

**Climate Investment Funds (CIF) Accelerating Coal Transition (ACT)  
Investment Plan (IP) preparation for the Philippines  
Scoping Mission, 22-26 August 2022  
Hosted by Department of Energy of the Philippines**

## **1. Introduction**

In October 2021, the Philippines was selected to develop an investment plan (IP) for the Accelerating Coal Transition (ACT) program of the Climate Investment Funds (CIF).<sup>1</sup> The main objective of the ACT program is to tackle key barriers related to governance, people, and infrastructure, and address funding gaps leading to the successful implementation of country-level strategies and associated kick-start projects; build support at the local and regional levels; and accelerate the retirement of existing coal assets (coal mines and coal power plants) together with enabling new economic activities for those impacted by the transition. The ACT program looks to support both public and private sector entities with the relevant toolkit necessary to affect the transition. ACT supports interventions including “soft” investments in government and people, and physical investments in infrastructure. Eligible infrastructure investments include mine closure, plant decommissioning, reclamation and repurposing, repowering with renewable energy and storage, ancillary services, energy efficiency, and biodiversity.

From August 22-26, the Philippines Department of Energy (DOE) hosted a scoping mission comprising multilateral development banks (MDBs), including Asian Development Bank (ADB), the World Bank (WB), and the International Finance Corporation (IFC) to discuss the preparation of the draft Investment Plan. The Joint Mission was led by ADB. The meetings also included key government agencies and other stakeholders including the Department of Finance (DOF), Climate Change Commission (CCC), Department of Environment and Natural Resources (DENR), Department of Social Welfare and Development (DSWD), and the CIF Administrative Unit (CIF AU). The key objectives of the mission were to: (i) agree on a broad strategy for ACT-supported investment consistent with the Government of Philippines (GOP) energy and climate change policies, programs and expenditure plans; (ii) review criteria and gather government suggestions on candidate projects to be considered for ACT investment pipeline; and (iii) agree on roles, responsibilities and timeline for draft preparation of the ACT IP. Follow-up missions will be scheduled in consultation with the GOP with a view to preparing the draft of the IP by the first quarter of 2023 and finalizing the IP for submission to the CIF Trust Fund Committee for endorsement by May 2023.

## **2. Background and Rationale**

The GOP has identified a just and affordable transition from coal to clean energy as part of its long-term development plans. As stated in the Nationally Determined Contributions (NDC), Philippines aims to peak GHG emissions by 2030 in context of accelerating the just transition (JT) of carbon-intensive sectors into a green economy and the delivery of green jobs and other benefits of a climate and disaster-resilient and low carbon development. Philippines commits to a projected GHG emissions reduction and avoidance of 75%, referenced against a projected business-as-usual cumulative economy-wide emission of 3,340.3 MtCO<sub>2</sub>e for the period 2020–2030 with the energy sector contributing 49.7%. While GOP does not yet have a formal net-zero target date, several transition scenarios have been mapped out as a part of the

<sup>1</sup> Other countries developing investment plans are India, Indonesia, and South Africa.

Philippines Energy Plan 2020 to 2040. There has been a moratorium on new coal-fired power plants (CFPPs) since 2020. There are regulatory mandated reserve margins for the electricity grids, and the Luzon-Visayas system has been facing challenges with meeting the growing electricity demand. This means that replacement renewable energy capacity and output must be brought online in advance of CFPP retirements.

