PMR PROJECT IMPLEMENTATION STATUS REPORT (ISR)

The PMR Project Implementation Status Report should be prepared by the Implementing Country or Technical Partner, with the support of the Delivery Partner and/or the PMR Secretariat. For any questions related to the preparation of the PMR Project Implementation Status Report, please contact the PMR Secretariat at: pmrsecretariat@worldbank.org.

1. SUMMARY INFORMATION

Implementing Country/ Technical Partner:	Republic of Indonesia
Reporting Period:	From 11/11/2016 to 09/30/2017
Report Date:	09/30/2017
Implementing Agency:	Coordinating Ministry for Economic Affairs (CMEA)
Contact Person:	Mr. Dida Gardera (CMEA) Mr. Roy Rahendra (PMU)

Grant Executed By:	UNDP Indonesia
Grant Effectiveness and Closing Dates:	11/11/2016 – 10/10/2020
Grant Amount (USD):	USD 3,000,000
Funding Mobilized (USD):	n/a
Funding Committed (USD):	n/a

2. OVERVIEW

The project aims to support the government of Indonesia to determine an appropriate market-based instrument to reduce the nation's GHG emissions. This will be achieved through the development of GHG emissions profiles and monitoring-reporting-verification (MRV) systems in power generation and energy-intensive industries; and the development and piloting of a framework for market-based instrument in Indonesia.

Indonesia was allocated with market readiness grant of USD 3,000,000 during the 7th Partnership Assembly meeting in Marrakech, October 22-23, 2013. However, due to many challenges, the grant could not be executed swiftly. This situation is further amplified by government rorganization in 2015, which leads to the disbandment of the National Council on Climate Change (NCCC) which was also the Indonesian focal point for PMR.

Started from early 2015, the Coordinating Ministry for Economic Affairs (CMEA) of Indonesia took over the role of NCCC as PMR's focal point. As per the CMEA's

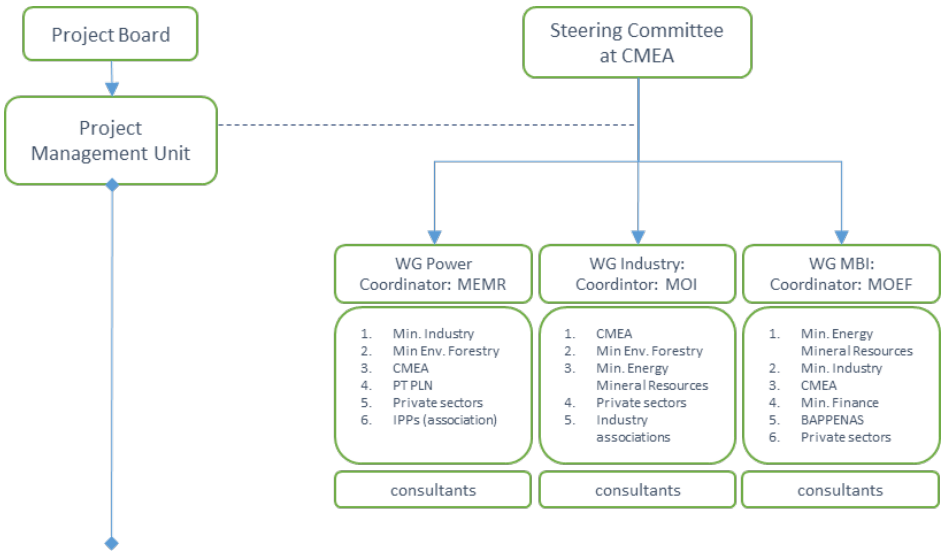
request, the Transfer Agreement (*TF No. TF0A3491*) was signed in October 20th, 2016 between the World Bank and UNDP, for UNDP to be the primary delivery partner for the Indonesia PMR project.

Following the Transfer Agreement, the Government of Indonesia and UNDP finalized the PMR Project Document (*ID: 97002*) which was signed on November 11th, 2016. The PMR Project Document serves as a guidelines for PMR project implementation in Indonesia.

Under the PMR Project Document, the governance structure of PMR Indonesia consists of the Project Board and Project Management Unit – which was fully established in February 2017. As other UNDP managed project, **the Project Board** consists of representative from UNDP, representative from donor (WB), and representative(s) from government – CMEA as primary beneficiaries.

The Project Board (PB) provides strategic direction and oversight for the project's execution and its activities, including recommendations for approval of project/budget plans and its revisions. The PB will ensure project's accountability, by ensuring measurable results, best value for money, fairness, integrity, and transparency in all aspects of PMR project implementation.

The Project Management Unit (PMU) consists of the Project Manager and assisted with several staffs responsible for administration, finance, and procurement for the project. The PMU will provide operational and technical support to the PMR Working Groups (WGs) in the formulation of Terms of Reference, and performing the necessary internal control functions to ensure that activities are carried out as per rules and guidelines.



The PMU (at UNDP) provides operational and technical support for PMR project implementation – it also serves as secretariat for the SC

On the government side, a Steering Committee and three Working Groups was established by CMEA. The Steering Committee consists of high-level officers from CMEA, MoEF, Bappenas, MoI, MoF and MEMR.

