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Urban-Act  
Integrated Urban Climate Action  
for Low-Carbon & Resilient Cities

on the basis of a decision  
by the German Bundestag

# Philippine Enabling Environment for Urban Climate Action

## Policy Analysis Report



## Imprint

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In cooperation with the Department of the Interior and Local Government - Bureau of Local Government Development (DILG-BLGD)

This report benefitted from a series of focus group discussions with partner cities Antipolo, Bacolod City, and Tagbilaran from May to July 2024. The FGDs tackled the gaps, barriers, and opportunities identified in a stock-take of the Philippines' enabling policy environment for urban climate action.

The preparation of this policy analysis report was coordinated by Urban-Act led by Francisco Dacumos III, with special advise and inputs from DILG-BLGD Director Anna Liza Bonagua, Arce Fajardo, and Anna Victoria Quibot.

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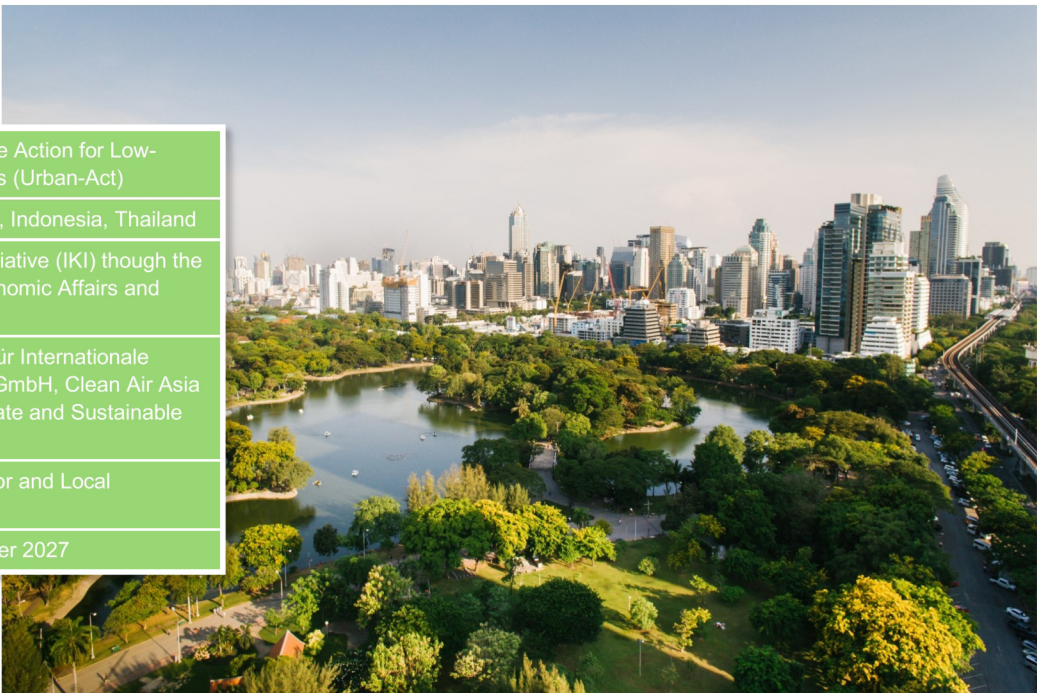


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the German Bundestag

# Integrated Urban Climate Action for Low-Carbon & Resilient Cities (Urban-Act)



Project Name	Integrated Urban Climate Action for Low-Carbon & Resilient Cities (Urban-Act)
Project Countries	Philippines, China, India, Indonesia, Thailand
Commissioned by	International Climate Initiative (IKI) through the Federal Ministry for Economic Affairs and Climate Action (BMWK)
Lead Executing Agencies	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Clean Air Asia (CAA), Institute for Climate and Sustainable Cities (ICSC)
Partner	Department of the Interior and Local Government (DILG)
Duration	October 2022 - December 2027

## Project Description and Objectives

Urban-Act supports the transformation of cities towards low-carbon and resilient urban development in the Philippines, China, India, Indonesia, and Thailand. It contributes to the implementation of Nationally Determined Contributions (NDC) and the 2030 Sustainable Development Agenda.

The Project aims to promote vertical coherence by ensuring the integration of national policies and frameworks into local plans and programs for effective climate action. The Project works at the regional (Asia-Pacific), national, and local levels across the climate change and sustainable urban development spheres.

At the Asia-Pacific level, the Project supports advocacy through intergovernmental and city-to-city dialogue with support from regional consortium partners UN Economic and Social Commission for Asia and the Pacific (ESCAP) and United Cities and Local Governments Asia Pacific (UCLG ASPAC). Urban-Act facilitates knowledge sharing to enable the scaling-up of project results and to help institutionalize good practices.

In the Philippines, the Project works with national government agencies to update and further develop policies and frameworks for urban climate action through technical services, cross-sectoral and multi-level coordination, and capacity development.

Additionally, Urban-Act works with the city governments of Antipolo, Bacolod, and Tagbilaran to develop climate-sensitive urban development plans that are supported by underlying budgets and clear investment plans.

## Impact

Cities in the Asia-Pacific region implement evidence-based and inclusive actions for sustainable, low-carbon and resilient urban development contributing to the implementation of the Paris Agreement and the 2030 Agenda.

## Outcome

Enabling conditions for planning and implementation of evidence-based and inclusive urban climate actions in line with Sustainable Development Goals (SDG) and Nationally Determined Contributions (NDC) are enhanced in the Urban-Act partner countries.





### Output 1

Improved institutional environment for climate-sensitive urban development



### Output 2

Evidence-based and inclusive climate-sensitive spatial and urban planning



### Output 3

Project concepts for urban climate action investments



### Output 4

Enhanced knowledge through regional networking, exchange, and learning

## Expected Outputs

- Local development, land use, and budget plans are developed integrating climate, urban mobility, and Measurement, Reporting, and Verification (MRV)
- Project concepts are developed together with local government units, with potential financing sources identified
- Increased collaboration and feedback between local and national levels, including civil society and academe

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# CONTENTS

Contents.....	4
List of Tables.....	4
List of Figures.....	6
Abbreviations.....	4
EXECUTIVE SUMMARY.....	10
1. INTRODUCTION.....	17
2. PURPOSE AND METHODOLOGY.....	21
3. ENABLING ENVIRONMENT FRAMEWORK.....	25
4. URBAN-ACT PILOT CITIES: LAY OF THE GROUND.....	27
Fiscal Resources of Pilot Cities .....	30
Urban Development Issues .....	35
Climate Risks and Responses.....	39
Organizational Issues.....	42
5. PROBLEM STATEMENT.....	43
Issues.....	43
Gaps.....	50
Challenges and Barriers.....	51
Opportunities.....	53
6. ALTERNATIVE POLICY OPTIONS .....	54
Logics of the Alternative Policy Options.....	55
Prioritized Alternative Policy Options .....	66
7. COURSES OF ACTION, Probable OUTCOMES AND POTENTIAL BENEFITS.....	74
8. CONCLUSION AND RECOMMENDATIONS.....	80
REFERENCES.....	84

# LIST OF TABLES

Table 1. Participants, First Round of FGDs .....	24
Table 2. Participants, Second Round of FGDs .....	24
Table 3. Characteristics of Urban-Act Pilot Cities .....	29
Table 4. Bacolod City Annual Income from Local and External Sources 2020-2024 (in PHP million) .....	30
Table 5. Antipolo City Annual Income from Local and External Sources 2020-2024 (in PHP million) .....	31

Table 6. Tagbilaran City Annual Income from Local and External Sources 2020–2024 (in PHP million) .....	32
Table 7. Bacolod City: climate risks, effects and responses .....	41
Table 8. Tagbilaran City: climate risks, effects and responses .....	41
Table 9. Policy areas and alternative policy options.....	54
Table 10. Local government climate investments recorded in the CCET, 2016–2020 (in PHP).....	56
Table 11. Summary of Climate change –related Official Development Assistance received by the Philippines, 2010–2022 (in PHP billion) .....	57
Table 12. Policies and Measures (PAMS) under the NDC Implementation Plan .....	61
Table 13. Potential Sources of Green Financing .....	65
Table 14. Prioritized Alternative Policy Options .....	66
Table 15. Comparative Priorities of Pilot Cities .....	73
Table 16. Suggested Specific Courses of Action .....	81

## LIST OF FIGURES

Figure. 1. Policy Analysis Process .....	23
Figure. 2. Conceptual framework of an enabling environment .....	25
Figure. 3. Conceptual framework of an enabling environment for urban climate action .....	26
Figure. 4. IRA Dependency of Negros Occidental Province, as of 2020. ....	30
Figure. 5. IRA Dependency of Rizal Province, as of 2020.....	31
Figure. 6. IRA Dependency of Bohol Province, as of 2020. ....	32
Figure. 7. Annual Data of Outstanding Loans of LGUs, 2003–2021 (in PHP million).....	33
Figure. 8. Loan Profile of LGUs, FY 2024 (in PHP Thousands) .....	34
Figure. 9. PAP4SCP Implementation Plan .....	46
Figure. 10. Preliminary 2010 National Greenhouse Gas Inventory .....	48
Figure. 11. Combined Ratings: Tagbilaran .....	67
Figure. 12. Bacolod Ratings .....	68
Figure. 13. Antipolo Ratings .....	68
Figure. 14. Comparative Ratings of Alternative Policy Options on Local Transportation Planning and Management .....	69
Figure. 15. Comparative Ratings of Alternative Policy Options on Green Housing and Settlements .....	70
Figure. 16. Comparative Ratings of Alternative Policy Options on Local Climate Finance.....	70
Figure. 17. Tagbilaran and Antipolo Comparative Ratings of Alternative Policy Options on NDC Implementation and GHG Inventory Management .....	71
Figure. 18. Pilot City Priority Options: Comparative Ratings .....	72



## ABBREVIATIONS

ADB	Asian Development Bank
AIP	Annual Investment Program
BEMO	Bacolod Environmental Management Office
BLGF	Bureau of Local Government Finance
BOI	Board of Investments
BOM	Budget Operations Manual
BOT	Build, Operate, Transfer
BSP	Bangko Sentral ng Pilipinas/Central Bank of the Philippines
BTAO	Bacolod Transport Administration Office
BUC	Biennial Update Report (to the UNFCCC)
CAA	Clean Air Asia
CCC	Climate Change Commission
CCAM-DRR	Cabinet Cluster on Climate Adaptation and Mitigation and Disaster Risk Reduction
CCET	Climate Change Expenditure Tagging
CCO	Climate Change Office
CDP	Comprehensive Development Plan
CDRRMO	City Disaster Risk Reduction Management Office
CE	Circular Economy
CLOA	Certificate of Land Ownership Award
CLUP	Comprehensive Land Use Plan
COA	Commission on Audit
COP	Conference of Parties
CREVI	Comprehensive Roadmap for Electric Vehicle Industry
CSC	Civil Service Commission
CTMO	City Traffic Management Office
DA	Department of Agriculture
DAO	Department Administrative Order
DAR	Department of Agrarian Reform
DBM	Department of Budget and Management
DBP	Development Bank of the Philippines
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of Interior and Local Government
DOH	Department of Health
DOST	Department of Science and Technology
DOTr	Department of Transportation
DPWH	Department of Public Works and Highways
DHSUD	Department of Human Settlements and Urban Development
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
ECC	Environmental Clearance Certificate
EMB	DENR Environmental Management Bureau
EPR	Extended Producer Responsibility
ERC	Energy Regulatory Commission
ESWM	Ecological Solid Waste Management
EVIDA	Electric Vehicle Industry Development Act

FGD	Focus Group Discussion
GAD	Gender and Development
GEDSI	Gender Equality, Disability and Social Inclusion
GFI	Government Financing Institution
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
HDMF	Home Development Mutual Fund
HLURB	Housing and Land Use Regulatory Board
HUDCC	Housing and Urban Development Coordinating Council
IATCTP	Inter-Agency Technical Committee for Transport Planning
ICSC	Institute for Climate and Sustainable Cities
IEC	Information, Education and Communication
IKI	Internationale Klimaschutzinitiative
IOD	Implementation Oversight Division (CCO, Climate Change Commission)
IPCC	Inter-Governmental Panel on Climate Change
IRA	Internal Revenue Allotment
IRR	Implementing Rules and Regulations
JMC	Joint Memorandum Circular
LCCAP	Local Climate Change Action Plan
LCCET	Local Climate Change Expenditure Tagging
LCE	Local Chief Executive
LDC	Local Development Council
LDIP	Local Development Investment Program
LGU	Local Government Unit
LTO	Land Transportation Office
LPTRP	Local Public Transport Route Planning
LTFRB	Land Transportation Franchising and Regulatory Board
MC	Memorandum Circular
M&E	Monitoring and Evaluation
MMTCO2e	Million Metric Tons of Carbon Dioxide Equivalent
MRV	Monitoring, Reporting and Verification
MUZ	Multiple Use Zone
NAP	National Adaptation Plan
NCCAP	National Climate Change Action Plan
NCCET	National Climate Change Expenditure Tagging
NDC	Nationally-Determined Contribution
NDC-TWG	Nationally-Determined Contribution Technical Working Group
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMF	National Disaster Risk Reduction Management Framework
NDRRMP	National Disaster Risk Reduction and Management Plan
NEDA	National Economic Development Authority
NEPF	National Evaluation Policy Framework
NFSCC	National Framework Strategy on Climate Change
NG	National Government
NGO	Non-Government Organization
NHA	National Housing Authority
NHGC	National Home Guarantee Corporation
NHMF	National Home Mortgage Finance Corporation



NSWMC	National Solid Waste Management Council
NTA	National Tax Allotment
NTP	National Transport Plan
NUDHF	National Urban Development and Housing Framework
ODA	Overseas Development Assistance
PAM	Policy and Measure
PAP4SCP	Philippine Action Plan for Sustainable Consumption and Production
PDG	Project Development Grant
PGHGIMRS	Philippine Greenhouse Gas Inventory Management and Reporting System
PDP	Philippine Development Plan
PEZA	Philippine Economic Zone Authority
PDP	Philippine Development Plan
PMC	Project Monitoring Committee
PNUA	Philippine New Urban Agenda
PPP	Public-Private Partnership
PSA	Philippine Statistics Authority
PSF	People's Survival Fund
PUV	Public Utility Vehicle
PWD	Person with Disability
RA	Republic Act
RE	Renewable Energy
RETF	Renewable Energy Trust Fund
RGHSF	Resilient and Green Human Settlements Framework
RPMES	Regional Project Monitoring and Evaluation System
SEPO	Senate Economic Planning Office
SHFC	Socialized Housing Finance Corporation
SIPP	Strategic Investments Priority Plan
SPZ	Strict Protection Zone
SUC	State College and University
SWM	Solid Waste Management
SWMF	Solid Waste Management Fund
TOD	Transit-Oriented Development
Urban-Act	Urban-Act - Integrated Urban Climate Action for Low-Carbon and Resilient Cities
UDHA	Urban Development and Housing
UNFCCC	United Nations Framework Convention on Climate Change
UN-Habitat	United Nations Human Settlements Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WB	World Bank
WHO	World Health Organization
10YFP	10 Year Framework Programmes for Sustainable Production and Consumption Patterns

## EXECUTIVE SUMMARY

### Philippine Enabling Environment for Urban Climate Action

The primary purpose of this policy analysis is to examine the inability of the policy environment for climate-sensitive urban development, determine gaps and challenges, and identify alternative policy options. This objective supports Output 1 of the Project (improved institutional environment for climate-sensitive urban development), specifically Indicator 1.2 (proposed policy instruments to aid localization of policies and/or regulations for climate-sensitive urban development).

The analysis used a two-tiered approach in examining the enabling environment:

1. First, examine the availability of enabling environment pillars according to commonly accepted concepts on what makes an enabling environment;
2. Second, re-examining the enabling environment using additional lenses pertinent to climate-sensitive urban development, namely, integration of climate financing, transport and mobility, green economy features, Gender Equality, Disability and Social Inclusion (GEDSI), institutional arrangements for localization; and Monitoring, Reporting and Verification (MRV), interchangeably used as Monitoring and Evaluation (M&E).

The first tier of analysis was mainly derived from a desk review of official documents and relevant literature, and the results are presented in the May 2024 Stocktake Report. The second tier of analysis is derived from primary data, particularly from two rounds of multi-stream and iterative focus group discussions (FGDs) with local government agencies, civil society, the private sector, and community groups in the Urban-Act pilot cities of Antipolo, Bacolod, and Tagbilaran. In two rounds of field visits, a total of eight (8) FGDs were facilitated, involving 111 participants.

#### Statement of the problem

The enabling environment for the localization of global and national policy frameworks on climate change is dynamic and is endowed with a robust supply of policies and other enabling pillars. New policy frameworks in aid of climate are sensitizing national development as a whole with a particular focus on urban and regional areas. Like the national transportation policy, green housing and settlements, transit-oriented development, sustainable consumption and production, circular economy, and green development in the energy and transportation sectors, pose new challenges to cities, both organizationally and financially.

The existing enabling environment for urban development is still inadequate to climate sensitize urban development. There are issues, policy, and structural gaps that need to be sorted out, and opportunities to be seized. This problem is characterized by the following issues:

- Unfinished business in local governance, specifically, unfinished devolution.
- Inexplicit climate investment policy and investment programming.
- Challenges in operationalizing new policy frameworks.
- Fragmented M&E and lack of local capacity for MRV of climate actions.



## Gaps

There are gaps in the areas of policy, structures, and local capacity.

- On the aspect of policy: inexplicit articulation of climate finance and investment policy, lack of articulation of GEDSI as a binder of existing policies on social protection, inclusion, and anti-discrimination, and absence of operational guidelines for new policy frameworks (such as green housing and settlements and transit-oriented development, among others).
- On the aspect of structures, there is a weak correspondence between national and local implementing structures and institutional arrangements.
- On the aspect of capacity, deficits in local government capacity are manifested in the unfinished devolution agenda and specific urban development capacities related to local transportation planning and management, green housing and settlements, and GHG inventory management, among others.
- Also, in relation to climate policy, there is a lack of explicit climate finance and investment policy. While local governments participate in the Local Climate Change Expenditure Tagging (LCCET) system, tagging specific budget lines does not substitute for climate investing.
- Finally, the gap in local M&E. The National Evaluation Policy Framework (NEPF) and its operational guidelines primarily focus on all government projects that involve national government funds. The guidelines do not include monitoring of local government projects involving local sources of funds. In addition, local governments are not yet equipped to use MRV in the M&E of climate mitigation actions.

## Challenges

Localization of global and national policy frameworks on climate change is confronted with the following challenges:

- First, the function-absorption capacity of LGUs in terms of financial capacity, technical resources, and organizational structure. Localization of transport policy, for example, does not have sufficient local counterparts in terms of organizational model, human resources, and technical capacity.
- Second, constraints in medium-term climate investment programming of local governments. Although local governments have autonomy to enact their local investment codes, medium and long-term investment programming is hindered by political considerations, particularly the three-year electoral cycles that do not guarantee the medium-term rule of a local chief executive beyond a three-year term.
- Third, balancing medium-term investments and direct services for citizens' welfare. Owing to the three-year cycle of local elections, LCEs may opt to satisfy needs for basic service provision more than medium-term and long-term economic development programming to deliver sustainable prosperity. Cities that are dependent on the National Tax Allocation (NTA) may be reluctant to leverage income to enter into debt financing. Data from the DOF-BLGF suggests that actual borrowing is way much lower than the borrowing capacity of LGUs (BLGF 2022, 2024).
- Balancing the regulatory power of the state and the interests of private sector partners and citizens. State policy indicates the importance of cooperation with the private sector in housing and urban development, respect for the rights of small property owners, and the right of citizens against eviction and demolition of homes without due process in accordance with

law (Sec. 1, RA 11201). These challenges recur in times of relocation and resettlement and pricing of privately developed housing and settlements.

- Lastly, developing climate-sensitive urban development strategies taking into consideration specific climate risks and urban development needs. Most cities need major motions in policy, regulation and development programming to change pre-existing conditions in privatized sectors that are not climate-sensitive.

