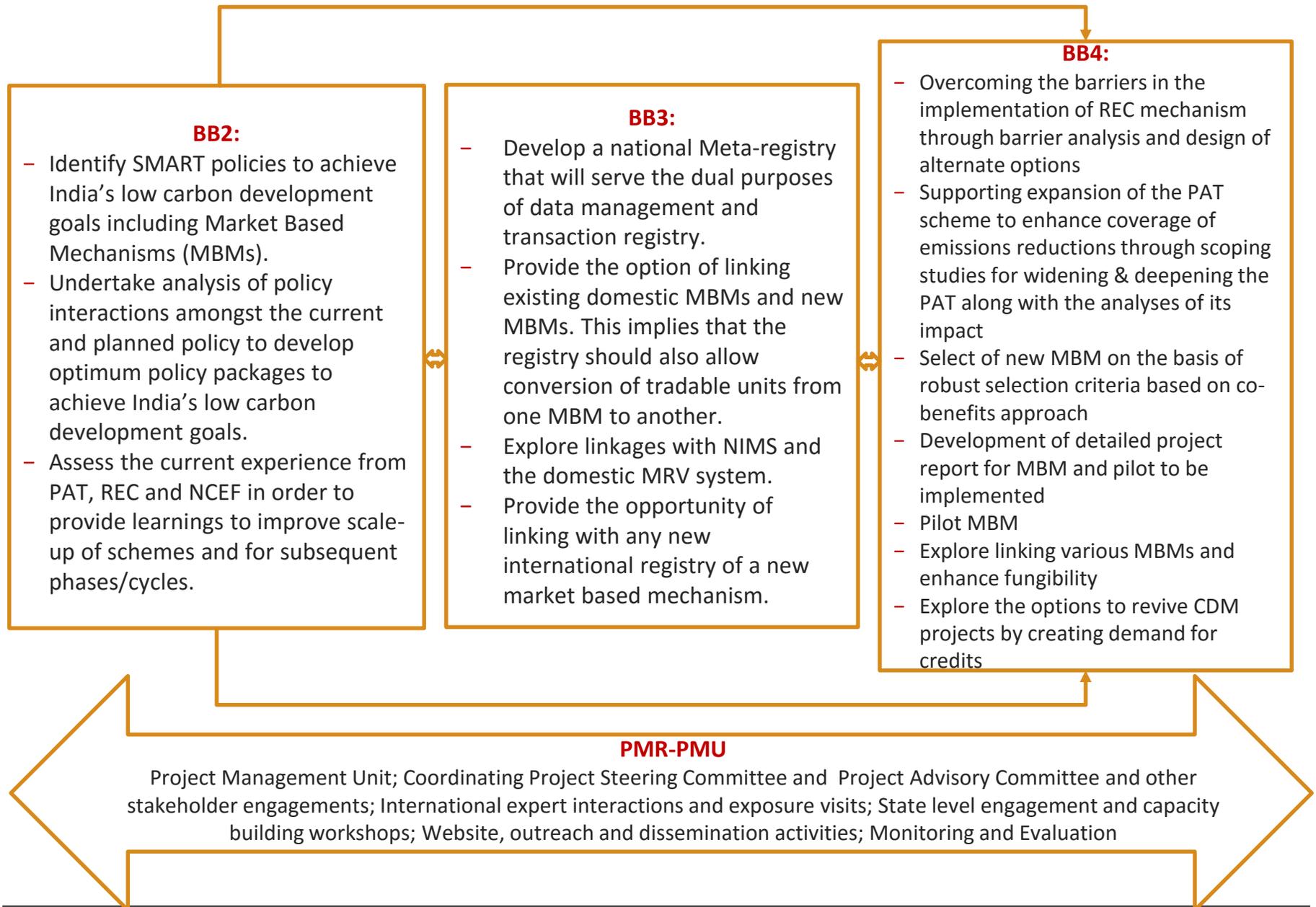
*\* with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF)*