As the PMR Indonesia focal point, CMEA's roles would be:

a. Overall coordination with stakeholders
b. Representing GoI in Project Board
c. Oversighting PMR Indonesia project to ensure its compatibility with the MRP
d. Hosting the PMR Indonesia Steering Committee

The working groups (WGs) which responsible to implement PMR Indonesia, namely:

1. the WG of Power - coordinated by Ministry of Energy Mineral Resources (MEMR)
2. the WG of Industry - coordinated by Ministry of Industry (MoI)
3. the WG of Market-Based Instruments (MBI) – coordinated by Ministry of Environment and Forestry (MoEF)

The roles of the Working Groups are to: (a)

a. Together with PMU, formulate detailed work plan based on an agreed baseline;
b. Facilitate planning and implementation of PMR's studies and activities, e.g. approve TORs;
c. Discuss PMR Indonesia's activities progress and results;
d. Provide improvement advices as necessary to ensure programme objectives are achieved.

Representatives from National Development Planning Agency (Bappenas), Ministry of Finance (MoF), National Electricity Company (PT PLN), industry associations, etc. were also involved in the working groups.

Indicators

The project objective were further translated into 5 project level components and indicators as follows:

Components	Indicators
Profiling emissions in the power and industry.	Reports on GHG Abatement cost curve analysis of power generation and energy intensive industries.
Design of governance aspects of an MRV system.	• Rules, regulations, and procedures on MRV. • Institutional set up for MRV.

	• Capacity building and awareness raising activities for sectoral MRV system in power and energy-intensive industries.
Piloting an MRV systems.	• Map of MRV activities at the installation level in Indonesia. • Monitoring protocols. • Data management system at the installation level. • GHG emission data and review on the MRV system at the installation level and at an aggregated data management level.
Development of a market-based instrument framework.	• Comprehensive assessment report on MBI options for Indonesia • Design of selected market-based instruments for the selected sector. • Draft policy(ies) required for the establishment and implementation of MBI. • Piloting the market-based instrument in the selected sector.
Organization, communication, consultation and engagement.	• Market readiness communication and information tool. • Stakeholders awareness and capacity of MBI options for climate change mitigation. • Stakeholders involvement in MBI discussion.

The first three components are no-regret support that is independent to MBI's implementation decision but is essential as core technical readiness if Indonesia would like to implement non-crediting type MBIs.

3. IMPLEMENTATION REPORT BY COMPONENT

Differences between the Objectives/Activities in the Market Readiness Proposal and the Grant Agreement

Are there any important and material differences between the objectives/activities proposed in the Market Readiness Proposal and endorsed by the Partnership Assembly of the PMR and those agreed to in the Grant Agreement with the Delivery	No

Partner and described in the Project's Results Framework?	

There is a difference between the Market Readiness Proposal and the Project Document in regard to industry's MRV pilot area that is deemed as not material. The MRP proposes cement sector as the MRV pilot area for energy-intensive industry but due to substantial delay in implementing the MRP, cement sector currently is in advance stage in preparation of its sectoral MRV system. Therefore, during the development of Project Document, the Government of Indonesia (GoI), cq. Ministry of Industry, proposes pulp-and-paper industry as the new MRV pilot sector.

This change will not affect the work plan much since pulp-and-paper industry belongs to energy-intensive industries group which will be consulted by the project in any other way.

Implementation Progress by Component

A. Component 1: Profiling emissions in the power and industry	
Status:	**Under Implementation** The component focusses on providing information to support the development of policies on GHG mitigation action in the target area, including the decision making on the implementing of a marked-based instrument. Study will be implemented to calculate and project baseline emissions, estimate potential emissions reduction, and estimate CO2 abatement cost of mitigation actions in power and energy intensive industry. The term of reference (TOR) for consultancy services has been developed by power and industry working groups PMR in the period of March – May 2017. During TOR development, there were five stakeholders meeting conducted with more than 150 participants participated both from power and industry working group. The areas covered within this TOR are power sector, cement industry, pulp and paper industry, chemical industry, fertilizer industry, food and beverage industry, iron and steel industry, textile industry, and ceramic and glass industry. The scope of works of TOR are including: Scope of work 1 Preparation of the overview of Indonesia's power and industry sectors Scope of work 2 Provide and develop GHG emissions baseline for the Indonesia's power sector

	Scope of work 3 Estimate potential of emission reductions and abatement cost of mitigation actions Scope of work 4 Develop a comprehensive final report Scope of work 5 Ensuring stakeholder participations The TOR has been reviewed and endorsed by Ministry of Coordination of Economic Affair, Ministry of Energy and Mineral Resources and Ministry of Industry to be tendered out by UNDP. Through process of open tender, UNDP has evaluated several bidders and selected the winning consultant on September 2017. It is expected that the project will start in the beginning of October 2017 and the final report will be submitted not later than 8 (eight) months from the commencement date. A total of 15 experts are expected to be on board by October to support the study in GHG emission profiling. Due to the large scale of target population and complexity of industry sub-sectors to be engaged within the study, and the fact that the study will only be conducted in limited period of time (less than a year); the industry working group proposed to have preparation meetings. Two meetings have been held on July and September, not only as preparation for the activity implementation, but also to ensure the commitment of each stakeholders who will be involved in the study. The meetings were participated by more than 50 people from the members of industry WG including the technical directorates within MoI which responsible for each of the sub-sectors, and some of the industrial associations as well as their member companies.
Comments:	n/a
B. Component 2: Design of governance aspects of an MRV system	
Status:	**Under Implementation** As proposed in the MRP, the project will design the governance aspects of the MRV system using the existing building block and initiative. So far, there are some capacity for measurement, calculation and reporting within MEMR for electricity production and within MoI with their initiative in Industries' GHG reporting system. • **Mapping of MRV system**