## Opportunities

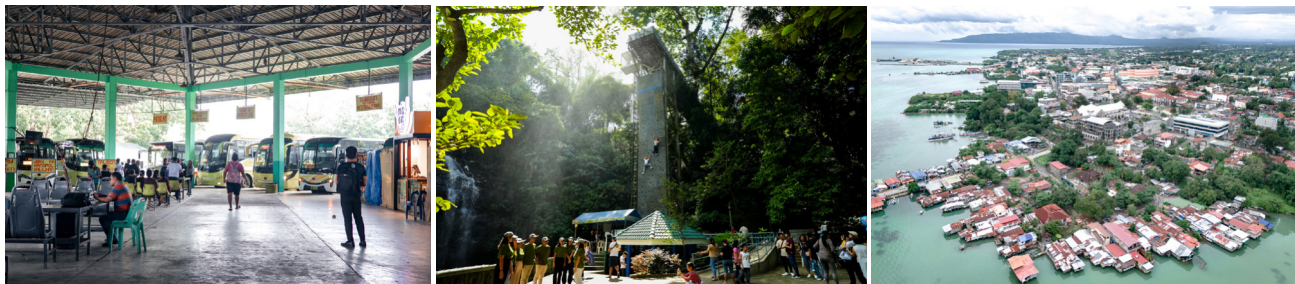
There are at least five opportunities for enhancing the climate sensitivity of urban development:

- First, the increased fiscal capacity of LGUs. As a result of the 2018 Mandanas Ruling of the Supreme Court, LGUs benefit from a higher tax base from which the NTA is computed. The ruling also triggered the renewal of the call for full devolution.
- Second, new policy frameworks serve as a wake-up call for revisiting LGU organizational models. New policy frameworks on urban development and housing, transport, and energy also serve as opportunities for rethinking organizational models to aid effective localization.
- Third, external sources of financing are available. As shown in the NEDA's ODA portfolio reviews, there are external sources of climate financing that LGUs can explore with the support of national government agencies.
- Fourth, LGUs can enter into partnerships with the private sector for financing. The PPP Code of 2023 recognizes local government autonomy to enter into PPP arrangements for financing development projects (Sec. 2, RA 11966). This recognition is an opportunity for cities to develop investment strategies and for small cities to collaborate with other cities in aid of pooling equity resources to partner with the private sector. A further opportunity is a **PPP contribution to climate-sensitive urban development. Among the guiding principles in developing PPP projects are climate resilience, sustainability, and social and environmental safeguards (Sec. 18, IRR of RA 11966).**
- Lastly, LGU's experience in monitoring and evaluation of national government projects. Although the National Evaluation Policy Framework and RPMES Operational Guidelines mainly cover M&E of national government projects, LGU experience in the monitoring activities of the PMCs (as well as LDC experience in evaluations) can serve as an opportunity for developing LGU M&E systems.



## Alternative Policy Options

Revolve around pillars of an idealized enabling environment for localization of climate action in urban areas or sensitizing urban development to climate change. Eight (8) policy areas were drawn from the Stocktake Report and the first round of FGDs with stakeholders (local government officials, civil society organizations, people's organizations, and the private sector) in pilot cities.



Policy Area	Alternative Policy Options
Climate Finance	<ul style="list-style-type: none"> <li>LCCET enhancement to include monitoring of actual expenditures.</li> <li>Inclusion of climate investment in the medium-term local development investment program (LDIP)</li> </ul>
Local transport and planning management	<ul style="list-style-type: none"> <li>Improved coordination and data exchange between LGUs and the LTFRB and LTO</li> <li>Local public transportation as an LGU enterprise</li> </ul>
Green housing and settlements	<ul style="list-style-type: none"> <li>Voluntary</li> <li>Third-party certification and rating system</li> <li>Fiscal incentives</li> </ul>
Local PPPs	<ul style="list-style-type: none"> <li>Additional guidelines for Local PPPs that involve two or more LGUs from different provinces or regions.</li> <li>Guidance on maximum amount of Local PPP projects</li> </ul>
NDC Implementation and GHG inventory management and reporting	<ul style="list-style-type: none"> <li>Decentralized GHG inventory management</li> <li>Interface NDC implementation plan and GHG inventory management and reporting</li> <li>Green financing for local NDC policies, activities, and measures (PAMs)</li> </ul>
MRV/M&E	<ul style="list-style-type: none"> <li>Expand coverage of the National Evaluation Policy Framework (NEPF) to include M&amp;E of locally funded projects</li> <li>Local Project Monitoring Committees (PMCs) created under the Regional Project Monitoring and Evaluation System (RPMES) to monitor and manage the evaluation of all government projects implemented locally, including locally-funded projects.</li> <li>Provision of regular budget for M&amp;E activities of PMCs.</li> <li>Build local capacity for MRV</li> </ul>
GEDSI	<ul style="list-style-type: none"> <li>Articulate GEDSI in sector policies and local government policies</li> </ul>
Circular economy in cities	<ul style="list-style-type: none"> <li>Integrate ecological solid waste management (ESWM) in the LCCAP.</li> <li>Specify climate risks addressed and climate outcomes of ESWM.</li> <li>Roll out and strengthen local capacity for implementation of the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP).</li> <li>Green financing for local implementation of the PAP4SCP.</li> </ul>

## Prioritized Alternative Policy Options

During deliberative policy discussions (2<sup>nd</sup> round of focus group discussions), stakeholders in the three pilot cities prioritized 10 alternative policy options in four (4) policy areas.

Policy Area	Prioritized Alternative Policy Options
Local Transportation planning and management	<ul style="list-style-type: none"> <li>Local public transportation as LGU enterprise</li> <li>Enhanced coordination between LGUs, LTFRB and LTO</li> </ul>
Green housing and settlements	<ul style="list-style-type: none"> <li>Green housing and settlements as mandatory</li> <li>Third-party rating and certification of green housing and settlements</li> <li>Fiscal incentives for green housing and settlements</li> </ul>
Climate finance	<ul style="list-style-type: none"> <li>Enhance LCCET to include monitoring of actual climate expenditures</li> <li>Formulate a medium-term local climate investment program</li> </ul>
NDC Implementation and GHG inventory management	<ul style="list-style-type: none"> <li>Vertical coordination between LGUs and NDC TWG and sector agencies</li> <li>Build local capacity for MRV on GHG</li> <li>Green financing for local NDC policies, activities, and measures (PAMs)</li> </ul>

## General Recommendations

This study recommends the following courses of action:

- For pilot cities, through the DILG and League of Cities, to engage in policy dialogues with the DBM, DOF, CCC, and concerned sector agencies;
- For oversight agencies and concerned sector agencies to give feedback on the alternative policy options; and,
- For GIZ, through the Urban-Act Project, to support policy dialogues and explore funding possibilities for pilot actions related to the alternative policy options.

Parallel to the recommended actions pertinent to the perspectives of pilot cities, this study also recommends the following:

- Formulation of a long-term climate investment program in line with the Climate Change Act of 2009, as amended, and to support long-term plans such as the NDC Implementation Plan, National Adaptation Plan, PAP4SCP, and other relevant plans;
- Creation of green jobs derivative of climate-oriented policies, plans, and programs. Pre-existing plans, such as SWMPs of LGUs and the long-running National Greening Program, have already set the pace in green job creation. In line with the Philippine Green Jobs Act of 2016, the database of DOLE and the Philippine Statistics Authority should include not only a database of available green careers and opportunities but also a database of green jobs already created and,
- Adoption of GEDSI as an overarching framework of social policies to complement existing social and environmental safeguards. The DILG and Local Government Academy can consider the possibility of including GEDSI as a criterion in social governance and the SGLG.

## Specific Recommendations

The following table elaborates on possible courses of action and the specific roles of pilot cities, concerned national government agencies, and GIZ.

	Climate Finance Policy	Transport Policy	NDC Implementation	Green Housing and Settlements
Alternative Policy Options	Enhance LCCET to include monitoring of actual expenditures	Improve coordination and data exchange between LGUs, LTFRB and LTO	Clarify LGU's responsibility in GHG inventory management and reporting and vertical coordination with NTWG	Mandatory or voluntary
	Inclusion of climate investment program in the LDIP	Upgrading of local traffic management office (LTMO) to a full-fledged local transportation department	Build local capacity for MRV	Third-party rating and certification
		Local public transportation as LGU enterprise	Financing for local NDC PAMs	Fiscal incentives
Pilot City LGU Actions	<ul style="list-style-type: none"> <li>Utilize annual accomplishment reports as a basis for accounting of actual climate expenditures.</li> <li>Local PMC to consolidate data on actual climate expenditures.</li> </ul>	<ul style="list-style-type: none"> <li>Engage LTFRB and LTO on automation of data exchange on franchises and licenses</li> <li>Incorporate land transportation route plan in the CLUP and ZO.</li> </ul>	Engage NTWG and/or sector agencies on data sharing and reporting.	Continue dialogues with DHSUD and DPWH on the viability of a mandatory policy.
	<ul style="list-style-type: none"> <li>LDC to formulate a climate investment program for inclusion in the LDIP.</li> <li>Sanggunian to approve climate-sensitized LDIP.</li> </ul>	<ul style="list-style-type: none"> <li>Sanggunian Resolution and Local Ordinance</li> <li>LCE Executive Order</li> </ul>	Demand capacity development support for MRV.	Initiate dialogues with national housing agencies and private sector firms involved in real estate development and construction.
		<ul style="list-style-type: none"> <li>Mass transit-oriented local public transportation as local PPP with existing transport organizations</li> <li>Safety nets and alternative livelihoods for displaced transport operators and workers</li> <li>Programmed disposal of old and high-emission vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Develop pilot projects related to GHG emissions reduction and avoidance.</li> <li>Collaborate with the private sector to develop local PPPs related to climate change mitigation.</li> </ul>	Engage the DOF, through the DILG and League of Cities, for policy dialogue on fiscal incentives for green housing and settlements.



	Climate Finance Policy	Transport Policy	NDC Implementation	Green Housing and Settlements
National Government Actions	Revise DBM-CCC-DILG JMC	LTFRB and LTO to engage pilot city LGUs on automated data exchange in aid of local transport planning and management	NTWG and/or sector agencies to support LGUs in GHG inventory management and reporting.	<ul style="list-style-type: none"> <li>For DHSUD and DPWH to interface GHSF and the National Green Building Code</li> <li>For DHSUD and DPWH to formulate a joint policy on green housing and settlements.</li> </ul>
	DILG and DBM to provide guidance on climate investment programming.	<ul style="list-style-type: none"> <li>DOTr devolution transition plan 01-2015</li> <li>DBM, DILG, and CSC joint guidelines on the creation of local transportation department.</li> </ul>	<ul style="list-style-type: none"> <li>CCC and sector agencies to support LGU capacity for MRV on GHG emissions reduction and avoidance</li> <li>DENR-EMB to popularize the 2016 GHG Inventory Manual</li> </ul>	For DHSUD to facilitate dialogues between LGUs, national housing agencies, the private sector, and the Philippine Green Building Council.
		DOTr guidelines on equity conversion and disposal of old and high-emission PUVs	<ul style="list-style-type: none"> <li>CCC and NDC TWG to provide guidelines on the formulation of local NDC PAMs.</li> <li>CCC and DOF to facilitate access to green finance.</li> </ul>	For DOF, DHSUD, NEDA, and DILG to engage private sector firms involved in real estate development and construction.
GIZ Actions	Support enhancement of LCCET guidelines.	Support IT requirements for data exchange.	Support local capacity development for MRV and GHG inventory and management.	To facilitate knowledge exchange between DHSUD, DPWH and international green building councils.
	Support formulation of climate investment programming in pilot cities.	Support formulation of local transport master plan (LTMP) in selected pilot cities.	Support knowledge sharing and disseminate international best practices.	Produce knowledge products from the experience of global and regional green building councils.
		Support feasibility of local public transportation as LGU enterprise.	Support the development of concept notes and project proposals for financing.	

## 1. INTRODUCTION

The world's human population is increasingly moving towards cities. By 2035, the majority of the world's population will live in metropolitan areas (UN-Habitat, 2020). Currently, there are 1,934 metropolitan areas worldwide, which are home to 60 percent of the urban population and a third of the global population. By 2035, 429 new metropolitan areas are expected to emerge. The number of cities in the Philippines has grown from 61 in 1977 to 143 in 2012, or a 134% increase in 35 years (SEPO, 2013). Five new cities were added as of March 2023.<sup>1</sup> Fifty percent of the country's population now lives in urban areas (DHSUD, n.d.).

Old cities in the Philippines have colonial traces, which suggest that 'urbanization' during the period was associated with centers of political administration, religious authority, and concentrations of people who acceded to colonial rule. Scott & Storper (2014) offer a modern articulation of past urban development theories: urbanization is a process of spatial concentration of production activities and clustering and sorting of other human activities. This process ought to be planned in anticipation of dysfunctions such as infrastructure breakdowns, land use conflicts, environmental pollution, and urban sprawl (Navarro, 2014).

Philippine cities are classified into three categories:

- (1) Highly Urbanized (HUC);
- (2) Independent Component Cities or ICCs (whose charters prohibit their voters from voting for provincial elective officials); and
- (3) Component Cities (which do not meet the requirements for HUC or ICC) (SEPO, 2013).

As of 2012, there were 33 HUCs, 16 of which are in the National Capital Region (NCR), 5 ICCs, and 105 component cities.

Big cities, particularly Metro Manila and other highly urbanized cities (HUCs), have helped propel the overall urban economy. However, many of them are confronted with a multitude of urban problems such as congestion, overcrowding, poor quality of life, and rapidly growing urban poor communities (HUDCC, 2016). They are a magnet for jobs and other economic opportunities under conditions of low job creation in rural areas, degradation of natural resources, violent conflicts, or loss of land assets.

Cities are not necessarily a product of urban planning or engineered urbanization. In the Philippines, urbanization of villages (barangays) connotes fulfillment of three administrative requirements such as:

- (a) a population of at least 5,000 or more,
- (b) at least one establishment with a minimum of 100 employees, and
- (c) five or more establishments with 10-99 employees or five or more facilities within a 2-kilometer radius of the barangay hall (Philippine Statistics Authority, 2013).

Facilities could be anything from a chapel, mosque, school, park, cemetery, port, library, health center, or postal service center, among others. A rural barangay that plays host to a coal power plant or a mining facility could instantly become an urban barangay. As of 2010, the level of urbanization in the Philippines (or the proportion of the population living in urban barangays) was 45 percent (Navarro, 2014).

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<sup>1</sup> DILG Facts and Figures, [https://www.dilg.gov.ph/PDF\\_File/factsfigures/dilg-facts-figures-2023717\\_4195fde921.pdf](https://www.dilg.gov.ph/PDF_File/factsfigures/dilg-facts-figures-2023717_4195fde921.pdf).







## Climate Sensitivity of Urban Development

There is also an indication that urbanization may simply equate to the conversion of municipalities to cities owing to political incentives (SEPO, 2013). The National Tax Allotment (NTA), previously known as the Internal Revenue Allotment (IRA), is the country's most important fiscal transfer program. Under the Local Government Code of 1991, local government units (LGUs) automatically receive the annual NTA. This NTA is distributed according to the classification of LGU: 20% for provinces, 23% for cities, 34% for municipalities, and 20% for barangay local government units. The principle of distribution is equal sharing. Given their relatively lower number, cities have higher revenues with relatively lower obligations for devolved services. The cost of devolved services is mainly borne by provinces (46%) and municipalities (47%) (SEPO, 2013).

Cityhood or urbanization as a political act offers opportunities with unintended negative consequences. On the opportunity side, cityhood means a bigger share of the NTA and higher tax and non-tax revenue-raising capacity with fewer burdens on costs of devolved services and, therefore, greater ability to deploy fiscal resources for meaningful public investments. On the negative side, there is the risk of not taking on the challenges of being a city or an urban area with new sets of circumstances and needs.

Climate change has given new light to urban development. Population density and expansion of housing and settlements, especially informal settlements and slums, have aroused concerns not only with regard to demand for welfare and protection services but also vulnerability to climate change and disasters. The concentration of an increasing demand for electricity and transport under conditions of fossil fuel-based infrastructure for energy supply and transport has amplified greenhouse gas (GHG) emissions.

The Inter-governmental Panel on Climate Change Assessment Report No. 6 (IPCC AR6) emphasizes the role of cities as places of increasing vulnerability (population growth) but also opportunities for climate adaptation and mitigation action (IPCC, 2022). Larger cities tend to have a stronger relationship between GDP and carbon dioxide (CO<sub>2</sub>) in the transport and industrial sectors (DH-SUD, n.d.). For cities of more than 1 million inhabitants, a 1 per cent increase in GDP is associated with a 0.5 per cent increase in transport CO<sub>2</sub> emissions, and in cities of fewer than 100,000 inhabitants, the increase is close to 0.3 per cent. Population plays a key role in the increase of emissions in the residential sector among intermediary cities. The estimated effect of a 1 per cent increase in population is an increase in emissions of 0.24 per cent in cities with less than 100,000 inhabitants to 0.46 per cent in cities of 100,000 to 500,000 inhabitants.

Cities are the arena for addressing many of the global challenges ranging from extreme poverty, unemployment, environmental degradation, and climate change (UN-Habitat, 2020). In South Asia, 130 million urban population live in slums (UN-Habitat, 2020). They are vulnerable to natural and human-induced hazards. The majority of South Asian cities face flood risks (Ellis & Roberts, 2016).

Cities also bear the brunt of population explosion and accompanying problems of congestion and growth of informal settlements and slums. The current level of housing production comprises a small fraction of housing needs, thus perpetuating the formation of informal settlements and urban slums (HUDCC, 2016). Inadequacies in the urban transportation system and bias towards individual motorized transport led to a loss of productivity and economic opportunities.

Sensitizing urban development to climate change needs to consider not only the transition to a low-carbon economy towards net zero, but also enhancing people-oriented development. Road infrastructure development, for example, needs a radical shift from the accommodation of an ever-increasing number of vehicles towards the mobility of people, including the non-use of vehicular transport. Housing and settlements also need to satisfy not only the basic need for shelter but also the low-carbon features of both the house and the settlement and the long-term sustainability of the whole environment.

Climate-sensitive urban development needs a particular enabling environment within the overall enabling environment for national economic and social development. Such an environment is very challenging to create, given the natural tendency of urban development to ramp up the supply of energy and transport that are traditionally dependent on fossil fuels. Immediate and short-term needs for prosperity will create a pull factor that can push back urban climate action. An enabling environment for climate-sensitive development needs to lend weight to bolder climate actions.

## 2. PURPOSE AND METHODOLOGY

This policy analysis aims to examine the enableness of the policy environment for climate-sensitive urban development, determine gaps and challenges, and identify alternative policy options. This objective supports Output 1 of the Project (improved institutional environment for climate-sensitive urban development), specifically Indicator 1.2 (proposed policy instruments to aid localization of policies and/or regulations for climate-sensitive urban development).

The analysis used a two-tiered approach in examining the enabling environment: first, examining the availability of enabling environment pillars according to commonly-accepted concepts on what makes an enabling environment; second, re-examining the enabling environment using additional lenses pertinent to climate-sensitive urban development, namely, integration of:

- Climate financing;
- Transport and mobility;
- Green economy features;
- Gender Equality, Disability and Social Inclusion (GEDSI);
- Institutional arrangements for localization; and,
- Monitoring, Reporting and Verification (MRV), interchangeably used as Monitoring and Evaluation (M&E).

The first tier of analysis was mainly derived from a desk review of official documents and relevant literature, and the results are presented in the May 2024 Stocktake Report. The second tier of analysis is derived from primary data, particularly from two rounds of multi-stream and iterative focus group discussions (FGDs) with local government agencies, civil society, the private sector, and community groups in the Urban-Act pilot cities of Antipolo, Bacolod, and Tagbilaran.

### The Policy Analysis Process

Policy analysis usually begins with the definition of a problem and segues with the search for alternatives, evaluating and comparing alternatives to derive probable solutions (Weimer and Vining, 2011; Patton et al., 2016). Although the starting point is problem-oriented, the central direction is solutions-oriented.