## INDIA'S DEVELOPMENT AND CLIMATE OBJECTIVE (2/2)

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- ◆ India is in the process of preparing a road map for achieving the goals of NDC. In this regard, certain activities are already underway, which includes:
  - Meetings and discussions with various departments
  - Stakeholder discussions with businesses, research organisations and civil society organisations
  - Several studies to prepare plan of action and feasibility of activities are underway
- ◆ We are open to exploring domestic market based mechanism in order to achieve NDC. Activities under India's MRP as critical part of this exercise, which involves:
  - Preparatory work including upstream policy work to implement market based mechanisms (MBMs)
  - Implementation work including meta-registry development
  - Designing and piloting a market based instrument in one of the identified sectors.

# MRP: SUMMARY OF BUILDING BLOCKS



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# MRP: OBJECTIVES

# OBJECTIVES AND FOCUS OF BUILDING BLOCK 2

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- ◆ India's ambitious INDCs can be achieved through a combination of SMART (Specific, Measurable, Assignable, Realistic and Time-related) policies
- ◆ Informed decision-making is key to identify and prioritise policy instruments and/or Market Based Mechanisms (MBMs)
- ◆ BB2 seeks to undertake analytical work to guide and support in selecting and prioritising policy instruments
- ◆ These studies determine post-2020 mitigation scenarios and identify packages of effective and cost-efficient policies

## OBJECTIVES AND FOCUS OF BUILDING BLOCK 3 (1/2)

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- ◆ Ambitious NDC which requires multiple policies including MBMs to be implemented in order to achieve its objectives
- ◆ Combination of existing and new MBMs need to be explored
- ◆ Paris Agreement (PA) also opens up opportunities for new international market based mechanisms
- ◆ Thus, in future a complex network of international and domestic mechanisms is envisaged.
- ◆ While this could pose challenges such as double counting and environmental integrity, it also opens up opportunities
- ◆ However, inter-linking different mechanisms is key to allow cost effectiveness of mitigation actions and avoid double counting.
- ◆ This interlinking is not possible as of now. It can be facilitated by developing a national meta-registry.
- ◆ India proposes to develop and pilot such a meta registry.

## OBJECTIVES AND FOCUS OF BUILDING BLOCK 3 (2/2)

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- ◆ A national meta-registry to be designed as win-win 'future proof' registry which possibility of interlinking various MBMs
- ◆ Activities to develop technical infrastructure to integrate existing MBMs and create foundation for integrating new mechanisms
- ◆ National meta-registry to be developed with dual objectives data management /MRV and transaction
- ◆ Meta-registry to also generate bottom-up data from these MBMs for the NIMS and hence strengthen MRV and transparency
- ◆ This will also facilitate consistency in available data for accurate reporting for greater transparency. Thus providing bottom-up data from the MBMs to NIMS
- ◆ Better data is key to allow better projection of GHG data for low carbon development
- ◆ Existing MBMs, PAT and REC mechanisms, have registries of their own, which offers rich experience and learnings while designing registry for any new MBM

## OBJECTIVES AND FOCUS OF BUILDING BLOCK 4

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- ◆ Activities planned to harness maximum GHG emissions reduction potential
  
- ◆ Expanding (upgrading and/or designing) the scope of existing MBMs to include additional new sectors/sub-sectors:
  - Inclusion of a new sector in PAT scheme
  - Inclusion of Off-grid projects in REC
  
- ◆ Creating domestic demand for stranded CDM projects in India
  
- ◆ Designing and piloting new MBM to include sectors identified in BB2 with untapped GHG mitigation potential.
  - Possible candidates for new MBMs in waste and MSME sector