	In order to have updated and clear information of MRV system, study is conducted to mapping the MRV of GHG emission in the national and sectoral level, especially in the power and industry sectors. The consultant has submitted the draft report and presented it in the power and industry working group meeting for inputs and feedback. The final report is expected to be available by Q4 2017. In addition to that, a meeting coordinated by CMEA and participated by both power and industry working group, and inviting key speakers from Ministry of Environment and Forestry, experts from academic institutions and National Standardization Agency, was held in July 2017 to discuss the scope of activity and workplan under component 2. It was clear that GoI, including both WG member still have limited knowledge on overall understanding of MRV, specifically related with MRV for GHG emission inventory, and its differences with MRV for mitigation actions. • **Design of MRV system in power sector** Two power working group meetings have been conducted to discuss the preparation of design of MRV system in power sector. It was agreed that the development of MRV guideline need to be started by 2017. Currently, MEMR is using a Clean Development Mechanism (CDM) methodology to develop national grid emission factor. The existing experience will be the basis for the MRV guideline development. TOR for consultancy service is being developed. It was also identified the need to support the development of draft regulation. • **Design of MRV system in Industry sector** An industry WG meeting held in September, paralleled with preparation meeting of GHG emission profiling discussed the preparation of overall design of MRV system for industry sector. Representatives from cement sector shared their steps and challenges in developing their MRV scheme, in which the other sub sectors were very keen to learn from cement sector, as they can be considered already in an “advanced” stage of developing their MRV scheme. The options for sub sectors to be MRV pilot were also discussed. Although the MRP mentioned cement sector to be the pilot, and the Project Document states pulp and paper to be the pilot; the industry WG proposed 3 sub sectors to be the pilot: cement, pulp and paper, and fertilizer. Having said that,

	MoI as the coordinator of WG, were not ready to finalize their decision on which sub sectors to be the pilot. The reason was because by learning from cement industry, the key aspect to develop a well-established MRV scheme are to ensure the commitment from association, and to ensure that the baseline calculation can be accounted for. Thus, the decision on which sub sectors to be the pilot will depend mostly on the progress of GHG emission profiling results. • **Capacity building on MRV** Several capacity building events and awareness raising campaign on MRV of GHG emission are planned to be conducted parallel with the profiling study. Training on measurement and quantification of GHG emission will be implemented in nine sub sectors as indicated above. One awareness raising campaign on MRV will be conducted targeting relevant senior staff of government and private sector related to the climate change. One technical training on validation and verification will also be conducted in Q1 2018. Prior to that, one capacity building on MRV, focusing on calculation and measurement of GHG emission has been conducted for food and beverage industry in August 2017. As one of sub sectors which still have limited knowledge and in the premature stage of preparation on GHG emission calculation compared to other sectors, and considering the high number of population within this sub sectors; hence MoI proposed this training on GHG emission calculation, to be held using IPCC GL 2006. More than 70 people from food and beverage industries and associations participated in the training.
Comments:	n/a
C. Component 3: Piloting an MRV system	
Status:	**Under Planning** The works in Component 3 is closely related to the works in Component 2. The MRP proposes to develop and pilot MRV systems for: 1. Electricity generation – with the JAMALI interconnected grid as the pilot area; and

	2. Energy intensive industries – with pulp & paper as pilot area. Power generation capacity in the islands of Java, Madura, and Bali is accounted for around 65% of total Indonesia's power generation capacity in 2016. These islands have integrated grid connection, which is known as JAMALI interconnected grid. Piloting an MRV system in JAMALI interconnected grid will be implemented in series with the development of MRV guideline as mentioned in component 2. It is expected that the coverage and schedule of piloting will be discussed and identified within the Power Working Group during the development of MRV guideline. JAMALI grid itself consists of more than 300 powerplant units of various types and technologies and is the main source of GHG emissions from Indonesian power sector. Related with MRV pilot for industry, as mentioned above in status under component 2; as a result from industry WG meeting conducted in September, MoI as the coordinator of WG, were not ready to finalize their decision on which sub sectors to be the pilot. The decision on which sub sectors to be the pilot will depend mostly on the progress of GHG emission profiling results. It is expected that by end of 2017, the decision will be made whether pulp & paper alone will be the pilot sub sector or other sub sector, such as fertilizers, will accompany pulp & paper as pilot.
Comments:	n/a
D. Component 4: Development of a market-based instrument framework	
Status:	**Under Implementation** This particular Component implementation is under the supervision of Working Group of Market-Based Instrument. The WG is led by Ministry of Environment and Forestry and the members are representatives from other ministries, such as Ministry of Finance, National Development Planning Agency (Bappenas), Ministry of Energy and Mineral Resources, Ministry of Industry, and relevant industry associations. This Component has four main activities as follow: 1) A comprehensive assessment report on MBI options for Indonesia.