The Stocktake Report provides a partial answer to the key question of this study: Is there an enabling environment for conflict-sensitive urban development? In this regard, urban development is categorized as local action in relation to and differentiated from national development. Correspondingly, urban climate action is categorized as local climate action in the context of national-local inter-governmental relations in the era of decentralization and local government autonomy.



Defining the problem situation itself is a challenge. A problem implies a discrepancy between needs and wants or between expectations and possibilities and may infer more than one problem or more than one cause of a problem (Geva-May & Wildavsky, 1997). Climate change, the main backdrop of the policy analysis question, is a conglomeration of various factors and actors that cut across current states of economic sectors and societal actors with varying interests, values, and attitudes. Climate action is rooted in the same complexity of actors and factors where policies and their alternatives are subject to continuous bargaining and negotiations, as can be gleaned from the complex climate negotiations in the UNFCCC Conference of Parties (COPs).

There are also problems intrinsic to policy: how stakeholders interpret the letter of the policy, calculation of incentives or disincentives of compliance, how unwritten rules on doing the right thing are vulnerable to shirking and differences in attitudes and values, and how bureaucracies influence policy implementation.

The problem becomes more challenging in privatized sectors where shifting to low-carbon systems may entail foregoing income from existing investments and costs of new investments. In this regard, the policy itself may be shaped by questions on the distribution of costs and benefits.

The study addressed the issue through an interactive approach where various stakeholders jointly examined and re-examined the problem in two rounds of FGDs.

The task of the Consultant was to facilitate the identification of the actual problem with input from the Stocktake Report and primary inputs from FGD participants.

This study adapted Patton et al.'s (2016) six-step process (see Fig. 1) and, for practicality, modified the whole process, mainly focusing on Steps 1 to 4. The time frame of this study does not include follow-through monitoring of implemented alternatives, and neither assumes that the proposed alternatives are translated into new or reformed policies.

The study was undertaken in four steps:

#### STEP 1

Verifying and initially defining the problem statement through the Stocktake Report and the first round of FGDs, and re-examining the problem statement in the second round of FGDs;

#### STEP 2

Establishing the evaluation criteria for analyzing the enabling environment for climate-sensitive urban development. The idealized enabling environment for climate-sensitive urban development includes the following pillars: (a) integration of transport and mobility; (b) integration of Gender equality, Disability, and Social Inclusion (GEDSI); (c) green economy features; and (d) localization of governance in the institutional arrangements;

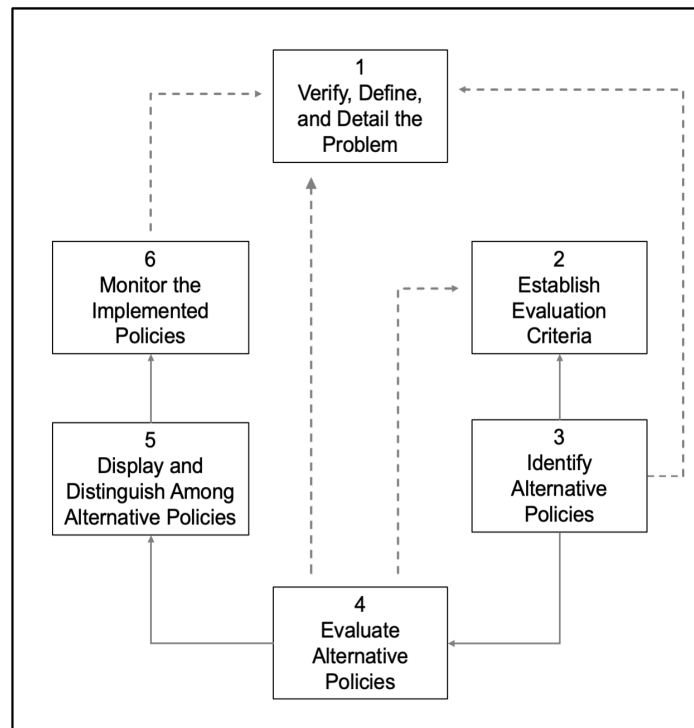
#### STEP 3

Exploring alternatives, particularly enhancement of existing policies in a deliberative and participatory manner. The exploration focused on policy areas that are deemed relevant to climate-sensitive urban development and;

#### STEP 4

Evaluating the alternative policy options using three lenses: (a) technical feasibility, with due consideration to human resources, local government organizational model, and administrative capacity; (b) financial feasibility, with due consideration to financial capacity and opportunities for external financing; and (c) political viability, with due consideration to the preference and priorities of the local chief executive. The evaluation of alternative policy options also considers existing local government practices in addressing the climate problem.

FIGURE 1. POLICY ANALYSIS PROCESS



Adapted from: PattoThen, C. V., Sawicki, D. S. and Clark, J.J. (2016). *Basic Methods of Policy Analysis and Planning*, 3rd Edition. London and New York: Routledge

As Bellinger (2007) argues, policy is evaluated against its goal formation: allocative efficiency, equity, and practicality. The question of efficiency pertains to the best use of resources given the range of devolved functions, services, and facilities (FSFs) and expenditure assignments of local government units. Equity is about the fair distribution of benefits to those affected by the policy. This includes the estimation of fair returns on private sector investments. The question of practically involves political considerations taking into account priorities and preferences during the three-year term of a local chief executive. The political dimension of decision making involves estimation of claimable and braggable successes within an administrative term or the political returns of a policy decision.

## Strategy

Policy analysis should be transformative. The scientific basis and essence of policy should be assessed for its relevance and usefulness from the perspective of policy-makers and implementing agents and those who are affected by the policy. In this study, the Consultant adopted Hajer & Wagenaar's (2003) deliberative and interpretive policy analysis approach. From a national-local inter-governmental perspective, this involved generating data and deriving analysis from the perspectives and interactions of national government agencies (where climate policy originates) and local government units, which are the frontline agents of policy implementation and translation of national

policy to local policies, plans, programs, and budgets.

Deliberative and interpretive policy analysis is iterative. During the first round of FGDs, stakeholders exchanged perspectives on three streams: one, the problem stream, particularly the climate emergency in general and the specific climate risks affecting the people and natural ecosystems of the city; two, policy streams related to climate actions and corresponding objectives; and, three, the political stream, particularly, decisions and actions with regards existing and not yet existing policy frameworks and other elements in the environment that enable (or should enable) urban climate action.

During the first round, a total of fifty-five (55) individuals participated in four (4) sets of FGDs. The first round of FGDs brought in perspectives of various local government agencies (particularly planning, budgeting, engineering, transport management, solid waste management, and disaster risk

reduction and management offices) as well as perspectives of civil society and people's organizations (POs), particularly those involved in partnerships with local governments in local planning (through the local development council), solid waste management, housing, and other sectoral agendas.

**TABLE 1. PARTICIPANTS - FIRST ROUND OF FGDs**

Pilot City	Stakeholder Group	No. of Participants	Date and Location
Bacolod City	LGU Official, CSO, PO, Private Sector and Government Agencies	30	Merzci East // 14 May 2024
Tagbilan City	LGU Officials	12	CDRRMO Conference Room // 28 May 2024
Antipolo City	DILG Officials (Region IV-A, City)	4	Loreland Resort // 13 June 2024
Total		55	

During the second round of FGDs, stakeholders revisited the policy and political streams, giving particular attention to opportunities, gaps, challenges and barriers and exploration of alternative policy options. The latter were further examined using the criteria of technical and financial feasibility and political viability. A total of 56 individuals participated in four sets of FGDs. Getting citizens involved in policy analysis is important. In four case studies of European cities undertaking climate action, Dekker (2019) found

the importance of ownership, planning, leadership, technology, and narratives of collaboration, in addition to institutional structures. Policy responses to climate change need to consider the lived experiences of citizens and how these respond to their concerns. How well citizens understand the impacts of climate change depends on their specific vulnerabilities. Trust is built when policymakers recognize the variability of specific contexts and needs, including recognition of past wrongs that need to be corrected.

**TABLE 2. PARTICIPANTS - SECOND ROUND OF FGDs**

PILOT CITY	STAKEHOLDER GROUP	NO. OF PARTICIPANTS	DATE AND LOCATION
Bacolod City	LGU Official, Private Sector	28	Merzci East // 11 July 2024
Tagbilan City	CSO, PO, Private Sector	6	Kew Hotel // 30 July 2024
	LGU Officials	9	Kew Hotel // 31 July 2024
Antipolo City	LGU Officials, CSO, Academe	13	Mayor's Conference Room // 29 August 2024
Total		56	

## Output

The alternative policy options presented in this report are descriptive more than prescriptive (see: Geva-May & Wildavsky, 1997). They illustrate the following elements:

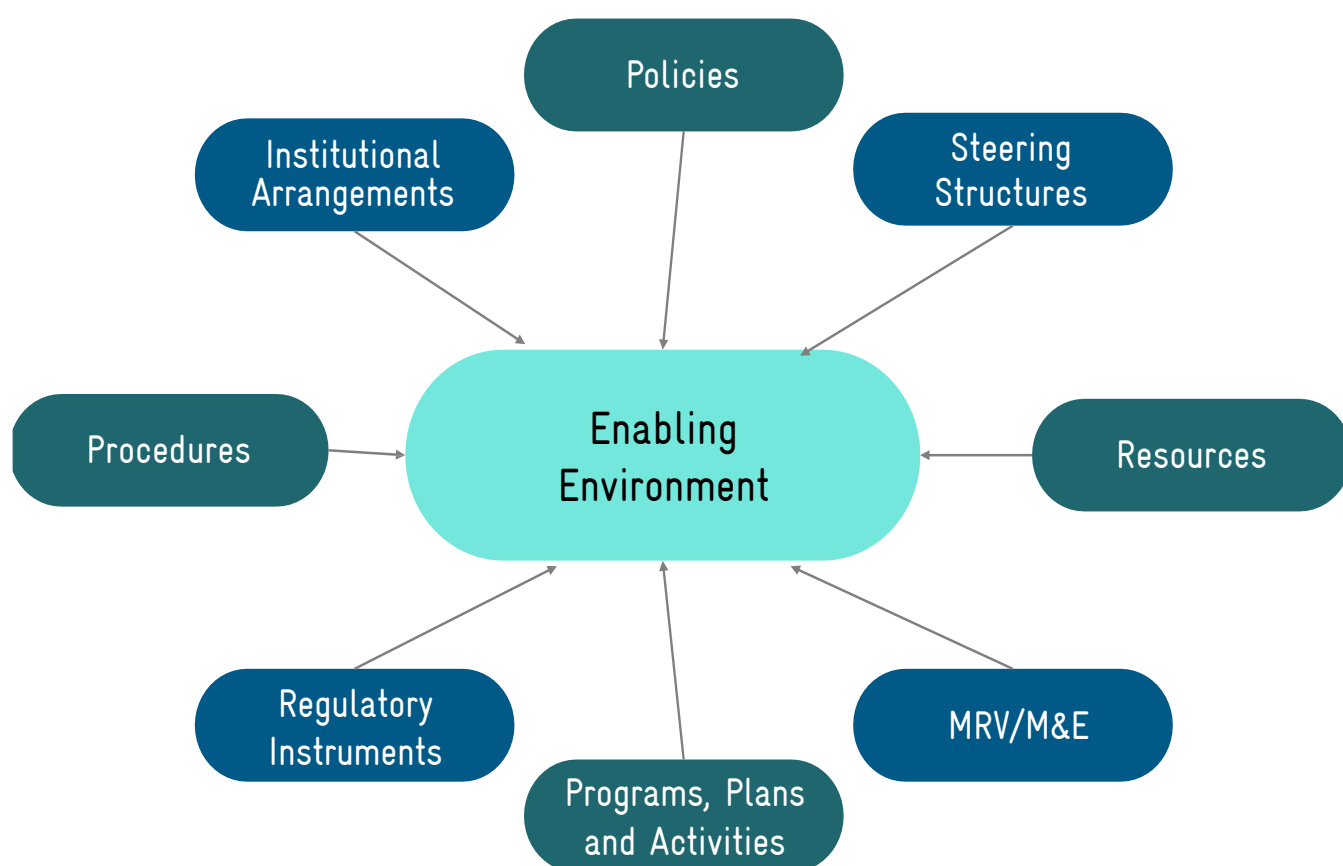
- Alternative policy options;
- Possible courses of action
- Possible outcomes in view of varying uncertainties;
- Probability of fulfillment in view of opportunities; and,
- Benefits, which sum up the positive consequences if favorable actions are taken.

### 3. ENABLING ENVIRONMENT FRAMEWORK

An enabling environment is like an ecosystem where various elements interact to nurture certain functions and services of the system. In forest ecosystems, for example, plants, animals, soil, water, air, microbes, human beings and other elements of the system interact for the sustenance of ecosystem functions and services. In political, economic, and social development, enabling environments are created. These creations comprise laws, policies, planning, and regulatory instruments that provide the operational basis of intended actions (IWRM Action Hub, n.d.).

Covers indicators related to institutional arrangements, facilities, budgets, policies, and practices (UNESCO Institute for Statistics, n.d.) and political, economic policy, social, legal, and regulatory systems within which individuals and organizations operate (UNDP, 2011, p. 10). It goes beyond typical issues of urban management and subsidiarity towards the broader challenge of economic development, gender, structure, and color of this environment (UCLG ASPAC Cities Alliance, 2018, p. 10).

FIGURE 2. CONCEPTUAL FRAMEWORK ON ENABLING ENVIRONMENT



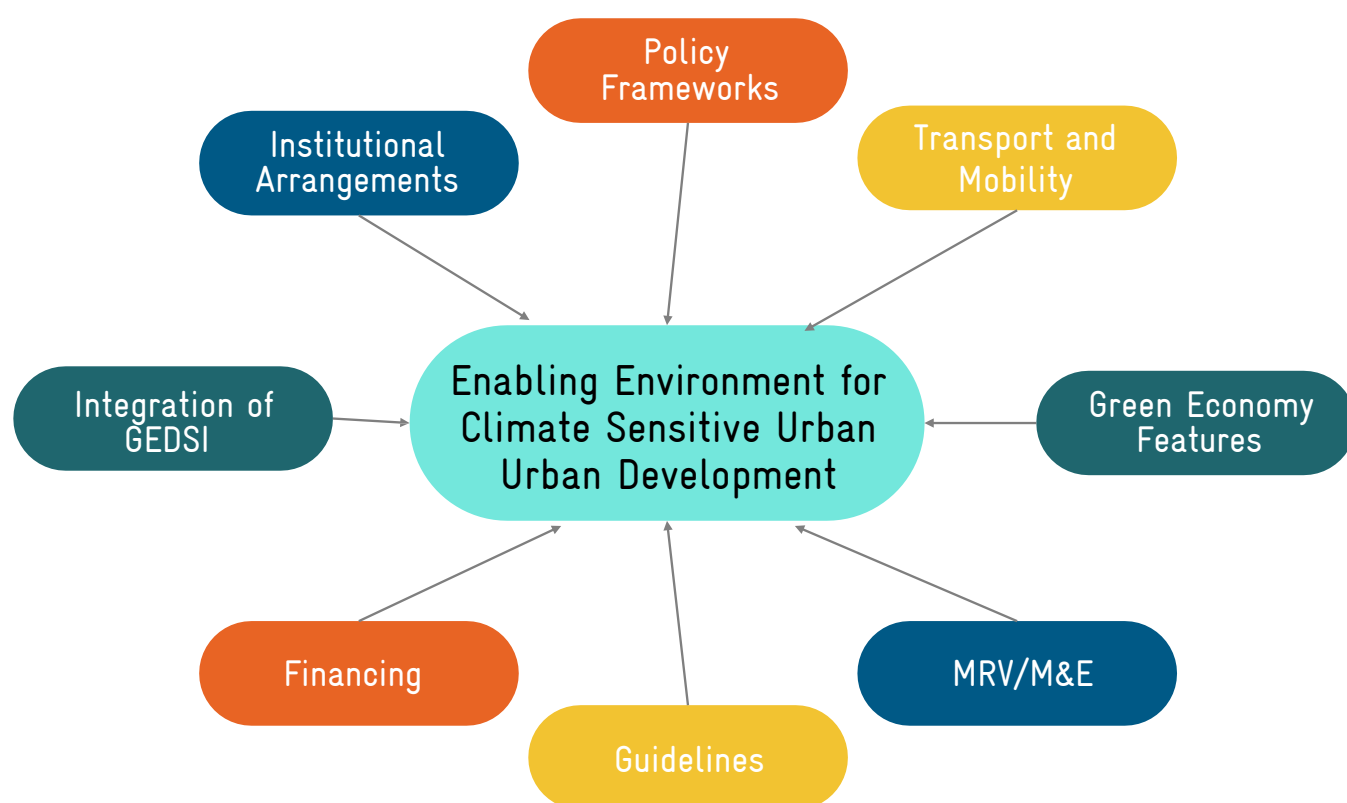


In some, the implications to local autonomy may not even be fully assessed by LGUs. In the context of urban climate action, there is a need to deepen policy analysis through the generation of primary data from cities and concerned national government agencies.

Using the deliberative policy analysis approach, stakeholders in pilot cities explored alternative policy options that could enhance the enabling environment for climate-sensitive development. Priority options were further examined to assess financial and technical feasibility and political viability.

The key elements of an enabling environment for localization of global and national development frameworks are present. Policy frameworks on governance, climate action, transport and energy, and corresponding rules, regulations, and guidelines increasingly converge around the need to address climate change. How far this enabling environment enables urban climate action can only be partially answered from the letter expression of policies. Implementation of new policy issuances (such as green housing, TOD, local transport route planning, and national police evaluation framework) is still in the early stages.

FIGURE 3. CONCEPTUAL FRAMEWORK ON ENABLING ENVIRONMENT FOR URBAN CLIMATE ACTION



An enabling environment for urban climate action is a derivative of the overall concept of the enabling environment. It has a different function implied by the overall function of an enabling environment. The difference lies in the specificity of the nurturing conditions that enable actions towards climate change mitigation or adaptation. These conditions comprise policy frameworks, institutional arrangements, financing, guidelines, and monitoring, reporting, and verification (MRV) systems. Under conditions of demographic expansion, urban stress, and differentiated impacts of climate change on natural ecosystems and people, the idealized enabling environment includes criteria such as integration of gender equality, disability and social inclusion (GEDSI), green economy features, and transport and mobility.

## 4. PILOT CITIES: LAY OFF THE GROUND



In the Urban-Act Project, the city is equated with urban. Hence, the Urban-Act pilot cities are also classified as urban areas. In fact, there is no common global definition of what constitutes an urban area or an urban settlement (UN, 2014).

In the Philippine legal framework, city and urban are separately defined. In the Local Government Code of 1991, a city is defined as a local government unit among other types of local government units (such as province, municipality, and barangay). Cityhood is a process based on population size, land area, and income requirements. The actual recognition is a legislative act affirmed by a plebiscite.

Urbanization or urban development, on the other hand, is defined in Republic Act No. 11201 (the Department of Settlements and Human Development Act of 2019). Section 3(h) of the law defines urban development as "... the process of occupation and use of land or space for activities such as residential, industrial, commercial and the like or their combinations, necessary to carry out the functions of urban living. It entails the building or rebuilding of more or less permanent structures over land that is often withdrawn or converted from its original use, resulting in the creation of a built environment".

There are physical indicators that distinguish urban and rural areas. These include physical infrastructures such as paved roads, electricity, piped water supply, and relatively higher levels of education and health services. In the Philippine context, a city could be both urban and rural or a city with a population residing in both urban and rural barangays.

As of 2020, 54 percent of the 109.3 population were in urban areas, or people living in barangays with a population of over 2,000 persons ([www.psa.gov.ph](http://www.psa.gov.ph)). Because of population density, only Metro Manila (National Capital Region) was classified as entirely urban. All other regions, provinces, cities, and municipalities are classified by degree of urbanization (or population concentration).

<sup>2</sup> See: Highlights of the Population Density of the Philippines, 2020 Census of Population and Housing, Retrieved from <https://psa.gov.ph/statistics/population-and-housing/node/164857>.

