



Foreign, Commonwealth
& Development Office



Mobilising climate finance into the Philippines

A sectoral analysis of barriers and
interventions for transport and waste



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Executive Summary

The Philippines has identified its preliminary climate investment needs and priorities. While its Nationally Determined Contribution (NDC) signals ambitious targets of 75% GHG reduction and avoidance, this achievement is contingent on external sources (72.29% with the Government committing to fund 2.71% towards this end). On the other hand, based on its NDC Implementation Plan, preliminary estimates of its total requirements stand at PHP4.1 trillion (USD 72 billion) through 2030. Substantial private capital must be unlocked to achieve decarbonisation goals, particularly in the transport and waste sectors.

Transport accounts for approximately 23% of the country's greenhouse gas (GHG) emissions from fuel combustion¹ with jeepneys alone estimated to contribute around 15.5% of the transport sector's total emissions.² Yet modernisation efforts have been slow: just 4% of the targeted jeepney fleet has been replaced as of end-2023, and fewer than 912 electric vehicle (EV) charging stations are operational as of March 2025.³⁴

Meanwhile, the waste sector contributes 13% of the country's GHG emissions and generated over 18 million tonnes of municipal solid waste in 2020, growing at an average of 3.4% annually over the last decade.⁵⁶ The country also loses an estimated USD 790–890 million annually from unrecovered plastic resources, with only 9% of plastic waste currently recycled.⁷⁸

This report marks the **first stage** of a broader effort to enable **capital deployment** into decarbonisation for the municipal solid waste (MSW) and road transport sectors in the Philippines. It aims to:

- 1. Identify the barriers** that hinder private finance from flowing into the transport and waste sectors. These are summarised as themes in Table 1.
- 2. Propose initial solutions** that address policy and financial constraints in mobilising private capital. These are summarised as themes in Table 2.
- 3. Determine how the “Green Force”** (the Inter-Agency Task Force on Sustainable Finance) could evolve into a more action-oriented investment platform for unlocking barriers to mobilise private finance into mitigation and adaptation investments.

¹ National Integrated Climate Change Database and Information Exchange System (2020). [GHG Inventory 2020 Data](#)

² Changing Transport (2018). [Modernising Public Transport in the Philippines](#)

³ Calanzo, A. (2023) [Manila's Colorful Jeepneys Make Way for Carbon-Free Minibuses](#).

⁴ Power Philippines (2025) [PH Boosts Electric Vehicle Future with Expanded Charging Network and New Policies](#)

⁵ National Integrated Climate Change Database and Information Exchange System (2020). [GHG Inventory 2020 Data](#)

⁶ DENR (2020) [National Solid Waste Management Status Report \[2008-2018\]](#)

⁷ World Bank (2024) [Roadmap for the Management of Plastic Waste and Reduction of Non-Recyclable Single-use Plastics in the Philippines](#)

⁸ World Wide Fund for Nature (2020) [Extended Producer Responsibility \(EPR\) Scheme Assessment for Plastic Packaging Waste in the Philippines Summary for Policymakers](#)

Insights were drawn from targeted interviews with government, private finance and industry. The questions posed focused on perceived investment barriers, policy gaps and the mechanisms or reforms needed to pave the way for private capital mobilisation in line with the Philippines' climate goals.

Summary of waste barriers

- **Low tipping fees:** Landfill disposal remains relatively cheap, often under USD 10 per tonne, which weakens the incentives for both public and private actors to finance more expensive but environmentally beneficial solutions.
- **Revenue and enforcement risks:** The impact of the Extended Producer Responsibility (EPR) law depends on consistent enforcement (as of early 2024, only 22.5% of obliged enterprises had registered an EPR programme) and transparent data of feedstock volumes. This introduces an uncertainty over whether recyclers, who rely on EPR revenues, can secure sustained demand or stable funding from brand owners required to meet EPR mandates.
- **Feedstock contract fragmentation:** Municipal waste service agreements lack standardisation, making revenue streams uncertain and scale difficult.
- **Project bankability:** Early-stage ventures face high capex, limited offtake certainty (e.g. Refuse-derived fuel sales) and often require other forms of support and financing such as blended finance or guarantees to proceed.

Summary of transport barriers

- **Cost and affordability:** Modern imported e-jeepneys can cost PHP1.6–3 million (~USD 28,000–50,000) per unit, and most operators lack sufficient equity or collateral to access concessional finance.
- **Fragmented operator base:** ~80% of jeepney operators own only one vehicle, limiting bankability and making cooperative consolidation difficult.
- **Route and revenue uncertainty:** Incomplete implementation of Local Public Transport Route Plans (LPTRPs) weakens ridership forecasts.
- **Policy gaps:** Most fiscal incentives expire by 2028, leaving a policy vacuum unless extended or replaced with long-term signals.
- **EV charging barriers:** Infrastructure rollout is slow, utilisation is uncertain and banks often lack the technical capability to understand EV charging technologies, battery degradation profiles and utilisation risks.

Despite these barriers, interviewees across sectors shared optimism

Globally, several public and private actors have developed new financing structures for both waste and transport—such as aggregator special purpose vehicles and pay-per-use models—offering a blueprint of what could work at scale. Encouragingly, early transactions in both waste and transport have secured commercial lending, showing that with the right risk-sharing mechanisms and clear policy signals, the Philippine market can deliver bankable projects at scale.

Looking ahead

As the Philippines pursues its climate and development goals, the mobilisation of private capital into sustainable transport and waste will be decisive. While challenges remain, this report highlights key foundations already in place. These include concessional public finance mechanisms, market-based obligations introduced by the EPR law and an emerging set of financing mechanisms that could improve project bankability if tested under real market conditions.

Meanwhile, the Green Force has laid the groundwork for cross-sectoral coordination. This report outlines a pathway for its evolution into the Philippines' sustainable investment platform—mirroring models seen in other countries—focused on pipeline validation, investor convening and public–private collaboration to drive capital into both mitigation and adaptation priorities.

Table 1: Cross-cutting themes limiting private investment.

No	Barrier Themes	Significance
Macroeconomic / Cross-Sectoral		
M1	Green investments carry higher perceived risk due to untested technologies, shifting policies or short political cycles that create uncertainty for investors	High
M2	Commodity price volatility and unpriced externalities undermine green competitiveness	Medium
M3	Neighbouring countries' stronger foreign direct investment (FDI) incentives risk diverting private capital flows away from the Philippines	High
M4	Complex bureaucracy and limited project readiness slow green finance, with numerous permits and approvals, and right-of-way constraints	High
Policy & Regulatory		
P1	Lack of a comprehensive framework or central coordinating body that harmonises incentives and regulations across transport, waste and finance regulations	High
P2	Inconsistent enforcement mechanisms create uncertainty for investors and weakens revenue certainty	High
P3	Economic disincentives due to the absence of fiscal levers such as landfill taxes or carbon pricing, which make greener solutions less financially attractive	Medium
Supply-Side		
S1	Lack of bankable projects due to uncertain feedstock quality (in the case of waste), ridership and revenue, and shortage of successful pilots undermines investor interest.	High
S2	Limited technical capacity in FIs to assess advanced or novel climate technologies and structure specialised green finance deals, and in project proponents to properly articulate bankability of project	Medium
S3	Insufficient or fragmented infrastructure can raise project costs and risks hamper the viability of greener solutions	High
S4	Funding challenges and high operational costs, especially in early phases (e.g. manufacturing lines, recycling plants)	Medium
Demand-Side		
D1	Difficulty accessing affordable capital and financing options for smaller players due to high perceived risks, weak collateral profiles and limited credit enhancements	High
D2	Available specialised or 'green' financial products tend to be structured for large corporates, with micro, small and medium enterprises (MSMEs) often reliant on higher-cost conventional lending	High
D3	Limited fiscal incentives to go beyond compliance with national targets	High
D4	Organisational capability gaps to develop and implement bankable projects	Medium

Table 2: Intervention themes to unlock private capital

Potential intervention theme	Sector	Barriers addressed	Brief description	Key stakeholders
De-risking capital				
Aggregator special purpose vehicles (SPVs), service contracts, and jeepney leasing agreements	Transport, Waste	S1, S3, S4, D1, D4	Pool operators into SPVs; introduce revenue-guaranteeing service contracts; offer jeepney lease agreements to lighten repayments and provide alternative pathways to ownership	Department of Transportation (DOTr), Local government units (LGUs), bilateral development banks/development financing institutions/multilateral development banks (MDBs), National development banks (Philippines), Private Sector
Utilisation Linked Finance (ULF)	EV charging	S1, D1, S3	Tie repayment to charging station usage to de-risk early cashflows	DOTr, LGUs, Department of Finance (DOF), Development Banks, Private Sector (charging point operators)
Blended finance platforms	Transport, Waste	M1, P3, S1, S3, D2	Concessional funding to lower risk for EV, Waste to energy, and recycling projects	DOTr, Department of Energy (DOE), Department of Environment and Natural Resources (DENR), DOF, National Solid Waste Management Commission, Development Finance, National Development Banks, Private Sector (project proponents)
Strengthening the policy environment				
Tipping fee reform & fiscal incentives	Waste	P3, D3, S3	Introduce landfill levies; offer fiscal incentives for recycling and WtE projects.	DENR, DOF, Department of Interior and Local Government (DILG), LGUs
Clarified EPR enforcement & WtE standards	Waste	P2, S1, S3	Strengthen EPR compliance and emission standards	DENR, Congress, LGUs, Industry coalitions, Private Sector (Producer Responsibility Organisations [PROs], waste contractors and auditors)
Carbon markets for waste and transport	Transport, Waste	M2, P3	Monetise emissions reductions via voluntary or compliance markets	DOF, DENR, DOE, Climate Change Commission (CCC), DOTr, DA, Department of Trade and Industry (DTI) and its Board of Investments (BOI), Department of Economy, Planning, and Development (DEPDev), PPP (Public-Private Partnership) Center, LGUs
Green bonds and Sustainability-linked loans	Transport, Waste	D2, D3, S1	Broaden access to debt financing for mid-sized firms	DOF, Bureau of the Treasury, Bangko Sentral ng Pilipinas (BSP), Securities and Exchange Commission (SEC), Private Sector

Potential intervention theme	Sector	Barriers addressed	Brief description	Key stakeholders
Improving market functionality & transparency				
Feedstock and route standardisation	Transport, Waste	P1, S1, S3, D1	Standardised agreements for feedstock and e-jeepney routes	DENR, LGUs, DOTr
Jeepney modernisation transparency platform	Transport	S1, M1, D1	Develop a digital platform that will provide comprehensive information on modern jeepney manufacturers, types of vehicles produced, the route franchises linked to each vehicle, and financing options available for consumers	DOTr, Land Transportation Franchising and Regulatory Board (LTFRB), Land Transportation Office (LTO) National Development Banks
Digital sustainable investment and business platform with green lane	Multiple	M4, P1, S1, S3, D4	Develop a centralised digital platform (modelled on Singapore's BizFile) that consolidates permits, registrations and approvals for green businesses and projects in waste, transport and other NDC sectors. Potential to introduce a "Green Lane" fast-track for eligible investments	Department of Information and Communications Technology (DICT), DTI and its BOI, DOF, DEPDev, Anti-Red Tape Authority (ARTA)
Institutional capacity building				
Strengthened Green Force (via an Executive Order)	Cross-Sector	P1, D2, D4	Strengthen Green Force structure; anchor sectoral working groups with private sector engagement	DOF, CCC, Green Force
Technical capacity building	Transport, Waste	S2, D4, M4	Upskill banks and developers in green investment models	Green Force Subgroups, Private Sector Adjunct Groups (especially Financial Sector)

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Acronym table			
AD	Anaerobic Digestion	EO	Executive Order
ADB	Asian Development Bank	EPR	Extended Producer Responsibility
AO	Administrative Order	EV	Electric Vehicle
ARTA	Anti-Red Tape Authority	EVAP	Electric Vehicle Association of the Philippines
ASEAN	Association of Southeast Asian Nations	EVCS	Electric Vehicle Charging Station
BOI	Board of Investments	EVIDA	Electric Vehicle Industry Development Act
BRT	Bus Rapid Transit	EVIS	Electric Vehicle Incentive Strategy
BSP	Bangko Sentral ng Pilipinas	GCF	Green Climate Fund
CBI	Climate Bonds Initiative	GEF	Global Environment Facility
CCC	Climate Change Commission	GFI	Green Finance Institute
CES	Clean Energy Scenario	GHG	Greenhouse Gas
CME	Coco Methyl Ester	GSS+	Green, Social, Sustainability and Sustainability-linked
CPI	Carbon Pricing Instruments	HEVs	Hybrid Electric Vehicles
CPO	ChargePoint Operator	IFC	International Finance Corporation
CREVI	Comprehensive Roadmap for the Electric Vehicle Industry	IRR	Internal Rate of Return
DA	Department of Agriculture	ITSF	Inter-Agency Task Force for Sustainable Finance
DBM	Department of Budget and Management	LBP	Land Bank of the Philippines
DBP	Department of Economy, Planning, and Development	LGUs	Local Government Units
DENR	Department of Environment and Natural Resources	LPTRP	Local Public Transport Route Plan
DEPDev	Department of Economy, Planning, and Development	LTFRB	Land Transportation Franchising and Regulatory Board
DFI	Development Finance Institution	LTO	Land Transportation Office
DICT	Department of Information and Communications Technology	MDB	Multilateral Development Banks
DILG	Department of the Interior and Local Government	MSMEs	Micro, Small and Medium Enterprises
DOE	Department of Energy	MRFs	Material Recovery Facilities
DOF	Department of Finance	MRT	Metro Rail Transit System
DOTr	Department of Transportation	MSW	Municipal Solid Waste
DTI	Department of Trade and Industry	NAP	National Adaptation Plan

Acronym table			
NDC	Nationally Determined Contribution	RDF	Refuse-Derived Fuel
NEA	National Environment Agency (Singapore)	RPS	Renewable Portfolio Standard
NGO	Non-Governmental Organisation	SAF	Sustainable Aviation Fuel
O&M	Operations and Maintenance	SEC	Securities and Exchange Commission
OCR	Ordinary Capital Resources	SIPP	Strategic Investment Priorities Plan
OEMs	Original Equipment Manufacturers	SLFs	Sanitary Landfill Facilities
OE	Obligated Enterprises	SPV	Special Purpose Vehicle
PCX	Plastic Credit Exchange	TFEC	Total Final Energy Consumption
PET	Polyethylene Terephthalate	ULF	Utilisation Linked Finance
PHEVs	Plug-in Hybrid Electric Vehicles	UNFCCC	United Nations Framework Convention on Climate Change
PHP	Philippine Peso	USAID	United States Agency for International Development
PPP	Public-Private Partnership	USD	United States Dollar
PRO	Producer Responsibility Organizations	UVVRP	Unified Vehicular Volume Reduction Program
PUVMP	Public Utility Vehicle Modernization Program	VAT	Value-Added Tax
RA	Republic Act	WG	Working Group
RCM	Revenue Certainty Mechanism	WtE	Waste-to-Energy



Context

Introduction

The Green Finance Institute (GFI) is developing a programme of work in the Philippines with the support of the Foreign, Commonwealth and Development Office (FCDO) through the British Embassy Manila (BEM). This programme aims to accelerate private capital mobilisation for the country's Nationally Determined Contributions (NDC) by addressing financing gaps in two key sectors: transport and waste. This work is being undertaken in collaboration with the Inter-agency Technical Working Group on Sustainable Finance (the "Green Force") led by the Department of Finance (DOF) and the Climate Change Commission (CCC). Formalised in 2021, the Green Force's mandate is to institutionalise sustainable finance and develop a pipeline of bankable green investments.

This work is being undertaken in collaboration with the Inter-agency Technical Working Group on Sustainable Finance (ITSF), also known as the Green Force, led by the Department of Finance (DOF) and the Climate Change Commission (CCC). Formalised in 2021, the Green Force's mandate is to institutionalise sustainable finance and develop a pipeline of bankable green investments.

According to the Philippine Greenhouse Gas Inventory (2020), the energy sector accounted for 56% of the country's total emissions, with transport responsible for 23% of that share, while the waste sector contributed an additional 13% to national emissions.⁹

The report was prepared with support from EY Philippines (SGV & Co.).

⁹ Data taken from Philippine Greenhouse Gas Inventory (2020) using AR5 methodologies, energy includes transport, fuel use in industry, commercial, public and household sectors. Percentages calculated from total which includes forestry and other land use.

Rationale for transport and waste as NDC sectors of focus

The Philippines' National Determined Contribution implementation plan (NDC IP) highlights a climate financing need of about PHP4.1 trillion (USD 72 billion)¹⁰ through 2030 across five sectors – agriculture, waste, industry, transport, and energy. With the government committing to fund only 2.71% of this, the country must rely on private capital and international support to achieve its climate targets.¹¹

The Plan shows that substantial emissions reductions can be achieved in transport and waste but will require significant investment (as shown in figure 1):

- **Transport:** ~USD 32.8 billion for achieving ~67 MtCO₂e reductions by 2030.
- **Waste:** ~USD 1.6 billion for ~66 MtCO₂e reductions in the same timeframe.

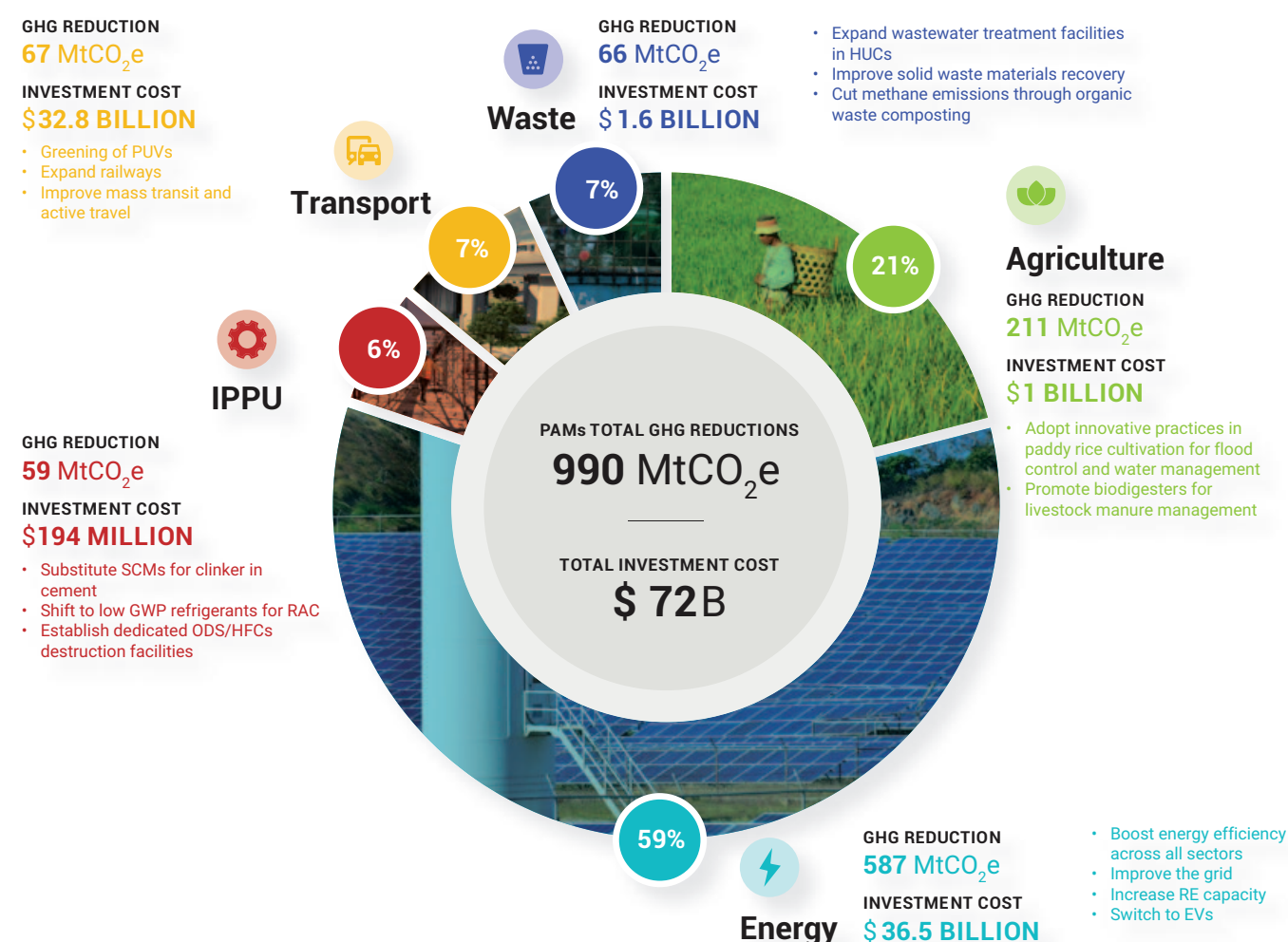


Figure 1: Commitments and cost of NDC Policies and Measures, source Philippines NDC IP (2024)

While the energy sector has seen comparatively larger inflows of investment, the financing landscape for waste and transport remains underdeveloped. In an ad-hoc Bangko Sentral ng Pilipinas (BSP) survey on green lending, 89% of commercial banks supported renewable energy projects, while only 28% supported resource efficiency and circular economy and 22% zero-carbon transportation.¹²

¹⁰ This figure is an underestimation of the full cost required as (i) it does not include a full picture of private sector costs associated with all the actions and (ii) PAMs have not been fully costed at this time, due to data availability

¹¹ Philippines' NDC Implementation Plan (2024) "The NDC stipulates that 2.71% of the reduction and avoidance of GHG emissions will be unconditional and 72.29% is conditional"

¹² BSP (2022) Sustainability report Box Article 2

Likewise, an Asian Development Bank (ADB) analysis noted that mass transport and solid waste management remain largely unexplored by private investors, even though the Philippines has a mature Public-Private Partnerships (PPP) framework.¹³ In 2018, ADB warned that municipal waste-to-energy (WtE) projects in the Philippines had seen virtually no uptake due to investment uncertainty.¹⁴ Similarly, the Climate Bonds Initiative (CBI) flagged mass transport and solid waste as “untapped” green investment sectors.¹⁵ In contrast, by mid-2020, Philippine entities had issued over USD 2.6 billion in green bonds with the majority of proceeds going into renewable energy projects.¹⁶ This mirrors broader regional trends: CBI data reveals that from 2014 to 2023, 35% of cumulative green bond proceeds across Asia-Pacific flowed into energy projects.¹⁷ See figure 2.