	2) Design of selected market-based instruments for the selected sector. 3) Draft policy(ies) required for the establishment and implementation of MBI. 4) Piloting the market-based instrument in the selected sector. As per the MRP, the first activity will be conducted in the first 1.5 year of MRP implementation. For this activity, procurement of consultant firm to study market-based policy options to scale up climate change mitigation in Indonesia has been started in August 2, 2017 with closing date of proposal submission was August 28, 2017. Eight proposals were received and being evaluated and the assignment is estimated to start in October 2017 for 40 weeks of duration. The outputs of this study are compiled experience of MBI in other countries, MBI options for Indonesia and a selected priority MBI option to be further elaborated by PMR project. The Term of Reference for this study was developed in participatory approach with the MBI Working Group in three meetings, namely in 14 June, 21 June, dan 10 July 2017. The study results of market-based policy options to scale up climate change mitigation in Indonesia is very important since it will be an important reference for further MRP implementation. MBI itself is not a common knowledge in Indonesia even among government officers. To levelize the knowledge and reach common understanding about MBI, CMEA organized two technical workshops on MBI in 10-11 August 2017 and 28-30 August 2017. The technical workshops was led by Director for Environment Protection of CMEA and Director of Regional and Sectoral Resource Mobilization of MoEF, attended by WG MBI members and representatives from Assistant to President's Special Envoy for Climate Change (UKP-PPI), MoF (Fiscal Policy Agency), MoEF (DG Climate Change), MoI (Green Industry Research Center), MEMR (DG Electricity and DG Renewable Energy), Bappenas, National Electricity Company, five Industry Associations, and several representative from private sector. The topic in this workshop covers the MBI definition, types, design principles, implementation challenges, etc. The discussions in those workshops are very constructive to build common understanding of MBIs and its uses.

	The MBI Working Group had also agreed on short term work plan (until end of 2017) that consists of MBI training workshops (completed), MBI perception survey, summarizing and translating several PMR Technical Notes, and technical meeting/assistance by demand.
Comments:	The needs for innovative financing for climate change, particularly to achieve NDC, is understood by the stakeholders considering the limited resources that Government have. Therefore, utilization of market-based instruments is becoming more interesting especially in order to provide flexibility for private sectors and incentize early actions. The MBI Working Group, as the stakeholders' representative, hosts the exploration of MBI policy options with PMR support. Interest toward MBI is being built by the Working Group's activities and future WG activities will be organized inline with the MBI options assessment study progress. This is to ensure that the WG -and wider stakeholders- can optimally tap the MBI learning curve developed with the study.
E. Component 5: Organization, communication, consultation and engagement	
Status:	**Under Implementation** In PMR, the CMEA (Coordination Ministry for Economic Affairs) would be the primary beneficiary of this project, while MEMR (Ministry of Energy and Mineral Resources) and MoI (Ministry of Industry) would be the main beneficiaries of the program. Meanwhile MoEF (Ministry of Environment and Forestry) as the focal point of UNFCCC would need to be provided with status of this project and invited to provide input in the planned carbon accounting activities. Likewise, the Ministry of Finance (MoF), and National Development Planning Agency (Bappenas) would play an important role in mainstreaming this project into the national development plans and the national budgeting system. Key important milestones and activities were implemented, among others: • The kick-off meeting was conducted on 1 March 2017, led by CMEA and attended by all relevant agencies, among others: Bappenas, Ministry of Finance (MoF), Ministry of Environment and Forestry (MoEF), Ministry of Industry

	(MoI), Ministry of Energy and Mineral Resources (MEMR), PT PLN (state owned electricity company), industry associations (cement, pulp and papers, etc.) • A Steering Committee and three Working Groups were established, which responsible to work on three different thematics program: (1) WG for Power – lead by MEMR (2) WG for Industry – lead by MoI (3) WG for MBI – lead by MoEF • A Project Management Unit has been established to facilitate the PMR program implementation and also served as National Secretariat for PMR Indonesia. • For communications and awareness raising, the project produced brochures and other comms/campaign materials. • For extensive outreach, a special website is being established and -subject to stakeholders consultation- will be launched with following address: www.pmr-indonesia.org, in October 2017. Series of working group consultation meeting had been facilitated since the launch on 1 March 2017. Between March-September there were 31 meetings held (see Annex).
Comments:	n/a

4. PROGRESS, CHALLENGES, AND LESSONS LEARNED

Important policy or regulatory developments related to the Grant's objectives and activities:
Developments: **1. Paris Agreement & Nationally Determined Contribution (NDC)** Paris Agreement (PA) was adopted by Parties with universal commitment to prevent adverse impacts of climate changes. Indonesia signed the PA on April 22 2016 at United Nations Headquarters in New York. Indonesia ratified Paris Agreement through Law No. 16 Year 2016 on 25 October 2016.