The Urban-Act pilot cities of Bacolod, Tagbilaran, and Antipolo are high population density areas with around 3,000 persons per square kilometer, roughly ten times the national average of 337 persons per square kilometer.<sup>2</sup> Bacolod and Antipolo are high-income cities with PHP 3.6 billion and PHP 5.04 billion in FY 2023 receipts, respectively. Most of the barangays in the three cities are classified as urban, with less than 10 percent of barangays considered rural. Each has context-specific vulnerabilities of the population.



Antipolo is the provincial capital of Rizal Province. It forms part of 14 LGUs in a province with a land area of 1,192 square kilometers. Roughly one LGU and one local chief executive (LCE) per 85 square kilometers. Adjacent to Metro Manila, Antipolo is a direct beneficiary of the metropolitan expansion of real estate and commercial development as well as a host of workers and job seekers in the National Capital Region (NCR). Inherent vulnerabilities of the population include malnutrition, lack of permanent sources of income, and makeshift dwellings in informal settlements.

Bacolod is the provincial capital of Negros Occidental, with rapidly growing residential and commercial development. It forms part of select provinces with the highest number of cities in the Philippines. For a total land area of 7,000 square kilometers, the province has 13 cities and 19 municipalities. Roughly, there is one local government unit (LGU) and one local chief executive (LCE) per 218 square kilometers. The inherent vulnerabilities of the Bacolod City population include poverty and malnutrition, young and old dependents that include persons with disabilities (PWDs), and informal settlements in some barangays.



Tagbilaran, the provincial capital of Bohol province, has gained prominence in the tourism industry and accompanying residential and commercial development.

It also serves as the nexus of maritime transport between Cebu and Negros Oriental (and other tourist destinations, such as Siquijor Island). The city forms part of 47 LGUs in a province with a land area of 4,117 square kilometers. Political territories in this province are even more compact and denser than Negros Occidental, with one LGU and one LCE per 87 square kilometers.

Coastal-based tourism and fisheries are both exposed to climate risks. Fishing families are most at risk owing to competition from tourism and real estate development and the degradation of maritime resources.

TABLE 3. CHARACTERISTICS OF URBAN-ACT PILOT CITIES

BASIC STATISTICS	BACOLOD	TAGBILARAN	ANTIPOLO
Year established	1755 or 1756	1742	1650
Land area	160.71 Square Kilometers	36.50 Square Kilometers	306.10 Square Kilometers
Population (as of 2020)	600,783	104,976	887,399
Population density	3738.67 persons per square kilometer	2876.33 persons per square kilometer	2898.76 persons per square kilometer
Income class	First	Third	First
Annual income (NTA plus other resources)	PHP 3.6 billion, as of FY 2023	PHP 1.1 billion, as of FY 2023	PHP 5.04 billion, as of FY 2023
Administrative category	Highly Urbanized City	Component City	Component City
Classification of barangays	61 Barangays (52 Urban, 7 Rural)	15 Barangays (14 Urban, 1 Rural)	16 Barangays (15 Urban, 1 Rural)
Population groups with inherent vulnerabilities	<ul style="list-style-type: none"> <li>• Informal settlers: vulnerability to displacement and inadequate living conditions</li> <li>• Dependents (children and elderly) who rely on other family members for survival.</li> <li>• Persons with Disabilities (PWDs) who are physically challenged against sudden shocks.</li> <li>• Individuals and families below the poverty line are at risk of extreme hunger during disasters.</li> <li>• Malnourished Individuals vulnerable to health risks during disasters.</li> </ul>	<ul style="list-style-type: none"> <li>• Individuals and families highly dependent on coastal and marine resources for livelihoods.</li> <li>• Informal settlers and job seekers who will be impacted by limited post-disaster financial support.</li> <li>• Individuals and families in coastal zones highly exposed to hazards like typhoons and storm surges.</li> <li>• Children, elderly, and persons with disabilities who are physically challenged.</li> </ul>	<ul style="list-style-type: none"> <li>• Food insecure families facing undernutrition and malnutrition.</li> <li>• Households with no permanent sources of income.</li> <li>• Informal settlers with makeshift housing vulnerable to disasters and diseases.</li> </ul>

Retrieved from the Philippine Statistics Authority (PSA) and Philippine Cities websites. The land areas used in the census were based on the 2013 master list of land areas of cities and municipalities provided by the Land Management Bureau (LMB) to the PSA. Population statistics as of May 2020. Inherent vulnerabilities of each city was culled from each respective LCCAP.



## A. Fiscal Resources of Pilot Cities

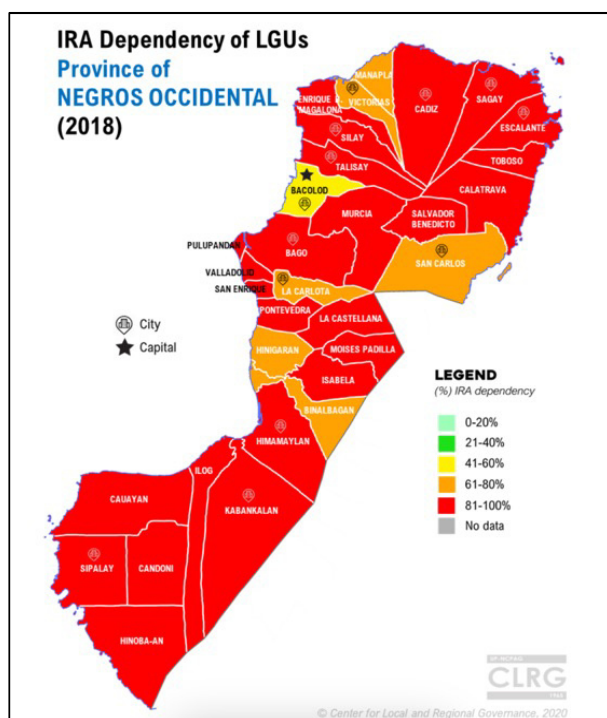
Pilot cities are relatively less dependent on the NTA for income compared to other LGUs in their respective provinces. Bacolod City's receipts from local sources (tax and non-tax revenues) have steadily grown from PHP 1.21 billion in 2020 to PHP 1.61 billion by 2024. As of fiscal year (FY) 2023, the city generated a total income of PHP 3.3 billion. Local tax and non-tax revenues comprised 45% of total income.

**TABLE 4. BACOLOD CITY ANNUAL INCOME FROM LOCAL AND EXTERNAL SOURCES 2020-2024 (in PHP million)**

year	Local Sources <sup>3</sup>			External Sources <sup>4</sup>					
	tax revenue	Non-Tax Revenue	Total Local Sources	National Tax	Share from GOCCs (PAGCOR and PCSO)	Share from Ecozone	Share from National Wealth	Extraordinary Recasts / Grants / Donations / Aids	Total External Sources
2024	1,271.97	340.41	1,612.38	1,895.05	19.58	51.65	-	-	1,966.27
2023	1,188.76	318.14	1,506.90	1,784.34	19.58	51.65	-	-	1,855.57
2022	1,110.99	297.33	1,408.32	2,091.91	19.58	51.65	-	-	2,163.13
2021	1,001.64	205.98	1,207.62	1,533.04	7.76	42.42	-	-	1,583.22
2020	1043.24	175.6	1,218.84	1,430.39	7.74	38.57	-	119.2	1,595.89

Note: Retrieved from Department of Budget and Management - Budget of Expenditures and Sources of Financing, Statements of Receipts and Expenditures by Cities 2024-2020.

**FIGURE 4. IRA DEPENDENCY OF NEGROS OCCIDENTAL PROVINCE AS OF 2020**



As of 2020, most of the 32 LGUs of Negros Occidental are 81-100 percent dependent on the Internal Revenue Allotment (IRA; now renamed as NTA) (UP-NCPAG CLRG, 2020). Bacolod City stands out as the only LGU that is less dependent on external sources of funds.

Relative to the two other pilot cities, Antipolo is the highest income earner. As of FY 2023, its total income was PHP 5.04 billion, of which local tax and non-revenues comprised 47.6 percent of the total.

Source: UP-NCPAG Center for Local and Regional Governance (2020)

<sup>3</sup> Tax Revenue includes Basic Real Property, Special Education Fund, Business, and Other Taxes. No-Tax Revenue Includes Regulatory fees, Service/ User Charges, Receipts from Economic Enterprise, and Other Receipts.

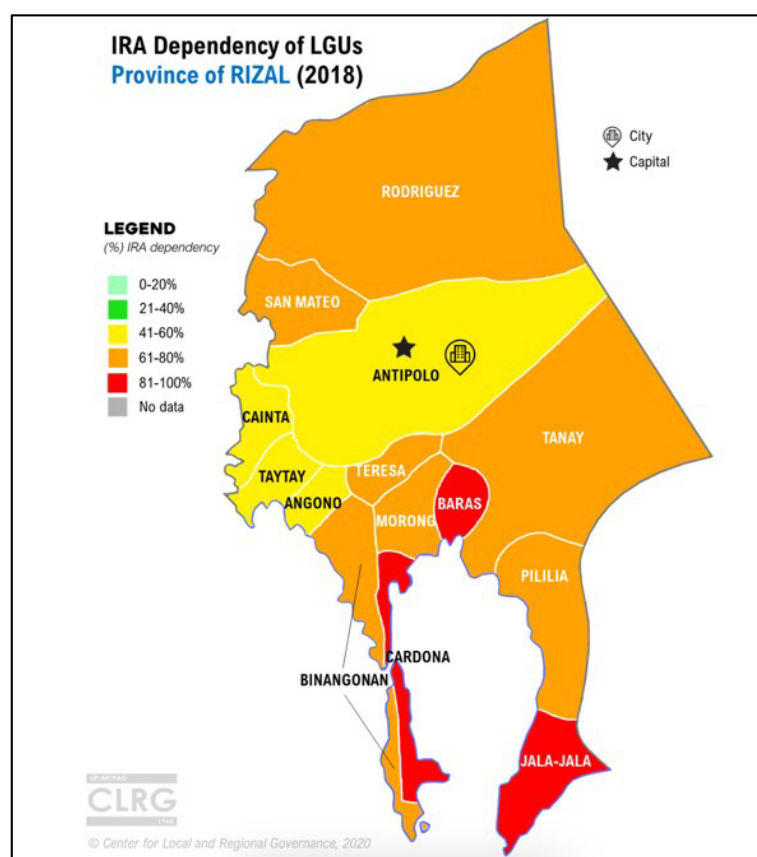
<sup>4</sup> External Sources also includes, Share from EVAT, Others, and Inter-Local Transfer.

TABLE 5. ANTIPOLO CITY ANNUAL INCOME FROM LOCAL AND EXTERNAL SOURCES 2020-2024 (in PHP million)

year	Local Sources			External Sources					
	tax revenue	Non-Tax Revenue	Total Local Sources	National Tax	Share from GOCCs (PAGCOR and PCSO)	Share from Ecozone	Share from National Wealth	Extraordinary Recasts / Grants / Donations / Aids	Total External Sources
2024	1,999.24	594.76	2,594.00	2,721.03	-	3.95	2.58	60.66	2,788.22
2023	1868.45	555.85	2,424.30	2,562.08	-	3.95	2.58	60.66	2,629.27
2022	1,746.21	519.49	2,265.70	3,002.23	-	3.95	2.58	60.66	3,069.42
2021	1,631.70	357.32	1,989.02	2,096.65	3.55	4.03	0.77	86.87	2,191.88
2020	1576.77	393.11	1,969.88	1956.26	3.61	4.74	3.21	165.32	2,133.13

Note: Retrieved from Department of Budget and Management - Budget of Expenditures and Sources of Financing, Statements of Receipts and Expenditures by Cities 2024-2020.

FIGURE 5. IRA DEPENDENCY OF RIZAL PROVINCE AS OF 2020



Among 14 LGUs in the province of Rizal, Antipolo, and three other LGUs stand out as less dependent on external sources of funds.

Tagbilaran City has a relatively lower income compared to Bacolod and Antipolo. As of FY 2023, its total receipts amounted to PHP 1.08 billion. Local tax and non-tax revenues comprised 46% of total receipts.

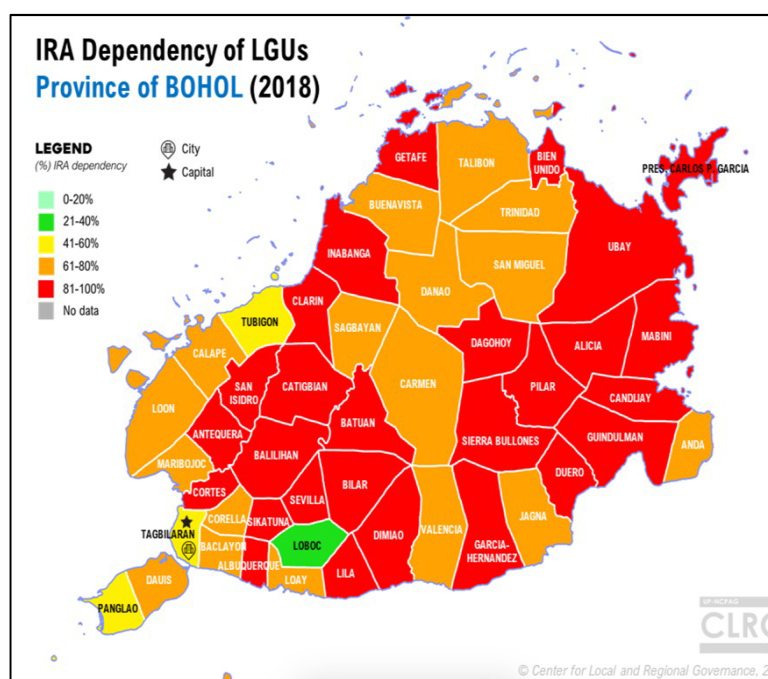
Source: UP-NCPAG Center for Local and Regional Governance (2020)

**TABLE 6. TAGBILARAN CITY ANNUAL INCOME FROM LOCAL AND EXTERNAL SOURCES 2020-2024 (in PHP million)**

year	Local Sources			External Sources					
	tax revenue	Non-Tax Revenue	Total Local Sources	National Tax	Share from GOCCs (PAGCOR and PCSO)	Share from Ecozone	Share from National Wealth	Extraordinary Recasts / Grants / Donations / Aids	Total External Sources
2024	388.87	144.49	533.37	621.94	2.23	-	-	2.99	627.16
2023	363.43	135.04	498.47	585.61	2.23	-	-	2.99	590.84
2022	339.66	126.2	465.86	688.58	2.23	-	-	2.99	693.81
2021	275.64	120.46	396.10	515.53	2.02	-	-	0.02	517.56
2020	338.78	118.73	457.51	481.01	0.83	-	-	40.11	521.95

Note: Retrieved from Department of Budget and Management - Budget of Expenditures and Sources of Financing, Statements of Receipts and Expenditures by Cities 2024-2020.

**FIGURE 6. IRA DEPENDENCY OF BOHOL PROVINCE AS OF 2020**



Among the 47 LGUs of the Province of Bohol, Tagbilaran and two other LGUs stood out in 2020 as less dependent on external sources of funds. Most other LGUs are almost totally (80-100%) on the IRA (now, NTA). During the last five years, Tagbilaran revenues from local sources averaged PHP 470.2 million, while the NTA averaged PHP 578.5 million.

Source: UP-NCPAG Center for Local and Regional Governance (2020)

Local government units derive revenues from two sources – local or own and external. As provided for in the LGC of 1991, each LGU exercises power to create its own sources of revenues and to levy taxes, fees and charges consistent with the basic policy of autonomy (Sec. 19, Chapter 1, Book 2, LGC). The taxing power is vested in the local legislative council (Sangguniang Panlungsod, in the case of

cities) and is subject to limitations (Sec. 132, Sec. 133, LGC). The code lists taxes that are reserved for the central government (such as income tax of individuals and corporations, customs duties, value-added tax and excise taxes on alcoholic beverages, tobacco products, and petroleum products).

The local power of taxation is also distributed according to the type of LGU. Cities have the advantage of being able to levy taxes, fees, and charges imposed by provinces and municipalities (Sec. 151). While municipalities may not levy taxes, fees, and charges imposed by provinces (Sec. 142).

The bulk of external sources come from central government transfers comprising formula-based block grants (such as the National Tax Allotment, formerly Internal Revenue Allotment or IRA), the origin-based share of national government revenues (i.e. share in national wealth), and ad hoc categorical grants (Manasan, 2005; National Tax Research Center, 2008).

Section 284 of RA No. 7160 provides that the LGUs shall have a 40 percent share in the national taxes based on the collections during the third fiscal year preceding the current fiscal year. The July 3, 2018, affirmative ruling of the Supreme Court on the Mandanas-Garcia petition declaring unconstitutional the phrase “internal revenue” appearing in

Section 284 of the LGC expanded the tax base from where the 40 percent share of LGUs is computed.<sup>5</sup> The computation is now based not solely on national internal revenue taxes but on all national taxes.

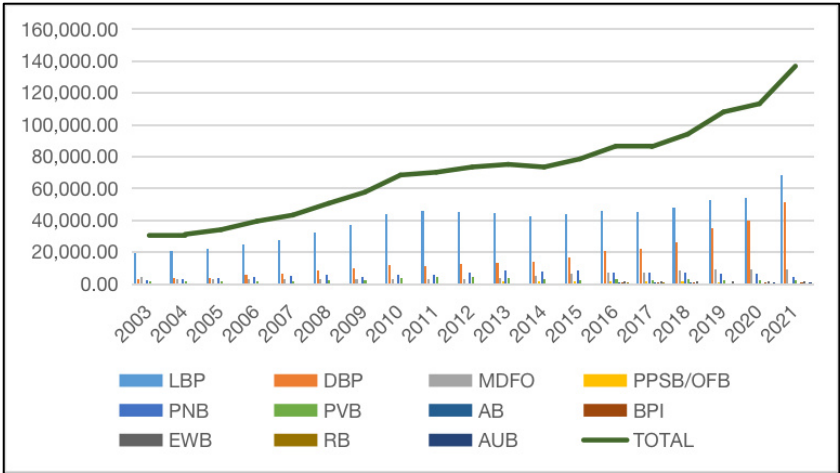
Prior to the Mandanas Ruling, block grants to LGUs were known as the IRA. From 2003 to 2007, the average annual receipts from the IRA were PHP 125.63 billion (National Tax Research Center, 2008). For Fiscal Year (FY) 2024, the total NTA of LGUs amounted to PHP 871.37 billion (DBM Local Budget Memorandum 87-A, December 28, 2023). Of the total, PHP 201.5 billion are to be shared by 149 cities (or an average of PHP 1.35 billion per city).

However, equal sharing is just one of three criteria in the allocation of the NTA. The sharing formula is computed according to population size (50%), land area (25%), and equal sharing (25%). The NTA share of some LGUs may be sufficient to carry out their devolved functions while it may not be for others.

LGU Borrowing

Local governments may create indebtedness and avail of credit facilities (Sec. 296, LGC). Data compiled by the DOF Bureau of Local Government Finance (BLGF) from 2003 to 2021 indicate that the annual borrowing of LGUs has steadily increased from PHP 30.28 billion in 2003 to PHP 136.58 billion by 2021.<sup>6</sup>

FIGURE 7. ANNUAL DATA OF OUTSTANDING LOANS OF LGUs, 2023-2021 (in PHP millions)



(Source: BLGF)(2022)

As of FY 2023, LGUs had an outstanding loan balance of PHP 184.35 billion, including PHP 590.49 million in past-due payments on loan amortization. Also, in FY 2023, the BLGF issued 313 Certificates of Net Debt Service Ceiling (NDSC) and Borrowing Capacity (BC), of which 36 (12%) were given to cities. Twenty-four new certificates were issued in April 2024 (20 for municipalities, 3 for cities, and 1 for province) with a total loan requirement of PHP 6.79 billion against a borrowing capacity of PHP 10.89 billion.

