Japanese ODA Loan

Ex-Ante Evaluation(for Japanese ODA Loan)

Southeast Asia Division 5,
Southeast Asia and Pacific Department
Japan International Cooperation Agency

１．Name of the Project

（１）Country: The Republic of the Philippines (the Philippines)
（２）Project: Climate Change Action Program, Subprogram 2
（３）Project Site / Target Area: Nation-wide (Population: approximately 115 million)
Loan Agreement: March 24, 2025

２．Background and Necessity of the Project

（１）Current State and Issues of the Climate Change Sector and the Priority of the Project in the Republic of the Philippines

The Republic of the Philippines (hereinafter referred to as “the Philippines”) , a country frequently hit by natural disasters such as typhoons, was ranked the highest disaster risk index among 193 countries (IFHV, 2024). If the Philippines does not take measures to address climate change, it is projected to suffer economic loss worth 13.6% of GDP by 2040 (World Bank, 2022). In addition, as the country experiences a demographic dividend and economic growth, its energy supply is expected to increase from 56.4 million tons of oil equivalent (MTOE) in 2020 to approximately 2.8 times that amount, 155.6 MTOE, by 2040 (Department of Energy (DOE), 2022). Despite these challenges, the government budget for climate change mitigation and adaptation measures has increased from 195 billion pesos in 2017 to 289 billion pesos in 2022.

As party of the United Nations Framework Convention on Climate Change (UNFCCC), the Philippine government enacted a Climate Change Act in 2009. Subsequently, it established the Climate Change Commission (CCC) under the Office of the President to develop, consolidate, and report on climate change plans. In 2010, the CCC published a greenhouse gas (GHG) inventory and a National Framework Strategy on Climate Change (2010-2022), followed by a National Climate Change Action Plan in 2011. Furthermore, in 2015, the Philippines submitted a draft Nationally Determined Contribution (NDC) to the UNFCCC Secretariat, demonstrating its commitment to addressing climate change.

As the energy sector is the largest source of GHG emissions in the Philippines, DOE has set a goal of increasing the share of renewable energy (RE) in the total energy mix from 22% in 2022 to 50% by 2040, as outlined in the Philippine Energy Plan 2022-2040. The plan estimates that an investment of 7 trillion pesos is required to achieve this target. With the electricity sector having undergone privatization since the enactment of the Electric Power Industry Reform Act (EPIRA) in 2001, there is an urgent need to accelerate investments in renewable energy.

Meanwhile, to ensure consistent and efficient implementation of climate change measures

by implementing agencies, donor organizations, and the private sector, there is a need to strengthen the Philippine government's climate change strategy. This includes developing a Long-Term Strategy (LTS) outlining a decarbonization strategy based on the NDC, a National Communication (NC) containing information on climate change policies, measures, and future GHG emissions projections, and Biennial Transparency Reports (BTRs) to report on GHG inventories and NDC progress, which have not been updated since 2010. Furthermore, the newly established CCC requires further capacity building in terms of personnel and capabilities to effectively promote climate change measures as an inter-agency coordination body.

（２）Japan’s and JICA’s Policy Cooperation Policy and Operations in the Climate Change Sector

Under these circumstances, the Asian Development Bank (ADB) and Agence Française de Développement (AFD) launched the Climate Change Action Program (CCAP) in 2020 to support and promote the development and implementation of climate change policies by the Philippine government. The CCAP, through three Subprograms (SP) (SP1: Institutional Capacity Building, SP2: Deepening and Ensuring Implementation of Policy Actions, and SP3: Further Dissemination and Scaling up of Policy Actions), supports the Philippine government's climate change policies in three areas: (1) strengthening planning, financing, and institutional linkages for climate action, (2) enhancing resilience (for adaptation) to climate change impacts, and (3) strengthening low-carbon pathways (for mitigation). By supporting these policy initiatives, the CCAP aims to strengthen the Philippine government’s policymaking and implementation capacity. The Program provides financial support for the policy actions under CCAP2 and the preparation, implementation and monitoring of policy actions for CCAP3. The Program is positioned as a high-priority project in the government's policies and guidelines.