The Philippines energy sector is a rather unique case among the Southeast Asian countries as all segments including electricity and fuels are largely privatized and commercialized (except for the Small Power Users Group / SPUG). Since early 1990s, electricity generation has been led by independent power producers (IPP). The Electric Power Industry Reform Act (EPIRA) of 2001 is the key governing law, which has been supplemented by the Renewable Energy Act of 2008. Most major generation plants sell their electricity outputs based on multiple short to mid-term power purchase agreements (PPAs) or Retail Electric Supply (RES) contracts and through the Wholesale Electricity Spot Market (WESM) rather than based on long-term PPAs in countries like Indonesia. Retail electricity prices are set on a full cost recovery basis with targeted subsidized prices to lifeline consumers. Offtakers now generally require baseload-structured PPAs, which entails delivery of the required capacity throughout the day. This presents specific challenges for intermittent renewable energy assets. Even without this requirement, the grid at large requires investments in storage and baseload renewable energy to maintain stability and to meet the rapidly growing electricity demand. Otherwise, CFPPs will dominate the market. In fact, CFPP capacity grew from just over 5,000 MW in 2012 to about 11,700 MW in 2021. The existing CFPPs need at least 24 million tons per year of coal (assuming high quality coal and high efficiency boilers) versus domestic coal production which averaged 14.265 million tons in 2019-2020.<sup>2</sup>

### **3. MDB Support to the Philippines**

The Government of Philippines has been working with the ADB and the WBG, and other international partners in its energy transition. Its efforts are focused on enhanced energy efficiency, renewable energy, other emerging technologies, ICT, energy resiliency, rural electrification, and sustainable transport.

Under CIF ACT, one of the key project areas that ADB is currently considering to support the Philippines is through the Energy Transition Mechanism (ETM) program for Southeast Asia, in its objective to reduce carbon emissions from coal and transform its energy systems to ensure sustainable, affordable, and secure energy generation. ETM is a market-based, replicable and scalable approach, which aims to accelerate the retirement of existing coal-fired power plants and unlock new investments in clean energy. ADB launched the ETM Feasibility Study at the United Nations Climate Change Conference (COP 26) in Glasgow, UK alongside the Government of Philippines and the Government of Indonesia as key partners. ADB has also provided a policy-based loan (PBL), Climate Change Action Program, Subprogram 1 in May 2022, which includes policy actions to setup an ETM financing framework in the country along with other policies to promote renewable energy development.

The World Bank has been working closely with the GOP on energy transition analytics through a multi-year advisory program. This work has led to the development of the Philippine Offshore Wind Roadmap jointly with DOE, the development of the Philippine E-Mobility Roadmap jointly with DOE and Department of Transportation, as well as collaboration with DOE on power sector

<sup>2</sup> Source: [Philippines: volume of coal produced 2020 | Statista](#)

decarbonization analysis. A policy note on Philippine Energy Transition is been prepared for publication in October 2022.

Under CIF-ACT, the World Bank plans to support the GOP on key policy reforms which would help accelerate the integration of solar and wind (onshore and offshore), scale up energy efficiency investments, catalyze the phasing out of CFPPs, and establish a framework and instruments for just transition. Specific to the preparation of the ACT IP, the World Bank could provide direct support to the preparation of the energy/coal transition roadmap and related analyses.

IFC's focus will be supporting the private sector in developing the much-needed baseload, peaking, and ancillary renewable energy capacity through IFC's financing and technical assistance programs. IFC has been working with several energy companies in the country. And IFC will continue its work with private sector players to assess different RE-based technologies that can potentially displace coal-based power sources, and the technical and economic viability of renewable energy as a source of dispatchable power within the context of the Philippines' power needs and supply-demand patterns.

#### **4. Mission Findings and Key Issues**

##### **I. Policy Reform Agenda**

In 2021, CFPPs accounted for 41% of grid-connected capacity and 58% of electricity output, while renewables accounted for 30% of capacity and 22% of output. In the 2040 energy outlook, the reference case is for coal to decline to 25% of electricity output with renewables at 35%; in the clean energy scenario coal is only 23% of output with renewables growing to 50%. Achieving the clean energy scenario implies that the GOP will revise the Philippines Development Plan (PDP), and the Philippines Energy Plan (PEP). Revisions to EPIRA 2001 are also in the works.

The GOP concluded a green energy auction on 24 June 2022 for 1.5 gigawatts of new capacity. The auction process is expected to be the primary mechanism for development of replacement renewable energy capacity. The World Bank has conducted a detailed assessment of offshore wind potential. DOE has issued 30 service contracts for offshore wind. The United States Trade and Development Agency (USTDA) recently signed a cooperation agreement for a detailed feasibility study of offshore wind which is expected to lead to up to 3000 MW of new capacity in the long-term.