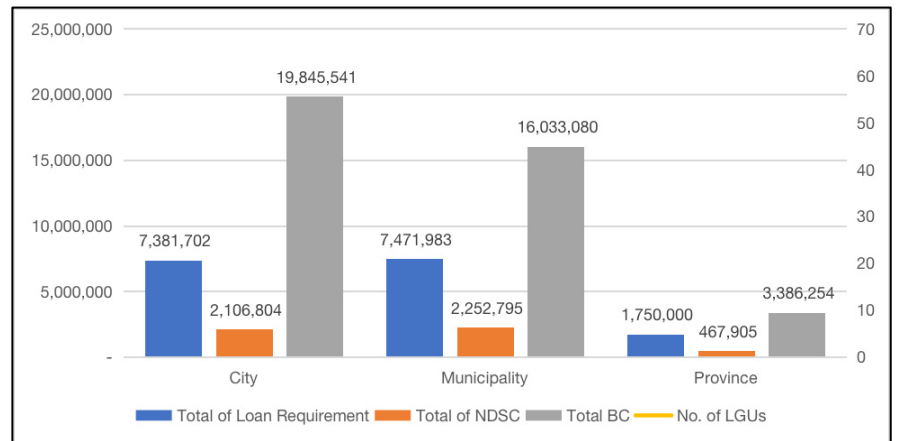
<sup>5</sup> See: <https://www.dbm.gov.ph/wp-content/uploads/Mandanas-Garcia-Case/IEC-Materials/FAQs-Mandanas-Garcia-Ruling.pdf>

<sup>6</sup> The annual data on loans of LGUs is the compilation of fourth quarter reports on the loans availed by the LGUs received by the BLGF, as submitted by government and domestic private banks and lending institutions to the Bureau on a quarterly basis (BLGF, 2022).



FIGURE 8. LOAN PROFILE OF LGUs, FY 2024(in PHP thousands)

The loan profile of LGUs with issued certificates in FY 2024 suggests that they have relatively higher borrowing capacity than actual loan requirements (see Fig. 8). Loans of city LGUs, for example, comprise only 37 percent of their borrowing capacity.



(Adapted from BLGF)(2024)

## B. Urban Development Issues

Cities are important drivers of development and poverty reduction, but unplanned urban growth also threatens sustainable development (UN, 2014). Unplanned and ill-managed growth leads to rapid sprawl, pollution, environmental degradation, and unsustainable production and consumption. Sustainable urban development is anchored on the pillars of economic development, social development, and environmental protection. Cracks in the intersectionality of these pillars threaten sustainable and equitable growth. These cracks will widen if urban development is not sensitized to climate change.

In focus group discussions, Urban-Act pilot cities identified urban development issues pertinent to subnational development sectors where local actions need vertical coordination and partnership with the national government.

### Antipolo City Urban Development Issues

The main development challenges of Antipolo City are population management and corollary issues of housing, basic services, and transport management. Antipolo's proximity to Metro Manila influences these issues. The city plays host to migrant workers employed in the metropolis. The immediate consequence is stress on housing, basic services, and daily highs and lows of traffic to and from Metro Manila.



- **Housing**

Housing is directly connected to population, land, and land use. The city population is estimated at a little over 800,000 as of 2020. This number does not reflect the actual population, given the invisibility of transients and migrant workers. The LGU collaborates with sixty-five (65) Homeowners Associations (HOAs) comprising 6,000 households. Some homeowners have opened portions of their houses to renters, mostly migrant workers with daily jobs in Metro Manila. It is impossible to determine the city's actual population, which includes transients and migrant workers. An existing ordinance enjoins homeowners to disclose renters, but compliance is observed to be low. This is believed due to fear of income

disclosure and taxation.

As of 2015, the housing gap was estimated at 6,000. This has since been reduced to 4,000 (as of 2020) due to proactive local measures where the LGU engages national housing authorities and the private sector.

The LGU has facilitated access to, for example, the Community Mortgage Program (CMP), where beneficiaries pay between PHP 500 per month for 30 years. Currently, Antipolo has no direct participation in the 4PH program on account of affordability. This program's monthly amortization is around PHP 3,500, or seven times the rate available to beneficiaries under the CMP.

- **Land resources and land use**

A number of governance issues were discussed during the FGD (on 29 August 2024).

- **Management of forests and forest lands.** The perception is “tali ang kamay ng LGU” (LGU hands are tied). Around 18,000 hectares of the 26,185 ha Upper Marikina River Watershed fall within the territory of Antipolo. Of these, 30% are classified as strict protection zone (SPZ) and 70% as multiple-use zone (MUZ). There are land ownership and land use decisions that are beyond the control of the LGU. Forest management is predominantly in the hands of the DENR.
- **Land ownership and land use changes.** Corollary issues include the issuance of Certificates of Land Ownership Award (CLOAs) by the Department of Agrarian Reform (DAR) without consultation with the LGU. There are observations that CLOAs were issued to non-existent beneficiaries or CLOAs issued in the watershed. Informal settlements also proliferate in forests and forest lands. Lastly, there are informal land market transactions where indigenous peoples are observed to be selling properties claimed as ancestral domains.
- **Land use regulations.** There is an observed dysfunction between land use regulations and actual land use. The Comprehensive Land Use Plan (CLUP) and corresponding Zoning Ordinance (ZO) is primarily a “model zoning ordinance where the model does not reflect actual land use reality. Moreover, there are land use decisions that are beyond the mandate of the LGU. Approval of housing subdivisions and condominiums is under the authority of the Department of Settlements, Housing and Urban Development (DHSUD).

Nonetheless, the LGU has proactively taken measures within its authority, such as non-approval of building permits without allocation of setbacks and parking space.

- **Local Transportation Management**

The Antipolo traffic management office grapples with road clearing, traffic violation apprehensions, and first response to road accidents. Public utility vehicles (PUVs), private vehicles, and tricycles converge on city streets. The city is host to 22,000 tricycles with franchises. It ranks # 2 in the region in terms of tricycle population. Tricycle operators are organized under 120 Tricycle Operators and Drivers Associations (TODAs). Of this figure, 18,000 no longer use 2-stroke engines, including electric-driven tricycles or e-trikes. Antipolo takes pride in the local e-trike innovation that expands carriage capacity to eight (8) passengers.

Two main highways connect Antipolo to Metro Manila: Marcos Highway and Ortigas Extension. The Antipolo section of the Marcos Highway has a capacity of 9,500 vehicles per day. However, the actual carriage is 16,000 per day. Spikes in traffic congestion are additionally influenced by DPWH maintenance projects and traffic movement going to (and from) the Ateneo de Manila University. The LGU has taken proactive measures to engage private subdivisions, specifically, negotiating voluntary access to private roads as alternate routes to ease traffic on the Marcos highway. Other measures include regulating the loading and loading of goods along congested highways.<sup>7</sup>

There used to be 2,000 public utility vehicles (PUVs) in Antipolo. With the PUV modernization program, this has since been reduced to 700, including 275 modern PUVs. Still, there is a lingering problem with old buses. Some of these buses were deployed to Antipolo during the COVID-19 pandemic. Currently, they are no longer allowed to ply routes using EDSA, the central artery of Metro Manila.

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<sup>7</sup> For example, junk shops can only load and unload stocks from 11 PM until 5 AM.

A core issue discussed during the FGD is local transportation management, particularly in the data-driven decision-making and local authority. The LGU has complied with the policy to formulate the Local Public Transportation Route Plan (LPTRP). The general perception is that this policy principally fulfills the needs of the LTFRB more than the LGU. LTFRB

needs the LPTRP for decisions on franchising. The LGU looks at transportation management not only as a function of traffic management but also as a more comprehensive transport planning and management. One suggestion is to devolve franchising authority to the LGU in some strategic areas of the city.

## Bacolod City Urban Development Issues

During the first round of FGDs, Bacolod City stakeholders cited the following urban development issues and challenges:



**a. Housing and settlements.** There is observed resistance from informal settler families (ISFs) to relocation. This resistance is shown even by ISFs located in danger zones. Socialized housing also faces problems of readiness to pay due to the dole-out mentality.

**b. Local transport.** Transport management needs a holistic approach regarding routing, terminals, and road networks. Modernization of public utility vehicles (PUVs) and the promotion of electric vehicles (EVs) face resistance from owners of old vehicles. Correspondingly, there is a problem with what to do with the old vehicles.

**c. Urban land use.** Land use planning is ideal, but implementation is difficult. There are houses and establishments where they are not supposed to be, but owners have property rights.

**d. Resilient and green housing and settlements.** This framework is anchored on voluntary compliance. It is challenging to implement or enforce.

**e. Management of plastic waste.** The LGU and communities are engaged in the recovery of plastic waste. However, there are two problems: one, what to do with collected plastic waste, and two, there is no ban on the manufacturing of plastics. The market is still flooded with plastic products.

**f. Climate investments.** The LGU tag climate budgets in the Annual Investment Program (AIP) Form. However, the AIP does not capture actual expenditures. Secondly, there is substantial climate investments of the private sector that are not monitored.



## Tagbilaran City Urban Development Issues

Also, during the first round of FGDs, the LGU and other stakeholders in Tagbilaran cited the following urban development issues and challenges:



**a. Housing and settlements.** The LGU still needs to fill a housing gap of 3,000 units. These include 240 units for families that need to be relocated. Data also shows that around 400 ISFs are not open to tenement housing in onsite relocation.

**b. Building and construction.** Seventy percent of old buildings do not follow regulations on setbacks. Some new constructions that comply with the setback allowance convert setback space to other uses that defeat the purpose of setbacks.

**c. Management of plastic waste.** The LGU is actively engaged in the recovery of plastic waste, including 'buy back' schemes. The problem is what to do with the collected plastic waste.

**d. Management of wastewater.** The LGU does not have a sewage treatment plant (STP). Also, there is a lack of coordination between the offices of Agriculture and Environment and natural resources.

**e. Management of biodegradable waste.** Biodegradable waste comprises 30-40 percent of total waste generated by the city. The city government does not collect this waste. Illegal waste dumping is rampant at the barangay/community level. Enforcement of regulations is difficult due to political considerations.

**f. Local transportation management.** There are 3,000 registered tricycles in the city; they are not covered under the Local Public Transportation Route Plan

(LPTRP). They ply routes anywhere in the city. Also, the LPTRP was submitted to the LTFRB one year ago, but there is still no response (approval). A lack of automated data sharing between the LGU, LTFRB, and LTO constrained traffic management.

**g. Urban land use.** In the old parts of the city there was no clear delineation between public and private property.

**h. Water supply.** City waterworks (utility) are dependent on groundwater extraction. This poses problems of depletion of the aquifers and vulnerability to saltwater incursion. The problem is mitigated by the involvement of private water companies that have access to surface water from outside the city.

**i. Greenhouse gas inventory.** It is difficult to gather and validate data from the private sector, for example, fossil fuel consumption recorded by gasoline stations.

**j. Devolution transition.** Few national government agencies (NGAs) have provided devolution transition plans (DTPs). The Department of Health (DOH), Department of Agriculture (DA), and Department of Tourism (DOT) have not yet provided DTPs. The DOH has only partially transferred some of its personnel. Private hospitals mainly provide hospital care.

## C. Climate Risk and Responses



Cities are a key contributor to climate change as much as the latter impacts on cities' basic services, infrastructure, housing, human livelihoods, and health.<sup>8</sup> But here is the rub. Climate change is more rapid than the ability of cities to implement strategies for climate change adaptation and mitigation. Short and Farmer (2021) describe this disjuncture as the “slow city-quick climate change” dilemma.

Urban-Act pilot cities face common climate-related risks brought about by extreme weather events: on the one hand, flooding and landslides during typhoons and heavy rains and, on the other, water scarcity during intense and extended droughts. The humanitarian and economic impacts are also similar, the difference being the financial costs of recovery and rehabilitation.

It is on the impact side of climate change where contextual variations of strategies are evident. The vulnerabilities of Bacolod and Tagbilaran are associated with their being coastal cities in island provinces. Antipolo, on the other hand, is landlocked. Its proximity to the National Capital Region (NCR) presents a duality of risks and opportunities. It forms part of urban sprawl characterized by expansion of housing and road infrastructure. Although endowed with forest ecosystems and watersheds, this natural capital is under stress from urban expansion.

Fifteen years since the enactment of the climate change law, pilot cities have taken measures to localize the National Climate Change Action Plan (NCCAP) through their Local Climate Change Action Plans (LCCAPs). They have also participated in the Local Climate Change Expenditure Tagging (LCCET) system, although with shortfalls in consistency.

Data from focus group discussions (FGDs) suggest a high level of awareness of climate change and its impacts. They have also proactively responded to climate-related disaster impacts. However, there are apparent deficits in the intersectionality of programs, projects, and activities (PPAs) tagged in the Annual Investment Program (AIP) and much more deficits in the accounting of climate outcomes.

<sup>8</sup> See: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities-and-climate-change>



## Antipolo City Climate Risks and Responses

The main risk faced by Antipolo City is the exacerbation of pre-existing natural hazards by extreme weather events. The city is prone to landslides and flooding. The most prominent was the August 1999 Cherry Hills Subdivision landslide caused by heavy rain during a typhoon. In that event, 60 people died and 378 houses buried to the ground. The victims were low-income families that paid for low-cost housing. A more recent case involved the deaths of four (4) construction workers clearing a retaining wall they had dismantled in a subdivision (INQUIRER.net, July 11, 2024).



The worst floods were experienced in 2020 (Typhoon Ulysses) and 2024 (Typhoon Carina). Flooding is caused by heavy precipitation and lack of proper drainage. Regulatory issues and the location of decision authority exacerbate this problem. Housing subdivisions are regulated by the DHSUD (previously, Housing and Land Use Regulatory Board or HLURB), and Environmental Clearance Certificates (ECCs) are issued by the DENR. While the latter has expertise in geology, the LGU is closer to ground truths on land users and land uses.

The LGU bears the humanitarian impacts of disasters. Its responses combine disaster risk reduction (DRR) and climate change adaptation actions. These include drainage improvement, relocation of informal settler families (ISFs) living in hazard zones, slope protection, and information and education campaigns (IEC). Another prominent action is the improvement of the cooperation system with private subdivisions regarding the connectivity of drainage systems.

## Bacolod City Climate Risks and Responses

Bacolod City stakeholders identified two significant risks from extreme weather events: flooding and extreme heat. The natural ecosystems and modern infrastructure can no longer absorb high precipitation levels. Neither are ecosystems and people conditioned to tolerate extreme heat. Extreme heat has the most observed disaster effects, including water shortages, spikes in the cost of potable water, drying up of farms lands, fish migration, grass fires, and public health problems.

The city government and private sector have undertaken mitigation and adaptation actions. The most significant actions of the private sector include the establishment of solar farms, the introduction of hydroponics in agricultural production, biopower production, and the propagation of the black soldier fly (BSF) for upcycling of biodegradable waste to organic fertilizer. The private sector has also responded to water shortages by distributing water rations in most affected barangays. On the other hand, the city government has taken steps to reduce the consumption of fossil-based energy by installing solar streetlights, improving forest carbon sinks through mangrove replating, and reducing people's vulnerability (to flooding) through relocation.



**TABLE 7. BACOLOD CITY CLIMATE RISKS, EFFECTS AND RESPONSES**

CLIMATE RISKS	OBSERVED EFFECTS	CURRENT CLIMATE ACTIONS
<ul style="list-style-type: none"> <li>• flooding</li> <li>• extreme heat</li> </ul>	<ul style="list-style-type: none"> <li>• drought</li> <li>• water shortage</li> <li>• suspension of classes</li> <li>• fish migration</li> <li>• grass fires</li> <li>• health problems</li> <li>• high cost of water redistribution</li> </ul>	<ul style="list-style-type: none"> <li>• solar farms (private sector)</li> <li>• solar streetlights</li> <li>• hydroponics (private sector)</li> <li>• Biopower using cane tops and leaves (private sector)</li> <li>• Mangrove replanting</li> <li>• Relocation</li> <li>• Water rationing (private sector redistribution)</li> <li>• Promotion of black soldier fly (BSF) for zero waste.</li> </ul>

### Tagbilaran City Climate Risks and Responses

Being a coastal city, Tagbilaran is exposed to cyclones. Heavy rains brought about by the cyclones result in flooding, especially in low-lying areas. Similar to Bacolod City, droughts lead to shortages of potable water and water for agriculture. However, the city is inherently vulnerable to water shortages and saltwater incursion of its aquifers. The local waterworks utility is dependent on groundwater extraction.



The problem is partly addressed by two private water suppliers that tap surface water from other municipalities.

The most significant climate actions undertaken by the city government are mangrove replanting and upgrading drainage systems. The former addresses vulnerability to flooding. In FY 2024, Tagbilaran tagged PHP 228.14 million for adaptation and PHP 278.05 million for mitigation projects. The results of previous climate-related expenditures have not yet been evaluated.

**TABLE 8. TAGBILARAN CITY CLIMATE RISKS, EFFECTS AND RESPONSES**

CLIMATE RISKS	OBSERVED EFFECTS	CURRENT CLIMATE ACTIONS
<ul style="list-style-type: none"> <li>• cyclones</li> <li>• flooding</li> <li>• extreme heat</li> </ul>	<ul style="list-style-type: none"> <li>• water shortage</li> <li>• saltwater incursion</li> <li>• disruption of livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>• upgrading of drainage</li> <li>• mangrove replanting</li> </ul>



## D. Organizational Issues

During the first round of FGDs, pilot cities shared common problems that indicate inter-connected constraints and stressors:

- **workloads.** LGU staff are overwhelmed with tasks. This phenomenon is influenced by two factors: one, plantilla positions of many offices are not yet filled up due to fiscal limitations, and two, things to do and frequency of advisories from national government agencies (NGAs). These factors multiply the activities and reportorial duties of concerned staff.
- **difficulty in fulfilling unit functions.** Many LGU offices are not yet full-fledged departments. City environment offices (CENROs) are headed mainly by designates or temporary heads of office who usually also head another department. Most CENROs are down-heavy with solid waste management staff and activities, thus leaving gaps in other environments and natural resources functions.
- **imbalance in vertical coordination with sector agencies.** This issue is connected to the second issue. Pilot cities do not have full-fledged counterparts for sector agencies like the Department of Transportation (DOTr), Department of Energy (DOE), and Department of Human Settlements and Urban Development. In the transportation sector, the main counterparts of LGUs are traffic management offices (TMOs) that fall short of the transportation planning and management requirements. The main local counterpart for housing is the LGU's engineering office, which is mainly for building and construction regulations and small infrastructure.
- **protracted devolution.** Not all NGAs have completed their devolution transition plans (DTPs). In Tagbilaran City, for example, the Department of Health (DOH) has only partially transferred national staff to the Tagbilaran City Health Office.
- **fiscal limitations.** Although pilot cities are relatively less dependent on the National Tax Allotment (NTA) compared to other cities, they are of the opinion that they do not have sufficient means to carry out development projects outlined in the Comprehensive Development Plan (CDP). Local sources of income are still limited. In Tagbilaran City, for example, the main sources of local income are the city college (PHP 25 million in revenues per year) and economic enterprises (PHP 74.5 million in revenues per year).

## 5. PROBLEM STATEMENT

The enabling environment for the localization of global and national policy frameworks on climate change is dynamic and endowed with a robust supply of policies and other enabling pillars. Since the enactment of the Climate Change Act of 2009 (as amended by the People's Survival Fund Act of 2012), climate change considerations have been integrated into national and local government plans, programs, and policies.

Meanwhile, new policy frameworks are in aid of climate sensitizing national development, with a particular focus on urban and regional areas. Some, like the national transportation policy, green housing and settlements, transit-oriented development, sustainable consumption and production, and circular economy and green development in the energy and transportation sectors, pose new challenges to cities, both organizationally and financially.

**The problem: the existing enabling environment for urban development is still inadequate to climate sensitize urban development.** Issues, policy and structural gaps need to be sorted out and opportunities need to be seized.