## MRP OBJECTIVES AND FOCUS OF BUILDING BLOCK 5

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- ◆ Ambitions MRP and set of activities need a dedicated project management unit (PMU) to coordinate the activities to be undertaken by different institutions under the grant.
  - ◆ There exists a network of institutions INCCA which can be exploited for rapid action.
  - ◆ PMU will allow number of activities being undertaken in parallel.
  - ◆ Sequencing has been done in cases where information from one activity feeds into other activity so that it allows uptake of sufficient learning from one activity to other.
  - ◆ ToRs have been included for PMU to be able to start activities from the outset.
  - ◆ PMU will facilitate transformation through consensus building by initiating conversation with various stakeholders
  - ◆ Emphasis is given on cross learning and experience sharing, India will be open to sharing experiences with others especially on new initiative like inter-linking of MBMs/markets and policy interaction work to inform decision making.
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## Comments and Suggestions Received\*

*\*The Draft MRP was improved considering the comments and suggestions provided during PA19, as well as written comments provided afterwards*

## COMMENTS RECEIVED AND ACTION TAKEN

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Comment	Response
<b>Regarding section on power production and the challenges this sector faces and how this fits with the MRP</b>	<ul style="list-style-type: none"><li>- Current trends and challenges included in a new section on power is included in Building block 1: Pg 11-12.</li></ul>

## COMMENTS RECEIVED AND ACTION TAKEN

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Comment	Response
<b>Regarding upfront policy analysis</b>	<ul style="list-style-type: none"><li data-bbox="688 410 1902 521">– Upfront policy analysis is envisaged to be undertaken in the building block 2</li><li data-bbox="688 602 1875 837">– This analysis will build on the work of Low Carbon Committee and other existing studies in India which have indicated range of actions and priorities for undertaking climate action</li><li data-bbox="688 919 1923 1029">– Some of these actions are being examined by relevant ministries and departments.</li><li data-bbox="688 1110 1871 1221">– This will facilitate identification and prioritisation of sectors with untapped GHG potential.</li><li data-bbox="688 1302 1787 1412">– The new MBMs will be developed in the sectors identified in this BB.</li></ul>

# COMMENTS RECEIVED AND ACTION TAKEN

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Comment	Response
<p><b>Regarding categorising the CDM projects and stabilise the supply and demand for CDM projects</b></p>	<ul style="list-style-type: none"> <li>- Added in description on the need to consider the categorisation of CDM projects and develop the modalities so as to keep view of demand and supply of the credits from CDM projects</li> <li>- Section 4.1.3 title “Reviving CDM projects and creating new demand” on Pg. 63-64 mentions that principles of environmental integrity and efficacy would be ensured while designing new demand of stranded CDM projects</li> <li>- Actual modalities will be studied as part of the studies under the PMR grant</li> </ul>

## COMMENTS RECEIVED AND ACTION TAKEN

Comment	Response (1/2)
<b>Regarding clarity on its purpose and functions of registry</b>	<ul style="list-style-type: none"><li data-bbox="688 394 1900 630">– A national meta registry will serve the dual purposes of data management and transaction registry and is envisaged with a vision to inform and support policy-making</li><li data-bbox="688 711 1885 824">– It will be designed as win-win ‘future proof’ registry which possibility of interlinking various MBMs</li><li data-bbox="688 906 1900 1076">– Technical infrastructure is envisaged to be developed so as to integrate existing MBMs and create foundation for integrating new mechanisms</li><li data-bbox="688 1157 1915 1328">– Meta-registry to also generate bottom-up data from these MBMs for the NIMS and hence strengthen MRV and transparency</li><li data-bbox="688 1409 1927 1580">– This will also facilitate consistency in available data for accurate reporting for greater transparency. Thus providing bottom-up data from the MBMs to NIMS</li></ul>

# COMMENTS RECEIVED AND ACTION TAKEN

Comment	Response (2/2)
<b>Regarding clarity on its purpose and functions of registry</b>	<ul style="list-style-type: none"><li>- Building Block 3, Pg.40-57. Additionally, we have also included a draft ToR as Annex II, Pg. 98-102, so that the work under this component can start immediately</li><li>- Figure 11 at Pg. 43 have been modified to explain the relationship between exiting registries and the Meta-registry.</li><li>- Details of the existing registries of PAT and REC schemes have been included in Annex I frpm Pg.96-97.</li><li>- We have also included a detailed draft ToR as Annex II, Pg. 98-102, so as to provide further details of nature of activities envisaged.</li></ul>

