



# *Transparency in the Energy Sector*

## *Philippines*

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# *NICCDIES*

## *National Integrated Climate Change Database Information and Exchange System*

Envisioned to be an **integrated climate information portal** to track the actions necessary to address climate change issues.

Aims to consolidate and monitor, among other things, data and information on climate change actions and support.



# *NICCDIES*

## *National Integrated Climate Change Database Information and Exchange System*

NICCDIES platform launched May 2018.

- Other modules are either currently being developed or are yet to start.



# *STATUS: NICCDIES*

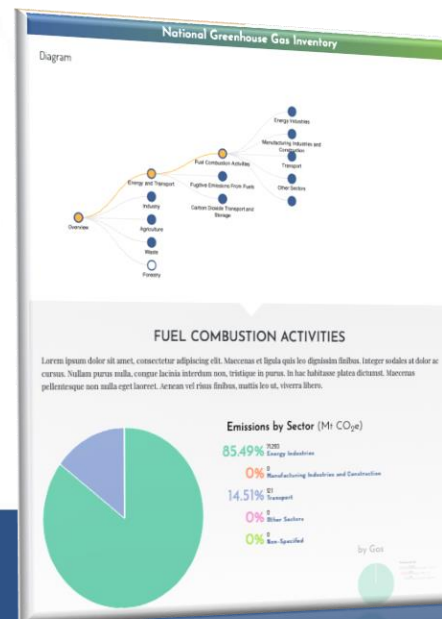
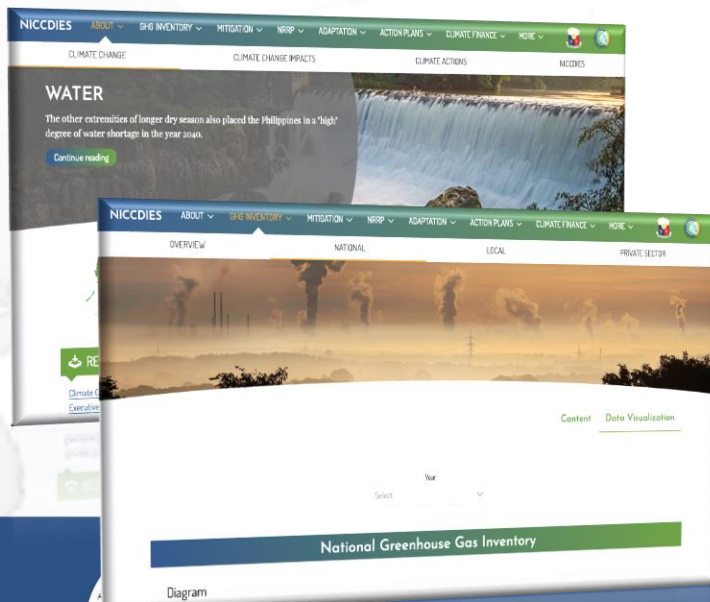
## *(modules concerning the energy sector)*

<b>NICCDIES MODULE</b>	<b>STATUS</b>
GHG Inventory	Development is almost finished, with minor revisions
Transparency for NDC Actions (Mitigation & Adaptation)	There is existing tool for MRV of mitigation actions; for enhancement.  No framework or tool yet for MRV of adaptation actions.
Transparency of support	No framework yet.
Climate change expenditure tagging	DONE.

# NICCDIES

## National Integrated Climate Change Database Information and Exchange System

<https://www.niccdies.ph>



# *Greenhouse Gas Inventory*

## *Energy and Transport Sector*

*Executive Order 174 (s. 2014) - Institutionalizing the Philippine Greenhouse Gas Inventory Management and Reporting System*

- Established the Philippine GHG Inventory Management and Reporting System in relevant government agencies to enable the country to *transition towards a climate-resilient pathway for sustainable development.*



# *Greenhouse Gas Inventory*

## *Energy and Transport Sector*

*Executive Order 174 (s. 2014)* - Institutionalizing the Philippine Greenhouse Gas Inventory Management and Reporting System

The Climate Change Commission (CCC) shall develop a system for the archiving, reporting, monitoring, and evaluating GHG inventories in all key sectors.