There is an urgent need to develop an energy/coal transition roadmap to guide policies and interventions needed to achieve just transition with a target timeline particularly for the power sector. Some of the key issues to be addressed include the financing needs for scaling up and integration of low or zero carbon generation technologies, CFPP decommissioning and potential stranded costs versus repurposing of CFPPs, and the framework for ensuring a just transition.

##### **II. Project Pipeline Development**

The project pipeline is yet to be identified and will be based in part on the coal transition roadmap. During this mission, the Joint Mission proposed to use the \$1 million available as the

investment plan preparation grant (IPPG) towards developing this roadmap as one of the key activities. This roadmap will help inform the project pipeline. (MDB team will prepare the IPPG application form post scoping mission to submit to the CIF Administration Unit).

For sovereign investment operations, future subprograms of the Climate Change Action Program PBL could be considered a conduit for ACT co-financing to develop upstream energy policy reforms.

During the scoping mission, GOP agreed that ADB discussions with the CFPP in Mindanao can proceed; this might be a potential project to include in the ACT investment plan as part of the ETM transactions currently being planned for the pilot in Philippines. The current model that may be applicable in the Philippines uses debt instruments with lower cost of capital which can lead to early retirement of power plants while keeping the same or a similar ownership and operation structures and the estimated returns to investors.

The World Bank is interested in identifying a potential development policy lending operation supporting the policy reform agenda of energy transition, including variable renewable energy integration, energy efficiency and just transition.

Given that the power sector is nearly fully privatized, IFC expects to play an important role in supporting the transition of the sector towards larger and quickly growing share of dispatchable renewable energy generation. IFC will continue working with private sector companies through its investments and advisory services to develop new renewable energy power generation capacity that can replace the retiring CFPPs, while meeting the rapidly growing demand. Subject to market conditions and opportunities, IFC's interventions will be developed as each of the financings and advisory service projects is processed.

### **III. Just transition Framework**

The potential impact on domestic coal mining, including the displacement of workers in the coal mining industry, was discussed as one of the principal focus areas of the investment plan. JT principles apply to the broader energy transition, but in the ACT investment plan JT is specific to the coal sector. DOE, DOF, DENR, NEDA and CCC will discuss amongst themselves and revert to the MDB team on who will be the lead agency for JT and safeguards. It is also noted that engagement with the Department of Labor and Employment is needed going forward.

### **IV. Safeguards**

The Joint Mission presented the key findings of the regional-level Strategic Environmental and Social Assessment (SESA) scoping study, the progress of the national SESA being undertaken in Indonesia and progress of assessment of impact of coal retirement on local communities and JT in Indonesia and Philippines being carried out as part of the ETM Feasibility Study.<sup>3</sup> Asset-level Environmental and Social Impact Assessments (ESIA) and JT assessments, as required, will be conducted for individual investments following respective MDB policies and procedures.

<sup>3</sup> [Accelerating the Clean Energy Transition in Southeast Asia: Regional Scoping Report for Strategic Environmental and Social Assessment Applied to the Energy Transition Mechanism in Southeast Asia | Asian Development Bank \(adb.org\)](#) ADB is currently in the process of updating its Safeguards Policy Statement 2009. This update will be completed by mid-2023 and is expected to be applied to the investments co-financed by ADB.

The Joint Mission and GOP agreed that a national SESA will help to identify key environmental and socio-economic issues to be considered in the planning and preparation of CIF ACT investments and will be supported through the IPPG. The TORs for the SESA consultants will be jointly developed by the MDBs. ADB will be responsible for hiring of consultants for the SESA.

## V. Workstream

During the mission, the GOP and the Joint Mission have identified and agreed to move forward on four (4) inter-related work streams which are necessary to complete the ACT IP. These are summarized in Table 1 below.