### A. Issues

#### Issue 1: Unfinished Business in Local Governance.

This issue revolves around the protracted agenda of devolution and decentralization. While pre-existing and new policy frameworks and sector plans demand local action, LGUs are not yet fully equipped to absorb devolved functions, both organizationally and financially. Localization of governance is enshrined in the 1987 Constitution and the Local Government Code of 1991. The language of policy is local government autonomy, the ultimate goal of the Local Government Code of 1991. Since 1991, however, both the national government (NG) and local

government units (LGU) have been grappling on how to deal with the readiness and capacity of LGUs to take on decentralized and devolved functions. The Mandanas Ruling of the Supreme Court in 2018 was a game-changer in NG-LGU relations that triggered a new call for full devolution. This was accompanied by an opportunity brought about by an expanded tax base from which the LGU share of national taxes is computed.

National oversight agencies, primarily the Department of Interior and Local Government (DILG), Department of Budget and Management (DBM), Department of Finance (DOF), and National Economic Development Authority (NEDA) have vigorously provided guidelines in planning, investment programming, public finance and expenditure management

and budgeting in aid of improving vertical alignment and horizontal coordination. Their inputs include climate action localization through mainstreaming climate change (and DRR) in CDP, CLUP, and climate budget tagging. Still, LGUs are not yet fully equipped to localize actions that address climate change.

Executive Order No. 138, s. 2021, renewed the call for devolution and set the target of completion by 2024. However, the goal was not met. The new administration has called for a suspension and review of the executive order (PCO, 2023). The decision is based on the assessment that many LGUs are not capable and/or not fully prepared for adopting full devolution.

## **Issue 2: Climate Finance and Investment Programming**

There are only a few sectors in the government's development agenda where policy frameworks hypothecate funding in implementation. These include gender and development, disaster risk reduction and management, and youth development. The implementation of affirmative policies for specific sectors of the population, such as senior citizens, is charged to the private sector in the form of special discounts. Where public finance is involved, the general tendency is to finance initial implementation from existing appropriations and continuing implementation from approved appropriations. Hence, it is common to find "shall" in the funding provision of policies rather than an immediate commitment with a fixed budget.

In the Climate Change Act of 2009, the Climate Change Commission (CCC) was given an initial appropriation of PHP 50 million. Other concerned agencies and LGUs were enjoined to charge law implementation against existing appropriations. The People's Survival Fund Act of 2012, which amended the Climate Change Act of 2009, is the first law that fixes a PHP 1 billion replenishing fund for local climate action.

It was not until the implementation of the climate change expenditure tagging system (CCET) in 2014 (at the national level) and

2015 (at the local level) that climate actions were integrated into budget policy.

In climate-related actions of privatized sectors (such as energy and transport), the government aims to induce private capital through financial and non-financial incentives through PPPs. The National Transport Policy, for example, prescribes financing modalities such as cost-sharing, public-private partnership (PPP), and privatization of public transport. Major climate-oriented plans and programs such as the development of the electric vehicle industry, improving the energy mix, the NDC Implementation Plan, and the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP) all involve private capital.

Local governments participate in the Local Climate Change Expenditure Tagging (LC-CET) system and integrate Local Climate Change Action Plans (LCCAPs) into their comprehensive development plans (CDPs). Budget tagging does not substitute for climate investment programming or the financial plan for achieving climate outcomes. It will be difficult for cities to mobilize climate funds or develop climate-oriented local PPPs without a clear financial plan or investment program. Climate plans (both national and local) are there, but there is no financial plan to implement the plan.

## **Issue 3: Operationalizing New Frameworks**

New policy frameworks have emerged in recent years. These include green housing and settlements, transit-oriented development (TOD), sustainable consumption and production, circular economy and gender equality, disability and social inclusion (GEDSI). The National Transport Policy adopts TOD as a framework for developing people-oriented and low-carbon multi-modal transport systems. The transport policy also encourages increasing public dominance in public transportation. Local governments are also enjoined to enhance the ownership of local public transportation route planning and management.

Some of the new frameworks can build on pre-existing policy frameworks. GEDSI, for example, can build on an adequate supply of social protection and anti-discrimination policies, plans, programs, and budgetary support.

The circular economy can build on advances and best practices in ecological solid waste management since 2000 and earlier promotion of sustainable agriculture.

- **GEDSI and Existing Social Policies**

The dominant tendency of existing social policies is towards social protection and prevention of discrimination, which focus on marginalized and disadvantaged sectors of the population. Inclusion (of the marginalized and vulnerable sectors) is implied in the language of participation in the political decisions of government and the economic life of society. The policy with the closest link to social inclusion is the policy of preventing social exclusion of persons with specific impairments (PWDs) or those with income difficulty (such as solo parents) rather than disability as a universal experience.

The first policy that explicitly used the term “inclusion” is Executive Order No. 100, s.2019 Institutionalizing the Diversity and Inclusion Program, Creating and Inter-Agency Committee on Diversity and Inclusion, And For Other Purposes. However, this policy focuses on social inclusion in government organizations, particularly the prevention of social exclusion (from employment, training, education, recruitment, and promotion in the hierarchy) on account of gender, sex, ethnicity, and other diversity characteristics.

- **TOD and Green Housing and Settlements**

Transit-Oriented Development (TOD) is a policy framework adopted by the Department of Human Settlements and Urban Development in 2023 (DHSUD Board Resolution No. 2023-02). The Resilient and Green Housing and Settlements Framework (RGHSF) was adopted in 2023 (DHSUD Board Resolution No. 2023-01 and 2023-03). The two frameworks indicate

paradigm shifts that should be integrated into land use planning and development.

The RGHSF highlights the concept of “green human settlements” to ensure that environmental sustainability is at the core when operationalizing the framework. This conceptual framework envisions mitigating greenhouse gas (GHG) emissions and the use of ecosystem services in human settlement development while addressing risks and vulnerabilities. It is introduced in the face of the continuing housing gap for the economically disadvantaged and vulnerable sectors of society. By their features, green housing and settlement costs are relatively higher than low-cost and socialized housing.

International experience suggests that the private sector is predominant in the research and development of green materials, certification, and rating.

TOD and RGHSF have yet to evolve into clearer operational guidelines and cascade downstream in terms of knowledge and capacity. Under conditions where public expenditures are focused on affordable housing for the poor and marginalized sectors, the arena for testing TOD and RGHSF are new housing and settlements developed by the private sector.

- **Circular Economy**

Circular economy (CE) is an economic concept based on three principles: design out waste and pollution, keep products and materials in use, and regenerate natural systems (EMF, 2021). This definition is just one of around 114 definitions of CE (Kirchherr et al., 2017). However, it focused on a central problem: waste, unsustainable consumption, and production; significantly higher in cities; cities demand two-thirds of global energy, produce up to 80% of GHG emissions and 50% of global waste (OECD,n.d.).

As yet, the Philippines has no CE policy framework and integrated strategy (ADB, 2020). However, there are ample policy and practice opportunities related to

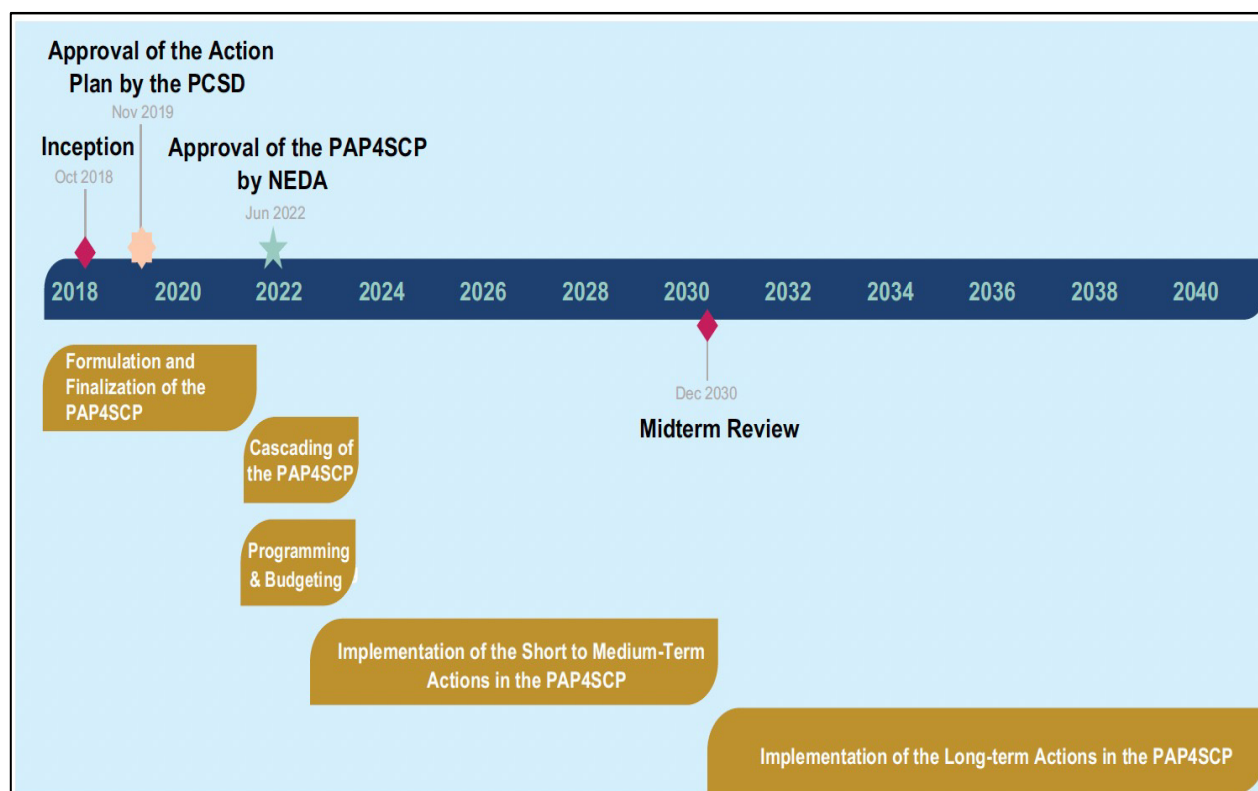


the implementation of the Ecological Solid Waste Management Act of 2000, Extended Producer Responsibility Act of 2022, and other related laws and policies (Bueta, 2022). Solid waste management programs of the national government and local government units have promoted the 3Rs (reduce, reuse, and recycle), a key principle in CE. As of 2019, 489 cities and municipalities (30% of all cities and municipalities in the country) have some form of policy to regulate the use of plastics, particularly plastic bags (NSWMC, cited in WWF 2020).

CE overlaps with the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP). This plan traces its

roots to the Oslo Symposium in 1994 when sustainable consumption and production (SCP) was defined.<sup>9</sup> The 2002 World Summit on Sustainable Development adopted the Johannesburg Plan of Implementation which recognized SCP as one the three overarching objectives for sustainable development (along with poverty eradication and management of natural resources). In 2012, the UN Conference on Sustainable Development (Rio+20) adopted a 10 year Framework Programme on SCP (10YFP). In 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development which includes SDG 12: “Ensure Sustainable Consumption and Production”.

FIGURE 9. PAP4SCP IMPLEMENTATION PLAN



Source: Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP), p. 50

PAP4SCP is the national version of the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP) and has medium (2020-2030) and long-term (2020-2040) goals. Its priority action nodes are policy and regulation, R&D, innovation and technology, infrastructure,

and promotion and education. It recognizes the important role of LGUs in SCP implementation. Among its targets in 2030 is the enactment of local ordinances on green buildings for public and private facilities. This specific aim intersects with the policy gap in DSHUD’s RGHSF and the DPWH’s

<sup>9</sup> See: <https://enb.iisd.org/topics/sustainable-consumption-production>

Green Building Code of 2015, which is a referral code of the National Building Code of the Philippines. The latter applies to new construction and/or alteration of buildings with total gross floor area (TGFA) with a minimum of 10,000-20,000 square meters (Sec. 8.1, Green Building Code). Conversely, it does not apply to buildings constructed prior to the promulgation of the code and buildings with smaller TGFAs.

Ordinances are local laws subject to penalties if not complied with. LGUs will weigh the consequences of enacting local laws whose financial impacts might be perceived differently by the affected private sector investors. The same laws, if applied, will cut across DSHUD's RGSF and will impact on the local building and construction markets.

There are corollary issues around operationalization and localization of new policy frameworks:

One, some, like TOD and green housing and settlements, are not yet accompanied by clear guidelines for operationalization and much less localization. TOD involves intersectionality of land use planning and zoning, investments in low-carbon multi-modal transport systems, development of green and walkable spaces, and major relocations of hazard-prone housing and settlements, among others. On the other hand, it is not yet known whether green housing and settlements is mandatory or voluntary. One of the action areas of the PAP4SCP is the enactment of local ordinances for green buildings;

Two, local government structures are not fully equipped to operationalize and localize new policy frameworks in terms of mandate, unit functions, and staffing. Most LGUs do not have full-fledged structures for transportation planning and management, environment and natural resources management and housing and settlements; and,

Three, fiscal capacity. While the tax base for computing LGU's share of national taxes has increased, the National Tax Allocation (NTA) expansion does not necessarily lead to secure fiscal capacity for absorbing devolved functions, services, and facilities (FSFs) and

much less for embarking on major development projects. LGUs still need to expand local sources of income and develop capacity to induce private sector investments.

#### **Issue 4: Climate-Sensitive Monitoring and Evaluation**

There are two interrelated concepts on this topic: monitoring and evaluation (M&E) and measuring, reporting, and verification (MRV). Results-based monitoring and evaluation is a long-standing M&E approach used by the NEDA. It is embedded in the overarching policy on M&E – the National Policy Evaluation Framework (NEPF) and corresponding operational guidelines of the Regional Project Monitoring and Evaluation System (RPMES). Both are informed by the evolution of policies since the late 1980s pertaining to project monitoring and the creation of national and sub-national project management committees (PMCs). In terms of substance, the framework and guidelines adopt the results-based monitoring and evaluation framework that has been used since 2011.

The NEPF refers to the NEDA-DBM JMC 2015-01 adopting the National Evaluation Policy Framework of the Philippines. This circular aims to provide a framework for the purposive conduct of evaluations in the public sector. It covers all agencies of the national government, including state universities and colleges (SUCs), government-owned and/or controlled corporations (GOCCs), government financial institutions (GFIs), and other instrumentalities. The JMC provides that all projects/programs implemented by the covered agencies, including programs/projects implemented by civil society organizations and other third parties on contract with the government implementing agency, shall be evaluated at least once at the end of the program/project life or as frequent as necessary.

Essential to the implementation of M&E at the local level is the local project monitoring committee (PMC). This committee dates back to 1988 via Presidential Memorandum Order No. 175; EO No. 376, s. 1989 and EO No. 93, s. 1993. The latter emphasizes regional, regional, provincial, city and municipal coverage of M&E to include

foreign-assisted projects, projects funded from the Internal Revenue Allotment (IRA; now NTA) and projects funded from locally-generated resources.

In 2004, the DILG called for reorganization and reactivation of the PMCs of LGUs (DILG MC 2004-78) and reiterated the same in 2019 (DILG MC 2019-188). In 2020, the DILG extended the reach of local M&E with the call for the establishment of Barangay Project Monitoring and Evaluation Committee (BPMEC) under the Barangay Development Council (DILG MC 2020-070).

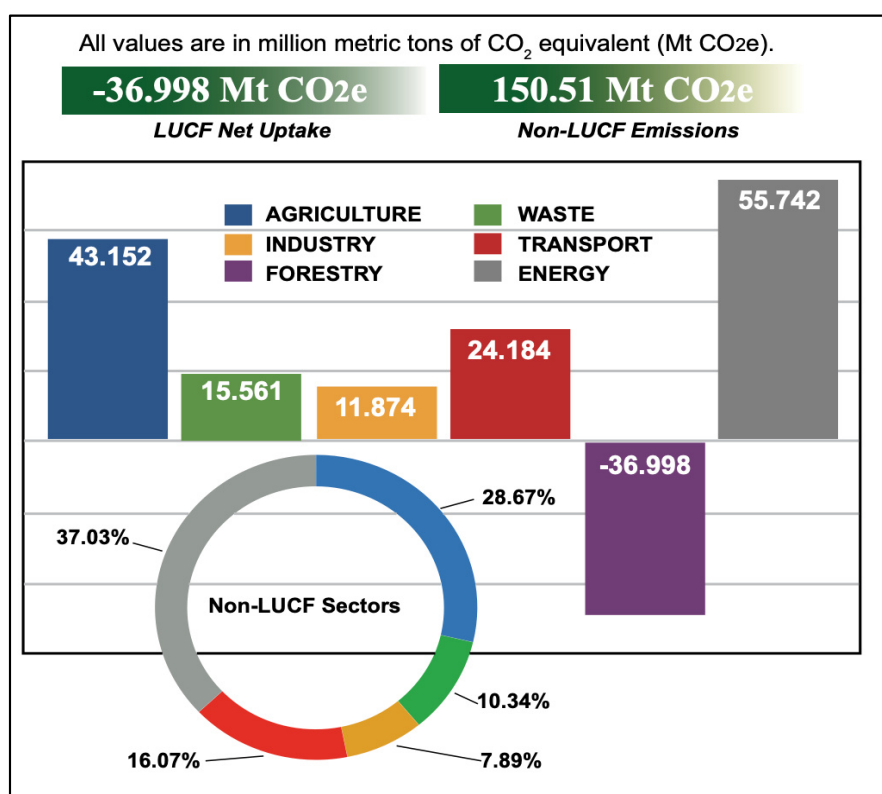
M&E of sector agencies, such as DOE, DOTr, UDHA and other national government agencies and entities form part of the NEPF. Each agency is mandated to create its own monitoring and evaluation unit. Sector policies and plans usually include provisions for M&E. The NEDA is the premier agency for consolidation of M&E and reporting at the output (accomplishment) and outcome (achievements) as elaborated in the results matrices of the PDP. Coverage includes projects (national and local) implemented with the use of

national government funds (including ODA funds). In fact, sub-national PMCs are mandated to monitor all projects implemented locally and corresponding local development councils are tasked to evaluate these project.

The MRV framework is specific to climate actions, specifically, accounting of GHG emissions reduction and avoidance. It is linked to mobilization of climate finance. Hence, the need for specific technical procedures (per type of GHG), transparency and third-party verification. MRV does not form part of the NEPF but it is explicitly cited in the NDC Implementation Plan. Likewise, it is a necessary tool for GHG inventory management and reporting.

GHG inventory management tracks GHG emissions and avoidance in the land use change and forestry (LUCF) and non-LUCF sectors. The 2010 Preliminary National Greenhouse Gas Inventory shows that the energy, agriculture, and transport sectors were the biggest GHG emitters in the non-LUCF sectors, accounting for 82 percent of 150.51 MtCO<sub>2</sub>e (million metric tons equivalent of CO<sub>2</sub>).<sup>10</sup>

FIGURE 10. PRELIMINARY 2010 NATIONAL GREENHOUSE GAS INVENTORY



Source: Recabar et al., 2019; cited in PAP4SCP, p. 63.

<sup>10</sup> This figure was adjusted to 144.352 mmtCO<sub>2</sub>e in the 2020 GHG Briefer of the CCC.

The 2010 inventory was used as basis for the business-as-usual emission scenario in the 1st Philippine Nationally Determined Contribution (NDC) and formulation of the NDC policies and measures.<sup>11</sup> The 2020 GHG Briefer of the CCC indicates uptakes of emissions in the non-LUCF sectors from 100.87 mmtCO<sub>2</sub>e in 1994, 126.88 mmtCO<sub>2</sub>e in 2000 and 144.352 mmtCO<sub>2</sub>e by 2010. Across the years, the agriculture, transport and energy sectors were on the high side of GHG emissions. The GHG inventory was updated in 2015 and 2020 but the results are not yet published and/or made available to the public.

Reporting of the national GHG inventory is the country's commitment to the global community, through the UNFCCC. Disaggregated local inventories are important to local governments, especially cities, to recognize particular contributions to GHG emissions and design strategies for avoidance and reduction.