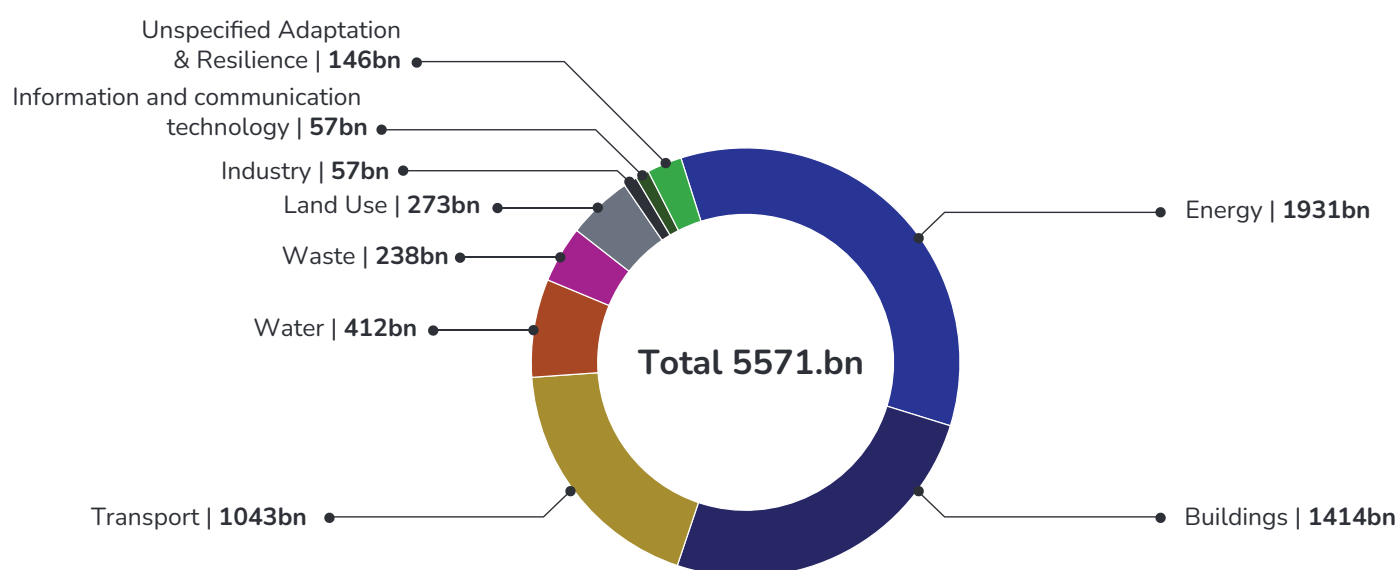


Figure 2: Cumulative green bond proceeds across Asia-Pacific (2014-2023), source: CBI

Project objectives

The project's objectives are twofold:

- Understand the policy framework and financial mechanisms needed to catalyse private investment into the waste and transport sectors.
- Determine how the Green Force can function more efficiently and effectively to create the enabling environment to fill identified decarbonisation investment gaps.

A combination of desk-based research and stakeholder interviews, balancing representation across government, private financiers, corporates and development partners, underpinned this analysis, spanning December 2024 to March 2025. Where material policy changes have occurred since this period, these are acknowledged in-line or in footnotes. Further details are provided in [Annex A](#).

¹³ BusinessWorld (2018) [ADB warns of barriers to waste-to-energy investment](#)

¹⁴ Ibid

¹⁵ Climate Bonds Initiative (2020) [Green Infrastructure Investment Opportunities](#)

¹⁶ ReGlobal (2020) [Opportunities for green finance in the Philippines](#)

¹⁷ Climate Bonds Market Data (accessed March 2025) <https://www.climatebonds.net/market/data/#country-map>

In designing this programme, the project deliberately focused on two sub-sectors within waste and transport: municipal solid waste (covering both organics and inorganics) and road-based public transport, specifically jeepneys and EV charging infrastructure. This is not because other interventions, such as rail, bus rapid transit, or solutions for agricultural waste, are less important. On the contrary, they are essential. But unlocking private capital requires specificity. Financial instruments and enabling reforms must be co-designed around unique risks that need to be priced, mitigated and tailored to the policy characteristics of each sub-sector. Jeepney modernisation and EV charging were prioritised because they are commercially relevant, present significant decarbonisation opportunities and are government priorities. To co-design actionable solutions – whether that means blended equity funds or SPVs with credit enhancements, diagnostics need to go deep not broad. The GFI recommends that other sub-sectors should be explored in a similar depth.





Macro-economic landscape and cross cutting barriers

Context

The Philippines has posted one of Asia's fastest expansion rates—5.7% full year GDP growth rate in 2024¹⁸—driven by strong consumer demand, remittances from Overseas Filipino Workers (OFWs), and a young labour market.¹⁹ The World Bank projects the country could reach upper-middle income status by 2026 if it maintains similar momentum.²⁰ Yet, foreign direct investment (FDI) remains modest. In 2023, the Philippines attracted the sixth-highest FDI inflows of the Association of Southeast Asian Nations (ASEAN), well behind Singapore, Vietnam, and Indonesia.²¹ Interviews with investors and foreign banks cite concerns such as perceived political instability, restrictions on foreign investments, corruption risks and a complex permitting process as key factors impeding capital inflows.

Institutional investments (insurance, pensions, funds) also remain limited, at roughly 19% of GDP—well below levels in neighbouring markets in 2024.²² Public listings face higher fees; initial public offering (IPO) costs equate to about 0.10% of a company's market capitalisation, compared to 0.05% in Thailand.²³ Against this backdrop, sustainability-themed debt issuance is taking root—the first ever green bond from an ASEAN entity was issued in 2016 by a Philippine corporate, AP Renewables, Inc.²⁴—but remains largely confined to top conglomerates with sufficient bankability and scale. According to the data from the Securities and Exchange Commission (SEC), the total ASEAN-label green, social, sustainability and sustainability-linked (GSS+) bond issuances in the Philippines amount to USD 15.26 billion as of January 2025—which ranks the third highest in the region, after Thailand and Malaysia (see figure 3).²⁵ While BSP and the SEC have introduced sustainable finance guidelines, actual transaction volumes suggest the market is still in a formative phase.

¹⁸ [Philippine News Agency \(2025\) Q4, full-year 2024 economic growth revised upward](#)

¹⁹ [World Bank \(2024\) The World Bank in the Philippines](#)

²⁰ [Ibid](#)

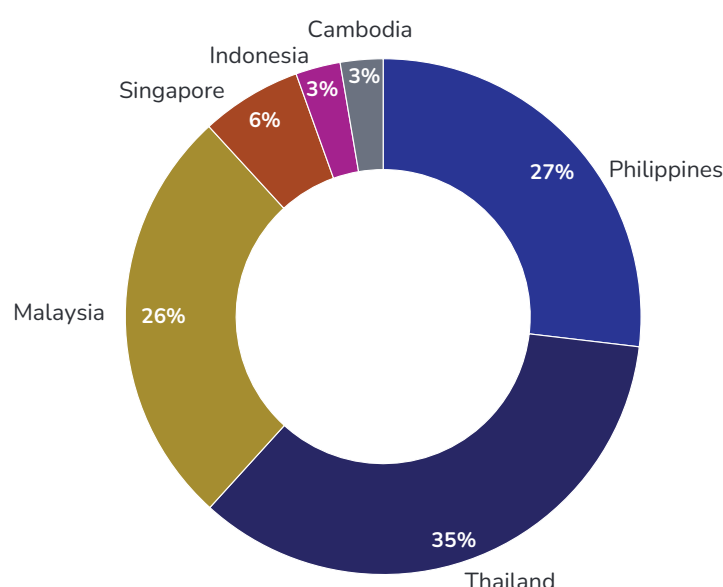
²¹ [Philippine News Agency \(2023\) PH aims 2nd highest FDI in ASEAN by '28](#)

²² [Rosales, E.F. \(2024\) Philippines trails ASEAN neighbours in capital market viability](#)

²³ [Ibid](#)

²⁴ [Reglobal \(2020\) Opportunities for green finance in the Philippines](#)

²⁵ [SEC \(2025\) Sustainable Finance Market Update as of January 2025](#)



* This includes USD428.41 million issuances from Malaysia in December 2024

TOTAL ASEAN-LABELED GSS+ BOND ISSUANCES BY COUNTRY (in USD Millions; figures may vary due to exchange rates)				
Country	As of 31 Jan 25	As of 31 Dec 24	% Change	Rank
Philippines	15,256.81	15,256.81	0.00%	3rd
Thailand	19,795.18	19,795.18	0.00%	1st
Malaysia	15,452.36*	15,023.95	2.85%	2nd
Singapore	3,593.15	3,593.15	0.00%	4th
Indonesia	1,593.86	1,593.86	0.00%	5th
Cambodia	1,517.78	1,517.78	0.00%	6th

Figure 3: Total ASEAN-labelled GSS+ Bond Issuances by Country. Source: SEC

Lower competitiveness compared to certain neighbouring ASEAN peers

Multiple interviews with international banks and private investors revealed the perception that the Philippines lags behind certain ASEAN neighbours in offering attractive conditions for decarbonisation capital. Specific challenges included:

- **The absence of carbon pricing instruments (CPIs):** While Singapore and Indonesia already operate some form of carbon tax or trading system, the Philippines remains in early-stage design discussions,²⁶ depriving low-carbon investments of potential revenue streams.
- **Restrictive leasehold terms:** Foreign investors may only secure 50-year land leases (extendable by 25), compared with 99-year leases in competing markets (see Table 4); In September 2025, legislation was passed to extend leaseholds to 99 years.²⁷
- **Complex permitting and fragmented incentives:** Interviewees noted that the process for establishing green infrastructure projects can involve as many as 200 discrete approvals. While there is a “green lane for strategic investments” that functions as a “one-stop shop” as outlined in Executive Order No. 18, series of 2023, this system differs significantly from Singapore’s (see box 1). Notably, projects must first be endorsed as eligible for the Green Lane before they can benefit from the expedited process, and there is currently no digital platform to facilitate faster processing within the Philippine Green Lane. This complexity can inflate compliance costs and timelines.

²⁶ In February 2025, the House of Representatives approved on second reading a bill “HB07705” that would set up a to create a carbon pricing framework for Philippine companies. Third reading to be scheduled.

²⁷ A bill seeking to extend the maximum lease to 99 years was recently signed into law, with the signing of [Republic Act No. 12252](#) on September 3. The analysis here reflects investor concerns raised prior to this reform.

Foreigners' leasehold tenures for ASEAN countries		
	leasehold tenures (yr)	Max. extension
Malaysia	99	n/a
Singapore	99	n/a
Vietnam	50	50
Cambodia	50	49
Thailand	50	49
Philippines	50	25
Myanmar	50	20
Laos	30	45
Indonesia	30	25
Brunei Darussalam	25	74

Table 3: Asean countries foreigners' leasehold periods (as of March 2025)

Box 1. Lessons from Singapore's BizFile platform.²⁸

Singapore is known for the supportive environment it provides around FDI, including strong tax incentives, transparent policies and high ease of doing business.

One key enabler is Singapore's BizFile platform—a unified digital platform that consolidates all statutory requirements for business setup, including permits, registrations and tax filings. Through BizFile, foreigners who wish to set up businesses in Singapore can complete multiple processes in one place electronically. Routine approvals can often be completed within a single business day, while more complex applications requiring additional government review typically conclude within 14 days to two months. In addition, most of the information related to FDI in Singapore is accessible online in English, allowing foreign investors to easily understand the relevant processes even from abroad.

Uncertain regulatory environment and implementation inconsistencies

A widely cited barrier is the fragmented application of laws at local government unit (LGU) levels. For example, Executive Order No. 12, series of 2023, exempts many electric vehicles from import duties, yet interviewees revealed that some importers continued to face tariff assessments in certain local jurisdictions. Similarly, Metro Manila localities differ sharply in single-use plastics rules: Quezon City enforces bans on plastic bags and straws, while adjacent Manila City still permits plastic bags for wet goods. This regulatory patchwork can strain businesses operating across municipal boundaries.

According to interviews with multiple stakeholders, large infrastructure projects can require over 200 approval steps spanning national agencies and multiple LGU levels. Beyond national agencies, approvals from each involved LGU can introduce midstream fee changes or additional requirements. One foreign asset manager disclosed that it had walked away from a waste to energy project due to the involvement of multiple LGUs and barangays (the smallest unit of the Philippine government, similar to villages or boroughs), as well as long permitting timelines.

²⁸ ASEAN Briefing, [Why Singapore - Singapore Guide | Doing Business in Singapore](#)

Short-term local political horizons

Under the 1987 Philippine Constitution, LGU officials are elected to three-year terms (with a maximum of three consecutive terms). Banks and industry note that these short cycles often disrupt multi-year public-private partnerships (PPPs), such as long-term concession agreements for waste. This short political horizon can dampen confidence among prospective financiers.²⁹ One high profile example is the ~PHP15 billion (USD 265 million) waste-to-energy (WtE) facility proposed by a private investment management firm for Quezon City in 2017.³⁰ While initially approved under the city's PPP framework, negotiations stagnated with the arrival of a new administration. Despite attempts to revive discussions in 2021–22, the project remains in limbo.^{31,32}

To mitigate such risks, LGUs need to ensure priority projects are backed by ordinances from the LGU's Sangguniang (local legislative council) or local executive orders by the LGU's chief executive.³³ These provide legal basis for the projects and support their implementation and enforcement. Still, not all LGUs have the capacity to craft such legislation, resulting in unbankable projects.

Lack of alignment among government tiers

The 1991 Local Government Code devolved significant powers to LGUs, occasionally clashing with national-level mandates. In the 2019 Manila Bay waste crisis, for example, certain LGUs illegally dumped rubbish despite parallel “Zero Waste” national targets.³⁴ Similarly, transport upgrades such as the Metro Manila Subway have faced land-use, right-of-way, and compensation disputes at the local level pushing back completion dates.³⁵ Stakeholders report that even in Metro Manila alone, navigating separate LGU approvals can add 18+ months to typical project timelines. Investors accordingly need to price in these uncertainties in Internal Rate of Return (IRR) calculations to mitigate these layered political and regulatory risks.³⁶

Oil price volatility

Stakeholders flagged crude oil price swings as a barrier for scaling private investment in plastics recycling. World Bank analysis shows virgin resin becomes cheaper than recycled material whenever oil prices dip below USD 70 per barrel, undercutting recycled plastic margins and deterring demand,³⁷ (see figure 4). Over the past decade, prices remained under that threshold for seven of those years, undermining stable revenue for recyclers. Without domestic carbon pricing or offset agreements to bolster recycled content, plastic reclamation projects face further economic vulnerability to global oil markets.

²⁹ In a 2023 paper for the University of the Philippines' Center for Integrative and Development Studies²⁹, Atienza and Go highlighted this issue. They specifically cited private and government bank loans as options for financing infrastructure projects, though the short political terms remain a key issue. ([Assessing-Local-Governance-and-Autonomy-in-the-Philippines.pdf](#))

³⁰ Inquirer (2021) [MPIC, QC gov't revive talks on 42-MW waste-to-energy project](#)

³¹ Manila Standard (2023) [MPIC plans to transfer waste-to-energy projects to MGen](#)

³² Inquirer (2021) [MPIC, QC gov't revive talks on 42-MW waste-to-energy project](#)

³³ According to Teng-Calleja et. al. (2016), sustainability of projects is still seen by local leaders as a key issue, thus the need for additional legislation to insulate these from changes in leadership. The same paper highlights Albay's Public Safety and Emergency Management office, established in 1995, as a successful example of the use of local legislation to ensure project sustainability. ([Transformation in Philippine local government: Local Government Studies: Vol 43, No 1](#))

³⁴ Philstar (2019) [Metro Manila in the midst of 'garbage crisis,' DENR chief says](#)

³⁵ Rappler (2025) [Why major railway projects face delays](#)

³⁶ GFI stakeholder interviews, 2024.