As stated in Paris Agreement Decision 1/CP.21 Paragraph 22, one of implementation of PA is NDC submission to UNFCCC. Indonesia submitted INDC to UNFCCC Secretariat in September 2015 and followed by submitted first NDC on 6 November 2016, which has pledged to unconditionally reduce 29% and conditional reduction target up to 41% of the BAU scenario by 2030. The BAU scenario is projected approximately 2,869 $GtCO_2e$ in 2030 which is up-dated from the BAU scenario on the INDC due to current condition on energy policy development in particular in coal fired power plant.

Table 1. Projected BAU and emission reduction from each sector category

No	Sector	GHG Emission Level 2010*	GHG Emission Level 2030 (MTon CO_2e)			GHG Emission Reduction (MTon CO_2e)		GHG Emission Reduction % of Total BaU		Annual Average Growth BAU (2010-2030)	Average Growth 2000-2012*
		MTon CO_2e	BaU	CM1	CM2	CM1	CM2	CM1	CM2		
1	Energy*	453.2	1,669	1,355	1,271	314	398	11%	14%	6.7%	4.50%
2	Waste	88	296	285	270	11	26	0.38%	1%	6.3%	4.00%
3	IPPU	36	69.6	66.85	66.35	2.75	3.25	0.10%	0.11%	3.4%	0.10%
4	Agriculture	110.5	119.66	110.39	115.86	9	4	0.32%	0.13%	0.4%	1.30%
5	Forestry**	647	714	217	64	497	650	17.2%	23%	0.5%	2.70%
	TOTAL	**1,334**	**2,869**	**2,034**	**1,787**	**834**	**1,081**	**29%**	**38%**	3.9%	3.20%

* Including fugitive **Including peat fire

Notes: **CM1** = Counter Measure (*unconditional mitigation scenario*)
CM2 = Counter Measure (*conditional mitigation scenario*)

The NDC describes the enhances actions and the necessary enabling environment during 2015-2019 period that will lay the foundation for more ambitious goals beyond 2020. As indicated in NDC, Indonesia welcome bilateral, regional and international cooperation in the NDC implementation as recognized under Article 6 of the Paris Agreement, that facilitate and expecite technology development and transfer, payment for performance, technical cooperation, and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future.

As a progress of NDC implementation, Government of Indonesia has:

- Integrated NDC elements into development planning (President's Instruction to Minister of National Development Planning and Minister of Environment and Forestry).
- Translating 'Transparency Framework" under Article 13 of PA into national context, includes development of National Registry System, enhancing MRV and other relevant system.
- Strengthening policies in key sector categories (forestry, energy, agriculture, IPPU and waste) and related sectors.
- Strengthening international cooperation/partnership (bilateral, multilateral and regional).

Furthermore, the implementation strategy of NDC consists of 9 programs, as follows:

a. Build ownership and committment
b. Capacity building
c. Enabling environment
d. Work framing and communication
e. GHG one-data policy
f. Intervention policy, planning and program
g. Design the NDC implementation guidance
h. NDC implementation
i. NDC monitoring and review

2. Ministry of Energy and Mineral Resources's Regulation on Monitoring, Reporting and Verification (MRV)

Based on the Ministerial Regulation No. 14 Year 2012 under Ministry of Energy and Mineral Resources (MEMR) on energy management, stated that for each companies that consumed energy more than 6000 TOE annually should report their periodic energy use to the Government. As a reporting platform, MEMR developed a reporting application called Energy Management Online Reporting (*Pelaporan Online Manajemen Energi-POME*).

Currently, the MEMR is drafting a regulation in regards of energy sector's emissions MRV. The regulation will support the reporting obligation as mentioned above as well as establishing the MRV framework of energy sector's GHG emissions.

3. Ministry of Industry's Regulation on Cement MRV

Emission reduction road map in cement industry is outlined in the Ministry of Industry Regulation No. 12 Year 2012. As stated in the regulation, the road map will be used as national planning reference, covering strategy, policy and program/action plan, to reduce emission in cement industry in Indonesia during 2011-2020. Specifically, cement industry should reduce their GHG emissions voluntarily by 2% during 2011-2015 and mandatory by 3% during 2016-2020 (both from baseline level of 2009).

Cement industry, represented by their association, had agreed and developed MRV guidelines for their emissions in accordance with The Cement Sustainability Initiative (CSI) standard. This guideline has been published in Bahasa Indonesia and had been used by Indonesian cement industries. Currently, the Ministry of Industry is drafting a regulation to adopt the guideline and establish MRV framework for Indonesian cement indutry.

4. National Energy Plan

In March 2017, President of Republic of Indonesia signed the Presidential Regulation No. 22 Year 2017 of the National Energy Plan (*Rencana Umum Energy Nasional-RUEN*). RUEN provides directives for national energy management towards energy independence and national energy security. Key figures in this regulation are references for actions toward national energy targets achievement of 23% renewable energy in 2025 national energy mix and national energy intensity decrease by 1% per annum in 2015-2025.