# *Roles*

Climate Change Commission – overall lead in the implementation of the executive order

Lead agencies:

- *Department of Energy – for the energy sector*
- *Department of Transportation – for the transport sector*
- Department of Agriculture and the Philippine Statistics Authority – for the agriculture sector
- Department of Environment and Natural Resources – for the forestry, waste, and industrial processes sectors





# *Greenhouse Gas Inventory*

## *Energy and Transport Sector*

### *January 2018*

- Institutionalization of the GHG Inventory Team of the Transport Sector (Air, Rail, Water, and Road)

### *March 2018*

- Institutionalization of the GHG Inventory Team of the Energy Sector

### *September 2018*

- Self-assessment on the conduct of GHG inventory for the energy sector

### *October 2018*

- Official submission to the CCC of the 2010 GHG Sectoral Inventory for the Energy and Transport Sectors

### *May 2019*

- QA/QC workshop with UNFCCC



# *MRV tool for energy sector mitigation actions*

The Philippine Department of Energy has an existing MRV template, which is currently being reviewed and enhanced further.

Formulation of the MRV templates for other sectors including **transport** is ongoing.

Both MRV templates would be reflected eventually in the NICCDIES.



# MRV tool

MRV Template: Implemented Mitigation Actions			
	<i>Annotation</i>	<i>Example 1 (Renewable Energy (RE) &gt; Solar RE)</i>	<i>Sample Notes/Comments from Preparer</i>
<b>Period covered:</b>	State the evaluation period for actual implementation of mitigation action(s)	January 1, 2020 - Dec 31, 2020	
<b>Title of the Overarching Policy, Plan, or Program:</b>	Name of the main policy, plan, or program that govern the implementation of the GHG mitigation strategy/action	<b>National Renewable Energy Program (NREP)</b> , as enshrined in the Renewable Energy Act (RA 9513)	Includes all incentives, actions, plans under RA 9513
<b>Description of the Policy, Plan, or Program</b>	Describe the overall policy or program and its features, including targets, start and end dates, components and/or activities, coordinating/managing agencies/entities, funding, etc.	In accordance with RA 9513, the Department of Energy (DOE) led the formulation of NREP in consultation with energy sector stakeholders. The NREP seeks to increase the RE-based capacity of the country to an estimated 15,304 Mw by the year 2030, almost triple its 2010 level. On a per technology basis, the NREP intends to: <ul style="list-style-type: none"> <li>- increase geothermal capacity by 75.0 percent;</li> <li>- increase hydropower capacity by 160 percent;</li> <li>- deliver additional 277 Mw biomass power capacities;</li> <li>- attain wind power grid parity with the commissioning of 2,345 Mw additional capacities;</li> <li>- mainstream an additional 284 Mw solar power capacities and work towards achieving the aspirational target of 1,528 Mw;</li> <li>- develop the 1st ocean energy facility for the country</li> </ul>	Targets based on current NREP, which is currently under review. Targets may change in the future.
<b>Level of Assessment</b>	Denote whether the assessment is carried out across the entire policy/program or delimited to a specific a) Whole Program b) Specific Component/Action	b) Specific Component/Action	
<b>Specific Action(s) and/or Technology(ies) being Assessed</b>	<i>If the answer to "Level of Assessment" is "a) state "N/A".</i> Otherwise, state which particular action or technology is being assessed	<b>Solar Renewable Energy</b>	
<b>Description of the Specific Action(s) and/or Technology(ies) being Assessed</b>	<i>If the answer to "Level of Assessment" is "a) state "N/A".</i> Otherwise, describe the particular action/technology being assessed. Also describe the specific target(s) for this specific action or technology, if any.	Promotion of solar energy technologies—photovoltaic (PV) or concentrating solar power (CSP), whether grid-connected or off-grid, or ground-mounted or at rooftops of homes and buildings. Initial incentives provided were FIT and net-metering. Per NREP, specific target is to mainstream an additional 284 Mw solar power capacities and work towards achieving the aspirational target of 1,528 Mw by 2030.	Reference: Annual Report 2020 of DOE-REMB Solar Division - based on records from solar energy developers - reconciled with NGCP data
<b>Implementing Entities(ies)</b>	Identify the agency(ies) and organization(s) implementing the action, including the role of sub-national, national, and international entities	DOE, ERC, Solar Energy Developers, Other regulatory agencies issuing permits to solar energy power projects	
<b>Geographical Coverage</b>	State the geographic/administrative area where the technology or action is implemented, promoted, or enforced: a) Nationwide coverage b) Island cluster/grid (Luzon-Visayas, Mindanao) c) Selected areas	a) Nationwide coverage	