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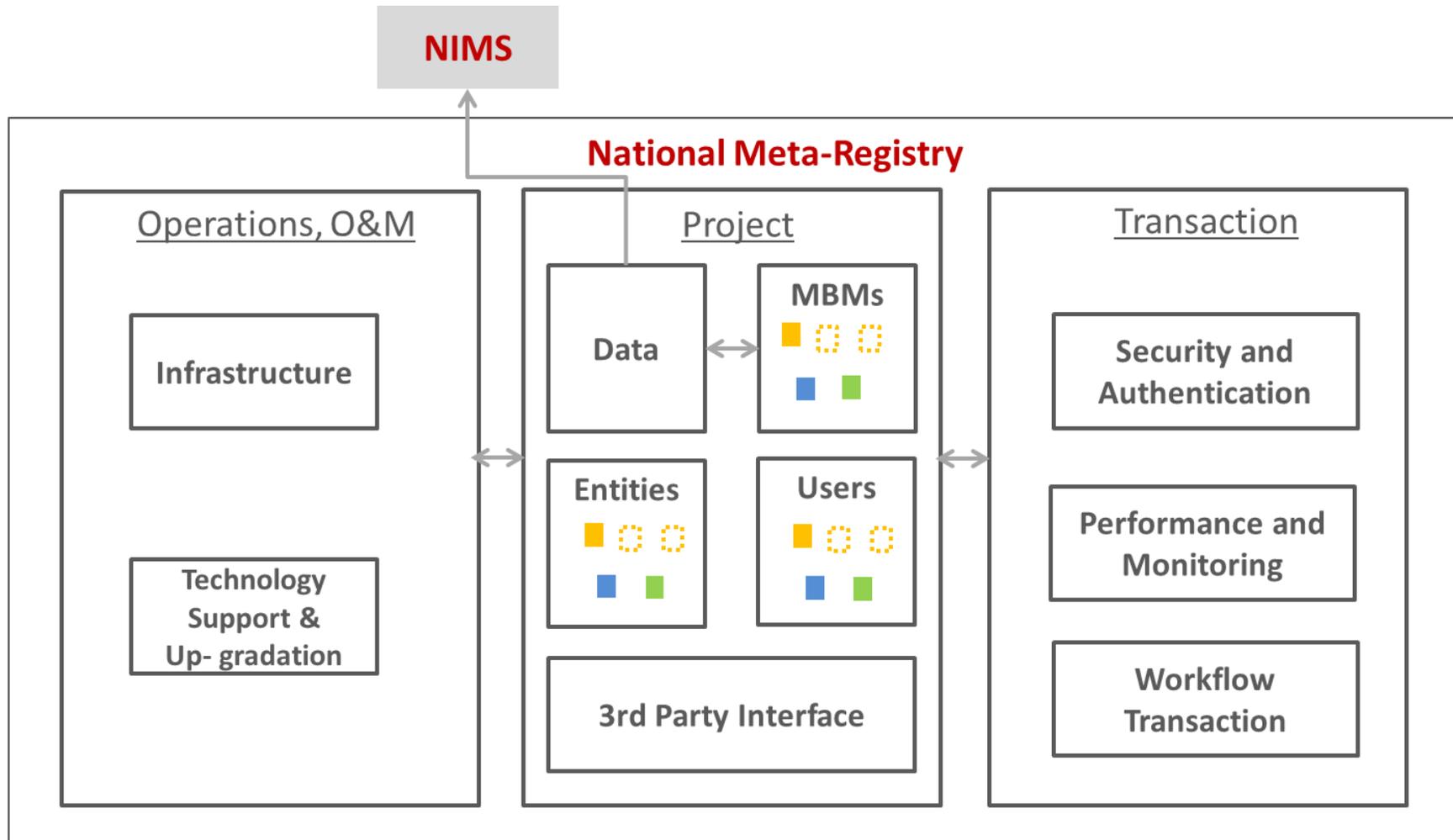
# SNAPSHOT: META-REGISTRY