³⁷ World Bank (2021) [Market Study for the Philippines: Plastics Circularity Opportunities and Barriers](#)

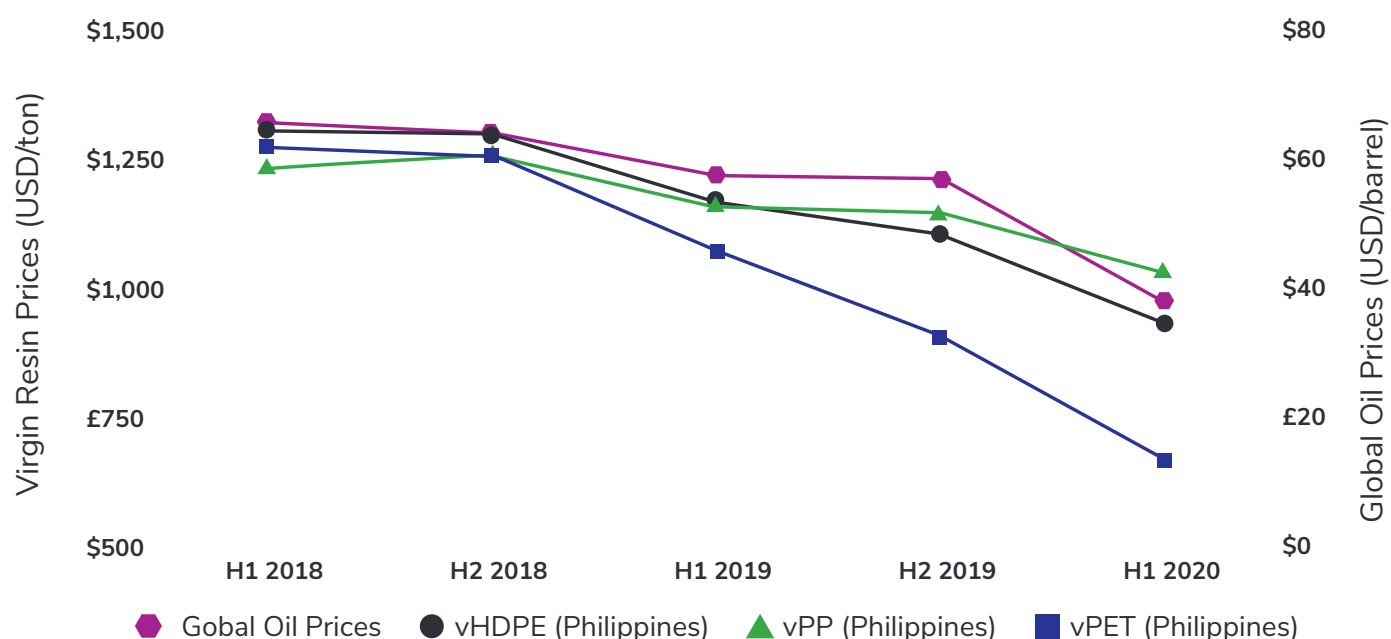


Figure 4: Comparison of global oil prices and virgin resin prices in the Philippines. Source: World Bank (2021)

Outlook

Despite strong macro fundamentals—robust GDP growth, a rising consumer base and supportive central bank signals—the Philippines' green finance market is complicated by these multi-layered bureaucratic, policy and political uncertainties. The recurring theme is that bridging the country's climate-aligned investment gap will require:

- More cohesive national regulations (especially around carbon pricing and consistent implementation of EV or waste mandates).
- Clearer project frameworks and one-stop shops (for streamlined permitting and LGU alignment).
- Stable fiscal incentives (to offset high perceived risk in emerging green technologies).

These shifts will help unlock private investment and position the Philippines more competitively alongside its ASEAN neighbours.



Sectoral deep dives: Municipal Solid Waste (MSW)

Context

Rapid growth in MSW and infrastructure gaps

The Philippines generated an estimated 21.4 million tons of MSW in 2022³⁸ and, according to DENR figures, generation increased 34% between 2010 and 2020.³⁹ Organic waste makes up roughly half of the municipal stream, with the remainder composed of plastics, paper, metals and other residuals. As population and urbanisation expand, city and municipal governments – responsible for collection and disposal under the Ecological Solid Waste Management Act (RA 9003) – struggle to keep pace. About 665 LGUs are serviced by Sanitary Landfill Facilities (SLFs) which is around 41% of its 1,634 municipalities, and many rely on open dumps or minimal landfilling due to budget constraints.^{40,41}

Material recovery facilities (MRFs)—over 11,600 in total—cover fewer than 40% of barangays, leaving significant volumes of unsorted and contaminated recyclables.⁴² Even where present, MRFs often lack financing for proper sorting equipment and consistent staffing. Multiple interviewees emphasised that feedstock quality is a critical constraint; sorting is inconsistent and underfunded. One industry coalition remarked **“the real challenge is not supply but the quality of feedstock.”** With shortages of properly sorted waste—amplified by an archipelagic geography—recycling or WtE facilities face uncertain input streams and elevated operational and maintenance costs.⁴³

³⁸ World Bank (2024) [Publication: Guidance on the Development of a Roadmap for Managing Plastic Waste and Reduction of Non-Recyclable Single-use Plastics in the Philippines](#)

³⁹ DENR (2020) [National Solid Waste Management Status Report \[2008-2018\]](#)

⁴⁰ DENR-EMB Sanitary Landfill Data (n.d.) [PH Sanitary Landfill Data](#).

⁴¹ A Plastic MFA done estimates that out of the annually 2,150k tonnes of plastic that are available for local consumption, approximately 760k tonnes or 35% are leaked to the open environment while 706k tonnes or 33% are disposed to landfills and dumpsites. Approximately 345k tonnes or 16% are stored and in-use. Only around 183k tonnes or 9% are considered recycled.

⁴² [Ibid](#)

⁴³ ADB (2020) [Materials Recovery Facility Tool Kit](#)

This infrastructure gap is fuelling both methane emissions and plastic leakage into marine ecosystems. Methane emissions account for 93.4% of waste sector GHG emissions, of which 34% is from solid waste management disposal.⁴⁴ A 2021 Science Advances study ranks the Philippines as the world’s top ocean plastic polluter, discharging 356,000 metric tons annually—far exceeding other large contributors (see figure 5).⁴⁵ The World Bank estimates 78% of the material value of plastics is lost to the Philippine economy, costing roughly USD 790–890 million per year.⁴⁶

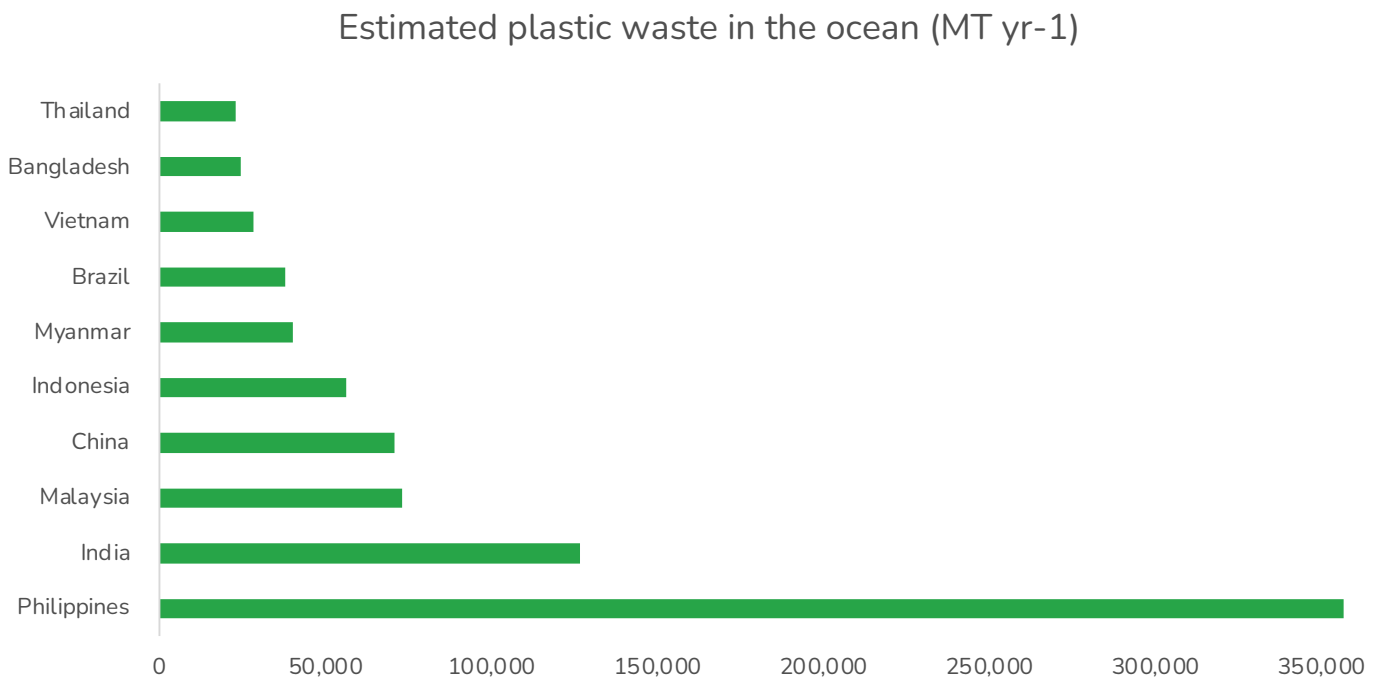


Figure 5: Estimated plastic leakage into the ocean (MT yr-1) of the top ten countries (source: data from Science Advance study)

Policy and market context for waste sector investment

The Extended Producer Responsibility (EPR) Act of 2022 (RA 11898) markedly shifts both accountability and financing for plastic waste management onto large companies. The Renewable Energy Act of 2008 (RA 9513) recognises certain WtE technologies as part of the renewable energy mix and encourages their adoption. Meanwhile, the Clean Air Act (RA 8749) establishes an air pollution control policy, which constrains certain WtE technologies.

Effective as of August 2022, the EPR law obliges companies with >PHP100 million (~USD 1.8 million) in assets to progressively recover and divert the plastic packaging they put into the market—rising from 20% in 2023 to 80% by 2028. Brand owners (Coca-Cola, Unilever, Nestlé etc.) can meet EPR targets by financing local recovery and diversion projects or purchasing plastic credits from Producer Responsibility Organisations, such as the Philippine Alliance for Recycling and Materials Sustainability (PARMS) and the Plastic Credit Exchange (PCX). PCX charges approximately USD 100 per tonne for co-processing credits and USD 500 per tonne for high-grade mechanical recycling credits.⁴⁷

While EPR provides a potential revenue stream for plastics recyclers or co-processers, interviews confirmed that waste still attracts only a modest share of green lending, overshadowed by renewable energy and transport investments (see rationale for transport and waste section). Emerging markets received only ~6% of plastic waste management investments between 2018 and 2023.⁴⁸

⁴⁴ Climate Tracker Asia (2025) [Managing Waste, Managing Emissions](#)
⁴⁵ Meijer et al (2021) [More than 1000 rivers account for 80% of global riverine plastic emissions into the ocean](#)
⁴⁶ World Bank (2021) [Market Study for the Philippines: Plastics Circularity Opportunities and Barriers](#)
⁴⁷ PCX (2024) [To Tackle Plastic Scourge, Philippines Makes Companies Pay](#)
⁴⁸ [The Private Investment Landscape for a Global Circular Economy for Plastics: Insights from the Plastics Circularity Investment Tracker](#)

Nevertheless, a few transactions show the potential:

- **HSBC's PHP1.35-billion (~USD 24.5 million) green loan** to Prime Integrated Waste Solutions' Cebu waste facility.⁴⁹ The financing expanded the facility's capacity to 2,000 tonnes per day, producing Refuse-Derived Fuel (RDF) for cement kilns. The project demonstrates that fully private-sector waste investments can become bankable when backed by a strong sponsor, robust demand (from tipping fees and RDF sales) and alignment with national waste laws.⁵⁰
- **The National Development Corporation's PHP40 million (USD ~700,000) equity stake** in Davao Thermo Biotech Corp. an organic waste-to-fertiliser facility operating commercially since 2017.⁵¹ NDC's minority stake helped de-risk the early-stage project, allowing it to scale with a proven business model. The case illustrates how public capital can catalyse private investment in smaller, regionally scalable waste solutions across provinces.

Beyond these, large-scale waste investments remain exceptional. Board of Investments (BOI) data suggest that PHP1.62 trillion in investment approvals for 2024 has mostly gone to renewable energy, followed by air and water transport.⁵² The PPP Center pipeline similarly lists only a handful of waste projects (e.g. the WtE facility in Pangasinan).⁵³ Although development institutions like the ADB have financed Philippine climate initiatives, their support has largely focused on energy and transport. In the waste sector, ADB efforts have primarily centred on technical assistance and operational improvements—such as feasibility studies and capacity building for LGUs—rather than CapEx financing for large-scale infrastructure.^{54,55}

Key barriers to investment

Shared barriers across the waste sector

Despite growing waste volumes and the introduction of EPR legislation, the sector faces several cross-cutting barriers that limit private investment across recycling, co-processing and WtE technologies.

1. Landfill remains inexpensive

The Philippines does not impose a landfill tax or carbon pricing and local governments rarely set tipping fees above USD 10–15 per ton,⁵⁶ among the lowest in Asia.⁵⁷ By comparison, co-processing and WtE facilities require break-even tipping fees closer to USD 20–30 per tonne. This dynamic weakens the incentives for both public and private actors to finance more expensive but environmentally beneficial solutions.

2. Inconsistent policy enforcement

As of early 2024, only around 900 of an estimated 4,000 obliged enterprises (OEs) (roughly 22.5%) registered an EPR programme, signifying low compliance to the EPR law.⁵⁸ Interviewees reported that sanctions have not been enforced (or the lack of transparency around it), introducing uncertainty over whether recyclers and co-processors can rely on EPR revenues. Additionally, anti-incineration language in the Clean Air Act (RA 8749) creates legal ambiguity for WtE projects, heightening perceived regulatory risk. Supreme Court rulings and DENR guidance confirm that incineration is permissible if emissions remain within allowable thresholds, though investor perceptions of regulatory risk persist.

3. Fragmented waste collection and feedstock risks

MRF coverage is limited. Those that do exist often lack financing for proper sorting equipment or consistent staffing. As a result, recyclers and WtE facilities face feedstock variability, contaminant risks — particularly from food and organic waste — and uncertain volume flows, complicating cash flow projections and bankability assessments.

⁴⁹ HSBC (2023) [HSBC Philippines announced P1.35 billion green loan for Prime Infra](#)

⁵⁰ HSBC (2023) [How is Prime Infrastructure supporting sustainable waste management in the Philippines?](#)

⁵¹ NDC.GOV.PH (2023) [NDC invests P40M in biodegradable waste management pioneer DTBC](#)

⁵² BusinessWorld (2024) [BoI exceeds investment approvals target](#)

⁵³ PPP.GOV.PH [List of Projects](#)

⁵⁴ ADB (2019) [Solid Waste Management Sector Project: Technical Assistance Completion Report](#)

⁵⁵ ADB. (n.d.). Projects – Philippines ([search: "solid waste"](#)).

⁵⁶ Agaton et al., (2020) [Economic analysis of waste-to-energy investment in the Philippines: A real options approach](#)

⁵⁷ ADB & AECOM (2016) [Mainstreaming Integrated Solid Waste Management in Asia](#)

⁵⁸ Business Mirror ['Companies slow in complying with law on waste disposal'](#)

4. High capital costs and weak returns

New facilities for mechanical recycling or WtE can cost hundreds of millions of dollars. Revenue streams (e.g. tipping fees, power sales or RDF) are rarely robust enough to cover debt and offer competitive returns—unless supplemented by viability-gap funding, guaranteed feedstock contracts or additional incentive mechanisms like a landfill levy.

5. Short local political cycles

Feedstock contracting remains highly fragmented across LGUs, which operate under three-year election periods, making it difficult to sustain long-term PPP contracts or guarantee a stable revenue base. This short timeline discourages lenders who may prefer a 10–20 year horizon aligned with typical infrastructure asset cycles. Without mechanisms such as inter-jurisdictional contracts or external aggregators, feedstock flows remain unstable and difficult to bank.

While recycling, co-processing and WtE solutions face common barriers, each also presents distinct sector-specific challenges shaped by both public and private stakeholders (see figure 6 for an overview of key actors across the municipal solid waste value chain).

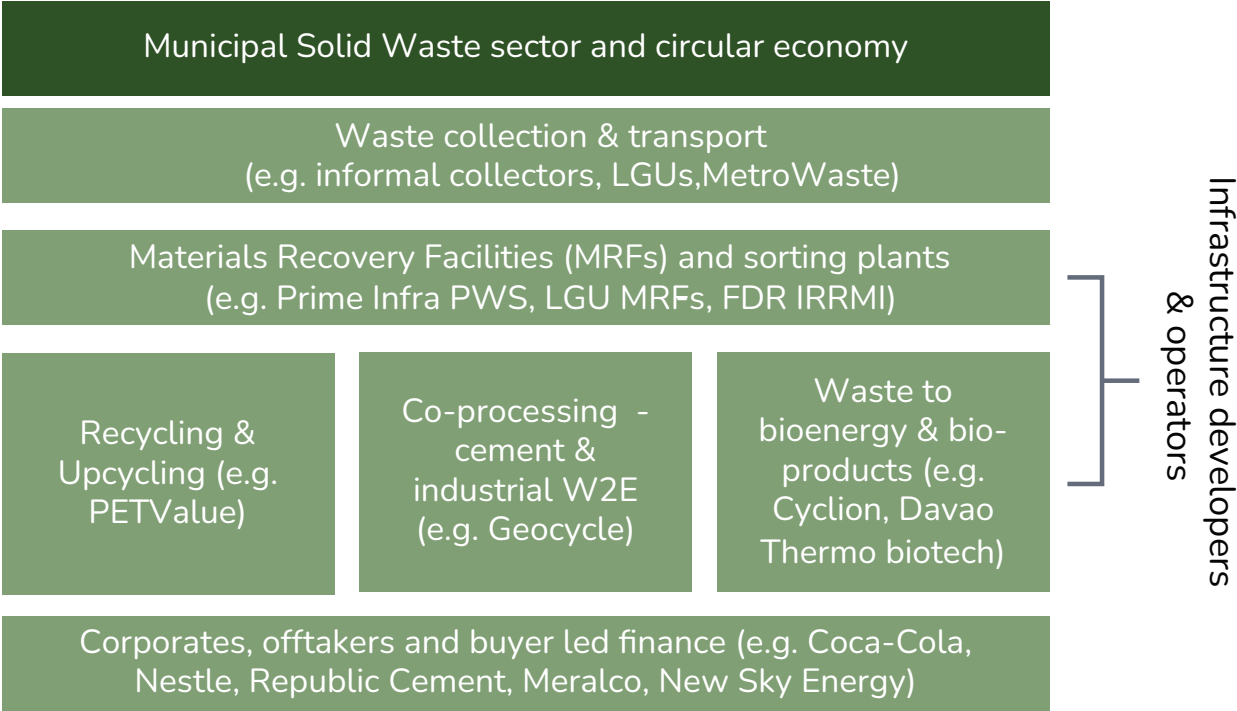


Figure 6: Key demand side stakeholders in the MSW ecosystem

Mechanical recycling of plastics & EPR-driven demand

1. Low EPR compliance and enforcement:

Theoretically, the EPR law should drive predictable demand for recycled plastics. However, compliance remains low (see shared barriers section). Although sanctions on paper include fines (PHP5–20 million) and potential business permit suspensions, enforcement has been inconsistent. Lawmakers and private sector stakeholders describe the current enforcement environment as “perfunctory,” with many companies adopting a “wait-and-see” approach rather than proactively investing in the reduction of plastic use or plastic recovery.⁵⁹ This situation introduces a fundamental uncertainty over whether recyclers, who rely on EPR revenues, can secure sustained demand or stable funding from brand owners required to meet EPR mandates.

⁵⁹ Ibid

2. Inadequate sorting infrastructure and high contamination

As highlighted earlier, the Philippines' MRF network remains underdeveloped. Even where MRFs exist, limited funding often reduces them to basic sorting sheds rather than full recovery centres. As a result, a large share of potentially recyclable material never gets separated at source.⁶⁰ This challenge is exacerbated by high contamination rates and the prevalence of multi-layer sachets—an estimated 163 million used daily—whose mixed materials make them difficult or uneconomic to recycle.⁶¹ These constraints collectively undermine any effort to produce reliably clean feedstock for recycling initiatives, driving up the cost of mechanical recycling operations.

3. High capital and operating costs:

Even small-scale community recycling facilities often face prohibitive capital and operational costs for MRFs.⁶² Outside major urban centres, revenue from low-value recyclables rarely covers day-to-day costs. As a result, numerous facilities have shut down or remain dormant.⁶³ This shortfall in stable operating funds reinforces a cycle: with fewer functioning MRFs, greater volumes of recyclables end up in landfills or dumps, further reducing the economies of scale that might support more efficient recovery systems.