# MRV tool

<b>GHG Impacts:</b>			
<b>Gases Covered</b>	State whether gases covered in the evaluation include CO <sub>2</sub> , CH <sub>4</sub> , and/or		CO <sub>2</sub>
<b>EFg, Luz-Vis grid</b>	Combined grid emission factor used,	0.5535	tCO <sub>2</sub> e/Mw
<b>EFg, Min grid</b>	tCO <sub>2</sub> e/Mwh	0.3912	tCO <sub>2</sub> e/Mw
<b>EG, Luz-Vis grid</b>	Annual electricity generation of RE	920,851	Mwh/yr
<b>EG, Min grid</b>	projects per year, per grid, Mwh/yr	60,269	Mwh/yr
<b>BE, Luz-Vis grid</b>	Baseline emissions, per grid,	509,691.10	tCO <sub>2</sub> e/yr
<b>BE, Min grid</b>	tCO <sub>2</sub> e/yr	23,577.20	tCO <sub>2</sub> e/yr
<b>BE, Total</b>	<b>Total baseline emissions</b>	<b>533,268.30</b>	<b>tCO<sub>2</sub>e/yr</b>
<b>PE, Luz-Vis grid</b>	Project emissions, per grid,	0	tCO <sub>2</sub> e/yr
<b>PE, Min grid</b>	tCO <sub>2</sub> e/yr	0	tCO <sub>2</sub> e/yr
<b>ER, Luz-Vis grid</b>	Emission reduction, per grid,	509,691.10	tCO <sub>2</sub> e/yr
<b>ER, Min grid</b>	tCO <sub>2</sub> e/yr	23,577.20	tCO <sub>2</sub> e/yr
<b>ER, Total</b>	<b>Total emission reduction</b>	<b>533,268.30</b>	<b>tCO<sub>2</sub>e/yr</b>
<b>ER, Total</b>	<b>tCO<sub>2</sub>e/yr</b>		
<b>Non-GHG Benefits:</b>			
<b>Employment</b>	Itemize jobs created, supported (quantify and disaggregated according to construction/O&M, if possible)	34,000	green jobs
<b>Resilience</b>	Itemize impacts on resilience of energy infrastructures/systems to climate change (quantify if possible)	Solar energy is used whenever there is a need for quick provision of electricity in typhoon-hit areas while the grid is being rehabilitated.	
<b>Air Quality</b>	Itemize the contributions of the action(s) to ambient and/or indoor air quality improvement	N/A	
<b>Others (Please specify):</b>	Itemize and/or quantify other applicable co-benefits to the program or action.	N/A	
<b>Issues/Challenges</b>	Enumerate the issues/challenges in the (a) implementation of the actions and/or (b) MRV system	Data from NGCP more accurately represents actual electricity supplied by solar RE projects; In lieu of this, the Solar Division has information on dependable capacity.	
<b>Further Support:</b>	Enumerate further support required (needed), requested, and received for the (a) implementation of the actions and/or (b) MRV system (Note: Link to MRV of support)	Use of blockchain for ease in reporting and submission	
<b>Crosscutting or Related Policies, Programs, or Strategies</b>	Mention/identify other policies, plans, programs, actions or technologies that may interact or cut across the specific action being assessed.	The action/strategy may interact with plans/projects of the Transport Sector to promote solar-powered vehicles.	
			Need to cross-check specific interventions/targets of DOTr



# *Climate Change Expenditure Tagging*

Policy context: Department of Budget and Management - Climate Change Commission (DBM-CCC) Joint Memorandum Circular 2015-01 - Revised guidelines for Climate Change Expenditure Tagging

Institutionalizing climate change expenditure tagging in the various stages of budgeting process.

To track, monitor and report climate change programs, projects and activities to enable oversight and department line managers to monitor climate change-related expenditures.

National and subnational climate change expenditure tagging are also components of the NICCDIES.