## Building Block 3: Objective of Meta Registry

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- ◆ A national meta registry will serve the dual purposes of data management and transaction registry and is envisaged with a vision to inform and support policy-making
- ◆ **Data Management and MRV Registry:**
  - Develop systems and processes to collect, organise, report and analyse data from MBMs. This can be used for informed policy-making
  - Generate bottom-up data from MBMs and explore linkages with NIMS and the domestic MRV system.
  - Enhance operational efficiency and avoid data redundancy
- ◆ **Transaction Registry:**
  - Facilitate linking existing domestic MBMs and new MBMs. This implies that the registry should also allow conversion of tradable units from one MBM to another.
  - Facilitate voluntary cancellation of CERs earned from the CDM projects in any domestic MBM.
  - Facilitate of linking with any new international market based mechanism.

# Framework for National Meta-registry



**Note:** The Meta-registry will have modules that will link and pick relevant information from registries of existing and new MBMs.

**Legend**

- New MBM under PMR
- PAT Scheme
- REC mechanism
- ⊞ Future new mechanisms (international domestic)

# COMMENTS RECEIVED AND ACTION TAKEN

Comment	Response
<p><b>Regarding development of a new MBM:</b></p>	<ul style="list-style-type: none"> <li>- India has put forth an ambitious NDCs requiring multiple policy instruments.</li> <li>- There is rich experience from the implementation of PAT and REC which can be used for the design of new MBM in an integrated approach</li> <li>- There are exiting MBMs but still there is untapped potential</li> <li>- It is important for informed policy making that we undertake upstream policy work (which will be done under BB2) and the shortlist the sector and instrument design</li> <li>- Activities in building block 4, have been streamlined to maximize learnings from the existing experience and upstream policy work.</li> <li>- At the same-time, two possible MBM candidates have been identified and elaborated in Annex III (Pg.104-111) and Annex IV (Pg112-119).</li> </ul>