4. Project scale and bankability issues

Scaling up recycling to a commercially viable level remains difficult. Much of the existing plastic supply flows through informal channels—thousands of small junk shops and waste pickers—making it difficult for formal recyclers to lock in reliable long-term feedstock contracts.⁶⁴ In an archipelagic country of over 7,600 islands, aggregation remains a major logistical challenge, particularly for low-density or contaminated plastics. Transport costs from remote islands and provinces further compound this issue, as smaller actors lack the capital to move feedstock to major recycling hubs, while potential buyers are reluctant to commit to offtake contracts when logistics costs and feedstock quality remain uncertain. Without sufficient volumes and certainty of supply, projects struggle to meet requirements for conventional bank financing or project loans, limiting access to capital.⁶⁵

5. Volatile market conditions and risk perceptions:

Recycling projects are perceived as inherently higher-risk and lower-margin compared to sectors like renewable energy (solar or wind farms typically benefit from long-term power purchase agreements). Volatile commodity prices for secondary plastics add to this perception. As discussed in the macroeconomic section, recycled resin prices can become uncompetitive when global oil prices fall below USD 70 per barrel, making virgin plastics cheaper (see box 2 for example). Few policy mechanisms—such as recycled-content mandates within the EPR or price floors—exist to stabilise returns. Consequently, many banks may apply a risk premium to recycling loans or avoid them altogether, leaving a funding gap that is only partially addressed by development finance institutions.⁶⁶ Without stronger signals that recyclers can secure stable feedstock and reliable end markets, private investors are likely to remain cautious, limiting the sector's potential to scale.

⁶⁰ PCU (2024) [Has the Philippines created a garbage problem too big to dig its way out of?](#)

⁶¹ World Bank (2021) [Market Study for Philippines: Plastics Circularity Opportunities and Barriers](#)

⁶² PlasTech Ventures (n.d) [Material Recovery Facilities \(MRFs\)](#)

⁶³ [Ibid](#)

⁶⁴ World Bank (2022) [Reducing Plastic Waste in the Philippines](#)

⁶⁵ World Bank (2021) [Market Study for Philippines: Plastics Circularity Opportunities and Barriers](#)

⁶⁶ ADB (2020) ADB, [Indorama Ventures Sign \\$100 Million Blue Loan to Boost Recycling, Reduce Ocean Plastic Waste](#)

Box 2: Recycled PET is often priced higher than virgin PET

PETValue Philippines is a PHP2.28-billion multi-phased joint venture investment using the most advanced bottle-to-bottle PET recycling technology that enables recycling of PET bottles to produce food grade recycled PET. This facility plays a crucial role in fostering a circular economy by ensuring that plastic waste is effectively transformed back into valuable resources, thereby reducing the reliance on virgin materials and minimising environmental impact. The facility has a projected capacity to process 30,000 metric tons (MT) of used plastic bottles annually, which translates to nearly 2 billion individual plastic bottles. From this input, it can produce approximately 16,000 MT of recycled PET resin each year. However, this capacity remains underutilised due to a lack of demand for recycled PET. The primary challenge lies in the cost disparity; recycled PET is often priced higher than virgin PET, making it less attractive for manufacturers. And, with no real incentive, in the form of EPR compliance, when recycled PET is used, the growth of recycling facilities is hindered. The feasibility of replicating similar facilities in other regions of the country remains uncertain without an enabling policy environment and a lack of demand for recycled materials.

Outlook

Stakeholders expressed optimism that as EPR enforcement expands, more predictable financing structures could emerge—especially if government or development partners help modernise and expand MRFs. Some practitioners advocate for “aggregator SPVs” that pool feedstock from multiple LGUs, stabilising volumes and smoothing revenue flows but banks are not sure how to structure them. In addition, part of the EPR enforcement expansion that industry participants would like to see is the incentivisation of reduced (virgin) plastic use so that the EPR law is able to achieve its objective of advancing a circular economy by avoiding or minimising pollution, while maximising use of materials.

Co-processing in cement kilns

Co-processing leverages cement kilns to burn plastics and other residuals alongside conventional fuels used in an industrial process. Major cement producers (Holcim, Republic Cement, Cemex) utilise non-recyclable plastics and residuals as alternative fuel. By 2023, Holcim alone co-processed over one million tons of waste, citing brand offsets⁶⁸ and municipal tipping fees as key revenue streams.⁶⁹ Municipalities partner with cement kilns (Holcim has inked waste management memoranda of understanding (MOUs) with sixty five LGUs for residual wastes)⁷⁰ to reduce landfill volumes, some paying a standard disposal fee, while others rely on partial or zero-fee arrangements.⁷¹ Brand owners also collaborate with cement producers to meet EPR obligations by diverting post-consumer plastics for co-processing.

1. Low tipping fees and limited LGU budgets

Many municipalities offer minimal disposal fees—often under USD 10 per tonne, well below the estimated ~USD 20 per tonne needed for co-processing to break even.⁷² This shortfall constrains cement plants’ ability to cover shredding and feeding costs. In some pilot projects, cement firms have waived fees altogether to secure residual waste streams. Scaling these models requires consistent revenue, which low landfill costs and constrained LGU budgets currently fail to provide.

⁶⁷ ADB (2020) ADB, [Indorama Ventures Sign \\$100 Million Blue Loan to Boost Recycling, Reduce Ocean Plastic Waste](#)

⁶⁸ Republic Cement (2022) [Achieves Plastic Neutrality, Offers Co-Processing as EPR Solution](#)

⁶⁹ Holcim (2024) [Holcim reuses over 1M tons of wastes in cement manufacturing to drive decarbonization, circularity](#)

⁷⁰ BusinessMirror (2025) [Holcim champions circular econ with waste management partnerships](#)

⁷¹ Holcim & GIZ (2019) [Guidelines on Pre-and Co-processing of Waste in Cement Production](#)

⁷² Ibid

2. Regulatory uncertainty and ESG risks

While co-processing is permitted under existing Department of Environment and Natural Resources (DENR) Administrative Orders, the broader incineration ban under the Clean Air Act (RA 8749) generates uncertainty. Environmental groups argue that burning plastics in kilns constitutes incineration, risking regulatory tightening or reputational harm.^{73 74} Banks with ESG mandates may remain cautious, particularly where emissions monitoring and community acceptance are perceived to be weak. Such concerns have led, for example, the EU to exclude waste incineration from its green finance taxonomy.⁷⁵

3. Dependence on proper waste pre-treatment

Cement kilns need relatively dry, uniform feedstock to achieve stable substitution of coal or pet coke. If LGUs deliver wet or contaminated residuals, operational costs escalate—requiring extra shredding or drying facilities. As discussed earlier, many provinces lack the necessary sorting infrastructure, which introduced feedstock quality risks for co-processors.

4. Patchwork funding models and limited private ROI

Co-processing typically uses a mosaic of revenue sources—modest tipping fees, EPR offsets and fossil-fuel savings. Yet none alone consistently covers capital and operating expenses for scaling up. The thin margins, along with potential controversies over “incinerating” plastics, can keep commercial lenders on the sidelines, necessitating blended finance or development bank participation. In some ASEAN pilots, the majority of investment has come from national grants (Cilacap, Indonesia),⁷⁶ highlighting that in the Philippine context as well, public–private cost-sharing or donor support may remain essential until stable EPR mechanisms or a landfill levy are solidified.

Outlook

Despite debates around circularity, co-processing is likely to remain a viable bridging solution. It is explicitly recognised as a recovery method under the EPR framework and cement plants are already established across the country. Stakeholders noted that co-processing can meet much of the near-term flexible plastics diversion requirement under the EPR law, an estimated “200,000 MT for the entire flexible plastic footprint”.⁷⁷ However, scaling further will likely require a combination of landfill levies to make co-processing more competitive, clearer regulatory guidance on permissible emissions and improved waste sorting infrastructure to ensure consistent feedstock quality.

Waste-to-Energy (WtE) infrastructure & viability

Waste-to-Energy technologies in the Philippines spans several potential pathways, incineration, pyrolysis, gasification and anaerobic digestion (AD). Metro Manila, Davao, and other urban centres have proposed WtE projects to reduce landfill reliance while generating power or fuel. The Department of Energy (DOE) recognises certain WtE processes (notably from biomass fractions) as renewable energy, making them theoretically eligible for incentives or inclusion in the Renewable Portfolio Standard (RPS).⁷⁸ To support this, the DOE has issued a Circular outlining eligibility criteria and incentives for biomass WtE using locally sourced MSW. As of June 2025, five registered facilities provide 10.3 MW of capacity, with five more under development totalling 133.6 MW. However, actual large-scale deployments remain rare, with a handful of small pilots or feasibility-stage proposals:

- **Incineration:** Large-scale “mass burn” facilities face legal ambiguity under the Clean Air Act’s incineration ban (RA 8749). Proposals in Metro Manila⁷⁹ and Davao⁸⁰ (600+ tonnes/day) have secured foreign technical partners but remain stalled at the pre-construction stage.

⁷³ Licas News (2023) [Philippine towns, cities are paying high cost of waste management. Plastic producers should help](#)

⁷⁴ PCIJ (2022) [Health, environment concerns are raised as Philippine cement plants burn plastic wastes for fuel](#)

⁷⁵ CBI (2022) [Public consultation comments and responses Cement Criteria](#)

⁷⁶ Ibid

⁷⁷ Plastic credit provider interviewed

⁷⁸ BusinessWorld (2024) [Waste-to-energy seen as balancing act between disposal, increased emissions](#)

⁷⁹ MMDA.GOV.PH (2023) [Feasibility Study \(F/S\) to Determine the Appropriate Waste-to-Energy \(WtE\) Technology in Metro Manila](#)

⁸⁰ ASEAN Energy News (n.d) [construction-of-p2-5-billion-waste-to-energy-project-in-davao](#)

- **Pyrolysis and gasification:** Marketed as “non-incineration” systems that heat waste in a low-oxygen environment, which are still in pilot scale (e.g. ReGreen Holdings, Klean Industries).⁸¹ Without proven local track records or consistent feedstock supply, these technologies struggle to attract mainstream lenders.
- **Anaerobic Digestion (AD)** is underutilised for municipal waste. Existing AD plants largely target agricultural or market wastes (e.g. the 1.5 MW project at Payatas Landfill, Quezon City).⁸² Scaling AD in city settings would require source-separated organics and robust local usage for biogas or digestate.

Across these technologies, several key barriers emerged during interviews:

1. High capital requirements

Incineration facilities typically cost USD 500–700 per annual tonne of capacity, translating to USD 169 million or more for a mid-sized plant.⁸³ Pyrolysis and gasification can cost even more on a per-tonne basis, especially at smaller scales.⁸⁴ Without feed-in tariffs for MSW-based electricity, revenue streams (tipping fees + power sales) rarely cover capex and O&M unless supplemented by viability-gap funding.⁸⁵

2. Regulatory ambiguity (Clean Air Act incineration ban)

Although a 2002 Supreme Court interpretation legally permits incineration technologies that meet emissions standards under the Clean Air Act, the perception remains mixed.. One foreign bank commented, “**Without clear incineration guidelines, it’s hard to start conversations around WtE investments.**” Environmental groups maintain that incineration contravenes RA 8749’s intent, creating a perception of high political and regulatory risk.⁸⁶

3. Tipping fees below profit threshold

As discussed earlier, tipping fees in most Philippine municipalities remain below USD 10 per tonne. A Metro Manila feasibility study indicated a breakeven tipping fee of PHP1,600 per tonne (~USD 29)—more than double prevailing rates.⁸⁷ Political leaders are often hesitant to raise fees or taxes sufficiently to close this gap, especially mid-way or near the end of their three-year term. Interviewees also highlighted that LGUs face potential audits for “overspending” if they adopt a more expensive disposal system.

4. Feedstock risk and short political cycles

WtE plants need 20+ years of stable waste supply. Fragmented waste streams and political turnover threaten feedstock security and PPP contract stability.

5. Limited technology familiarity and O&M costs

Local banks interviewed noted limited experience underwriting incineration or pyrolysis. The latter can have higher per-ton operating expenditures (O&M)—maintenance can exceed 2% of initial capex annually—⁸⁸ given the complexities of smaller-scale advanced systems.

Lessons from Singapore: Take-or-Pay security (box 3). A contrasting model comes from Singapore, where the National Environment Agency (NEA) guarantees long-term incineration service agreements under a set disposal fee of ~SGD 77/tonne. This creates predictable revenue, enabling bankable PPPs. In the Philippines, by contrast, short LGU election cycles (every three years) and widely varying local budgets can introduce volatility.

⁸¹ Klean Industries (2022) [Klean & RGH to Build Plastics-to-Energy Plant in the Philippines](#)

⁸² MMDA.GOV.PH (2023) [Feasibility Study \(F/S\) to Determine the Appropriate Waste-to-Energy \(WtE\) Technology in Metro Manila](#)

⁸³ Waste to Energy International (2015) [Cost of incineration plant](#)

⁸⁴ Satiada & Calderon (2021) [Comparative analysis of existing waste-to-energy reference plants for municipal solid waste](#)

⁸⁵ ADB (2016) [Prefeasibility Study – Conventional Waste-to-Energy Project](#)

⁸⁶ ASEAN Energy News (n.d) [environmental group opposed to garbage incineration](#)

⁸⁷ y Kyong-Ho Engineering & Architects Co (203) [Feasibility Study \(F/S\) to Determine the Appropriate Waste-to-Energy \(WtE\) Technology in Metro Manila](#)

⁸⁸ Philippine Journal of Science (2022) [Financial and Socio-economic Study of Modular Pyrolysis Facilities as Waste-to-Energy Technology: a Case Study in Metropolitan Manila, Philippines](#)

Box 3: Lessons learned from Singapore's integrated waste management system

Singapore incinerates almost all of its non-recyclable municipal waste (about 8,200 tonnes/day) across four modern WtE plants, reducing waste volume by up to 90%.⁸⁹ Two plants remain government-owned; two are privately-owned and run via PPPs. The government (via the National Environment Agency, NEA) guarantees demand for plant capacity (e.g. 25-year incineration services agreements which secured a SGD 650 million limited-recourse loan to fund construction of one plant)⁹⁰. NEA sets a national disposal fee (~SGD 77/tonne) covering long-term capital and operating costs across all plants.⁹¹ Operators also sell electricity from incineration (some plants export up to 80MW), providing a second revenue stream.⁹²

Lessons learned:

- The government's willingness to assume demand risk and guarantee revenue via long-term contracts. By switching to a take-or-pay model (assuring payment for full capacity), Singapore made the projects bankable.⁹³
- With NEA as a dependable off-taker (backed by Singapore's AAA-rated credit), private financiers had confidence in the predictability of cash flows.
- Singapore's use of open tenders and well-defined concession terms attracted reputable firms, leading to multiple bidders.⁹⁴
- Singapore showed that privatising a brownfield asset (Senoko) could inject private capital and efficiency, while the NEA retained control through long-term service contracts.⁹⁵
- The NEA maintained oversight and continuity by ensuring knowledge transfer – e.g. NEA staff worked alongside private operators during transitions and ensured plants meet stringent air quality standards.⁹⁶

Outlook

While some local governments have explored WtE PPP proposals—such as Davao's plan to build a PHP5-billion incinerator and MPIC's proposed ~PHP15 billion (USD 265 million) WtE facility in Quezon City—few projects have broken ground. Project developers commonly cite an insufficient revenue mix—tipping fees remain too low, and WtE electricity lacks the premium tariffs or guaranteed purchase that solar or wind sometimes enjoy. The incineration ban's legal grey area further complicates project timelines and financing.

Summary of waste barriers

Sub-sector barriers do vary across plastics recycling, co-processing and WtE. Overall, however, the single most influential factor is low landfill disposal costs, which blunt the business case for more high-grade recycling and expanded infrastructure. A second critical element is regulatory clarity—both for EPR enforcement (which underpins plastics recycling revenue) and for incineration (which shapes WtE bankability). In addition, short local political cycles and minimal standardisation of waste-collection contracts hamper long-term deals.

⁸⁹ Sg101.gov.sg (n.d) [Waste Management](#)

⁹⁰ Hogan Lovells (2017) [Water and Environmental Infrastructure Projects in Singapore](#)

⁹¹ Lets Recycle (2010) [Singapore's Tuas Incinerator officially opened](#)

⁹² Ibid

⁹³ GPSC.org (n.d) [Keppel Seghers Waste-to-Energy Plant, Singapore](#)

⁹⁴ Ibid

⁹⁵ Hogan Lovells (2017) [Water and Environmental Infrastructure Projects in Singapore](#)

⁹⁶ Ibid

The combined effect is that, despite a nominal policy push toward green solutions and NDC targets, private capital remains hesitant to fund large-scale projects. Interviewees consistently pointed to the need for targeted policy interventions—such as a landfill levy, explicit guidelines on WtE, and stronger EPR enforcement and incentives—alongside aggregator or PPP models that reduce feedstock uncertainty. Absent these shifts, the Philippines risks continuing reliance on inexpensive disposal methods that fail to capture the full environmental and economic value of its expanding waste stream.

Potential interventions to address key barriers

MSW volumes are expected to reach 23 million tonnes by the end of 2025, yet infrastructure gaps persist across landfilling, recycling and waste recovery. Capturing even half the country's lost plastic resources—worth USD 790–890 million annually—could deliver both climate benefits and economic gains. Regional analysis from the CBI also points to a financing gap of around USD 5 billion each year across Asia's primary plastic-polluting nations, including the Philippines.⁹⁷

Below are potential interventions drawing on stakeholder interviews and GFI's expertise aimed at resolving the core barriers to mobilise private capital into the MSW value chain.

De-risking capital

Regional waste aggregator SPVs (“Waste corridors”)

- **Concept:** A pooled special-purpose vehicle (SPV) that aggregates multiple municipalities or waste-management schemes under one financing entity. By consolidating feedstock supply and credit, individual LGUs and barangays can spread capital and operating costs more efficiently. This approach leverages economies of scale: one larger, more creditworthy entity is often better placed to raise bonds or loans compared to a scattering of smaller LGUs.
- **Example:** In India, the state of Tamil Nadu successfully pioneered a pooled financing model to fund municipal infrastructure in 13 local government units. Its Water and Sanitation Pooled Fund raised INR 304 million (USD 6.2 million) under a 15-year bond, backed by a partial guarantee and a debt service reserve mechanism that helped secure an AA rating.⁹⁸
- **Potential application in the Philippines:** Adapting this model could expand beyond existing “clustered landfill” approaches recommended by the DENR⁹⁹ and align with ongoing legislative proposals under the draft WtE Bill, which promotes LGU clustering to pool resources and optimise waste collection. A new SPV—established province- or region-wide—could lock feedstock supply through multi-year and inter-jurisdiction agreements with member LGUs. With additional support from government or development partners (e.g. a guarantee fund or liquidity facility), the SPV could tap private financing for upgrades to, and expansions of, MRFs and AD plants. Fees from waste collection or the sale of recyclables and energy would then repay the debt, aligning revenue streams and credit enhancement to accelerate project rollout. Stakeholders also noted that tying SPV participation to EPR compliance could further strengthen the model: companies with EPR obligations could channel part of their compliance budgets into structured SPV arrangements, in exchange for reduced targets or verified credits, creating a more bankable demand signal that commercial lenders can support.

⁹⁷ Climate Bonds Initiative (2020) [Financing waste management, resource efficiency and circular economy in the green bond market](#)

⁹⁸ World Bank (2016) [Pooled Municipal Bond Issuance in Tamil Nadu \(India\)](#)

⁹⁹ PIDS.GOV.PH (2021) [Failure to implement sanitary landfills due to budgetary constraints—DENR official](#)

Public-private waste infrastructure fund

- **Concept:** A dedicated waste-infrastructure fund—drawing on public, private and development finance—can directly address sectoral financing gaps. By pooling resources, it could offer concessional loans or equity for high-CapEx projects such as large-scale recycling plants or pyrolysis facilities.
- **Example:** Circulate Capital's USD 165 million Ocean Fund, launched across South and Southeast Asia, illustrates how blended finance can mobilise institutional and philanthropic investors alongside multinational corporates. Since 2020, it has financed a raft of recycling and collection enterprises, leveraging major consumer brands like Coca-Cola and Unilever as anchor backers.¹⁰⁰
- **Potential application in the Philippines:** A bespoke "Waste Infrastructure Investment Facility," designed in partnership with development banks and private sponsors, could deploy low-interest loans or equity into priority solutions—from advanced plastics recycling to regional composting plants. In exchange for capital support or risk mitigation, consumer goods companies and cement producers might secure feedstock or alternative fuel supply in line with EPR obligations. A portfolio-based approach would let stronger investments offset early-stage or riskier ventures, expanding the overall pipeline and crowding in further private finance.