Challenges:

Climate change is gaining attention and committment of the Government of Indonesia. More and more sectoral policies are issued or being developed to cope with climate change challenges. Whilst this is an overall positive development, both for PMR and low carbon development, there might be aspects that will need better inter-ministerial harmonization. CMEA, as one of the coordination entity in Indonesia, is working closely with sectors to identify overlaps/gaps and improve the policy frameworks where necessary.

Lessons learned:

Involve key stakeholders throughout the dialogue process. Changes in government regimes often encourage policy changes that sometimes occur quickly in a short time. This changes occassionally create disharmony among institutions that culminate in the non-synchronization of inter-ministerial policies. Proactive engagement of key stakeholders in early stage of the process will be useful in reducing the disharmonization of policies between ministries and agencies. With updated information acquired by CMEA (as one among coordination entities), PMR project could quickly adapt or fine-tune its activities in accordance with the newest policy development or contribute in the policy development processes.

Important changes in the technical design or approach related to the Grant's activities:

Developments:
n/a

Challenges:
n/a

Lessons learned:
n/a

Key capacity issues (implementation, technical, financial management, procurement) related to the Grant's activities:

Developments:

- Several relevant ministries are developing MRV system of GHG emission both in national level and sectoral level. Integration is needed to ensure systems' effectiveness and efficiency. However, the current capacity to develop seamless integration among reporting system is still lacking. During WG meeting, MoI and MoEF proposed to CMEA for PMR to support this integration, for example to link the web-based reporting system between MoEF and MoI, as both of them have their own modalities on GHG emission reporting.
- MRV and market based instrument topics are highly technical and requires PMR to support training for working groups members.

Challenges:

- Many kind of MRV system is being developed without a clear reference to types of MRV which often leads to confusion because the nature of MRV-related activities differs per context and application. Not to mention, several Ministries have their own different modalities for GHG emission reporting.
- Tailored trainings are needed to bring the working group's understanding in the same level. Different target sectors may require different modules of the training, depending on which type of guideline they will use (i.e. cement using CSI protocol, others using IPCC GL 2006, etc.)

Lessons learned:

Promoting a flexible approach to tehnical dialogue will enables the harmonization of policies to proceed smoothly through a continuous and gradual process, resulting in mutual agreement and mutual understanding to achieve a common goal in order to reduce GHG emissions while maintaining national economic growth - which in its implementation is sometimes contradictory. Flexible approach in this case means that there is no right or wrong established preliminarily. All stakeholders are invited to express their opinions and understanding and synthesis are encouraged afterwards.

Coordination with other carbon pricing initiatives, including those funded by other donors:

Developments:

A couple of carbon pricing-related initiatives funded by other donor are described as below:

- **World Bank - NDC Partnership Support Facility (NDCP-SF)**

  This program is a collaboration of the World Bank with a grant facility supported by the German Government. The NDCP-SF supports implementation of the NDCs submitted by WBG clients within the Paris Agreement in a variety of ways, including investment lending or technical assistance projects and through analytical work on regional or sectoral strategies. In Indonesia, the NDCP-SF main counterpart is the Fiscal Policy Agency of Ministry of Finance and the National Development Planning Agency (Bappenas), which is also PMR's main stakeholders.

  NDCP-SF in Indonesia, according their latest work plan, has two components of activities that should be completed by 2018. Component 1 consists of support for economic and fiscal policy reforms for climate change mitigation and adaptation. The proposed activities would support the GoI in implementing the NDC by assessing the macroeconomic, fiscal and distributional effects of various policy and fiscal tools to meet the NDC emissions targets.

  The main outputs of this component include:
  1. A note that provides a peer-review and recommendations for improving the BKF budget tagging methodology.
  2. A study to provide recommendations on how to establish the most promising carbon market mechanisms, including carbon pricing, to reduce carbon emissions in Indonesia, and the macroeconomic and fiscal costs and benefits of such an initiative.
  3. A study to provide recommendations for nurturing green industries in Indonesia that could act as a viable source of significant growth in the medium-term.
  4. A compendium of possible fiscal instruments that could be used to effectively reduce emissions in Indonesia and recommendations on additional fiscal channels which can implemented to help Indonesia reach the NDC.
  5. Note on implementation administration options of introducing carbon taxation, including how best to use existing systems to facilitate its collection with minimal additional work by taxpayers.
  6. Summary Policy Note on key macroeconomic and fiscal effects associated with selected fiscal instruments to mitigate adverse impacts on disadvantaged industries/households, as well as channels to extend and fine tune the analysis.

7. One policy workshop presenting the key results of the Notes and background papers – including key stakeholders from government, NGOs and the private sector.
8. One or more technical workshops will be held with relevant staff from the Ministry of Finance, Ministry of Planning, Ministry of Environment and Ministry of Energy.
9. Outreach activities to further increase awareness the role of fiscal instruments and initiatives in reducing emissions and mitigating climate change.

The second Component is Rapid Assessment of GHG Emissions Modeling Framework for LULUCF and Energy Sectors. Funding from the NDC Partnership Facility is sought to support two deliverables:

(i) An assessment of the current emissions model, including methodology, data sources, stakeholder consultations, institutional capacity, etc. The assessment will be compared to other modelling approaches and will identify gaps and needs, identifying possible solutions based on best practices.
(ii) A proposal for follow up technical assistance for strengthening the modelling framework, tools and other measures to enhance the quality of the modelling and underlying assumptions as well as the institutional capacity to carry out strengthening measures.