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# Snapshot: New MBM

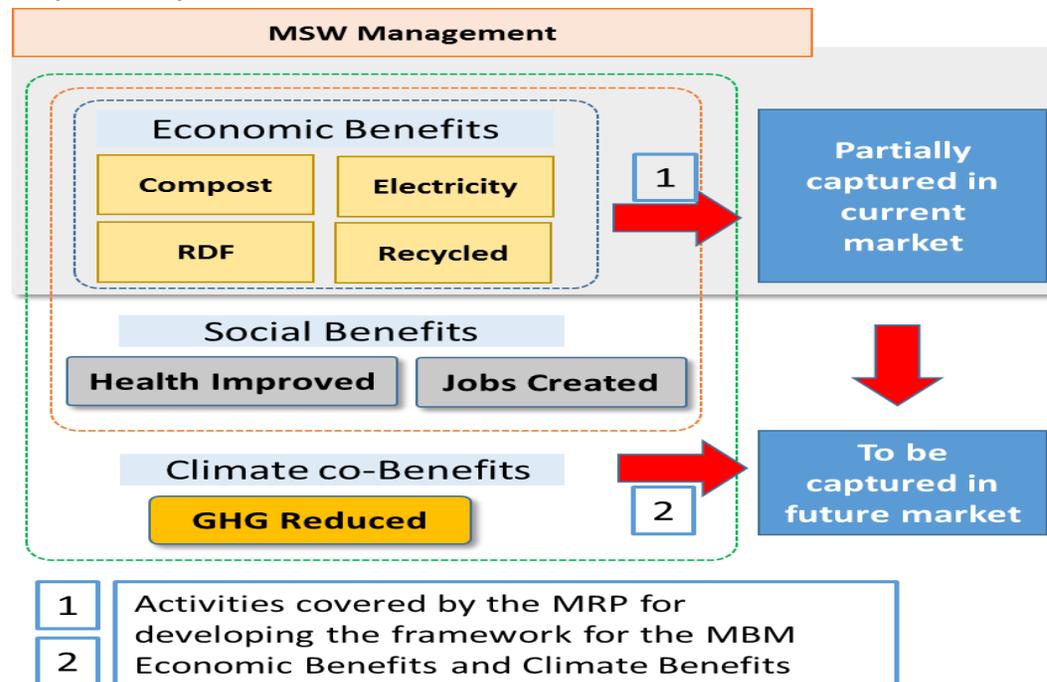
## BUILDING BLOCK 4: ACTIVITIES

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- ◆ Overcoming the barriers in the current schemes and supporting the expansion of existing mechanisms to enhance coverage & effectiveness
  - Output 4.1: Design options for deepening and broadening of PAT
  - Output 4.2: Design options for the expansion of REC mechanisms
  
- ◆ Reviving projects in the CDM pipeline and creation of demand for credits from existing projects (Output 4.3)
  
- ◆ Designing of a new MBM in identified sector (Output 4.4)
  
- ◆ Piloting new MBM in one identified sector (Output 4.5)
  
- ◆ Linking of various domestic markets (Output 4.6)

## BUILDING BLOCK 4: POTENTIAL NEW MBM IN WASTE

- ◆ GHG emissions from waste sector are currently about 4% of the total emissions in India
- ◆ As per the NAMA feasibility study for the waste sector conducted with the support of GIZ total sector emissions will more than double between 2015 and 2030 from roughly 19 million to 41 million tons CO<sub>2</sub> eq in a BAU scenario.
- ◆ We propose to phase out methane emissions from solid waste disposal, and move from being a cost centre to being a profit centre through monetising GHG reduction benefits around compost, electricity, RDF, lower land requirement for disposals and recycled products.



## BUILDING BLOCK 4: POTENTIAL NEW MBM IN MSME

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- ◆ Micro, Small and Medium Enterprises (MSME) are organized in clusters and there are 180 clusters within 18 energy intensive industries in India and their overall energy consumption is estimated to be 22.5 Mtoe per annum.
- ◆ Not covered by the PAT scheme though there have been few very good efforts trying to streamline the sector Like BEE SME Program.
- ◆ New MBM with Energy Efficiency Package for the MSME sector consisting of a levy to be collected from the industry to set-up a Partial Risk Guarantee Fund (PRGF) for transforming the SME sectors and introducing PAT like scheme to incentivise enterprises for monitoring their energy consumption and to implement energy saving measures.



## COMMENTS RECEIVED AND ACTION TAKEN

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Comment	Response
<b>Regarding scope, timeline, sequencing and prioritisation of activities:</b>	<ul style="list-style-type: none"><li data-bbox="632 386 1969 496">– India has put forth a very ambitious Nationally Determined Contribution (NDC)</li><li data-bbox="632 578 1864 748">– To achieve this, India needs ambitious and aggressive domestic policies that facilitate a shift into low carbon societies</li><li data-bbox="632 829 1923 943">– This requires multiple policy instruments which can push large scale transformative change</li><li data-bbox="632 1024 1955 1195">– In this context, India seeks a grant through PMR for preparatory work to study and implement various policy instruments including market based mechanisms (MBMs).</li><li data-bbox="632 1276 1780 1390">– The gnat chart has been modified to reflect better sequencing and prioritisation of the deliverables</li><li data-bbox="632 1471 1923 1576">– The plan of delivery is strengthened by adding draft ToRs for few deliverable to assist the PMU</li></ul>