Guarantees and risk-sharing instruments

- **Concept:** Many private financiers remain reluctant to lend for waste infrastructure due to uncertain revenue streams, credit risk from smaller LGUs or cooperatives, and technology concerns. Partial guarantees, which could promise repayment of (for example) 50–80% of a loan's principal if the borrower defaults, can directly reduce lenders' perceived downside.
- **Example:** Chile's Organic Waste Management Guarantee Fund (backed by a USD 20 million climate initiative) illustrates the impact. Developers converting organic waste into biogas or compost could access a state-guaranteed facility that eased bank concerns and extended loan tenors—subject to proof of feedstock contracts and operational viability.¹⁰¹
- **Potential application in the Philippines:** Agencies like the Philippine Guarantee Corporation, Maharlika Investment Corporation, or the LGU Guarantee Corporation¹⁰² could similarly launch a waste-focused guarantee window. This mechanism could extend to off-taker guarantees (e.g. ensuring a cement kiln or power utility pays at an agreed price for Refuse-Derived Fuel or electricity). With development-partner input—mirroring past USAID risk-sharing facilities¹⁰³—this strategy could improve access to commercial loans, particularly for smaller municipal projects and novel technologies. A Revenue Certainty Mechanism (RCM) developed by the GFI for the UK's Sustainable Aviation Fuel (SAF) sector could also help address price and revenue volatility in the Philippine waste sector (see box 4).

¹⁰⁰ Circulate Capital (2022) [Circulate Capital Achieves Third Close for Circulate Capital Ocean Fund I-B, Led by the International Finance Corporation \(IFC\) and Proparco](#)

¹⁰¹ Nationally Appropriate Mitigation Action (n.d) [Catalyzing Industrial Organic Waste Management in Chile](#)

¹⁰² IISD [Local Government Unit Guarantee Corporation](#)

¹⁰³ CSIS (n.d) [20 Years of the Development Credit Authority](#)

Box 4: Exploring a Revenue-Certainty Mechanism for waste-to-energy technologies

One innovative financing model developed by the GFI to accelerate investment into emerging technologies is the Revenue Certainty Mechanism (RCM), first proposed to support the UK's Sustainable Aviation Fuel (SAF) sector. Under an RCM structure, investors and lenders are offered downside protection through a fixed-price revenue backstop, providing greater certainty over future cashflows for projects that face price or demand volatility. If market prices or revenues fall below an agreed floor, the RCM triggers a top-up payment from a third-party guarantor (such as a government fund or a blended finance facility). Conversely, if revenues exceed expectations, the project sponsor retains the upside or the guarantor fund is topped back up.

RCMs are designed to overcome a persistent barrier in nascent sectors: high perceived risk due to uncertain future revenue streams. In sectors such as WtE—where tipping fees and offtake prices are often volatile or insufficient—RCMs can help projects secure more attractive debt financing terms and mobilise private capital at scale. While they are designed to manage volatility, they do not replace missing revenues.

Potential application in the Philippines

While the Philippine waste sector has different characteristics compared to other markets, an adapted RCM could help de-risk early WtE investments (such as large scale AD plants or pyrolysis facilities) where tipping fees generally sit below the thresholds needed for commercial viability.

For an RCM to be effective in the Philippine context, several enabling conditions would need to be explored:

- Municipalities or aggregators would need to commit (e.g. through a government or LGU mandate) to minimum tipping fee levels, moving closer to breakeven rates, so the RCM only steps in during revenue dips, not continuously.
- The mechanism would target projects that meet strict technical and environmental standards (e.g. emission controls for WtE, compliance with EPR frameworks).
- A public entity such as the Philippine Guarantee Corporation or LGU Guarantee Corporation could provide the RCM backstop, supported by donor or development-partner input. This would reassure lenders that downside risks are limited.
- Data on feedstock volumes, tipping fee collections, and energy output would need to be independently verified to determine if the RCM trigger conditions are met.

Improving market functionality & transparency**Standardise supply/off-take contracts:**

Access to commercial lending is easier when credit officers see robust, standardised agreements between waste suppliers (e.g. municipalities, cooperatives) and offtakers (cement companies, energy utilities or consumer goods firms). Such frameworks could set uniform tipping fees, guaranteed minimum volumes and mutual performance clauses and — critically — incorporate structures that can withstand political cycles, such as inter-jurisdictional agreements or contracting via an external aggregator.

Strengthen the policy environment

Promote organics diversion

Developing policy incentives to divert food and organic waste — such as mandatory source separation or organics collection targets — would reduce feedstock contamination for recycling and mitigate methane emissions from landfills, improving both environmental outcomes and project bankability. There is also opportunity to better utilise existing government-funded composting facilities by involving private-sector partners, developing buyback schemes for compost products, and integrating these solutions into broader waste planning at LGU level — building on successful public–private models already emerging in the Philippines (see Davao Thermo Biotech example).

Clarify WtE regulations and incineration ban

Current Clean Air Act restrictions have generated confusion as to whether WtE incineration is permissible. Issuing formal guidelines thresholds through the DENR's Environmental Management Bureau—aligned with international standards¹⁰⁴¹⁰⁵—could reduce investor apprehension. Setting strict emission thresholds and mandating environmental impact reviews can preserve environmental safeguards while clarifying the legal space for waste to energy technologies.

This could be further strengthened by the proposed Waste-to-Energy Bill (Senate Bill 2267 / House Bill 6444), currently under legislative review, which aims to establish a national WtE policy framework with LGU clustering, investment incentives and environmental protections.

Introduce a landfill levy

Increasing landfill disposal costs through a modest levy, earmarked for infrastructure upgrades, can help shift waste flows toward recycling, co-processing or WtE and generate capital for sector reinvestment. Such levies have proven effective in markets including parts of the EU.¹⁰⁶

Strengthen EPR incentives, enforcement and data transparency

A stronger incentive framework is needed to create demand pull for recycled materials, promote sustainable packaging, and support investment in recycling — underpinned by consistent EPR enforcement and transparent data.

There is opportunity to strengthen EPR incentives by incorporating eco-modulation—structuring incentives to favour the use of recycled content and penalise hard-to-recycle materials—as a tool to stabilise demand and improve the economics of recycled plastics. For example, under the EU Packaging and Packaging Waste Directive, several Member States apply eco-modulated EPR fees, where packaging that is more recyclable or made from recycled content pays lower fees, while harder-to-recycle materials face higher fees.

Stronger monitoring, clearer penalties, incentives to reduce upstream (virgin) plastic use and the publication of real-time compliance data would bolster confidence in EPR-driven revenue streams. This includes standardising plastic credit protocols, improving implementation of Obligated Enterprises (OE) registrations (still mostly self-initiated), incorporating/considering recycling percentages in plastic packaging to reduce recovery and diversion targets, streamlining assessment of OEs' audited footprints to ensure compliance, and finalising notification procedures in cases of violations, all of which could encourage banks to view plastic credits as a reliable partial revenue mechanism.

¹⁰⁴ European Commission (2008) [EU air quality standards](#)

¹⁰⁵ Kawamoto, K. (2015) [Waste-to-energy status in Japan](#)

¹⁰⁶ European Environment Agency (2023) [Technical note accompanying the EEA briefing 'Economic instruments and separate collection – key instruments to increase recycling'](#)

- Plastic Bank, for example, has developed a blockchain platform that allows tracking of the plastic collection and recycling journey from collection branches to processors.¹⁰⁷ PCX also has a proprietary public registry of all its transactions, for both EPR compliance and voluntary offsetting, which supports transparency and traceability.¹⁰⁸
- A more credible EPR system could also facilitate aggregator models that unify smaller players into a bankable volume of recyclable plastics.

Carbon and plastic credits

Although carbon pricing remains under debate in Congress, any eventual framework incentivising methane avoidance or advanced recycling could yield additional revenues and/or a more robust EPR compliance and achievement of EPR Law’s objectives. The DOE is currently formulating guidelines to support carbon credit generation and monitoring in the energy sector, highlighting the potential to monetise climate co-benefits across waste and energy. Similarly, a more comprehensive EPR model could expand from “tonnage-based” compliance to infrastructure-based credits—funding large-scale MRF expansions, recycling facilities or pyrolysis lines.

Institutional capacity building

Leverage the Green Force for cross-agency coordination

1. Sector Working Groups

A dedicated “Waste and Waste resources” working group within the Green Force could convene DOF, DENR, DOE, LGUs, and the private sector to unify permitting, expedite large projects and develop blueprints/guidebooks to replicate successful pilots (e.g. Davao Thermo Biotech Corp.’s biofertiliser plant). Such a forum could also validate pipeline projects, identify priority technologies and coordinate EPR data platforms.

2. Private capital outreach and pilot development

The Green Force, in tandem with development partners, could host regular “match-making or deal facilitation” sessions—matching potential investors or lenders with local governments and project developers. This would encourage deeper dialogue on structuring “bankable” waste transactions and identify which policy levers require further refinement.

Outlook

From a financier’s perspective, the Philippine MSW sector offers untapped value, but a confluence of structural and policy barriers continues to deter large-scale private participation. Although the EPR law offers a new revenue stream, its impact will depend on robust enforcement and a concerted effort to address relatively cheap landfilling. Encouragingly, a handful of private-led waste ventures have begun to secure commercial financing, illustrating that with the right conditions—stable revenues, supportive local policy, off-take certainty—waste projects can become creditworthy.

Ultimately, enabling a more robust waste-management ecosystem in the Philippines will require:

- Greater cost parity with landfill (via levies or other fiscal instruments);
- Clear and enforceable regulations (particularly for WtE);
- Aggregation and pooling mechanisms that reduce feedstock and credit risk; and
- Risk-sharing tools, from guarantees to blended-finance funds, to lower the cost of capital.

¹⁰⁷ Plastic Bank (n.d.) Achieve EPR Compliance

¹⁰⁸ PCX (n.d.) Registry | PCX



Sectoral deep dives: Road-based transport

Context

Emissions growth, outdated fleets and underdeveloped EV infrastructure

The Philippines' transport sector emitted an estimated 29,431 gigagrams of CO₂e—equivalent to 23% of the country's fuel combustion activities.¹⁰⁹ Oil-based fuels dominate, with the sector consuming around 10.79 million tonnes of oil in 2022. In terms of total energy demand, the total final energy use (TFEC) reached 37 million tonnes oil equivalent (MTOE) in 2023—an increase of 2.8% from 2022. Transport remained the most energy-intensive sector, comprising 35% of TFEC.¹¹⁰

Climate-related hazards further exacerbate pressures on transport infrastructure. Average annual losses to roads and other transport assets are projected at roughly USD 347.8 million (~ 0.03% of GDP),¹¹¹ with up to 25,000 kilometres of roads potentially exposed to increased flooding by 2050 if global emissions are not curtailed.¹¹² Further, electricity costs are among the highest in Asia- at approximately PHP 11.34 (USD 0.19) per kilowatt-hour (kWh),¹¹³ which raises concerns about the affordability of any electrification of transportation.

¹⁰⁹ National Integrated Climate Change Database and Information Exchange System (2020) [Philippine GHG Inventory 2020](#)

¹¹⁰ DOE.GOV.PH (2023) [Key Energy Statistics](#)

¹¹¹ Asian Transport Outlook (2023) [Transport and Climate Profile](#)

¹¹² Business World (2023) [PHL roads, railways and ports highly vulnerable to climate risks — experts](#)

¹¹³ As of 2024, [according to data from Global Petrol Prices](#), the Philippines ranks third in Asia for electricity costs, with rates at approximately P11.34 (\$0.19) per kilowatt-hour (kWh). Singapore and Japan lead the region, with rates of P14.00 (\$0.239) and P11.80 (\$0.201) per kWh

Policy and market context for transport sector investment

The Philippines aims to reduce national greenhouse gas emissions by 70% by 2030 (relative to a business-as-usual scenario), yet the NDC does not include a dedicated emissions targets for each transport sub-sector.¹¹⁴ Existing mandates in place—such as a 3% coco methyl ester (CME) blend in all diesel fuel, rising to 5% by 2026—primarily apply to road-based transport, with no clear mandates for maritime or aviation.¹¹⁵ Initial steps are underway in both sectors, including the development of a national Sustainable Aviation Fuel (SAF) roadmap and the DOE supporting pre-feasibility studies for green shipping corridors such as the Western Nautical Highway and Cebu–Manila.

Efforts to scale electric vehicle (EV) adoption have centred on the Electric Vehicle Industry Development Act (EVIDA) and fiscal incentives under Executive Order 12, series of 2023, expanded through EO 62, series of 2024 complemented by the Department of Energy's Comprehensive Roadmap for the Electric Vehicle Industry (CREVI).¹¹⁶ Under CREVI's Clean Energy Scenario (CES), the government sets an ambition for 50% EV fleet share by 2040 across all sectors (excluding households), and 65,000 EV charging stations by 2028. To further support implementation, the DOE is also developing the Electric Vehicle Incentive Strategy (EVIS), which aims to support demand aggregation, pricing mechanisms and investment promotion. However, while the CREVI provides a foundational framework, these targets are not binding and as of March 2025, only 912 EV charging stations are operational nationwide, well below the level required for widespread adoption.¹¹⁷¹¹⁸ Persistent barriers to the widespread adoption of EVs include high upfront costs, fragmented implementation of regulations across government agencies and limited charging infrastructure.

Although international assistance has supported the development of urban transport such as rail and bus rapid transit (BRT),¹¹⁹ jeepney modernisation and EV infrastructure in the country remain under-invested due to technological, financial and policy barriers. In addition, most of the current incentives—although subject to review—expire by 2025–2028, leaving a policy vacuum unless extended or replaced with long-term signals.

Recent transactions do, however, indicate appetite for low-carbon transport investments:

- The ADB recently committed a USD 100 million loan to support the rollout of EV charging infrastructure across the Philippines.¹²⁰ The financing package comprises an USD 85 million ordinary capital resources (OCR) loan and a concessional loan of up to USD 15 million from ADB's Clean Technology Fund. The facility aims to fund an integrated national EV charging network, helping to address the infrastructure bottleneck that continues to inhibit large-scale adoption. The structure blends concessional and commercial capital, demonstrating how development finance can de-risk early-stage projects in sectors still perceived as unproven by commercial lenders.

¹¹⁴ [Asian Transport Outlook \(ATO\)](#)

¹¹⁵ DOE (2024) [DOE mandates higher biodiesel blend beginning October 2024 | Department of Energy Philippines](#).

¹¹⁶ DOE (2023) [Comprehensive Roadmap for the Electric Vehicle Industry \(CREVI\)](#)

¹¹⁷ BYD Charging Ahead: [Navigating EV Opportunities in the Philippines](#)

¹¹⁸ Power Philippines (2025) [PH Boosts Electric Vehicle Future with Expanded Charging Network and New Policies](#)

¹¹⁹ ADB (n.d) [Philippines: South Commuter Railway Project](#)

¹²⁰ Electrify (2025) [Asian Development Bank backs EV charging network in the Philippines with \\$100-million loan](#)

Key barriers to investment:

Shared barriers across the road-based transport sector

Despite supportive policies around EVs and the Public Utility Vehicle Modernization Program “PUVMP” (Note: since this analysis was conducted, the DOTr has reformed the PUVMP to the Public Transport Modernization Program “PTMP”) the sector faces several cross-cutting barriers that limit private investment across e-jepneys, charging infrastructure and domestic EV manufacturing.

1. High capital costs and affordability gaps

Upfront costs for imported modern jeepneys range from PHP 1.6 million to PHP 3 million (~USD 28,000–50,000), and charging infrastructure also requires significant outlay. Although government lenders offer subsidised loans, most operators lack the equity or collateral to access them. Energy costs are high, and even electrified options offer limited cost savings without broader grid decarbonisation.

2. Fragmented operator base and weak creditworthiness

The jeepney sector remains dominated by small owner-operators, with ~80% of operators owning only one vehicle. Cooperatives face governance and capacity issues, while banks require stable revenue projections and consolidated repayment mechanisms. In the EV space, charging providers often lack long-term demand certainty.

3. Lack of route rationalisation and ridership data

Fragmented public transport routes and uncoordinated route planning reduce visibility over projected ridership and revenue—undermining financial models for both fleet electrification and private investment in infrastructure. Many LGUs have yet to implement Local Public Transport Route Plans (LPTRPs).

4. Short policy timelines and regulatory uncertainty

Most incentives for EV adoption expire by 2028, and there is no long-term framework for pricing, demand aggregation or private participation in EV infrastructure. The lack of binding mandates or revenue guarantees deters long-term capital allocation. Conflicting signals across national agencies and suspended orders (e.g. Land Transportation Office “LTO” AO 2021-039) further weaken investor confidence.

Public Utility Vehicle Modernization Program (PUVMP)

Slow implementation despite significant potential

While for those in Metro Manila, a limited but expanding network of rail lines provides an efficient mode of transport, including the Manila Light Rail Transit System (LRT) and the Metro Rail Transit System (MRT), jeepneys remain the dominant form of public transport accounting for 40% of all vehicle trips.¹²¹¹²² They are deeply embedded in Filipino culture, noted for their ex-military origins and affordability—but they are criticised for unsafe conditions, high pollution and fuel inefficiency. Over 90% of existing jeepneys are more than 15 years old. Some analysts estimate that, although they constitute about 20% of the vehicle fleet, jeepneys account for 94% of soot pollution in Metro Manila alone¹²³ and account for an estimated 15.5% of the country’s transport GHG emissions.¹²⁴

The government’s PUVMP (see figure 7) aims to phase out all ~220,000 aging jeepneys, replacing them with Euro 4 diesel vehicles or EV models. Electrification would substantially reduce emissions compared to diesel use, with the scale of reductions dependent on the carbon intensity of the electricity grid. Recent analysis shows that even a 10% increase in e-jepney uptake can deliver 36 gCO₂/km emission reduction and 0.70 PHP/km energy cost savings when paired with a decarbonised grid.¹²⁵

¹²¹ Other options include various types of buses, such as city buses, provincial buses, taxis and popular ride-hailing service ‘Grab’. Minibuses known as ‘AUV’ (Asian Utility Vehicles) or ‘FX Express’ are also common. Motorised and pedal-powered tricycles are common, especially in smaller streets

¹²² GIZ (2016) [Transforming Public Transport in the Philippines](#)

¹²³ Agaton et al. (2019) [Diesel or Electric Jeepney? A Case Study of Transport Investment in the Philippines Using the Real options Approach](#)

¹²⁴ Changing Transport (2018) [Modernising Public Transport in the Philippines](#)

¹²⁵ Stringer et al. (2025) [Charging ahead: Prioritizing renewable energy for electric minibuses in the Philippines](#)



Figure 7: PUV Modernization Program' Components. Source: DOTr (2016)

Despite available subsidies and loans, PUVMP implementation has progressed slowly. The Land Bank of the Philippines (LBP) the Development Bank of the Philippines (DBP) have collectively released approximately PHP 15.3 billion in credit lines as of early 2025.¹²⁶¹²⁷ Yet as of end 2023, only ~4% of targeted units have been replaced.¹²⁸ This is due to governance barriers and a lack of access to financing by small transport cooperatives due to bankability and creditworthiness criteria, a key risk criteria for financial institutions.

High upfront costs and 'one franchise, one operator, one unit' structure

Even with available government support, the cost of fleet modernisation remains prohibitive for most jeepney operators and cooperatives.

An estimated PHP 417.3 billion (~USD 7.1 billion)¹²⁹ is needed to fully modernise the fleet. LBP and DBP offer financing at 6% interest over seven years, with an equity subsidy of PHP 280,000 (~USD 4,900) per unit.¹³⁰ However, this covers only 12–15% of the purchase price, leaving operators to bear substantial remaining costs. Imported modern jeepneys often cost between PHP 1.6 million and PHP 2.3 million per unit, further constraining affordability.¹³¹¹³² With private banks viewing potential loans as high-risk as cooperatives, composed largely of individual jeepney owners with volatile incomes, often fail to meet conventional lending criteria. LBP and DBP remain the main lenders.