**Table 1: Workstream and GOP Focal**

<b>Workstream</b>	<b>GOP Focal / Lead Agency</b>
Energy transition/decarbonization strategy, policy and regulatory changes, options for implementation modality	DOE
Project pipeline development	DOE, DOF
Just transition and Safeguards	To be determined
Drafting the IP	DOE

Source: Joint Mission

## VI. Drafting the Investment Plan

GOP indicated its interest in availing of the IPPG of \$1 million for the CIF ACT country IP preparation. The grant will support the workstreams noted above in Table 1. Under CIF ACT procedures, as the lead MDB, ADB will administer the grant and coordinate with government, World Bank, and IFC on use of the grant funds.

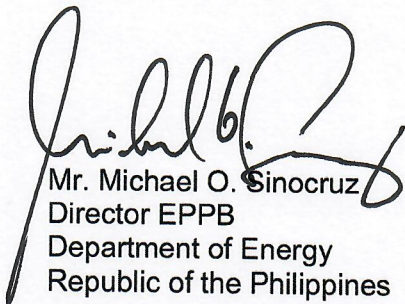
**Table 2: Summary of key follow up activities**

<b>Next Steps</b>	<b>Timeline</b>	<b>Comments</b>
Identify Focal points for Task Force	End of scoping mission	As per the list identified in the AM and attached Task force Contacts list
Aide Memoire endorsed by CIF Admin Unit	2 weeks	
Apply for Investment Plan Preparation Grant (IPPG)	End of November 2022	As the lead MDB, ADB will submit application for the grant
Joint Mission for IP first draft	January/February 2023	
IP First draft	February 2023	First draft may be shared with CIF governing committee Public disclosure of the draft IP to be done by GOP; date to be determined
Finalize Draft	March 2023	


DOE underscored the need to present the draft investment plan to relevant stakeholders in a public consultation.

## 5. Scoping Mission Initial Assessment

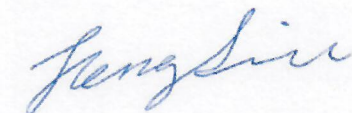
The scoping mission's assessment is that (i) the GOP is committed to decarbonization and further support for policy reforms and a coal transition roadmap will help accelerate its efforts; (ii) given the privatized energy market, the transition program will largely rely on supporting the private sector; (iii) developing replacement dispatchable renewable energy capacity and output is needed prior to CFPP retirements at any scale; and (iv) ACT co-financing can play a critical role in the Philippines energy transition. The MDBs jointly finalized the indicative concept of activities to be carried out under the IP planning, as summarized in this aide memoire. The MDBs will work on mobilizing the human resources and to support the GOP to ensure the preparation of the IP in accordance with the indicative timeline noted above.



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Republic of the Philippines



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Southeast Asia Regional Department  
Asian Development Bank



Feng Liu  
Senior Energy Specialist  
World Bank



Andrey Shlyakhtenko  
Senior Operations Officer,

International Finance Corporation

**Appendix: List of Persons Met**

**Philippine Government Agencies**

	NAME	POSITION	OFFICE/UNIT
<b>Department of Energy</b>			
1	Michael O. Sinocruz	Director	EPPB
2	Mylene C. Capongcol	Director	REMB
3	Irma C. Exconde	Assistant Director	REMB
4	William Quinto	Division Chief	ECCD
5	Francis Richard Rabulan	Division Chief	EPPB
6	Jhun Escobar	Division Chief	REMB
7	Nenito Jariel	Division Chief	ERDB
8	Letty Abella	Senior Science Research Specialist	EPPB
9	Lemuel Alvarado		
10	Jensen Alvarez		
11	Angelou Austria	Science Research Specialist II	EPPB
12	Luningning Baltazar		
13	Aira Baluyut		
14	Ingrid Marche Perpetua Calapit	Science Research Specialist I	EPPB
15	Hershey Dela Cruz	Supervising Science Research Specialist	EPPB
16	Anabel Elmaga		
17	Ian Espaldon		
18	Victorino Getalado Jr.		
19	Roselle Ibuna		
20	Daniel Collin Jornales	Supervising Science Research Specialist	EUMB
21	Matuwid Lagang	Supervising Science Research Specialist	ERDB
22	Michael Leabres	Senior Science Research Specialist	EPPB
23	Robert Jae Legaspi		
24	Merielle Maranan		
25	Mark Marollano	Supervising Science Research Specialist	EPIMB
26	Karlo Louise Matias	Science Research Specialist II	EPPB
27	Madonna Naling		
28	Melanie Papa		
29	Zan Lawrence Perez		
30	Caroline Quitaleg	Senior Science Research Specialist	EPPB
31	Anna Mikko Realo		
32	Camille Roxas		
33	Melanie D. Rubaya	Senior Science Research Specialist	EPPB
34	Peter Sablay		
<b>Department of Finance</b>			
1	Catherine Fong	Undersecretary	
2	Mark Dennis Joven	Undersecretary	
3	Neil Adrian Cabiles	Assistant Secretary	
4	Roberto Miguel Dimaculangan	Director IV	Multilateral Assistance Division
5	Donalyn Minimo	Director III	International Finance Policy Office
6	Jenaira Jalasco	Director III	Multilateral Assistance Division
7	Nelson Ambat		