The Philippine government submitted its first NDC (1st NDC) to the UNFCCC Secretariat in 2021 through efforts in the CCAP area (1). The 1st NDC sets a GHG reduction target by 75% (of which 2.71% is Unconditional) (total for 10 years of about 2,505 million tonnes of carbon dioxide equivalent (MtCO2e)) in the energy, agriculture, waste, industrial processes, and forestry sectors against to a cumulative emissions of 3,340.3 MtCO2e under the Business As Usual (BAU) scenario which means no action was taken to address climate change. The sectoral reduction targets are stated in the medium-term development plan, the Philippine Development Plan (PDP) 2023-2028, as a high policy priority. Furthermore, the 1st NDC implementation plan and national adaptation plan will be developed in area (1) of the SP2, and the 2nd NDC will be developed in SP3.

The area (2) focuses mainly on adaptation in agriculture and forests, and addresses expansion of climate risk assessment and insurance products to mitigate agricultural damage from climate change impacts, examination of carbon market formation in the forest and natural environment sectors, and strengthening of forest management capacity and attracting investment that will contribute to the activities aforesaid.

In area (3), aiming for increasing the share of RE, it is made effort to develop a system to introduce alternative fuels for the phase-out of thermal power generation, to formulate risk

reduction measures to increase geothermal power generation, to expand renewable energy auction programs, to introduce smart/green power distribution networks, to strengthen capacity markets and so on.

（３）Other Donors' Activities

The CCAP1 is a co-financing by ADB ($250 million) and AFD (€150 million), and the CCAP2 is also to be co-financed in Euros by ADB ($500 million equivalent) and AFD ($270 million equivalent).

The World Bank has provided Philippines Disaster Risk Management and Climate Development Policy Loan with a Catastrophe Deferred-Drawdown Option ($500 million, 2023), Philippines First Sustainable Recovery Development Policy Loan ($750 million, 2023), Philippines Financial Sector Reform Development Policy Financing (First ($400 million, 2022), Second ($600 million, 2023)), The Philippine Offshore Wind Power Roadmap (2022) and so on. The United Nations Development Programme (UNDP) also provides assistance to promote the introduction of green climate finance ($1.8 million, 2022-2024).

３．Project Description

（１）Project Description

① Project Objective

The Program objective is to strengthen planning, financing and institutional linkages for climate action, enhance resilience to climate impacts, and strengthen low-carbon pathways, through policy dialogue and financial support, thereby contributing to the realization of the Philippines' climate action targets by supporting the government's climate change policies.

② Project Components

1) Outline of overall program plan

Based on the Climate Change Policy Dialogue among the Philippine government, ADB, AFD and JICA, sector reforms will be promoted based on the Policy Matrix that is composed by 3 Policy Reform Areas (PRA) as follows;

- PRA1: Planning, financing, and institutional linkages for climate action strengthened.
- PRA2: Resilience to climate impacts enhanced.
- PRA3: Low-carbon pathways strengthened.

A summary excerpt of the main policy matrix is as follows;

Prior Actions: Subprogram 1 Completed January 2020–March 2022	**Prior Actions: Subprogram 2 Completed April 2022–June 2024**	**Policy Actions: Subprogram 3 July 2024–June 2026**
Reform Area 1: Planning, financing, and institutional linkages for climate action strengthened		
(1) The government approved its first NDC committing to address climate change by (i) reducing GHG emissions by 75% by 2030, (ii) adapting to the impacts of climate change, and (iii) mainstreaming gender and	(1) The government began implementing its NDC by adopting a comprehensive plan charting actions to reduce greenhouse gases in key sectors by 37%, a corresponding gender action plan, and a long-term national adaptation	(1) The government will increase commitment to climate action by approving its second NDC with updated climate targets and adopting a long-term strategy for climate change.