# MODIFIED GANT CHART (1/4)

Activity	Description	Q*	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Activity 2.1	Assessment of current status of the PAT scheme		■	■								
Activity 2.2	Assessment of current status of the REC scheme		■	■								
Activity 2.3	Assessment of current status of NCEF		■	■								
Activity 2.4	Modeling resulting in prioritized list of policy instruments in key sectors		■	■	■	■						
Activity 2.5	Develop and select optimum policy-packages by analyzing policy interactions				■	■	■					
Activity 2.6	Assessment of technological, infrastructural, legal and regulatory needs at the national level					■	■	■				

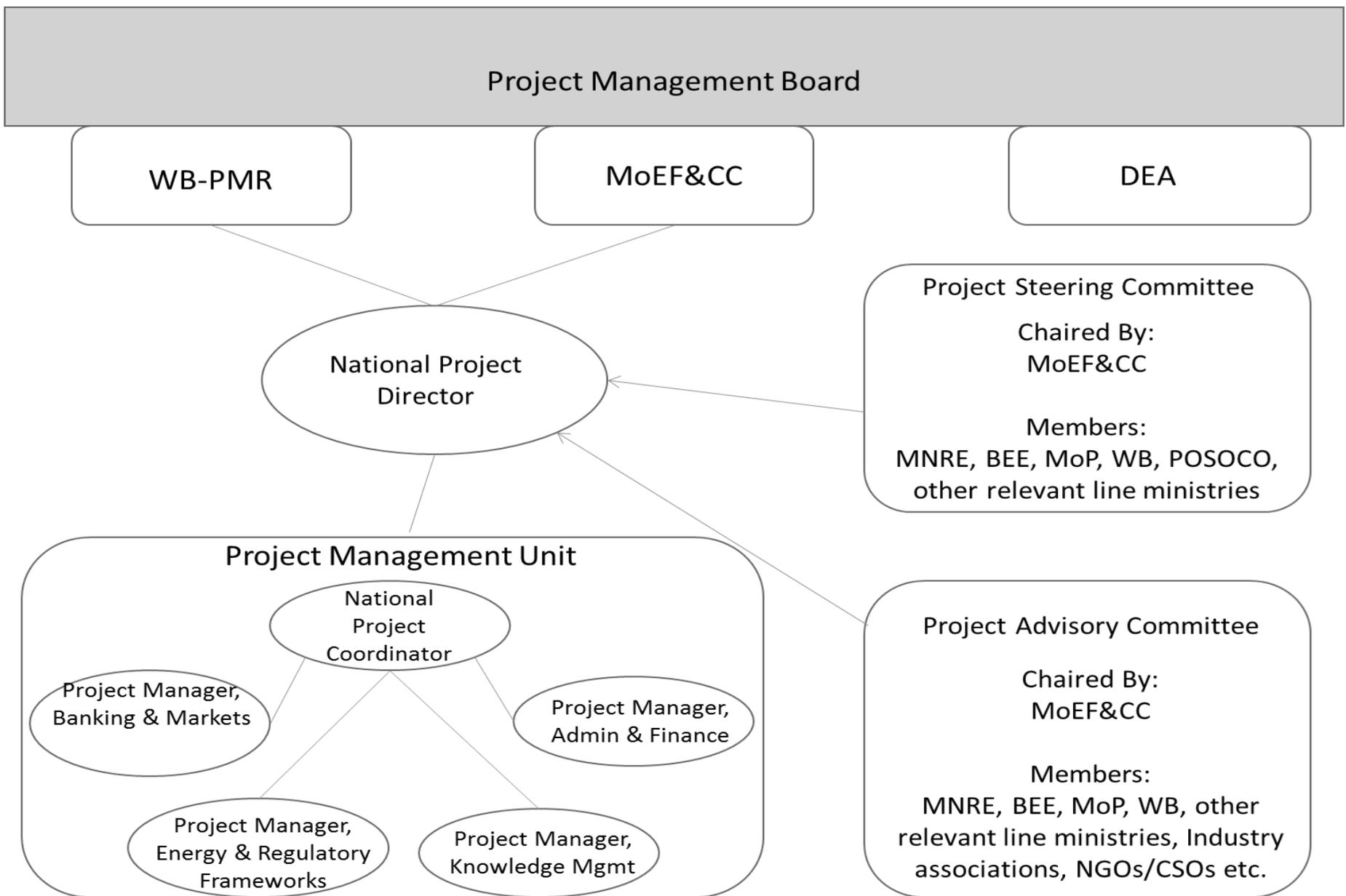
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- 1. Assessment of current schemes**
  - 2. Identification and prioritisation of policy instruments in key sectors**
  - 3. Developing and selecting optimum policy-packages**
  - 4. Need Assessments for policy-packages**