Philippines CIF ACT IP Scoping Mission Aide Memoire 22-26 August 2022

	NAME	POSITION	OFFICE/UNIT
8	Nathan Bayasen		
9	Dale Lim		
10	Paola Matanguihan		
11	Andres Medina		
12	Sharmaine Ramirez		
13	Anica Sarmiento		
14	Hannah Sasil		
15	Willa Tac an		
16	Marius Torres		
17	Terence Brian Tsai		
<b>Climate Change Commission</b>			
1	Jacir Bebing		
2	Arnold Belver		
3	Jerome Ilagan		
4	Ernest Mateo		
<b>Power Sector Assets and Liabilities Management Corporation</b>			
1	Glenda Leah Caringal		
2	Ralph de Jesus		
3	Irene Besido Garcia		
<b>Department of Environment and Natural Resources</b>			
1	Jonas Leones	Undersecretary	Environment and International Environment Affairs
2	Alyssa Micah Macasieb		
<b>Department of Social Welfare and Development</b>			
1	Hiasma M. Gani		

**Multilateral Development Banks**

	NAME	POSITION	OFFICE/UNIT
<b>Asian Development Bank</b>			
1	Toru Kubo	Director	SEEN
2	Alix Burrell	Principal Investment Specialist	PSIF2
3	Pradeep Tharakan	Principal Climate Change Specialist	SEEN
4	Dionisio Camangon	Senior Public-Private Partnership Specialist	OPA2
5	Christian Ellermann	Senior Climate Change Specialist	SDCD
6	Katherine Hughes	Senior Climate Change Specialist	SDCD
7	Yuki Inoue	Senior Energy Specialist	SEEN
8	Rangina Nazrieva	Senior Social Development Specialist (Safeguards)	SEEN
9	Genevieve O'Farrell	Senior Environment Specialist (Safeguards)	SEEN
10	Diana Connett	Energy Specialist	SEEN
11	Ayato Kurokawa	Energy Specialist	SEEN
12	Jeffrey Almera	Senior Operations Assistant	SEEN
13	Karan Chouksey	Consultant	
14	Dan Millison	Consultant	
15	Angelica Natividad	Consultant	
16	Divya Nawale	Consultant	
<b>World Bank</b>			
1	Ditte Fallesen	Senior Social Development Specialist	

	<b>NAME</b>	<b>POSITION</b>	<b>OFFICE/UNIT</b>
2	Feng Liu	Senior Energy Specialist	
3	Slavena Georgieva	Energy Specialist	
4	A Sitarama Krishna		
<b>International Finance Corporation</b>			
1	Andrey Shlyakhtenko	Senior Operations Officer	
2	Thuy Thu Bui	Senior Country Officer	
3	Jonathan Chu	Investment Officer	
4	Tendai Madenyika	Operations Officer	
5	Charu Suri	Associate Investment Officer	
<b>Climate Investment Funds</b>			
1	Abhishek Bhaskar	Senior Energy Specialist	
2	Paul Mathew		