social inclusion into climate action. (2) The government (through DOF, BSP, and CCC) strengthened its policy framework for climate finance by (i) establishing a high-level interagency task force on sustainable finance, also known as “Green Force”, (ii) DOF adopting a sustainable finance framework and issuing the country’s first sovereign green bond, and (iii) BSP approving regulations for financial institutions to integrate climate change and other environmental and social risks in credit and operational risk management.	plan to scale up resilience [CCC and DENR]. (2) BSP began mainstreaming climate finance by adopting a Sustainable Central Banking Strategy and issuing regulations to incentivize green lending by banks for activities linked to the Philippines Sustainable Finance Taxonomy Guidelines, among others.	(2) The government will expand socially inclusive climate policy by adopting a framework for generation of carbon credits under the Paris Agreement and voluntary carbon markets, including for LGUs [DENR and DOF], and roll-out a national approach for Just Transition [DENR and CCC].
Reform Area 2: Resilience to climate impacts enhanced		
(1) The government initiated reforms for agricultural insurance through: (i) the transfer of PCIC from Department of Agriculture to DOF, with a reconstituted board, to provide cost-effective services to farmers; (ii) a review of PCIC operations for 2018-2020; and (iii) the use of satellite technology to pilot post-planting validation and confirmation of damages on farms. (2) The government enacted the Organic Agriculture Act 2020 to modernize the regulatory and institutional framework for climate-resilient organic agriculture, including (i) a participatory certification system, (ii) an incentive scheme for producers to undertake organic agriculture, and (iii) a guaranteed annual budget allocation of ₱1.0 billion for programs.	(1) The PCIC doubled climate risk insurance coverage for high value crops and fisheries to almost 600,000 producers in 2022 and 2023; and launched index-based insurance modeling for better climate risk management for (a) rice production, in collaboration with PhilRice and IRRI, for climate vulnerable paddy farmers, (b) banana cultivation, for cash crop producers, and (c) fisheries, in collaboration with BFAR, for small-scale fisherfolk. (2) The government strengthened climate resilient agriculture production systems and technologies by structuring and staffing the NOAP and providing it with budget allocations (₱519 million in 2022, ₱900 million in 2023, and ₱922 million in 2024), rolling out a participatory guarantee system, developing a digital organic marketplace, adopting a medium-term action plan for climate-smart technologies, and approving, budgeting and initiating 39 new research projects under this plan.	(1) The DENR will enhance sustainable forest management through provision of an enabling environment for investments in forestry and forest-based products and services, assuring investors of stable climate resilient policies, incentives and technical support. (2) The PCIC will develop a pilot parametric insurance product for crops in climate vulnerable regions, test and refine the product to ensure its effectiveness and sustainability, and seek an associated reinsurance option to share risk.
Reform Area 3: Low-carbon pathways strengthened		
(1) The government, through DOF and DOE, initiated reforms to accelerate the transition from coal to renewables through (i) a moratorium on greenfield coal fired power plants, and (ii) the launch of the ETM Partnership to mobilize financing.	(1) The government submitted an investment plan on energy transition to CIF ACT[w] to help phase down coal. The plan, which the CIF subsequently endorsed, aims to achieve energy security and a just transition with gender equity.	(1) The government will issue a strategy to introduce alternative clean fuels such as ammonia and hydrogen for power generation.

(2) The government implemented reforms to enable greater renewable energy entrance into the grid and electricity market by (i) the ERC implementing the Green Energy Option Program, which allows end-users to choose renewable sources of electricity, and (ii) the DOE rolling out new requirements for competitive and transparent grid services procurement to support additional variable renewable energy.	(2) To increase renewable energy penetration into the grid, the government developed regulatory framework to procure reserve capacity by conducting a competitive bidding and launching a reserve market.	(2) The government will expand renewable energy deployment by carrying out successive GEAPs to increase renewable energy capacity, including offshore wind, establishing a geothermal de-risking facility, enhancing the bidding design to scale up renewable energy through MGSP in unserved and underserved off-grid areas, and strengthening the credit worthiness of Electric Cooperatives in off-grid area.
(3) To reduce fossil fuel use in the transport sector, the government, through DOE and DOTr, implemented the Energy Efficiency and Conservation Act 2019 by establishing (i) a system for development of fuel economy standards, (ii) regulations for the standardized development and operation of electric vehicle charging stations, and (iii) a comprehensive classification and registration system for electric vehicles.	(3) The government implemented reforms to support universal access to clean energy by approving the National Total Electrification Roadmap 2023–2032, approving regulations for the off-grid area to rationalize subsidy including promotion of renewable energy,[ac] conducted the first competitive bidding for MGSP in unserved and underserved off-grid areas, and issued revised rules and guidelines to set renewable energy portfolio standard in off-grid area.	(3) The government will increase the grid capability to accommodate renewable energy by developing supporting framework to accelerate investment in the transmission grid, finalizing a Smart and Green Grid Plan, developing policy and regulation to increase reserve capacity, and reduce reserve market price and its volatility.