- **GEF - Market Transformation through Design and Implementation of Appropriate Mitigation Actions in Energy Sector (MTRE3) – UNDP**

  The project funded by the Global Environment Facility (GEF) with UNDP Indonesia as delivery partner and implemented in 2017-2020. Indonesia through Ministry of Energy and Mineral Resources (MEMR) is cooperating with GEF and UNDP to support the design and implementation of climate change mitigation actions in energy generation and energy end use sectors (especially buildings), including the support to develop the micro-hydro power plants. The implementation of project through five component activities, namely: (A) technical review; (B) institutional arrangements, monitoring and evaluation; (C) financial planning and co-financing investments; (D) validation workshop; and (E) completion.

  A couple of deliverables that will have strong correlation with PMR are: (a) abatement cost curve and baseline for renewable enery and energy efficiency in buildings; and (b) sectoral MRV and registry for RE and EE.

Challenges:

In general, the existence of other carbon pricing-related initiatives is providing leverage for PMR Indonesia. However, there are several challenges:

- The different timeframe may hamper coordinated efforts between initiatives. The NDCP-SF activity in Indonesia for example, has to end in mid-2018. Around the same time, PMR study of market-based policy options would only reach compilation stage of other countries experience in implementing/planning market-based instruments. Therefore, there is a risk that the results of NDCP-SF may be presented as a fait-accompli of PMR results considering the overlaps in stakeholder structure.

- The different priorities of initiatives may also hamper coordination. MTRE3, for example, is working in MRV of renewable energy and energy efficiency in building whilst PMR is in the MRV of power and industry. Ideally, the MRV outputs under MTRE3 will partly be input to the MRV system developed under PMR. However, since the focal points are different then there are risks that the MRV systems developed are not integrated into a complete sectoral MRV system of GHG emissions.

To addressed those challenges, PMR will seek for closer coordination with the above initiatives or any other identified later. Among the coordination challenges are the schedule of the related personnel and probably the initiatives' inability to flexibly adjust their schedule for better coordinated results.

PMR Indonesia's focal point will also seek coordination with national counter parts of the above initiatives, or any other identified later, to encourage cooperation among initiatives and reduce the risks of overlapping. PMR Project will use informal and formal mechanisms that facilitate the coordination among donor programs, and the exchange of information, to ensure that assistance resources are used effectively and strategically with minimal duplication of effort.

Lessons learned:

Coordinate with other programs/donors. The sooner the information about related initiatives is known by PMR Indonesia is the better. PMR Indonesia has been doing related initiatives mapping in the beginning of the project but it is most likely not perfect. We encourage other initiatives as well as its donor agency to conduct similar mapping and reach out to PMR Indonesia if they see potential cooperation or overlap with PMR Indonesia.

Special problems arise when several programs/donors are working in a particular area in a country to solve related policy problems. These parallel activities are often based on differing assumptions, goals, and approaches that emerge from bilateral dialogue. Multilateral policy dialogue requires greater donor coordination than do other types of assistance activities. Policy reform initiatives will be more successful if they send consistent signals concerning the need for modified choices and actions with respect to preferred outcomes.

Stakeholder engagement related to the Grant's activities:

Developments:

In PMR, the CMEA (Coordination Ministry for Economic Affairs) would be the primary beneficiary of this project, while MEMR (Ministry of Energy and Mineral Resources) and MOI (Ministry of Industry) would be the main beneficiaries of the program. Meanwhile MoEF (Ministry of Environment and Forestry) as the focal point of UNFCCC would need to be provided with status of this project and invited to provide input in the planned carbon accounting activities. Likewise, the Ministry of Finance (MoF), and National Development Planning Agency (Bappenas) would play an important role in mainstreaming this project into the national development plans and the national budgeting system.

Key important milestones and activities were implemented, among others:

- The kick-off meeting was conducted on 1 March 2017, led by CMEA and attended by all relevant agencies, among others: Bappenas, Ministry of Finance (MoF), Ministry of Environment and Forestry (MoEF), Ministry of Industry (MoI), Ministry of Energy and Mineral Resources (MEMR), PT PLN (state owned electricity company), industry associations (cement, pulp and papers, etc.)
- One Steering Committee and three Working Groups were established, which responsible to work on three different thematics program:
    (1) WG for Power – lead by MEMR
    (2) WG for Industry – lead by MoI
    (3) WG for MBI – lead by MoEF
- The Steering Committee consists of reperesentation from relevant government institutions/ministries (*Director General – or echelon 1 level*) and from Industry Associations.
- The Working Groups memberships consist of reperesentation from relevant government institutions/ministries (*echelon II or III*), private sectors, and industry associations.
- The working groups meet regularly to discuss every aspect of program/project implementation and make decision on technical issues emerged during project implementation.

Challenges:

Inter-ministerial Dialogues
Most of the works in PMR requires strong support and involvements from relevant institutions/ministries. To get all stakeholders into a dialogue and come to an agreement is the main challenge. This is a multi-stakeholders' process

which requires intensive consultations and dialogues – which potentially could delays program implementation.