The structure of the sector compounds financing difficulties. Approximately 80% of operators own only a single jeepney, resulting in highly fragmented ownership, with under 1% holding ten or more vehicles—leading to an average of just 1.3 vehicles per operator (figure 8).¹³³ Consolidation into cooperatives or corporations is required to access government subsidies, but the process has faced resistance (many of whom fear the loss of vehicle ownership or remain distrustful of official structures) or has remained as a significant challenge for those that were able to form cooperatives due to lack of adequate knowledge and training on how cooperatives can function optimally¹³⁴ (i.e. lack of understanding of the cooperative principle, inadequate management skills, too accustomed to working independently, etc.). Additionally, if cooperatives opt for OEM (original equipment manufacturer) financing, they risk forfeiting government equity subsidies, while parts unique to imported units are not readily available in the Philippines (unlike traditional jeepneys), causing repair delays and rendering high costs to operators.¹³⁵

¹²⁶ The Manila Times. [PUV modernization loans still available – Landbank | The Manila Times](#).

¹²⁷ ABS-CBN News. [Financing will make or break PUV modernization says senator | ABS-CBN News](#).

¹²⁸ StarCarSifu (2023) [Manila's colourful jeepneys make way for carbon-free minibuses](#)

¹²⁹ Philstar (2017) [Jeep modernization to cost P417 B — DOF data](#)

¹³⁰ LandBank (2023) [LANDBANK assures accessible funding for modern jeepneys](#)

¹³¹ ABS CBN (2024) [LTFRB urged to consider locally made vehicles in PUV modernization program](#)

¹³² Locally-manufactured vehicles (such as those made by Francisco Motors) cost about P980,000 in comparison (with a monthly amortisation of about P17,000 vs. the P40,000 of imported vehicles). - [LTFRB urged to consider locally made vehicles in PUV modernization program | ABS-CBN News](#)

¹³³ GIZ (2019) [Reforming the \(semi-\)informal minibuses system in the Philippines](#)

¹³⁴ 2025, GFI and SGV Interview.

Banks cited the absence of proven ridership data and predictable revenue streams as key deterrents to financing new cooperatives or operators.

The fragmentation of the jeepney sector and the dominance of single franchise holders or individual operators is one of the biggest barriers towards fleet modernisation, due to the limitation of financial resources and access to capital.

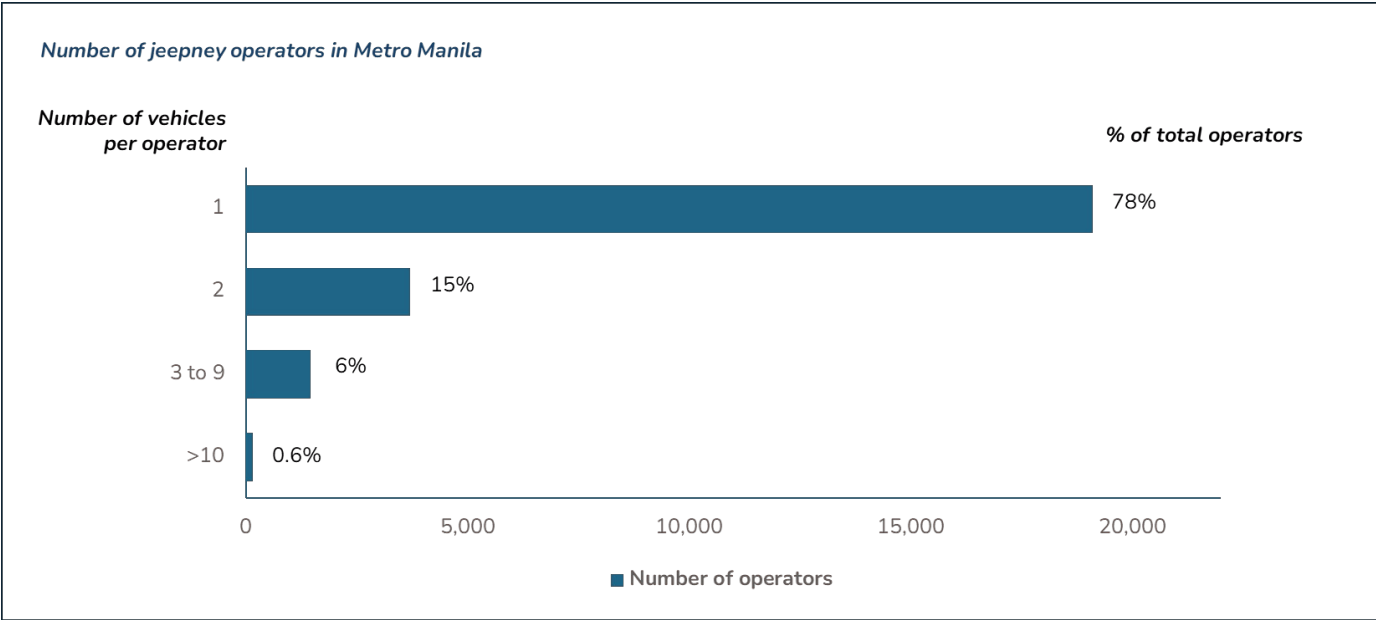


Figure 8: Number of jeepney operators in Metro Manila. Source: LTFRB data (2018)

Incomplete route rationalisation and policy fragmentation

The PUVMP requires existing jeepney operators to consolidate into cooperatives and apply for new, rationalised routes under the Local Public Transport Route Plans (LPTRPs, with the Land Transportation Franchising and Regulatory Board (LTFRB) estimating 190,000 vehicles for consolidation ahead of the April 30, 2024, deadline initially set.¹³⁶ However, progress has been slow and inconsistent. Although the Omnibus Franchising Guidelines (2017)¹³⁷ sought to formalise and rationalise routes, many Local Government Units (LGUs) have yet to complete or implement their LPTRPs. Even where plans exist, operators face inconsistent approval processes, with conflicting interpretations between national agencies and local authorities and fragmented implementation of related national programmes such as EVIDA, Green Routes and the PUVMP.¹³⁸

The Department of Transportation (DOTr) commissioned a route rationalisation study to identify optimal routes that cross boundaries within the Greater Manila Area. However, this study has not been completed. One interviewer stated that the PUVMP implementation methodology and LPTRP are unreliable and fundamentally flawed, resulting in the over projection of the number of jeepney units. Some transport groups also oppose the PUVMP, citing potential job losses (up to 86,000 drivers) and distrust of the government’s implementation capacity.¹³⁹

¹³⁵ Dimalanta and Morales (2024) [Examining_PUVMP_Just_Transition_Lens_Jeepney_Operators_Bacolod3.pdf](#).

¹³⁶ Philstar (2024) [No more extension for PUV consolidation deadline — Marcos](#)

¹³⁷ Supreme Court E-Library (2018) [Memorandum Circular No. 2018-006](#)

¹³⁸ Municipality of Sabangan (2023) [Local Public Transportation Route Plan 2022-2026](#)

¹³⁹ Panay News (2024) [DOTr allays fears on immediate phase out of traditional jeepneys](#)

Without stronger leadership from the DOTr—coordinating route rationalisation, franchising reforms, and job protections—modernisation efforts stall. The absence of standardised, predictable routes undermines the ability of cooperatives and aggregators to demonstrate future cashflows. Banks and investors require visibility over projected ridership volumes and revenue stability before lending at scale. Until route rationalisation is strengthened and consistently implemented across LGUs, private capital is likely to remain cautious.

EV Sector, charging infrastructure and the wider transport ecosystem

‘Chicken-and-Egg’ Dilemma

The CREVI sets a target of 65,000 EV charging stations by 2028 under its CES. However, as of March 2025, only 912 charging stations are operational nationwide—which is only 1.4% of the CREVI goal. Most stations are concentrated in Metro Manila, while more are underway in Cebu and Davao (figure 9), with limited expansion into secondary cities.

This infrastructure gap reinforces a “chicken-and-egg” problem that affects multiple countries: limited charging access discourages EV purchases, while low EV adoption deters private investment into charging stations. Without a critical mass of users, charging operators face low utilisation rates, undermining revenue stability. For banks and investors, this translates into heightened cash flow uncertainty, making it difficult to extend financing for new charging infrastructure.

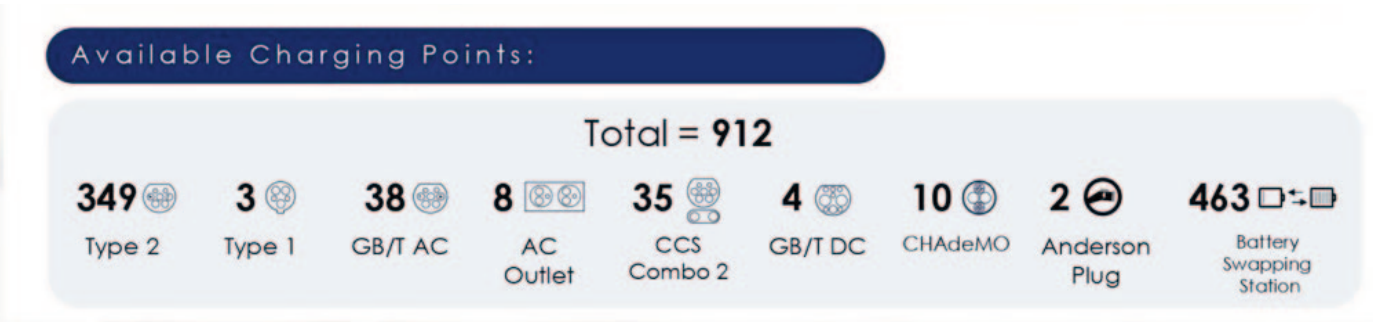


Figure 9: Available charge points

Stakeholders interviewed consistently cited this “chicken-and-egg” dilemma as a primary barrier. Lenders are reluctant to back charging projects unless demand-side risks—such as minimum utilisation thresholds—are mitigated. Meanwhile, fleet operators and individual consumers hesitate to transition to EVs without assurances of reliable, widespread charging access.

Disjointed EV policies and temporary incentives

While EVIDA (2022), EO 12 and EO 62 provide a framework for EV adoption, execution has proved fragmented across multiple agencies. The DOTr, Department of Trade and Industry (DTI), Department of Energy (DOE), Board of Investments (BOI), Land Transportation Office (LTO) and LGUs all issue regulations, but overlapping mandates and inconsistent application have created confusion in the market.

For example, Administrative Order 2021-039, which sought to define classifications, registration and operating guidelines for electric motor vehicles, was suspended by the LTO, complicating basic registration for micro-EVs.¹⁴⁰ Meanwhile, EO 12 lowers import tariffs on EVs and components but does not fully extend to charging infrastructure or provide clarity for all vehicle categories. EO 62, series of 2024, was subsequently issued to expand coverage under EO 12, suspending import tariffs on battery e-motorcycles, tricycles, quadricycles, hybrid EVs (HEVs), and plug-in hybrid EVs (PHEVs)—including cars, jeepneys, buses and trucks—as well as completely knocked-down EVs, until 2028.

¹⁴⁰ This Administrative Order was crucial and required by the EVIDA Law to be in place, its lack thereof negatively impacts micro-EV (MEV) owners as they are unable to secure Certificate of Payments (COP) for their units, which is a crucial document for the initial registration of EVs with the LTO.

Beyond exemptions from the Unified Vehicular Volume Reduction Program (UVVRP or more popularly known as the “number coding” scheme), few non-fiscal incentives exist to encourage private EV adoption.¹⁴¹ Additional measures such as excise tax exemptions (0% for BEVs, 50% for HEVs) and discounts on motor vehicle user charges are in place, but most fiscal incentives—including import duty and value-added tax (VAT) exemptions—are set to expire by 2025–2028. While these are subject to review and possible extension no long-term, binding mandates currently exist to ensure fleet electrification targets policy aspirations under CREVI’s CES.

Without certainty that existing measures will be extended or expanded, both fleet operators and investors face a moving policy landscape, making it difficult to justify long-term capital commitments.

Infrastructure investment risks and knowledge gaps

Developing the charging infrastructure and value chain relies on the collaborative efforts of government and private sector, which are critical to driving EV adoption.

From the supply side, there is no dedicated public investment program to anchor early-stage infrastructure. EO 12, while reducing import tariffs on EVs and related components, does not directly support EV charging stations beyond some coverage for parts and equipment. EO 62, issued in 2024, expanded tariff suspensions to cover additional EV categories and completely knocked-down units until 2028, but did not extend to charging infrastructure. Most charging infrastructure-related policies are limited to technical standards and guidelines (e.g. safety regulations, equipment specifications), without direct fiscal or financial incentives for private developers. On the demand side, projected EV adoption rates remain uncertain. Without clear near-term visibility on EV volumes, infrastructure developers face difficulty justifying long-term investments.

Interview feedback highlighted that many credit officers and risk analysts lack sufficient technical understanding of EV charging technologies, battery degradation profiles and utilisation risks. This leads to conservative underwriting standards, risk premiums or outright reluctance to lend to charging infrastructure projects, particularly outside major urban centres. Lenders and investors typically seek verifiable historical utilisation rates to model revenue projections. In the absence of aggregated, transparent data, financing relies heavily on assumptions, making projects harder to bank.

Although various government agencies are working with the Electric Vehicle Association of the Philippines (EVAP) to define technical standards and drive EV adoption,¹⁴² and the CREVI provides a strong foundation for the Philippines’ EV sector, several key gaps and challenges in implementation have been identified by stakeholders, industry groups, and government. For example, regulatory requirements such as mandatory charging stations at gas stations are still in the consultation or draft stage.¹⁴³

Limited domestic EV manufacturing and supply chain support

At present, the Philippines’ automotive industry depends heavily on imports, subjecting operators to currency risks, supply chain delays and servicing challenges.¹⁴⁴ Although domestic EV assembly can benefit from income tax holidays (5 years) and a preferential 5% corporate income tax rate under the Strategic Investment Priorities Plan (SIPP), practical support (such as concessional finance or local R&D grants) remains limited. Smaller local firms also face challenges accessing incentives, given documentation and scale requirements. Accessing enhanced incentives (outside the standard SIPP coverage) requires PHP50 billion minimum investment or the creation of 10,000 direct jobs, reinforcing barriers for smaller market entrants.¹⁴⁵

¹⁴¹ Business World (2024) [Perks for EV sector eyed](#)

¹⁴² Daily Tribune (2025) [EVAP drives the EV shift](#)

¹⁴³ Business World (2024) [Small PHL EV production capacity to limit competitiveness with foreign rivals](#)

¹⁴⁴ PIDS.GOV.PH [DTI official urges development of EV industry in PH](#)

By contrast, regional peers offer more targeted support for EV and battery production. Thailand provides corporate tax exemptions of 3 to 8 years specifically for EV and battery projects, direct EV subsidies and import duty exemptions. Indonesia offers up to 20-year corporate tax holidays for EV and battery investors, along with subsidies and incentives tied to local battery manufacturing.¹⁴⁶ Vietnam grants three-year registration fee exemptions for EVs and supports local producers like VinFast through policy incentives.¹⁴⁷ Without comparable measures to attract and retain investment across the EV value chain, the Philippines risks falling behind in regional competitiveness.

Summary of transport barriers

Despite ambitious national goals for jeepney modernisation and EV adoption, the Philippine road transport sector faces interlocking financial, regulatory, and operational barriers. High upfront costs, fragmented operator structures, incomplete route planning, disjointed EV policies, underdeveloped charging networks, lender knowledge gaps, and the absence of a local EV manufacturing strategy all combine to limit private sector participation.

EV charging infrastructure value chain

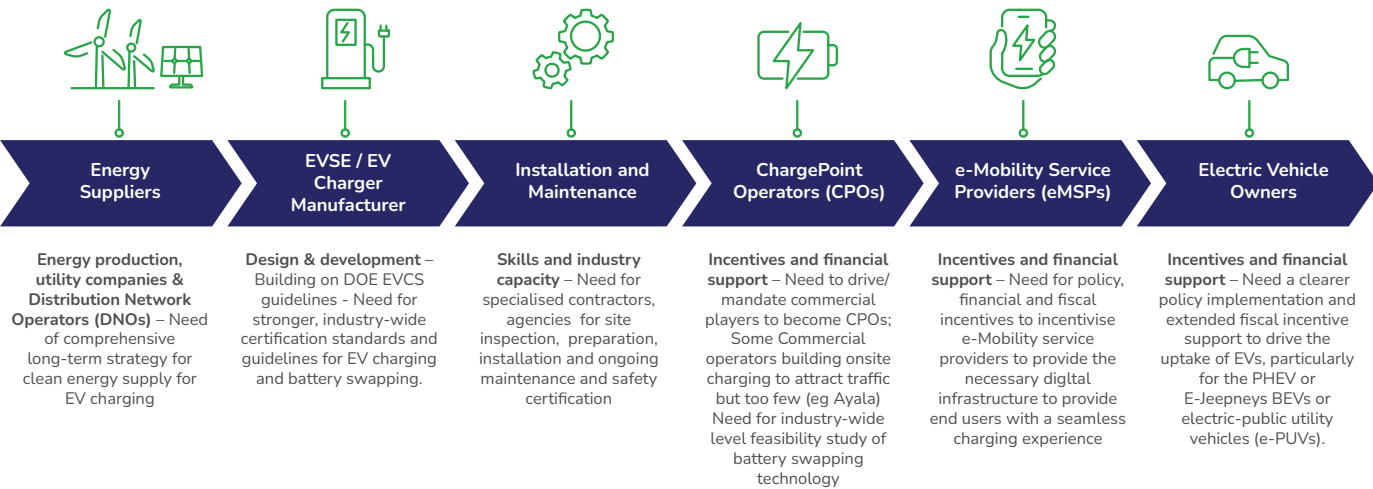


Figure 10: Summary of the key barriers across the EV charging infrastructure value chain

Potential interventions to address key barriers

With the transport sector contributing around 23% of the Philippines’ fuel combustion emissions and facing an estimated PHP 400 billion (USD 7+ billion) financing gap to modernise public utility vehicles alone, there is a clear imperative that new investors and lenders will have to enter the market. The EVIDA and EO 12 provide some fiscal incentives, yet adoption of EVs and e-jeepneys remains limited. Infrastructure bottlenecks—particularly the need for charging networks—and gaps in financing for small operators underscore the challenge. Below are potential interventions, drawing on stakeholder interviews and GFI expertise, that could address key barriers for private capital to flow into road transport decarbonisation.

¹⁴⁵ FIRB.GOV.PH (n.d) [Fiscal Incentives](#)
¹⁴⁶ ASEAN Briefing (2024) [Indonesia Issues New Tax Incentives to Spur EV Production and Sales](#)
¹⁴⁷ FDI intelligence (2023) [South-east Asia's EV investment race](#)

De-risking capital

Utilisation Linked Finance for EV charging

- **Concept:** Utilisation Linked Finance (ULF) is an innovative financial solution developed by the GFI to accelerate EV charging deployment in areas where short-term demand is less certain. (See box 5). Under a ULF model, the borrower—typically a ChargePoint Operator (CPO)—begins repayments only once the charging station is revenue-generating, and scales with utilisation over time. By aligning debt servicing with actual cash flow, ULF offers a more flexible financing structure that gives installers greater comfort to deploy charge points ahead of short-term demand. Public or blended capital can further de-risk transactions, for example, by covering downside scenarios or helping capital providers meet their required return thresholds.

Box 5: Exploring Utilisation Linked Finance (ULF) for EV Charging Infrastructure

In the UK, the GFI has partnered with an asset financier to develop a pay-per-use ULF model, and scale the offering. ULF aims to resolve a persistent “chicken-and-egg” problem that plagues EV charging investment. ULF is structured so that the repayments scale with utilisation, and it helps shift the period in which the borrower services their debt to the period they receive revenue from the chargepoint. This flexible structure recognises that it takes time for utilisation to grow after initial installation. In the UK, the GFI have explored ULF being backed by a guarantee, which can be provided by philanthropic or public capital, to maintain returns if utilisation is much lower than expected. If utilisation exceeds projections, part of the excess then flows back into the reserve. Terms can also be flexibly adjusted—e.g. extending tenor or adjusting the usage fee—to ensure capital is repaid, whilst still maintaining the key feature of repayments being linked to usage.