2) Overview of this program

JICA will provide financial support for policy reforms in SP2 of the three SPs that comprise the CCAP, and will also consider policy actions for SP3. While developing the Policy Matrix for SP2, JICA proposed to set up an electricity researve market based on the compatibility with Japan's efforts, and as a result, the related Policy Action was introduced. Concerning SP3, JICA will follow up with Japan’s efforts in mind on policy actions such as promotion of the implementation of the Paris Agreement, sustainable and effective forest management, promotion of the introduction of alternative fuels, and promotion of the introduction of electricity reserve.

③ Project Beneficiaries（Target Group）

Nation-wide (Population: approximately 115 million)

（２）Estimated Project Cost

146,230 millionn Yen (Japanese ODA loan: 35,000 million Yen, co-financing with ADB: $500 million equivalent and AFD: $270 million equivalent)

（３）Schedule

Financial support for the program commenced from April 2022. The target for achievement of SP2 policy actions is June 2024 and all policy actions have been achieved. After confirming the achievement of the triggers, the program will be completed when the loan is disbursed (scheduled for April 2025).

（４）Project Implementation Structure

１） Borrower: Government of the Republic of the Philippines

２） Guarantor: None

３） Executing Agency:

The Department of Finance (DOF) as the Program Executing Agency, shall be responsible for the Request for Disbursement.

The following organizations are recognized as the Program Implementing Agency (PIA) which shall be responsible for implementing each Policy Action

Organization	abbreviation
Climate Change Commission	CCC
Department of Agriculture	DA
Department of Budget and Management	DBM
Department of Environment and Natural Resources	DENR
Department of Energy	DOE
Department of Finance, Climate Finance Policy Group	DOF-CFPG
Department of Transportation	DOTr
Bangko Sentral ng Pilipinas	BSP
Energy Regulatory Commission	ERC
Laguna Lake Development Authority	LLDA
Philippine Crop Insurance Corporation	PCIC

（５）Collaboration and Sharing of Roles with Other Donors

１） Japan’s Activity:

The technical cooperation Project on Resource Inventory of Hydropower Potential Sites (2024-2026), which supports for a survey on suitable sites for pumped storage power generation to be traded in the reserve power market established through related Policy Action, has been adopted and is being prepared for implementation. In addition, Project on Strengthening Sustainability and Transparency Framework, Project on Enhancing Forest Monitoring Capacity for Sustainable Management and Conservation of Forests, and advirory for Climate Change are under consideration as new technical cooperation. This Project aims to achieve the operational and effectiveness indicators, as well as to generate, sustain, and expand its development impact, by supporting the design and achievement of SP3 Policy Actions which are being considered with the synergy effect with the newly formulated technical cooperation projects in mind.

２） Other Donors’Activity

The policy matrix of this Project is shared by ADB and AFD, and the achievement of the outcome indicators will be monitored together with ADB and AFD.

（６）Environmental and Social Consideration

① Category: C

② Reason for Categorization: The Project is deemed to have no undesirable impacts on the environment based on the JICA Guidelines for Environmental and Social Considerations

(promulgated in January 2022).