In the context of localization, there are three corollary issues on this topic:

**One**, M&E in the NPEF is primarily orientated towards national government projects. There is no M&E framework for evaluating local government projects distinct from local M&E in relation to the national government. Circulars from the DILG primarily focus on the operating structure, i.e., the PMC. While the NEPF can be adopted by LGUs and adapted to local contexts, this process falls within the overall process of devolution or how LGUs can absorb this function with consideration to financing, structuring of the organization, and deployment or development of human capacity. Secondly, the preponderance of monitoring, more than the evaluative aspect of M&E. Thirdly, the consolidation role of the NEDA is dependent on the distributed M&E functions of sector agencies and sub-national PMCs and LDCs;

**Two**, climate mitigation actions need MRV in M&E. This challenge is evident in the M&E of climate action. In the NCCAP and GHG inventory, M&E functions are distributed across different sector agencies, with the Climate

Change Commission (CCC) being the consolidating agent. By law, the CCC is mandated to prepare annual accomplishment reports and three-year evaluation reports on the NCCAP. The consolidation role of the CCC is dependent on the independent M&E actions of sector agencies. Secondly, MRV is not yet a distributed function. The main implementing agency is the Department of Environment and Natural Resources (DENR); and,

**Three**, MRV is lacking, more so at the local level. The NDC implementation plan commits to a GHG reduction of 990 mmtCO<sub>2</sub>e by 2030 from the 2010 baseline. This NDC target is based on the 'business-as-usual' national scenario. For cities to design climate-sensitive urban development, they need to account for and report their contributions to national GHG emissions, reduction, and avoidance. They need to build their own MRV capacity.

The Philippine Greenhouse Gas Inventory Management and Reporting System (PGH-GIMRS) (EO 174, s. 2014) is operationalized through CCC Resolution No. 2018-003 Adopting the PGHGIMRS Guidance Document, CCC Office Order No. 2019-122 Operationalizing Executive Order No. 174, s.2014 and CCC Resolution No. 2018-003. The PGHGIMRS assigns roles to sector agencies in the national government: DA and PSA for agriculture, DENR for waste, industrial processes and product use and forestry and other land use, DOTr and DOE for transport and the DOE for energy.

The EO provides that **LGUs and the private sector may be invited to participate** in the PGHGIMRS. This is a gray area in GHG inventory management given that GHG stocks and emissions occur differently in local areas and the main contributors of emissions are in the privatized sectors (such as transport and energy) that are situated locally. There is a big difference between 'may be' invited and 'must be' or 'should be' invited given the important roles of LGUs and the private sector in GHG inventory management and reporting. For one, LGUs are primarily responsible for solid waste management and, therefore, accounting of avoided emissions from solid waste.

<sup>11</sup> <https://niccdies.climate.gov.ph/ghg-inventory>



## B. Gaps

As articulated in the May 2024 Stocktake Report, the gap analysis does not include a comparative assessment of original policy objectives and actual results. In the first place, climate-sensitive urban development is a concept that has yet to be operationalized. The gap analysis was modified to focus on the gap between the letter expression of policies and the idealized enabling environment for urban climate action.

Data suggests the following major gaps in the existing enabling environment:

### a) Policy Gaps

- **Inexplicit Climate Finance and Investment Policy** The key question is how much does the government invest in climate action in proportion to planned budgets? Every plan typically includes a budget plan (for expenditure assignments) and a financial plan (to include mobilization of financial resources that are not yet available). However, major climate action plans, such as the NCCAP and LCCAPs, do not have budget and financial plans. The dominant tendency is to rely on annual budget appropriations.

The estimated cost of achieving climate outcomes, for example, in reducing GHG emissions by 2030, is explicit, but public finance is cautiously anchored on what is possible in annual budget appropriations. In privatized sectors such as transport and energy, low-carbon actions are highly dependent on the cooperation of the private sector and the deployment of private equity financing. The latter is also contingent on the provision of fiscal and non-fiscal incentives encouraging the transition to renewable energy. The purpose is not to dampen private sector participation in energy development.

- **Unarticulated GEDSI** While sector policies have evolved to increasingly emphasize climate considerations, social policies remain predominantly on the side of social protection. Gender inclusion is more emphasized

in gender mainstreaming and by pothecation of budgets for GAD. Disability inclusion is more emphasized on particular impairments of PWDs and the relative disadvantage of solo parents, senior citizens, and the poorest of the poor who are on the list of the country's premier cash transfer program – the Pantawid Pamilyang Pilipino Program (4Ps). What is missing is the articulation of the intersectionality of the various social policies.

### • Operationalization of new frameworks

New frameworks, such as TOD, green housing and settlements, sustainable consumption and production, and circular economy, have been introduced. The key question is how to operationalize and localize these frameworks. It is unclear, for example, if green housing and settlements is mandatory. International best practice suggests a voluntary and self-regulatory approach in the hands of the private sector. Rating and certification implemented by the World Green Building Council (WGBC) and its network of more than 75 national green building councils and industry partners are private sector-led and market-driven.<sup>12</sup>

In transport policy, the suggested hierarchy is public mass transit over private transport, among other priorities such as people-oriented transportation infrastructure, multi-modal transportation system, and increasing public dominance in public transportation. Again, the question is how do cities, depending on size and proximity to other urban areas, operationalize the new transport framework?

### b) Structural Gap

**There is weak correspondence between national and local implementing structures and institutional arrangements.** National policies and plans generally provide for the creation of inter-agency steering committees and technical working groups. These structures are multiplied by the number of policy issuances, thus multiplying the burdens of department secretaries and/or undersecretaries. Localization also

<sup>12</sup> See: <https://worldgbc.org>

tends to mimic the creation of inter-agency committees at the LGU level. However, LGU organizational structures are not fully equipped to deal with national level counterparts. For example, the environment and natural resources offices (ENROs) of LGUs do not have full personnel complement and capacity to deal with functions on biodiversity and community forestry and forest carbon accounting, among others. In many cases, ENROs are occupied by designates who have other primary functions within the LGU.

New frameworks on green housing and settlements, low-carbon transport, and energy suggest LGU involvement, including LGU ownership of local public transportation. However, there are no local counterpart structures for transport, housing, and energy. Local organizational capacity related to transport, for example, is orientated towards and limited to traffic management, road clearing, and franchising of tricycle operations. Moreover, LGUs do not have specialized housing agencies. Local housing programs form part of national housing programs (currently, 4PH) that are predominantly driven by national housing agencies.

**c) Localization capacity gap.** The protracted process of devolution and the non-completion of full devolution in 2024 suggest gaps in localization. While supply of policies is robust, local government organizational and human capacities do not march in step with the requirements for localization. These include gaps in structures (and corresponding human capacities) for local transportation planning and management, green housing and settlements, GHG inventory and management, and NDC implementation and localization of the PAP4SCP and circular economy.

**d) Local climate investment gap.** Climate budget tagging is integrated into budget policy and institutionalized through the LCCET. However, there is a distance between annual budgeting and an unknown and still unarticulated medium-term climate investment program. Climate investments are analyzed ex-post rather than ex-ante. This problem is influenced by the absence of a climate investment policy aligned with the 6-year public investment program (PIP) at the

national and regional levels and the 3-year LDIP of LGUs.

Climate budgets tagged in the AIP are amounts assigned to line items of specific programs, plans, and activities (PPAs). They are reported as separate expenditures at the end of one fiscal year. Climate investing is not tied to specific line items. It is programmatic and designed to achieve returns (outcomes) at medium or long-term. They are measured against expected returns or outcomes.

**e) M&E Gap.** There are two major gaps: one, the NEPF covers all government projects that are supported by national government funds. This leaves a gap in the M&E of local government projects that are supported by local sources of funds; and, two, MRV in the M&E of climate action. If cities (and LGUs in general) aim to access international climate finance, they need MRV capacity to account for avoidance and reduction of GHG emissions.

## C. Challenges and Barriers

Cityhood in the Philippines is political (choice of politicians and affirmation of citizens through a plebiscite), based on law and act of Congress. The minimum requirements are average annual income (of at least PHP 100 million during the last two consecutive years based on 2000 constant prices), population (of at least 150,000 inhabitants), and territory (of at least 100 square kilometers). It is possible that cities become cities before they achieve characteristics of urbanization beyond demographics and politics.

In the context of climate-sensitizing urban development, not all cities are created equal in terms of spatial plans, housing and settlements, economic growth and investments, and the capacity of the local organization to perform its functions as a corporate body and political unit of the national government.

Localization of global and national policy frameworks on climate may appear differently by type of city (according to income class and economic growth), demographic characteristics (sex, gender, ethnicity, age groups, income class), and specificity of climate and disaster risks.

Considering the universal (national) framing of policies, localization faces the following challenges:

- **First**, the function-absorption capacity of LGUs in terms of financial capacity, technical resources, and organizational structure. Localization of transport policy, for example, does not have sufficient local counterparts in terms of organizational model, human resources, and technical capacity. From a wider angle, devolution and decentralization have already taken more than 30 years since the enactment of the Local Government Code (LGC) of 1991, and full devolution has not been fully fulfilled. Full devolution envisioned in Executive Order No. 138 was to be completed in three years from fiscal year (FY) 2022 to FY 2024 (DBM Briefer on EO No. 138). However, this has since been extended, and EO 138 was placed under review (Presidential Communication Office, 21 June 2024).

- **Second**, constraints in medium-term climate investment programming of local governments. Although local governments have autonomy to enact their local investment codes, medium- and long-term investment programming is hindered by political considerations, particularly the three-year electoral cycles that do not guarantee the medium-term rule of a local chief executive beyond a three-year term. Furthermore, while the local Comprehensive Development Plan (CDP) has a 6-year time frame, the main instrument for implementation (i.e., the Local Development Investment Program or LDIP) has a three-year time frame attached to the term of the incumbent.

- **Third**, balancing medium-term investments and direct services for citizens' welfare. Owing to the three-year cycle of local elections, LCEs may opt to satisfy needs for basic service provision more than medium-term and long-term economic development programming to deliver sustainable prosperity. Cities dependent on the National Tax Allocation (NTA) may be reluctant to leverage income to enter

into debt financing. Data from the DOF-BLGF suggests that actual borrowing is way much lower than the borrowing capacity of LGUs (BLGF 2022, 2024).

- **Balancing the state's regulatory power and interests of the private sector partners and citizens.** State policy indicates the importance of cooperation with the private sector in housing and urban development, respect for the rights of small property owners, and the right of citizens against eviction and demolition of homes without due process in accordance with law (Sec. 1, RA 11201). These challenges recur in times of relocation and resettlement and pricing of privately-developed housing and settlements. Even the government's 4PH housing program faces challenges in balancing the financial interests of private sector partners and the financial capacity of housing beneficiaries.

- **Lastly**, developing climate-sensitive urban development strategies taking into consideration specific climate risks and urban development needs. Most cities need major motions in policy and regulation, and development programming to change pre-existing conditions in privatized sectors that are not climate sensitive. In 2014, for example, the (then) HUDCC formulated a national informal settlements strategy which reflected housing deliverables for 2021-2022, 2022-2028, and 2028-2040.<sup>13</sup> The target was one million ISFs by 2025 and, on the same year, at least 40% of cities would be implementing city-wide urban renewal, upgrading, housing programs, and strategic urban development plans. While it may be possible to initiate green housing and settlements in new sites for middle and high-income groups, the financial cost may not be affordable to informal settlers. Similarly, in the transport sector, the modernization of public utility vehicles and the shift to electric vehicles may not be affordable to lowly-capitalized

<sup>13</sup> See: HUDCC. (2014). Developing a National Informal Settlements Upgrading Strategy for the Philippines: Final Report. Retrieved from [https://www.hudcc.gov.ph/sites/default/files/styles/large/public/document/NISUS%20Final%20Report\\_July2014.pdf](https://www.hudcc.gov.ph/sites/default/files/styles/large/public/document/NISUS%20Final%20Report_July2014.pdf)

transport operators or individual entrepreneurs. Cities also have to grapple with ‘not-green’ existing structures (houses, public

## D. Opportunities

There are at least five opportunities for enhancing the climate sensitivity of urban development:

**First**, increased fiscal capacity of LGUs. As a result of the 2018 Mandanas Ruling of the Supreme Court, LGUs benefit from a more significant tax base from which the NTA is computed. The ruling also triggered the renewal of the call for full devolution.

**Second**, wake-up call for revisiting LGU organizational models. New policy frameworks on urban development and housing, transport, and energy echo climate considerations emphasized in the guidelines for CLUP and CDP. While these policies pose challenges to LGU organizational capacities, they also serve as an opportunity for rethinking organizational models to aid effective localization.

**Third**, external sources of financing are available. As shown in the NEDA’s ODA portfolio reviews, there are external sources of climate financing that LGUs can explore with the support of national government agencies.

**Fourth**, LGUs can enter into partnerships with the private sector for financing. The PPP and private buildings, and facilities that have been constructed prior to the promulgation of the Green Building Code.

Code of 2023 recognizes local government autonomy to enter into PPP arrangements for financing of development projects (Sec. 2, RA 11966). This recognition is an opportunity for cities to develop investment strategies and for small cities to collaborate with other cities in aid of pooling equity resources to partner with the private sector. A further opportunity is a PPP contribution to climate sensitive urban development. Among the guiding principles in developing PPP projects are climate resilience and sustainability and social and environmental safeguards (Sec. 18, IRR of RA 11966).

**Lastly**, LGU experience in monitoring and evaluation of national government projects. Although the National Evaluation Policy Framework and RPMES Operational Guidelines mainly cover M&E of national government projects, LGU experience in the monitoring activities of the PMCs (as well as LDC experience in evaluations) can serve as opportunity for developing LGU M&E systems.



## 6. ALTERNATIVE POLICY OPTIONS

Alternative policy options revolve around pillars of an idealized enabling environment for localization of climate action in urban areas or sensitizing urban development to climate change. Seven policy areas were drawn from the Stocktake Report and the first round of FGDs with stakeholders (local government officials, civil society organizations, people's organizations and private sector) in pilot cities.

TABLE 9. POLICY AREAS AND ALTERNATIVE POLICY OPTIONS

Policy Areas	Alternative Policy Options
Climate Finance	<ul style="list-style-type: none"> <li>• LCCET enhancement, to include monitoring of actual expenditures.</li> <li>• Inclusion of climate investment in the medium-term local development investment program (LDIP)</li> </ul>
Local transport planning and management	<ul style="list-style-type: none"> <li>• Improved coordination and data exchange between LGUs and the LTFRB and LTO</li> <li>• Local public transportation as an LGU enterprise</li> </ul>
Green housing and settlements	<ul style="list-style-type: none"> <li>• Voluntary</li> <li>• Third-party certification and rating system</li> <li>• Fiscal incentives</li> </ul>
Local PPPs	<ul style="list-style-type: none"> <li>• Additional guidelines for Local PPPs that involve two or more LGUs from different provinces or regions.</li> <li>• Guidance on maximum amount of Local PPP projects</li> </ul>
NDC Implementation and GHG inventory management and reporting	<ul style="list-style-type: none"> <li>• Decentralize GHG inventory management</li> <li>• Interface NDC implementation plan and GHG inventory management and reporting</li> <li>• Green financing for local NDC policies, activities and measures (PAMs)</li> </ul>
MRV/M&E	<ul style="list-style-type: none"> <li>• Expand coverage of the National Evaluation Policy Framework (NEPF), to include M&amp;E of locally funded projects</li> <li>• Local Project Monitoring Committees (PMCs) created under the Regional Project Monitoring and Evaluation System (RPMES) to monitor and manage evaluation of all government projects implemented locally, including locally-funded projects.</li> <li>• Provision of regular budget for M&amp;E activities of PMCs</li> <li>• Build local capacity for MRV</li> </ul>
GEDSI	<ul style="list-style-type: none"> <li>• Articulate GEDSI in sector policies and local government policies</li> </ul>
Circular economy in cities	<ul style="list-style-type: none"> <li>• Integrate ecological solid waste management (ESWM) in the LCCAP.</li> <li>• Specify climate risks addressed and climate outcomes of ESWM.</li> <li>• Roll-out and strengthen local capacity for implementation of the Philippine Action Plan for Sustainable Consumption and production (PAP4SCP).</li> <li>• Green financing for local implementation of the PAP4SCP.</li> </ul>

## LOGICS OF THE ALTERNATIVE POLICY OPTIONS

The alternative policy options are solutions-oriented. They focus on idealized pillars of the enabling environment for urban climate action that are either missing, lacking clarity, or are still new or evolving. New frameworks, such as TOD, circular economy, green housing, and settlements, still lack clear and actionable guidelines. Others, like the NDC implementation plan, have a clear estimation of costs but lack guidance on how to finance the expected costs.

Climate finance is a big challenge. Big plans, like the NCCAP, are dependent on climate-oriented plans, programs and activities with appropriations in the annual budgets of the national government and local government units. The single-biggest hypothecated climate fund is the PHP 1 billion PSF, which is mainly for local climate adaptation projects.

Intended climate outcomes need to be planned for, not annually, but from medium and long-term perspectives. Climate budgets monitored in the CCET system are challenging to evaluate for results if the concerned PPAs are not scaled into a programmatic orientation. There needs to be a climate investment program. The question is how to find and embed climate investments in the medium-term PIP of the national government and LDIP of local governments.

### Climate Budget Monitoring and Climate Investing

Two alternative policy options are being put forward: one, enhancement of the LCCET to include monitoring of actual climate expenditures; and two, inclusion of medium-term climate investment in the LDIP. The latter is a program to allocate an investible portion of the annual general fund budget for funding development programs, projects, and activities identified in the medium-term Comprehensive Development Plan (CDP). While the LCCAP is assumed to be integrated into the CDP, the LCCAP financing plan is not yet integrated into the LDIP.

These options are founded on the following logics:

**One**, the current guidelines for LCCET enjoin LGUs to tag climate mitigation and adaptation budgets in the Annual Investment Program (AIP). The spending authority granted by the local legislative council, i.e. the Appropriations Ordinance, may not exactly reflect what is stated in the AIP Form. Moreover, actual expenditures may differ from what is stated in the AIP Form and/or the Appropriations Ordinance. As a monitoring tool, the LCCET should be able to reflect actual expenditures. The AIP Form is not an accurate reflection of actual expenditures. To enhance validity of LCCET data, it should monitor actual expenditures.

The proposition should not be difficult to operationalize. LGU agencies prepare annual accomplishment reports, including reports on expenditures. These reports can form the basis for monitoring actual climate expenditures.

**Two**, current LCCET system is a climate budget monitoring instrument that captures short term (annual) expenditures. It does not allow ex-ante projection of multi-year investments that characterize climate actions such as reduction of GHG emissions, rehabilitation of natural ecosystems or improvement in the adaptive capacities of ecosystems and peoples in the locality.

LCCET implementation since 2015 has yielded information on how much LGUs spend for climate actions each fiscal year. From 2016 to 2020, for example, LGUs spent PHP 263.3 billion or an average of PHP 52.6 billion per year. This is from a retrospective angle. Turning it around, this data can enable LGUs to estimate proportion of investible portions of the general fund that can be used for climate action.

TABLE 10. POLICY AREAS AND ALTERNATIVE POLICY OPTIONS

NCCAP Strategic Priorities	Local CCET (2016–2020 AIP submissions)
• Food security	• 17,768,761
• Water Sufficiency	• 60,231,439
• Ecological and Environmental Stability	• 8,271,485
• Human Security	• 28,476,082
• Climate-smart Industries and Services	• 12,099,699
• Sustainable Energy	• 117,905,668
• Knowledge and Capacity Development	• 5,771,288
• Cross-cutting	• 29,776,919 <sup>15</sup>
• Total	• 263,309,456

Sources: CCC, n.d., CCET Data Visualization, <https://niccdies.climate.gov.ph/climate-finance/ccet>; CCC, 2022, Local Climate Change Investment Report 2016-2020.

Every plan should include a budget as part of the implementation strategy. Implementation of intended programs, projects and activities can only be fulfilled if and when the necessary budgetary allocations are provided for in the plan. The National Climate Change Action Plan 2011-2028 (NCCAP) provides direction and a chart of outputs, outcomes, and impacts but has no projection on how much budget is needed. The National Adaptation Plan (NAP) also does not include a budget estimate for implementation. Local Climate Change Action Plans (LCCAPs) of LGUs also do not include budget projections, even as they lay down expected activities, outputs, and outcomes. These plans lean on probable budget appropriations depending on the will of legislative bodies to authorize the spending of public funds.