Potential application in the Philippines

ULF could be adapted for the Philippine EV charging market, where demand outside high-traffic areas (e.g. Metro Manila) remains nascent but is expected to grow—especially given the national ambition of 65,000 EV charging stations by 2028. While the UK model targets CPOs, the concept could be extended to other actors in the Philippines—such as municipalities, fleet operators or SPV aggregators—who take on infrastructure deployment.

A Philippine ULF model could be paired with public guarantees or concessional capital (e.g. from the Maharlika Investment Corporation) to reduce early repayment risk. Repayment schedules could be linked to charging data (e.g. kWh sold), with reserve accounts or minimum revenue guarantees triggered when utilisation is low. This approach would require data collection on charging sessions and stakeholder agreements on usage metrics and monitoring protocols.

Aggregator SPVs for E-Jeepney fleet Modernisation:

- **Concept:** A SPV that consolidates multiple jeepney cooperatives or operators under one financing and operating structure. Rather than each small co-op seeking a micro-loan for a handful of vehicles, the SPV pools capital needs (e.g. for 100 e-jeepneys), uses standard documentation, and coordinates route-level revenue collection. By aggregating credit demand and operational responsibilities, the SPV can secure better financing terms and streamline governance.

- **Example:** In India, the Shuttli bus aggregator platform overcame fragmentation by bundling numerous minibus routes into a single operating entity. This uniform approach to route scheduling, fare collection, and branding gave investors confidence in the service's scale and efficiency. By 2021 Shuttli has raised over USD 97 million in a series of financing equity and debt rounds.¹⁴⁸
- **Potential application in the Philippines:** An aggregator SPVs that holds consolidated route franchises for e-jeepneys. Jeepney cooperatives would maintain equity stakes but rely on the SPV to raise financing in bulk, purchase vehicles at scale and allocate fleets to the appropriate routes. This model reduces default risk, improves procurement efficiency and can be further de-risked via partial guarantees or service contracts (see below). Over time, the SPV might also manage automated fare systems and provide ridership data to lenders, further boosting confidence in loan repayments. Such an SPV would require consistent route rationalisation and franchising frameworks to guarantee sufficient ridership and revenue.

Revenue-certainty mechanism – service contracting

- **Concept:** A contractual setup where the government—such as the DOTr or LGUs—pays operators a fixed fee per kilometre or per route served. This model guarantees more stable income for operators, making it easier to repay capital costs for modern e-jeepneys or fleets.
- **Example:** Singapore's Land Transport Authority (LTA) adopted a bus contracting model in 2016, compensating operators through per-kilometre service fees instead of leaving them wholly dependent on farebox revenue. This gave operators stable incomes; banks consequently provided more favourable financing for new bus fleets. The LTA recovers costs via fares plus government subsidy, but the operators are freed from ridership volatility¹⁴⁹
- **Potential application in the Philippines:** Under the PUVMP, DOTr or LGUs could sign long-term service contracts guaranteeing stable monthly or per-kilometre payments to operators who meet route and performance criteria. Private investors and banks, in turn, would see reduced volatility and a clearer path to repayment. Over time, as ridership grows and farebox revenues rise, the service contract's subsidy portion may decrease. Because service contracting relies on government paying a set rate, sustained budget allocations and binding multi-year agreements through national or local legislative support would be needed.

Blended Finance for an EV infrastructure fund

- **Concept:** A specialised fund, seeded by a mix of public/philanthropic/development capital (which absorbs higher risk or accepts lower returns) along with commercial investors. By offering concessional loans or equity to e-transport projects—such e-jeepney fleets, charging stations or battery leasing—this fund reduces the cost of capital for early movers and helps scale up deployment.
- **Example:** In 2024, Macquarie Asset Management launched Vertelo, a blended finance platform aimed at accelerating EV fleet adoption across India. The Green Climate Fund provided anchor investment (USD 200 million) and Macquarie aims to raise a further USD 205 million from institutional investors to mobilise USD 1.5 billion of capital. Vertelo leverages blended finance to offer commercial fleet operators more affordable capital and longer tenors.¹⁵⁰
- **Potential application in the Philippines:** The DOF, DOTr, Land Bank or DBP could anchor a “Philippine E-Transport Fund,” inviting contributions from climate funds (e.g. Green Climate Fund or GCF) and private investors. This fund could finance priority EV infrastructure (charging stations) or e-PUV acquisitions by cooperatives. The Green Force and partners might manage pipeline section ensuring each project has credible ridership data (for e-PUVs) or location analysis (for charging).

¹⁴⁸ Tech Crunch (2021) [India's Chalo acquires Amazon-backed bus aggregator Shuttli](#)

¹⁴⁹ LTA.GOV.SG (n.d.) [Bus Contracting Model](#)

¹⁵⁰ Macquarie (2024) [Macquarie Asset Management launches Vertelo, a new \\$US 1.5 billion EV fleet solutions platform](#)

Farebox-linked or Automated Fare Collection (AFC) repayment structures

- **Concept:** Integrate loan repayments directly with daily fare collection through an automated system. Passenger fares flow into an escrow account that first deducts a set portion for debt service before releasing the remainder to operators.
- **Example:** Mexico City's Metrobus system channels fare revenue into a trust, from which operating costs and financing obligations are paid automatically. Lenders are reassured by real-time data on ridership, minimising default risk.¹⁵¹
- **Potential application in the Philippines:** In the scenario where aggregator SPVs or consolidated operators are installed, they could utilise contactless fare systems for e-jeepneys.¹⁵² Mobile wallet companies, which have become more commonly used in the Philippines after the COVID-19 pandemic, could serve as partners for this. A portion of daily farebox receipts would be automatically directed to lenders, lowering default risk. Combined with partial guarantees or service contracting, this real-time payment structure would offer banks further confidence in credit recovery, especially for small operators with limited collateral.

Multimodal corridors & PPP for charging Infrastructure

- **Concept:** A corridor-based approach where the government designates certain highways or routes as "EV priority lanes" and launches a PPP to build, operate and maintain charging facilities. The private partner invests in fast-charge stations, supported by tolls, user fees or minimal guaranteed usage payments, while the government provides land or right-of-way.
- **Example:** Ionity, a pan-European EV-charging joint venture, developed a network of ultra-fast chargers along major highways, partly supported by European public funding (Euro 39.1 million). The corridor approach ensured consistent coverage, fostering confidence in EV adoption.¹⁵³
- **Potential application in the Philippines:** The DOTr or Department of Public Works and Highways (DPWH) could identify strategic corridors (e.g. Manila–Clark or Manila–Batangas) as early "EV highways," awarding concessions to private consortia that install reliable charging stations every 50 km, potentially incorporating chargers into existing gas stations. Government might provide land or viability-gap funding if initial charging demand is low. Over time, these corridors could expand to additional regions, addressing the "chicken-and-egg" challenge of insufficient EV charging infrastructure.

Jeepney leasing agreements

- **Concept:** A lease agreement model between fleet owners (manufacturers or management companies) and drivers/operators aims to ease the transition to modernised jeepneys. This model simplifies financing with lighter repayment terms tied to route revenue, helping drivers with limited credit access funds. Drivers receive "concession agreements" granting rights to operate on specific routes and collect fares, ensuring stable income. At lease end, drivers can purchase the vehicle, promoting ownership and responsibility. Fleet owners handle vehicle maintenance, allowing drivers to focus on operations. Manufacturers may also provide ongoing support and training.
- **Example:** The International Finance Corporation (IFC) invested USD 127 million, along with USD 217 million in loans from other partners, in e-buses in Chile to replace its existing public fleet through a similar set-up. This project aims to reduce 47,092 tCO₂e annually, addressing the transport sector's environmental impact.¹⁵⁴

¹⁵¹ Global Green Growth Institute (2019) [Comparative Analysis of Bus Public Transport Concession Models](#)

¹⁵² Several manufacturers (e.g. [Star 8](#) and [Francisco Motors](#)) offer e-Jeepneys and e-trikes with AFCS and, following an agreed with Central Luzon's local LTFRB, [DyipPay is onboarding drivers onto AFCS](#)

¹⁵³ EU (2020) [pan-european ev infrastructure takes shape after Ionity launched its 150th charging station](#)

- **Potential application in the Philippines:** The Philippine government, through the Department of Transportation (DOTr) and the Land Transportation Franchising and Regulatory Board (LTFRB), can create a regulatory framework for jeepney lease agreements. Standardised concession agreements can clarify rights and responsibilities. An automated fare system can ensure payments to fleet owners. Local manufacturers and fleet management companies can be incentivised to join the leasing program, while training programs can enhance drivers' financial literacy and operational skills.

Improving market functionality & transparency

Jeepney modernisation transparency platform

- **Concept:** A transparency platform providing detailed information on jeepney manufacturers, including production capabilities, certifications, and vehicle specifications. It will also include data on route franchises from LGUs, covering geographic areas, passenger demographics, and performance metrics (e.g., ridership and revenue). Financing options, such as government subsidies and loans, will be compared across financial institutions, detailing interest rates and repayment terms. The platform will be accessible to government agencies, manufacturers, operators, drivers, and financial institutions.
- **Examples:** Alibaba's auto marketplace connects manufacturers, dealers, and consumers in China, allowing vehicle browsing and financing comparisons.¹⁵⁵ New York City's MTA has an open data platform with detailed information on subway and bus routes and performance metrics.¹⁵⁶
- **Potential application in the Philippines:** This could be developed by expanding existing platforms such as the DOE's EV Industry Portal or integrating new modules within the Department of Budget and Management (DBM) electronic procurement system "PhilGEPS". This would allow agencies like the DOTr, LTFRB, and LGUs to layer in route-level data, modernisation-compliant vehicle specifications and link manufacturers, operators, drivers, and end users. This platform will provide real-time access to vehicle specifications, financing options, and approved route franchises, aiding informed decision-making and enabling compliance monitoring with modernisation standards. It can be integrated with existing service contracts or leasing models.

Strengthen the policy environment

Set sector-wide decarbonisation targets and supportive regulations

- Establish GHG reduction targets across land, air and maritime transport and align EV and biofuel policies into an integrated framework. This progressive approach could be integrated into a coherent policy framework that articulates reduction targets for all transport sub-sectors, sets ambitious targets for electric vehicle (EV) adoption and enhances biofuel utilisation across all transport sectors.
- Building on the Omnibus Franchising Guidelines, DOTr and its adjunct agencies (LTFRB, etc.) could expedite route rationalisation studies and unify route approvals to reduce unpredictability for lenders. More transparent, performance-based franchising could reduce overlap, ensure stable ridership and help operators repay loans.

Revise Jeepney modernisation guidelines and co-op requirements

Present rules tie equity subsidies to co-ops, complicating access for OEM in-house financing or individual operators. Adjusting guidelines so that government support (subsidies, interest rebates) can flow to accredited private financiers, aggregator SPVs or sole-corporations could expand capital inflows.

¹⁵⁵ Alibaba's Auto Marketplace (n.d.) Vehicles & Transportation

¹⁵⁶ NYC Open Data Platform (n.d.) Catalog | NYC Open Data

Extend and expand fiscal incentives beyond 2028 and to cover EV charging infrastructure and domestic supply chains:

- Current fiscal incentives under EO 12, while recently expanded through EO 62, focus primarily on EV imports and remain time-limited, with most due to expire by 2028. Although both orders are subject to review and potential extension, the scope of incentives could be expanded to explicitly cover EV charging infrastructure and provide longer term certainty.
- As the Electric Vehicle Incentive Strategy (EVIS) is finalised, the government could introduce similar incentives adopted by regional peers to strengthen domestic manufacturing, such as VAT exemptions for locally made EV parts, concessional financing for battery assembly plants or bonus tax credits linked to local content thresholds.

Explore carbon credit revenues for EV fleets

Although carbon pricing remains under debate in Congress, any eventual framework could allow fleets that convert from diesel to EV to claim credits based on verified CO₂ reductions.

Institutional capacity building**Leverage the Green Force for cross-agency coordination**

A dedicated “Sustainable Mobility” working group—under the Green Force—can complement existing inter-agency structures such as the EVIDA technical working group by providing a platform for market-facing coordination. While the EVIDA-TWG supports technical and regulatory alignment among government agencies, the Green Force group could engage financiers, OEMs, cooperatives and LGUs to accelerate the pipeline of e-Jeepney and EV projects, share data on route rationalisation, and align incentives with investment needs.

Outlook

The road-based transport sector offers high potential but is currently structurally undercapitalised. Interviewees highlighted persistent gaps in route certainty, co-op creditworthiness and EV charging economics—all of which elevate risk and suppress investor interest. Yet targeted financial innovation—especially around revenue-certainty, aggregation and public-private corridor models—could improve project bankability. Sustained impact will depend on:

- Route standardisation and franchise certainty;
- Aggregation vehicles (e.g. SPVs, leasing platforms) to reduce fragmentation;
- Risk-sharing mechanisms to offset early-stage demand and credit risks;
- Longer-term policy signals and incentive certainty beyond 2028.



Governance and Green Force evolution

Governance and Green Force Evolution

Formalised in 2021, the Inter-agency Technical Working Group on Sustainable Finance (the “Green Force”) led by the Department of Finance (DOF) and the Climate Change Commission (CCC) has a mandate to institutionalise sustainable finance and develop a pipeline of bankable investments for mitigation and adaptation. However, private capital providers consistently cite policy fragmentation and weak cross-agency alignment as a barrier to investment.

In April 2025, the DOF announced that the Green Force will be revised to operate through three functional clusters that will focus on policy, financing, and investment, supported by regular quarterly meetings and an expanded government membership.¹⁵⁷ These developments are welcome and offer a foundation to achieve the objectives of the Green Force.

However, a critical piece needs to be added – the operating model capable of delivering risk-adjusted returns that will mobilise private capital at scale. With the government committing to only fund 2.71% of the country’s estimated PHP4.1 trillion (USD 72 billion) climate financing needs through 2030, substantial private capital must be unlocked to bridge this gap.

¹⁵⁷ An ITSF Center of Excellence as a central hub for capacity building among other key initiatives will also be developed.

To enhance this structure and enable it to create capital flows towards real-economy outcomes, the GFI advocates that the Green Force Clusters employ a sector-specific structure, underpinned by partnerships with private sector actors. There are three reasons for this:

- Barriers to crowding in private capital—and therefore solutions to unlock those barriers—differ sharply between, say, e-jeepney fleets and waste-to-energy plants.
- Financial instruments (guarantees, revenue-certainty mechanisms, utilisation-linked loans, etc.) must be co-designed around each sector's unique risks that need to be priced and mitigated.
- The enabling environment, such as a demand signal for EV charging stations or tipping fees, must dovetail with existing sector policy and regulatory architecture.

This cannot be achieved by government alone. A neutral, market-facing convener is needed to connect the Clusters with private capital and market participants such that any interventions, such as guarantees, are co-designed and will stand the test of market implementation and ensure investment flows towards decarbonisation in real economy sectors.

In the UK, the GFI has played exactly that role, partnering with financial institutions, corporates and policymakers to co-create solutions that mobilise private capital towards the sectoral transition in the UK and Europe.

Operationalising the Clusters using GFI's SAF blueprint

The GFI's SAF programme shows how a neutral convener can bridge market and policy gaps across the value chain to recommend demand signals, co-design financial tools and prepare a pipeline to **deliver an investable sustainable aviation fuel sector**.

If adapted to operate on a sector-specific basis, convened by a market-facing neutral party, the Green Force's new structure could serve as the foundation of a Philippines Investment Platform, mirroring other country platforms being set up around the world and successfully pioneered by the GFI, initially in the UK. The table below shows how each Cluster could function in the Philippines using transport as an example, mapped against the GFI's real-world SAF work.

Table 3: Mobilising private capital through a sector-based Cluster model

Green Force cluster	Role of Cluster	Example: How it would work in Transport (Philippines)	SAF precedent (GFI, UK Programme)
Policy Cluster	Translate WG findings into mandates that give the appropriate demand signals.	The Transport WG could recommend a jeepney-fleet electrification target—then route that ask to the Policy Cluster for adoption and policy design.	Convened a SAF Investment WG (airlines, fuel producers, government) to agree a demand signal. UK Government adopted a binding SAF mandate (2 % of jet fuel in 2025 → 10% in 2030 → 22 % in 2040).
Financing Cluster	Optimise sector-specific financial mechanisms, developed within each WG, (e.g. RCM, Utilisation-Linked Finance, partial guarantees, concessional debt).	Working with the Financing Cluster, the Transport WG co-designs financial mechanisms, such as a utilisation-linked facility for EV-charging, that gives installers greater comfort to deploy charge points ahead of short-term demand.	GFI co-designed a Revenue-Certainty Mechanism (RCM) that balances the needs of SAF producers, investors and government, to ensure plant bankability for lenders and investors.
Investment Cluster	Acts as a project preparation facility. Curate, validate and endorse pipelines of bankable projects within each WG, works with them to align with NAP and NDC IP, and size risk layers for support.	Transport WG prepares e-jeepney and charging-station projects; Investment Cluster conducts readiness screening and proposes projects for guarantee support.	Co-conducted a techno-economic assessment of SAF pipeline with KPMG to identify where SAF could be developed.

Proposed Green Force “Investment Platform” structure

Figure 11 illustrates how this model could work in the Philippines. The DOF and CCC/DENR, provides strategic oversight of the Clusters and formally endorses projects recommended by the Investment Cluster for concessional finance or guarantees. A neutral market-facing convener connects the Clusters with private capital and market participants in each sector.