Change in Government staffs or structure

There is a risk is that changes in government staffs/structure could result in a change in leadership among the key government bodies, with implications for the loss of institutional memory. Between January and September 2017, there has been changes of staffs (heads of technical or administrative departments) at CMEA, MEMR, and MoI.

Managing Political Risks

Perhaps the most important risks to the project are sustainability/replicability and coordination. There is a risk that results produced by project will not be sustained beyond the project lifetime. There is also a risk that project results will not be scaled up. This risk is largely due to political commitment to apply policy reforms. Given that these results emerged through external financing and support, key project results must be sufficiently institutionalized if the larger outcomes are to be sustainable.

Lessons learned:

Strong government leadership and continuous engagement is important in the managing the conflicting priorities and interests of each institution/ministry. The project is responsible to facilitate the dialogues process to be constructive and point towards achievement of planned (targeted) output. Additionally, the project must select activities to strengthen institutional mechanisms for improved coordination and collaboration. These include negotiating best consultative processes and memoranda of understanding.

Champions (keyindividuals) within each institutions needs to be supported/encouraged to anticipate changes of leadership in the key government bodies, to preserve and retain the institutional memory.

Other issues related to the Grant's activities :

Developments:
n/a

Challenges:
n/a

Lessons learned:
n/a

Please describe any developments, challenges and lessons learned regarding any other issue related to the achievement of Grant's objectives and the implementation of the Grant's activities.

5. ADDITIONAL INFORMATION

In this Section, please provide any additional information that may be relevant for the achievement of the Grant's objectives and/or the implementation of the Grant's activities. Please also provide any relevant information related to carbon pricing and the use of market-based instruments for climate change mitigation.

Paris Agreement and NDC committment induced fast-changing climate-related policy landscape in Indonesia, therefore one of the key factors assumed for successful PMR implementation in Indonesia is the abilities to (a) quickly adapt to new policies and (b) influence policy development with valid information and findings. The latter is particularly relevant for carbon pricing and the use of market-based instruments for climate change mitigation in Indonesia.

Discussions on how to get the second factor have been rolled and one of the evolving synthesis of the discussion is that there's a solid need to work more on how to generate demands of emissions reduction units. One of the strategy that is in discussion within the MBI Working Group is to develop domestic crediting mechanism and pre-start the market-based instruments piloting component of PMR Indonesia with this mechanism.

Even though the Indonesian MRP does not foresee crediting-type instrument development with PMR support -since the Nusantara Carbon Scheme (NCS) was being developed by the National Council of Climate Change (DNPI) then prior to its disbandment in 2015- but present situation will take benefit from development of domestic crediting mechanism. The first reason is that any non crediting-type mechanism most likely will use or link with domestic offset units and the second reason that it is necessary for the stakeholders to have concrete exposure to market-based instruments so that further MBI discussions can be enriched with concrete experience, effective and straight-forward.

Annex: List of Meetings – PMR Indonesia 2017

No	Date	Description
1.	15 -18 February 2017	PMR Internal Consolidation meeting at CMEA
2.	1 March 2017	PMR Project Kick Off Meeting
3.	2 March 2017	Coordination meeting with MEMR
4.	9 March 2017	Coordination meeting with MoF
5.	15 March 2017	Coordination meeting with MoEF
6.	16 March 2017	Coordination meeting with MoI
7.	30 March 2017	Consolidation meeting of Power Working Group
8.	7 April 2017	Internal Coordination meeting CMEA-PMU PMR
9.	10 April 2017	Kick-off and FGD for MBI Working Group
10.	13 April 2017	Consolidation meeting of Industry Working Group
11.	17 April 2017	FGD Carbon Market
12.	2 May 2017	Coordination meeting with MEMR
13.	8 May 2017	TOR development with Industry Working Group
14.	16 May 2017	Coordination meeting with PLN
15.	18 May 2017	TOR development with MBI Working Group
16.	19 May 2017	TOR development with Power and Industry Working Group
17.	2 June 2017	Monitoring and Reporting GHG Emissions for Food Industry
18.	7 June 2017	Presentation in Climate Change Corner - MoEF
19.	14 June 2017	TOR development with MBI Working Group
20.	21 June 2017	TOR development with MBI Working Group
21.	22 June 2017	Coordination meeting with MoI
22.	10 July 2017	TOR development with MBI Working Group
23.	17 – 18 July 2017	FGD MRV for Power and Industry Working Group
24.	18 – 19 July 2017	Preparation for GHG Profiling with Industry Working Group
25.	3 – 5 August 2017	GHG Reporting for Power Working Group
26.	10 – 11 August 2017	MBI Capacity Building for Power and Industry Working Group
27.	14 – 16 August 2017	GHG Reporting for Beverage Industry
28.	28 – 30 August 2017	MBI Workshop for MBI Working Group
29.	6 September 2017	Preparation for MRV Guideline Development for Power Working Group
30.	14 September 2017	Panel Discussion: Improving clean energy use with market-based policy instrument
31.	18 – 20 September 2017	Preparation for GHG Profiling and MRV System Development with Industry Working Group