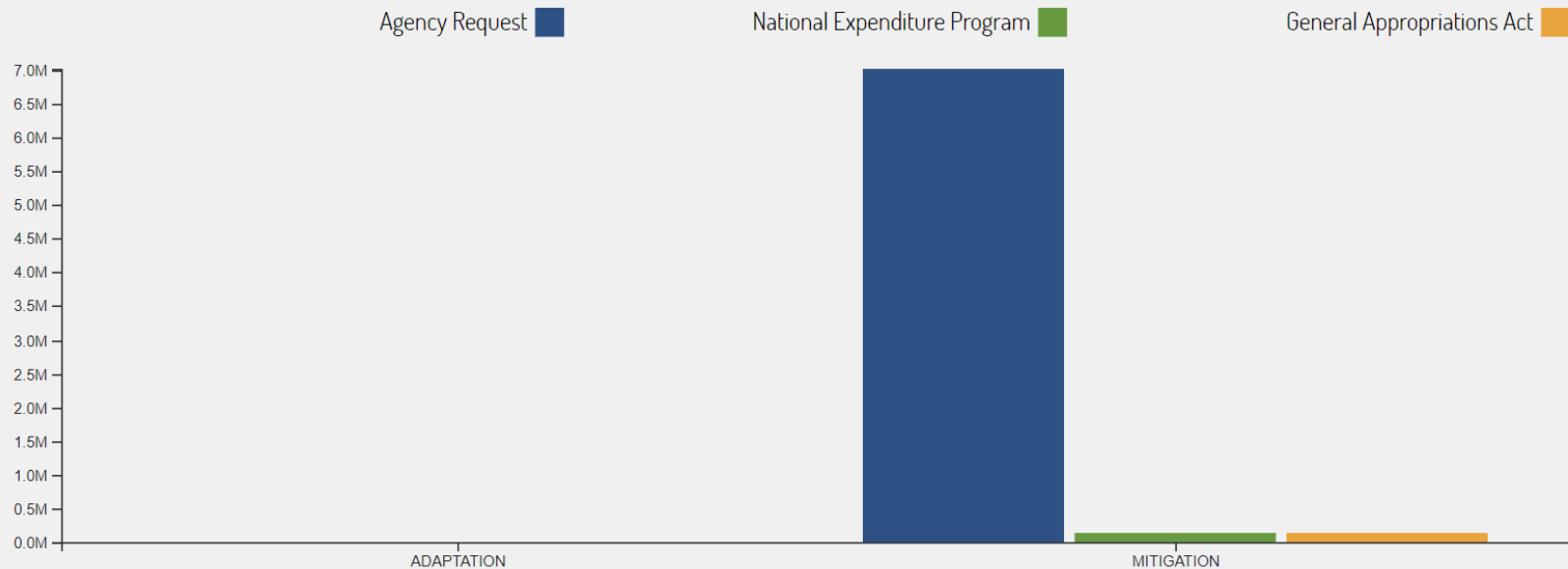


# Climate Change Expenditure Tagging

## Department of Energy: 2016 Data



Amount in Thousand PhP



# Climate Change Expenditure Tagging

## Department of Energy: 2016 Data

Percent Share



# NDC Partnership

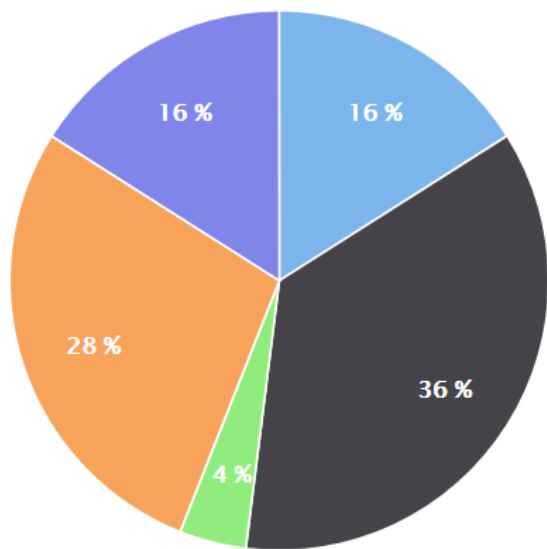
## Philippines Request for Support

25 requests

48% mitigation; 40% cross-cutting; 12% adaptation

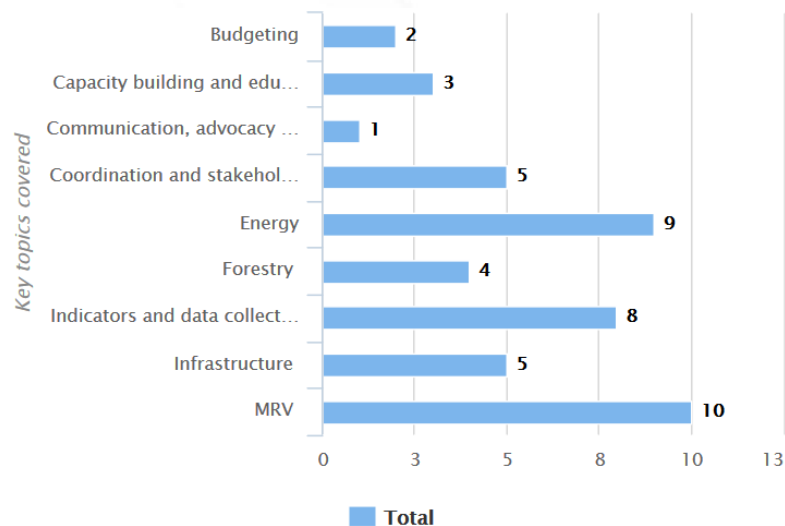
Top key topics: **Energy and MRV**

Sectoral distribution: **44% Energy and Transport**



### Sectors

- Transport
- Multi-sector
- Industry
- Energy
- AFOLU





# ***Thank You!***

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