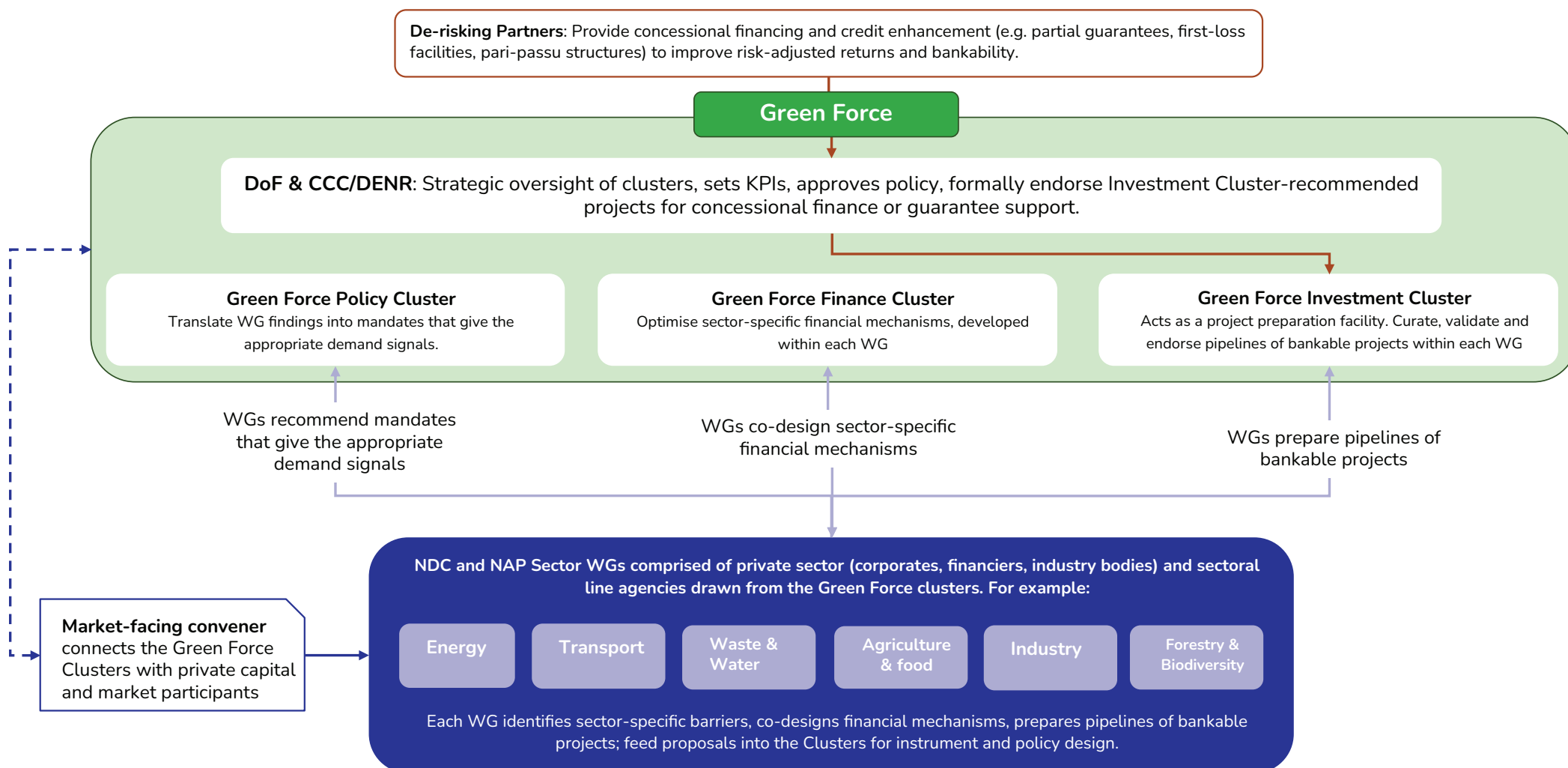
Figure 11: proposed Green Force Investment Platform structure

Table 4: Proposed Green Force Investment Platform governance structure"

Level	Stakeholders	Role
Strategic Platform & Secretariat	DOF CCC & DENR ¹⁵⁸	Strategic oversight of clusters and sets KPIs, formally endorse Investment Cluster-recommended projects for concessional finance or guarantee support.
Green Force Clusters	Policy Cluster Financing Cluster Investment Cluster	Policy: Turn WG asks into mandates and demand signals. Financing: Co-design sector financial instruments (e.g. RCM, partial guarantees). Investment: Curate & prepare projects for bankability, size risk layers, recommend projects for endorsement.
Sector WGs	Sectoral line agencies drawn from the Green Force + private sector (Corporates, financiers, industry bodies)	Identify sector-specific barriers, co-designs financial mechanisms, prepare pipelines of bankable projects; feed proposals into the Clusters for instrument and policy design, and project preparation.
De-risking Partners	Maharlika Investment Corporation, PhilGuarantee, LGU Guarantee Corp, Multilateral Funds (GCF, GEF)	Provide concessional financing and credit enhancement (e.g. partial guarantees, first-loss facilities, pari-passu structures) to improve risk-adjusted returns and bankability.
Neutral convener	GFI (or another market facing independent body)	Act as the nexus between public and private sectors; facilitate co-design of financial tools and pipeline preparation, ensure solutions are market-tested and aligned with real-economy needs.

¹⁵⁸ An ITSF Center of Excellence as a central hub for capacity building among other key initiatives will also be developed.

Strengthening the Green Force through an Executive Order

The Green Force currently operates under a CCC resolution (and thus may have limited enforceability by agencies outside of the CCC), with ad hoc private-sector engagement. While it has produced landmark documents (e.g. Sustainable Finance Roadmap, Taxonomy) feedback suggests more could be done to spur private lending and investment into real-economy decarbonisation. According to interviews, some participants have limited involvement and external recognition of the Green Force is low.

An Executive Order could offer a robust upgrade to empower the Green Force. Unlike an MOU or enacting legislation, an EO can be enacted relatively swiftly, so long as it aligns with presidential directives and does not conflict with existing laws. Historically, EOs have effectively set up major inter-agency bodies in urgent national priorities (e.g. IATF-EID).¹⁵⁸ A well-crafted EO would:

- Establish the Green Force Platform, including clusters, legally and structurally.
- Grant specific mandates (e.g. formalising risk-sharing tools and project preparation).
- Formalise private sector engagement structures.

The 2019 EO draft could serve as a reference, updated to reflect the current sustainable finance landscape. [Annex C](#) provides governance and institutional considerations on EOs.

By anchoring on an EO for the long term but leveraging short-term sector working groups, convened by a neutral market facing partner, the Green Force can improve its impact while maintaining its ability to act swiftly. Given that it has already made strides in releasing the key sustainable finance documents mentioned above, the next steps (e.g. engaging with the private sector, improving pipeline of bankable projects for financing, aligning key policies, etc) could be supported by the presence of both a formal EO and dedicated WGs.

¹⁵⁸ The Inter-agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) was established through EO No. 16 in 2014, with a strong resurgence in 2020 due to the COVID-19 pandemic. Other examples of task forces established through EOs include the Inter-agency Task Force on Zero Hunger (EO No. 101) in 2020, with amending EOs in 2023 and 2024 to reorganise the task force's membership in light of the country's growing hunger problem; and the National Task Force to End Local Communist Armed Conflict (EO No. 70) in 2018, due to communist activities by the Communist Party of the Philippines and the New People's Army and the cessation of peace talks with the same.

Recommended next steps

As the Philippines pursues its climate and development goals, the mobilisation of private capital into sustainable transport and waste will be decisive. While challenges remain—from short political cycles to constrained access to affordable finance—this report has highlighted key foundations already in place. These include concessional public finance mechanisms (e.g. DBP and LBP credit lines), EPR law’s market-based obligations and an emerging set of replicable financing models and early project examples in waste and transport that illustrate how private capital can be mobilised under the right conditions.

Proposals—such as Utilisation Linked Finance, farebox-linked repayment models, and regional waste SPVs—offer potential blueprints that, if implemented, could demonstrate how pooled demand, clearer revenue structures and public-private risk-sharing can lower barriers to private finance. Meanwhile, the Green Force has laid the groundwork for cross-sectoral coordination—and now has the opportunity to use this next stage of its evolution to evolve into a more action-oriented platform focused on de-risking projects and forging public-private collaborations.

However, mobilising private finance will require more than project-by-project breakthroughs. It demands robust financial architecture: standardised supply agreements, credible offtake arrangements in waste and fuel markets, long-term certainty on tipping fees or fare revenues, and dedicated financial mechanisms that reduce risk at the transaction level.

In this context, the following steps are proposed as near-term priorities:

- 1. Operationalise near-term pilots to test financing structures under real-market conditions.**
Focus on 1–2 transactions —such as an e-jeepney SPV or regional recycling facility backed by plastic credits and service agreements—to refine bankability models and build a demonstrable track record.
- 2. Expand and institutionalise the Green Force as the country’s sustainable investment platform.**
Through an Executive Order, establish the Green Force’s cluster-based governance model, anchored in sector-specific working groups that support project preparation, financial structuring and policy alignment across NDC and NAP sectors. These WGs should be convened and facilitated by a **neutral, market-facing body**—such as the GFI—to ensure coordination between the Clusters and private capital and market participants.
- 3. Improve the current “green lane for strategic investments” to be a one stop digital platform to streamline permits and approvals for green businesses and companies.** A unified interface can accelerate green deal flow by improving transparency, consolidating permitting processes and creating an improved “green lane” for eligible investments.
- 4. Prioritise the extension and integration of fiscal incentives across agencies.**
Ensure continuity of EV incentives beyond 2028 and harmonise them with credit-enhancing mechanisms such as guarantees and concessional finance.
- 5. Scale enforcement and transparency mechanisms that stabilise project revenue.**
This includes scaling enforcement of EPR compliance, tipping fee reform and route finalisation, each of which plays a key role in underpinning commercial viability.

There is clear appetite from both public and private stakeholders to realise the Philippines’ climate and development goals. The opportunity now lies in delivering the investment and institutional infrastructure that can turn ambition into scale.

Annexes

Annex A: Methodology

In collaboration with the GFI's delivery partner, EY Philippines (SGV & Co.), insights were gathered through two main phases of work between December 2024 and April 2025:

Desk-based research

- Reviewed the Philippines' NDC Implementation Plan (NDC IP), National Adaptation Plan (NAP), sector-specific legislation (e.g., Electric Vehicle Industry Development Act, Public Utility Vehicle Modernization Program, Extended Producer Responsibility Act), along with relevant executive orders.
- Examined the Sustainable Finance Roadmap, Taxonomy Guidelines, and updates from the Green Force regarding climate finance regulations.
- Assessed the background and recent activities of the Green Force, including existing public-private partnerships, to understand how policy goals align with on-the-ground market uptake.

Stakeholder mapping & consultations

- We longlisted public agencies, private financiers, corporates, and development partners based on current or prior involvement in green initiatives, potential for NDC-related investments or capacity to enable policy and financial innovation. We then prioritised a balanced selection of representatives across government, financial institutions, and industry coalitions.
- From mid-January to mid-March 2025, in-depth interviews captured perspectives from regulators, local and international banks, NGOs, asset managers and industry associations (see Figure 11 for composition). Key topics included:
 - Identifying investment challenges in transport and waste, from both demand- and supply-side standpoints.
 - Assessing stakeholder familiarity with the Green Force's role, perceived impact, and potential enhancements.
 - Gathering "quick wins" and longer-term suggestions for unlocking private capital, especially measures feasible within a two- to five-year timeframe.

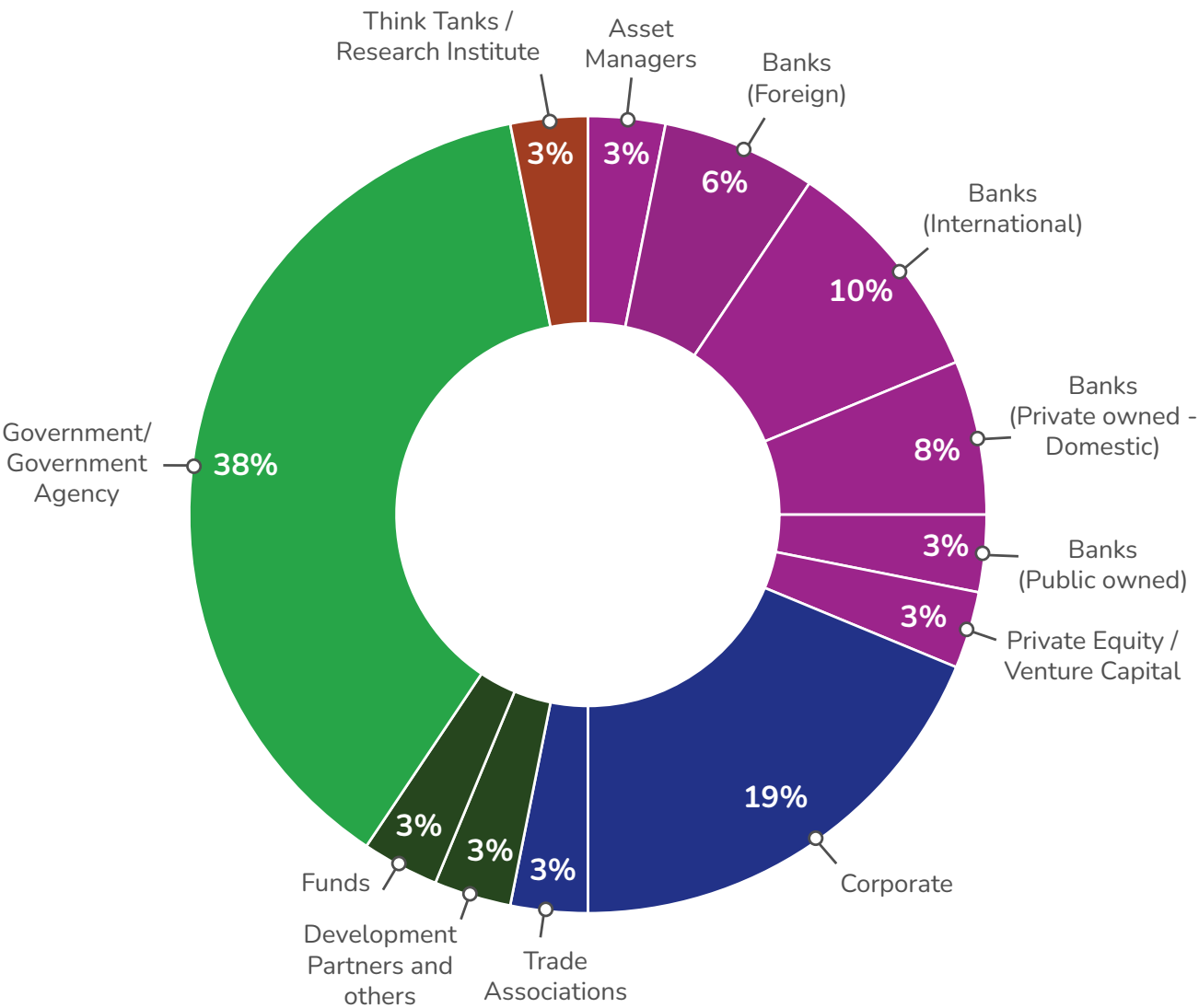


Figure 11. Breakdown of engaged stakeholders for this project.

Data Synthesis & Validation

Stakeholder inputs were collated and grouped by recurring themes (e.g. policy gaps, financing constraints). Some proposed interventions reflect direct stakeholder recommendations, while others draw on GFI’s analysis of feasible policy or financing tools. These findings informed the core of this report, detailing priority barriers and potential interventions for scaling green finance in the Philippine transport and waste sectors.

Annex B: General stakeholder consultation questions grouped stakeholder type.

Government Institution
1. Agency involvement in Green Force (GF) and NDC projects; policies encouraging transport/waste investment. 2. Public financing role in de-risking; adequacy of blended financing; agency promotion of blended finance. 3. Best practices from other countries for the Philippines. 4. Barriers to sustainable investment: 5. Gaps to address for maximising blended financing for NDC investments.
Financial Institutions and Multi-lateral Banks
1. Familiarity with Green Force (GF) and its role in NDC/NAP objectives. 2. Investment sectors in NDC (Energy, Agriculture, Transport, Waste, IPPU, FOLU); typical project ticket sizes. 3. Internal criteria preventing sustainable investments; unacceptable risks in transport/waste sector. 4. Role of public financing in de-risking; adequacy of blended financing; effective public-private partnership models. 5. Experience with structuring blended finance projects; familiarity with blended finance mechanisms; lessons from ASEAN experience. 6. Internal capabilities to assess sustainable investment risks; development of capabilities; support needed. 7. Best practices or policies from other countries for the Philippines. 8. Impact of Philippine policies and regulatory frameworks on financing NDC sectors; obstacles and effectiveness. 9. Views on sustainable finance policies; feedback on improving the investing ecosystem. 10. Barriers to sustainable investment
Private Companies (Investors)
1. Familiarity with Green Force (GF) and its role in NDC/NAP objectives. 2. Investment sectors in NDC (Energy, Agriculture, Transport, Waste, IPPU, FOLU); typical project ticket sizes. 3. Internal criteria preventing sustainable investments; unacceptable risks in transport/waste sector. 4. Role of public financing in de-risking; adequacy of blended financing; effective public-private partnership models. 5. Internal capabilities to assess sustainable investment risks; development of capabilities; support needed. 6. Best practices or policies from other countries for the Philippines. 7. Impact of Philippine policies and regulatory frameworks on financing NDC sectors; obstacles and effectiveness. 8. Views on sustainable finance policies; feedback on improving the investing ecosystem. 9. Barriers to sustainable investment

Chambers of Commerce

1. Familiarity with Green Force (GF) and its role in NDC/NAP objectives.
2. Investment sectors in NDC (Energy, Agriculture, Transport, Waste, IPPU, FOLU); typical project ticket sizes.
3. Hindrances to member companies' investment.
4. Role of public financing in de-risking; adequacy of blended financing; effective public-private partnership models.
5. Internal capabilities of member companies to assess sustainable investment risks; development of capabilities; support needed.
6. Impact of Philippine policies and regulatory frameworks on financing NDC sectors; obstacles and effectiveness.
7. Views on sustainable finance policies; feedback on improving the investing ecosystem.
8. Barriers to sustainable investment

Corporates

1. Familiarity with Green Force (GF) and its role in NDC/NAP objectives.
2. Investment sectors in NDC (Energy, Agriculture, Transport, Waste, IPPU, FOLU); typical project ticket sizes.
3. Current decarbonisation goals and emissions targets; urgent or challenging decarbonisation areas; Training needs for low-carbon technologies.
4. Evaluation of decarbonisation project value; consideration of ESG factors in decisions; internal benchmarks for project selection.
5. Sources of financing for decarbonisation initiatives (in house, debt, equity); adequacy of blended financing; effective public-private partnership models.
6. Hardest projects to finance and reasons; barriers to sustainable investment
7. Impact of Philippine policies and regulatory frameworks on financing NDC sectors; obstacles and effectiveness.
8. Existing partnerships with investors, suppliers, government; desired partnership types and funding mechanisms.
9. Innovative financing models and partnerships in the sector; company's future role in low-carbon transition.

Annex C: Governance and institutional discussion on EOs

Many of the private stakeholders we spoke to mentioned that they were either unfamiliar with the Green Force altogether or unsure of its mandates. With this, there is a need to evolve the structure of the Task Force in order to strengthen its presence and broaden its powers. Several options for this exist, including passing relevant laws, drafting an internal memorandum of understanding (MOU), or releasing an Executive Order (EO) signed by the President:

	Laws	MOUs	EOs
Credibility	Strongest – supported by both the House and Senate, with approval by the President. Enforceable by law, with corresponding penalties and incentives.	Weakest – highly reliant on internal agreements between/among agencies. No enforcing body.	Strong – directive from the President, with no need for further legislative approval. Cannot violate or repeal existing laws.
Common use case + key examples	Establishing government agencies or policy departments Example: Department of Information and Communications Technology (DICT) – established through RA No. 10844 (though began with an EO creating a transitory ICT commission)	Voluntary inter-agency cooperation or partnerships Example: Financial Sector Forum (through a master Memorandum of Agreement signed July 5, 2004)	Administrative or restructuring efforts Example: Task forces mentioned in footnote 21 of the main report
Timeline	Longest – requires several hearings at both the House and Senate, along with reviews and revisions.	Fastest – can immediately be executed upon agreement by the involved agencies.	Medium – may require reviews and is subject to political priorities, but can lapse into effectivity ASAP upon the signing of the President.
Structure	Uncertain – how the task force/body is structured would be highly dependent on the how the bill (and eventual law) is drafted, including other clauses.	Uncertain – highly reliant on internal agreements between/among agencies. Structure may change constantly with no clear leadership/points of contact.	Detailed – structure, including point persons, membership, and leadership, are usually described in detail as part of the EO.
Access to resources	Strongest, with some caveats – once a law is finally passed, the resulting body/agency has access to government funds and contacts. However, until then, the access remains limited.	Weakest – will mainly be reliant on the available funds and network that the agreeing agencies have, subject to internal discussion.	Potentially strong – depending on how the EO is written, the President may detail where resources can be accessed from with immediate effectivity upon approval of the EO.

EOs are listed among the ordinance powers of the President in the 1987 Administrative Code of the Philippines, and function as directives from the President to help manage the government's operations. Since they do not require legislative approval, they are often used for administrative purposes, such as organising bodies or directing agencies to carry out more specific tasks.

These documents, and related resolutions, detail the situational context for creating the task force, the relevant government agencies involved, and its duties and responsibilities. The EOs' primary value therefore is serving as the key document which supports the functioning of the task force, ensuring that the tasks laid out are accomplished in line with Philippine law (as EOs cannot override or repeal existing laws). The efficiency with which these can be released allow the relevant agencies to operate immediately while still in an official and credible capacity.

The release of an EO may seem simple in practice, where a draft EO is written for the review of certain department heads and ultimately of the President for signing. However, the actual drafting often follows several rounds of stakeholder consultations and inter-agency meetings, especially for more complex issues. This may cause immediate delays in the process. In addition, reviews of the drafted EO may take time if there is a need to present it to various departments and legal advisors.

Perhaps the biggest challenge, however, is that the EO approval process is highly dependent on the sitting President's primary concerns. Thus, if the President deems that other matters may be more pressing or aligned with his or her priorities, there is a chance that the EO will not be signed right away.

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