# MODIFIED GANTT CHART (2/4)

Activity	Description	Q*	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Activity 3.1	Systems Need Assessment		■	■								
Activity 3.2	Functional System Specification		■	■	■	■						
Activity 3.3	Technical System Assessment						■	■	■	■		
Activity 3.4	Software development							■	■	■		
Activity 3.5	Systems deployment and capacity building								■	■	■	■

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1. **Systems Need Assessment (Linkages with PAT, REC, NIMS, New MBM)**
  2. **Functional System Specification (International best practise and need assessment)**
  3. **Technical System Assessment**
  4. **Software development**
  5. **System deployment and capacity Building**

# PROJECT MANAGEMENT AND OUTREACH



# MODIFIED GANT CHART (3/4)

Activity	Description	Q*	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Activity 4.1	Deepening and broadening of PAT				■	■	■	■				
Activity 4.2	Expansion of REC mechanism				■	■	■	■				
Activity 4.3	Reviving CDM projects and creating new demand				■	■	■	■				
Activity 4.4	Designing new MBM					■	■	■	■			
Activity 4.5	Piloting any of the above design								■	■	■	■
Activity 4.6	Linking of various domestic markets								■	■	■	■

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1. **Designing options for expansion of existing schemes**
  2. **Designing options for CDM projects**
  3. **Designing new MBM**
  4. **Piloting one of the above**
  5. **Linking various domestic market**
  6. **Linking with international market**

# MODIFIED GANTT CHART (3/4)

Activity	Description	Q*	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Activity 5.1	Project Management Unit		█	█	█	█	█	█	█	█	█	█
Activity 5.2	PMR inter-ministerial committee		█	█	█	█	█	█	█	█	█	█
Activity 5.3	National and International expert interactions		█	█	█	█	█	█	█	█	█	█
Activity 5.4	Exposure visits/learning Visits		█	█	█	█	█	█	█	█	█	█
Activity 5.5	Outreach and dissemination activities		█	█	█	█	█	█	█	█	█	█
Activity 5.6	State level engagement and capacity building workshops		█	█	█	█	█	█	█	█	█	█
Activity 5.7	Stakeholder engagements		█	█	█	█	█	█	█	█	█	█
Activity 5.8	Website		█	█	█	█	█	█	█	█	█	█
Activity 5.9	Monitoring and Evaluation			█		█		█		█		█
Activity 5.10	Synthesis Report										█	█

- Addition of ToRs : Annex II: Draft ToR for Meta-registry

# MRP: SUMMARY OF BUDGET

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Summary of Budget (in US\$)						
Building Block	Estimated Support from PMR			Funding Source		
	Year 1	Year 2	Year 3	PMR	Govt	Total
BB2	700,000	0	0	700,000	510,000	1,210,000
BB3	300,000	1,500,000	600,000	2,400,000	873,000	3,273,000
BB4	750,000	1,650,000	1,000,000	3,400,000	1,202,000	4,602,000
BB5	487,000	557,000	456,000	1,500,000	960,230	2,460,230
<b>Total</b>	<b>2,237,000</b>	<b>3,707,000</b>	<b>2,056,000</b>	<b>8,000,000</b>	<b>3,545,230</b>	<b>11,545,230</b>

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**Thanks**