③ Environmental Permit: None

④ Anti-Pollution Measures: None

⑤ Natural Environment: None

⑥ Social Environment: None

⑦ Other/Monitoring: None

（７）Cross-Sectoral Issues

① Climate Change Countermeasures:

This Project will contribute to both climate change mitigation and adaptation by reducing GHG emissions and reducing or addressing natural disaster risks and impacts caused by climate change through policy dialogue on climate change action.

② Poverty measures and considerations: None

③ AIDS/HIV and Other Infectious Diseases Countermeasures: None

④ Participatory Development: None

⑤ Disability Consideration: None

（８）Gender Category:

[Gender Case] ■GI (S) (Gender activity integration project)

<Details of Activities/Reason for Categorization>

Gender-based challenges were identified, such as the risk of energy transitions disadvantaging women and marginalized populations. This project is a strategy to develop a funding proposal and NDC Gender Action Plan to address such challenges, and to set indicators for the expenditure of the responsible ministries and agencies on gender-oriented activities and the progress of the NDC Gender Action Plan.

（９）Other Important Issues: None

４. Targeted Outcomes

（１）Quantitative Effects

1) Main outcomes (Operation and Effect Indicators)

Outcome Indicators	Baseline		Target Value (2027)
	Actual Value	Update	
Reform Area 1: Planning, financing, and institutional linkages for climate action strengthened			
50% of policies and measures supporting NDC targets under implementation (Source: CCC) *applied for Policy Action (1)	0% (2021)	38% (2024)	50%
Reform Area 2: Resilience to climate impacts enhanced			
At least one parametric insurance product developed and piloted (Source: PCIC) *applied for Policy Action (1)	0 (2020)	0 (2024)	1

50 new research projects on developing new climate-smart technologies under implementation in public research institutions (Source: DA) *applied for Policy Action (2)	N/A （2020）	39 （2024）	50
Reform Area 3: Low-carbon pathways strengthened			
Share of renewable energy in total installed generation capacity mix increased (Source: DOE) *applied for Policy Action (1)(2)	21.6% （2020）	21.6% （2024）	30%
Reach 99% of electricity access in off-grid area by interconnection, and scaling up independent and distributed renewable energy system (Source: DOE) *applied for Policy Action (2)(3)	91% （2020）	-	99%

（２）Qualitative Effects

- Reduction of risks such as disasters with climate change impacts through enhanced adaptive capacity.
- Reduction of the share of GHG emissions by increasing the capacity of power generation from renewable energy sources.
- Increased investment in climate change measures by strengthening interagency collaboration policy formulation/implementation capacity within the Philippine government.

（３）Internal Rate of Return

Will not be calculated for this program, as this is a program loan.

５. External Factors and Risk Control

（１）Preconditions: None

（２）External Factors: None

６. Lessons Learned from Past Projects

In the ex-post evaluation of the Support Program to Respond to Climate Change (I)-(VII) (evaluation year: 2019) for the Socialist Republic of Viet Nam, the quantitative effect of disaster risk reduction on economic development and the effect of institutional improvements in mitigation measures on GHG emissions were used as indicators, which made it difficult to quantitatively calculate at the time of the ex-post evaluation.

Based on the above lessons learned, in this project, a cross-agency committee including the

program executin agency (DOF) and line ministries will be established as a study group for setting policy actions and indicators and their monitoring methods, and regular discussions and monitoring will be conducted to enable quantitative evaluation in the ex-post evaluation.

7 . Evaluation Results

This program is in line with the Philippines's developmental challenges and policies as well as Japan and JICA's cooperation policy and analysis. Furthermore, the program will contribute to the achievement of Goal 2 (Zero hunger), Goal 5 (Gender equality), Goal 7 (Affordable and clean energy), Goal 9 (Industry, innovation and infrastructure), Goal 11 (Sustainable cities and communities), Goal 13 (Climate action) and Goal 15 (Life on land) of the SDGs, and therefore the need to support the implementation of this program is high.

8 . Plan for Future Evaluation

（1）Indicators to be Used

As indicated in Sections 4.

（2）Future Evaluation Schedule

Ex-post evaluation: Three years after the project completion

END