The only major plan with a clear projection of investment costs is the implementation plan for the Nationally-Determined Contribution (NDC) in the reduction of GHG emissions. In this plan, the estimated investment cost until 2030 is \$ 72 billion (PHP 4.1 trillion equivalent). The major bulk of investment costs are in the liberalized energy (PHP 2.1 trillion) and transportation (PHP 1.9 trillion) sectors.

The Philippine Development Plan 2023-2028 (PDP 2023-2028) recognizes the inadequacy of climate action financing and suggests bolstering private sector investments in green development and a blended approach to climate financing (i.e., grants, investments, and subsidies). It also suggests structuring public spending to stimulate private-sector investments. In the Philippine Green Jobs Act of 2016, for example, the government eyes private sector investments while offering tax deductions and tax-exempt importation of capital equipment. Climate actions require multi-year projection of investment costs. Annual budgeting may result to significant activities and outputs but cannot capture social and economic returns in the medium and long term.

Prior to the enactment of the Climate Change Act of 2009, the Philippine government had appropriated US \$ 1.57 billion for direct and indirect climate change-related programs (cited in the NCCAP 2011-2028). A 2010 study “National Environmental, Economic and Development Study (NEEDS) for Climate Change” conducted by the Resources, Environment and Economics Center for Studies (REECS) reported that external multilateral and bilateral sources extended US\$ 0.5 billion in grants and US \$ 0.35 billion in loans for climate related programs.

<sup>14</sup> Figure includes items categorized as Finance, Other - CCA/CCM, Other CCA/CCM - No code identified, and Other CC

The ODA Portfolio Review reports of the NEDA indicate climate change related ODA flows amounting to PHP 880.76 billion in loans and grants for 430 projects between 2010 and 2022. Ninety percent of the amount was in the form of loans. Loan proj

ects averaged PHP 4 billion while grant projects averaged PHP 324 million. The portfolio review disaggregates climate spending by type of climate action (i.e. mitigation and adaptation).

**TABLE 11. Summary of Climate change -related Official Development Assistance received by the Philippines, 2010-2022 (in PHP billion)**

Type	Adaptation		Mitigation		Combination		Total	
	Amount	No. of Projects	Amount	No. of Projects	Amount	No. of Projects	Amount	No. of Projects
Loan	412.56	103	285.38	79	102.58	42	800.52	183
Grant	28.18	170	30.66	104	21.41	78	80.24	247
Total	440.74	273	316.03	183	123.99	120	880.76	430

Source: NEDA. Various ODA Portfolio Review Reports

Climate finance data recorded by the National Economic Development Authority (NEDA) and Climate Change Commission (CCC) indicates government capacity to invest in climate action without necessarily and primarily leaning on public finance. National government agencies (NGAs) and LGUs can access climate funds from various sources, including multiplier investments from the private sector.

New fiscal policies, such as the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act of 2021, the Strategic Investment Priority Plan (SIPP), and the Sustainable Finance Roadmap, aim to foster an enabling environment for private sector participation in green investments. The 2022 SIPP was approved in May 2022 for Tier 2 funding (Official Gazette, 2022).<sup>15</sup> Green lanes for projects listed in the SIPP are now mandatory for all government agencies (Office of the President, 2023). The Department of Trade and Industry (DTI) and Board of Investments (BOI) are to set up a One Stop Action Center for Strategic Investments (OSAC-SI) as a single point of entry for SIPP projects.

New fiscal policies have yet to hit the ground. The Philippine government's budget allocation for climate and disaster resilience remains inadequate (cited in Chapter 15, PDP 2023-2028, NEDA, 2024). The proportion of government spending for climate change mitigation and adaptation to the total annual budget declined from 6.99% in 2017 to 5.77 percent in 2022.

Climate budgeting monitored through the LCCET focuses on climate expenditures as a proportion of the annual budget. It primarily leans on intended annual appropriations. Without a medium and long-term climate investment program, LGUs cannot widen the aperture for the generation of climate investment funds beyond and outside what is possible in the annual general fund. Only a medium and/or long-term climate investment program can justify the need to develop climate investment strategies.

<sup>15</sup> Tier 2 funding refers to new spending and expansion of Programs, Activities and Plans (P/A/Ps) of national government agencies to constitute the total proposed budget of the concerned agency.



## Local Transportation Planning and Management

The transport sector is highly liberalized and privatized. Public transport on land, sea and air is predominantly in the hands of the private sector. The new national transport policy provides combinations of cost-sharing, PPPs and privatization of public transport (NEDA Board Resolution No. 5, s. 2017). In the development of the electric vehicle industry, the government primarily targets private sector financing with offers of fiscal and non-fiscal incentives, concessional loan packages from GFI's and other financing institutions and grants and subsidies (Republic Act No. 11697; CREVI 2023-2040).

The new transport policy prioritizes urban and regional areas with emphasis on moving more people than vehicles, public mass transportation being given priority over private transport, importance of sidewalks, bicycle lanes and light electric transport, multimodality and interconnectivity and universal accessibility of transport infrastructure.

The policy on Local Public Transport Route Planning (LTPRP) suggests a shift from private sector dominance to public sector involvement in provision of public transportation services. However, there is no financing template. LGUs have yet to develop financial plans considering their own revenue capacity and capital investments and operating costs of the local public transportation system.

The guidelines on the preparation of LPTRP emphasize details on service frequency, number of vehicles, route structures, service plans, and other important requirements such as estimated passenger volume and inventory of transport facilities. While these satisfy data-driven decisions of the LTFRB in the issuance of franchises, they fall short of guiding LGUs in the preparation of local transportation master plans. Moreover, the guidelines for LPTRP preparation mainly focus on the transitory or ad hoc structure of the LPTRP team.<sup>17</sup> While the guidelines are clear on who prepares the plan, there is no clarity on who implements the plan. Apparently, the LPTRP planning exercise mainly satisfies the decision-making needs of the LTFRB more than the needs of the LGU to plan and manage local transport beyond traffic and routing.

Three alternative policy options are being put forward: one, upgrading of local traffic management offices to full-fledged transportation departments; two, improving vertical coordination and data exchange between LGUs, LTFRB, and LTO; and three, exploring possibility of entering the market as provided of local public transportation.

These propositions are founded on the following logic:

**One**, local public transportation route planning is currently based on ad hoc planning by a TWG and is primarily focused on transport routing. This plan is supposed to evolve into a local transportation master plan (LTMP) that includes not only route planning but management of the local transportation system including terminals, PUVs and other vehicles. Beyond traffic management, the LTMP includes connectivity to land use planning and incorporation of climate sensitive features such as mobility of people, multi-modal transportation system and transition to low-carbon transportation systems

(such as promotion and introduction of electric vehicles). The LTMP needs an organization with capabilities higher than traffic management.

Among the three pilot cities, Bacolod City has already inched forward with a Sanggunian Resolution to create a full-fledged local transportation authority.

**Two**, while the national transport policy and the LPTRP guidelines encourages stronger LGU ownership of local transportation planning and management and shift from private

<sup>17</sup> The LPTRP Team is composed of the following Local Chief Executive, Head of the Transport Committee, Planning and Development Coordinator, and representatives from various offices such as Traffic Management, Engineering, Agriculture, Tourism, and more.

sector to public sector dominance, essential information such as franchises and licenses are in the hands of national agencies, i.e. LTFRB and LTO. For data driven local traffic

and transportation management, LGUs and the concerned national agencies need to improve vertical coordination and exchange of data. In Tagbilaran City, the LGU and LTO have already initiated discussions in aid of data exchange.

**Three**, the national transportation policy recognizes private sector dominance in public

transportation. Nonetheless, the same policy encourages stronger LGU participation and ownership. The proposition is for LGUs to explore possibility of entering the market of public transportation services as a local enterprise. As a corporate body, LGUs are mandated to generate local sources of income. The current enterprise experience revolves around management of public markets, public transportation terminals and some utilities like water supply. Entry to a privatized sector may raise concerns regarding unfair competition as well as enterprise management capabilities.

### **Green Housing and Settlements**

Urban development and housing is a multi-faceted development arena with robust private sector involvement in housing, settlements, transportation, energy, and mixed-use real estate development, among others. The Urban Development and Housing Act of 1992 prioritizes public finance for housing and settlements of informal settlers. The premier agency for housing is the National Housing Authority (NHA), which derives financial resources from 50% of the annual net income of the Public Estates Authority (PEA), proceeds from the disposition of ill-gotten wealth administered by the National Home Mortgage Finance Corporation (NHMFC), proceeds from social housing tax (with the concurrence of LGUs) and tax on idle lands, proceeds from the sale and disposition of alienable public lands in urban areas, domestic and foreign investments through build-operate-transfer (BOT) schemes, and, loans, grants, bequests and donations from foreign sources.

Under the General Appropriations Act for FY 2024, the DHSUD is allocated a budget of PHP 2.66 billion, of which, PHP 344.56 million is for human settlements and urban development coordination; PHP 186.22 million for homeowners' associations and community development; PHP 157.53 for environmental land use and urban planning; and, PHP 122.26 million for housing and real estate development regulations. Also under the DHSUD is the PHP 750.8 million Pambansang Pabahay sa Pilipino (4PH) Program implemented in coordination with LGUs. More recently, DHSUD announced presidential approval of a sovereign guarantee to fast-track borrowing of housing agencies from the private sector (Presidential Communications Office, August 7, 2024).

Parallel to the implementation of the housing program, DHSUD adopted the Resilient and Green Human Settlements Framework (DHSUD Department Circular 2023-01 and 2023-03). The first circular is intended to provide a reference for stakeholders to pursue action-oriented paradigm shifts towards building safe, inclusive, resilient, and sustainable communities across the Philippines. The second circular provides guidance on using green development and a resilience-driven perspective to assess, develop, manage, and evaluate settlements and their component parts.

Green housing and settlements is an essential feature of a climate-sensitive urban development. The question is how to operationalize the framework. Three alternative policy options are put forward: one, green housing and settlements as mandatory; two, third-party rating and certification of green housing and settlements; and three, provision of fiscal incentives for green housing and settlements developers.

The propositions are founded on the following logic:

**One**, the framework is not self-executory. It can be operationalized only through an explicit policy – whether mandatory or voluntary. The question is viability in compliance and to what extent non-compliance is finalized. Moreover, there are cost considerations, such as up-front costs for land acquisition and development, research and materials development, and the still-high cost of greening, such as renewable energy generation and storage. International best practices in the United Kingdom, Germany, Japan and India, among others, suggest that green housing and settlements is voluntary and market-driven. On the other hand, the government can initiate operationalization of green housing and settlements of 4PH. However, this could lead to escalation of unit costs with immediate

impact on housing targets.

**Two**, international best practice also suggests efficacy of third-party (non-governmental), rating and certification. The Philippines already has a Philippine Green Building Council that is associated with global and regional green building councils with credible experience in third party rating and certification.

**Three**, similar to climate-related undertakings of the private sector (such as investments in renewable energy), provision of fiscal incentives can induce private capital flows towards green housing and settlements development.

## Local PPPs

The State recognizes the autonomy of LGUs in entering and implementing Local PPP Projects to enable them to attain their fullest development as self-reliant communities and make them more effective partners in the attainment of national goals (Sec. 2, RA 11966). This provision is embodied in RA 11966, otherwise known as the Public-Private Partnership Code of 2023.

This new policy allows LGUs to undertake major projects with private-sector participation. The law outlines more than 30 possible projects, including climate change adaptation and mitigation, disaster risk reduction and management infrastructure.

Contractual arrangements with private sector partners include Build-and-transfer (BT), Build-lease-and-transfer (BLT), Build-operate-and-transfer (BOT), Build-own-and-operate (BOO), Build-transfer-and-operate (BTO), Contract-add-and-operate (CAO), Develop-operate-and-transfer (DOT), Rehabilitate-operate-and-transfer (ROT), and Rehabilitate-own-and-operate (ROO).

The Implementing Rules and Regulations of the PPP Code provide guidance on local PPPs. These include:

- Approval by the local legislative council (Sangguniang Panlungsod in the case of cities) with prior confirmation by the Local Development Council (LDC). This approval authority is subject to the guidelines of the PPP Governing Board (Sec. 37, IRR of RA 11966).
- Local PPPs that affect national and sectoral development plans, as well as national projects, shall be endorsed by the national government through the concerned Regional Development Council (RDC) (Sec. 35). The endorsement shall be based on alignment with the Consolidated List of Investment Programs (CLIPs) and List of PPP Projects.
- Local PPP projects that use national government funds are subject to review by the concerned RDC in coordination with the Department of Finance (Sec. 36). The review criteria include guarantee of demand, guarantee of loan repayment, and guarantee of private sector return, among others.
- Local PPPs submitted for approval are deemed complete if they fulfill requirements such as a complete feasibility study (FS), traceable economic and financial model, proposed parameters, terms and conditions (PTCs), value for money (VFM) analysis,

and documentation of stakeholder consultations, among others (Sec. 40).

- If local PPP projects involve two or more local implementing agencies, they may be implemented by the national government subject to the approval process of national PPP projects; or by a higher level LGU subject to approval of the next higher level LGU (Sec. 46).

Two alternative policy options are explored in this study: one, additional guidelines for local PPPs involving two or more LGUs from different provinces or regions; two, guidance and criteria for determining the upper limit of local PPP projects.

These options are founded on the following logics:

**One**, existing guidelines do not indicate whether LGUs from different provinces or regions can enter into local PPP projects where one LGU is host to the project while the other is a cooperating partner and equity investor. For example, what is the guidance if an HUC (like Makati City or Quezon City) invests in a local PPP project implemented by a component city in other province or region (e.g. Tagbilaran City).

indicate limitations for local PPP projects. In national PPP projects, the NEDA Board and Investment Coordinating Committee (ICC) approves PPP projects worth PHP 15 billion and above as well as projects below PHP 15 billion but overlap or negatively affect other projects (Sec. 24.1, 24.2, Sec. 24.3, RA 11966). There is no similar guidance for local PPP projects that may be approved by the Local Sanggunian through the Local Development Council (Sec. 34)

**Two**, existing guidelines specify the upper limits of national PPP projects but do not

## NDC Implementation Plan and GHG Inventory Management

In the 2015 Paris Agreement, developing countries agreed to publicly outline Nationally-Determined Contributions (NDCs) that identify post-2020 climate actions. The Implementation Plan for the Republic of the Philippines Nationally Determined Contribution (NDC) 2023-2030, sets the Philippines on a pathway to low-carbon growth, delivering, once fully implemented, an aggregate reduction of approximately 990 million metric tons of carbon dioxide equivalent (mmtCO<sub>2</sub>e) against the baseline. The 2030 target is a 75% reduction of GHG emissions from agriculture, waste, industry, transport, and energy sectors from its 2020 baseline. The estimated cost of NDC implementation in the energy, transport, and solid waste management sectors is US \$ 70.7 billion.

**TABLE 12. Policies and Measures (PAMS) under the NDC Implementation Plan**

PAMs	Impact (mmtCO <sub>2</sub> e)	Estimated Cost (\$ million)
Energy Policies and Measures	587	36,455
Transport Policies and Measures	67	32,758
Waste Management Policies and Measures	66	1,575
Total	720	70,788

Source: Implementation Plan for the Republic of the Philippines Nationally Determined Contribution (NDC) 2023-2030

In parallel, the Philippine Greenhouse Gas Inventory Management and Reporting System (PGH-GIMRS), as stipulated in EO 174, s. 2014 and as operationalized through CCC Resolution No. 2018-003 Adopting the PGHGIMRS Guidance Document, CCC Office Order No. 2019-122 Operationalizing Executive Order No. 174, s.2014 and CCC Resolution No. 2018-003, assigns roles to sector agen-

<sup>16</sup> Tier 2 funding refers to new spending and expansion of Programs, Activities and Plans (P/A/Ps) of national government agencies to constitute the total proposed budget of the concerned agency.



cies of the national government. These include DA and PSA for agriculture, DENR for waste, industrial processes and product use and forestry and other land use, DOTr and DOE for transport, and the DOE for energy. The same EO provides that LGUs (and private sector) may be optionally invited to participate.

Three alternative policy options were explored in this study: one, decentralization of GHG inventory management; two, interfacing of NDC implementation plan and GHG inventory management and reporting; and three, green financing for local NDC policies, activities, and measures (PAMS).

These options are founded on the following logics:

**One**, the need to decentralize GHG inventory management. While it is essential to aggregate GHG inventory at the national level, actual inventories are at the local level and in privatized sectors of the economy. Carbon sinks (such as forests, wetlands, mangroves, etc.), GHG emissions, and actions towards reduction and avoidance happen in local areas, especially cities. Secondly, inventory management is not only about monitoring, reporting, and databasing but also about proactive actions towards reduction, avoidance, and, ideally, carbon neutrality. In connection with the NDC implementation plan, proactive and localized policies, activities and measures (PAMS) are needed. Most of PAMS related to the waste sector are already localized through local solid waste management plans (SWMPs).

**Two**, interfacing of NDC implementation plan and GHG inventory management and

reporting. Monitoring and evaluation of NDC implementation requires a baseline that can be established through the PGHGIMRS. Both the NDC and PGHGIMRS requires standardized monitoring, reporting and verification (MRV).

**Three**, green financing for local NDC PAMS. While NDC targets are broadly seen at the sector level, LGUs are encouraged to develop and implement local NDC PAMS. In fact, local expenditure patterns include public financing for solid waste management. LGUs can scale-up contributions to NDC implementation and GHG inventory management with appropriate support in green financing (and local capacity building).

### **Measuring, Reporting and Verification (MRV) and M&E**

Measuring, Reporting, and Verification (MRV) is a system specifically developed to measure, report, and verify results of mitigation actions; in particular, MRV of avoided emissions and GHGs removed from the atmosphere (through carbon sinks). The development of a national MRV system in the Philippines is still in progress. The system is particularly important in GHG inventory and accounting of the NDC implementation plan.

The National Evaluation Policy Framework (NEPF) does not explicitly cite MRV as a sub-system specific to M&E of climate outcomes regarding GHG emissions reduction. However, it is implied that MRV would be essential in the M&E of the NDC implementation plan, GHG inventory management, and reporting of internationally transferred mitigation outcomes (ITMOs).

Four alternative policy options are explored in this study: one, expand coverage of the National Evaluation Policy Framework (NEPF) to include M&E of locally funded projects; two, mobilizing local Project Monitoring Committees (PMCs) created under the Regional Project Monitoring and Evaluation System (RPMES) to monitor and manage the evaluation of all government projects implemented locally, including locally-funded projects; three, provision of regular budget for M&E activities of PMCs; and, four, building local capacity for MRV.

These options are founded on the following logic:

**One**, the NEPF and RPMES mainly cover national government projects and local government projects using national government funds. In practice, local government projects also include locally funded projects.

**Two**, PMCs have become a permanent feature of local government structures in close cooperation with the DILG. In fact, DILG forms part of local PMCs. The role and functions of the PMC can be expanded to also include monitoring of locally-funded projects. Local government agencies prepare annual accomplishment reports of programs, projects, and activities that include both national government funds and local funds.

### **Gender Equality, Disability and Social Inclusion (GEDSI)**

GEDSI, as a collective term, is relatively new in the Philippine social policy environment. Taken separately, there has been an abundance of social policies on gender and disability, most of which are within the framework of social protection and prevention of discrimination and violence. In fact, social services form part of a major cluster in the national government budget. This includes education, health, social services, housing, and employment.

The policy with the closest link to social inclusion is the policy of preventing social exclusion of persons with specific impairments (PWDs) or those with income difficulty (such as solo parents), rather than disability as a universal experience. The first policy that explicitly used the term “inclusion” is Executive Order No. 100, s.2019 Institutionalizing the Diversity and Inclusion Program, Creating and Inter-Agency Committee on Diversity and Inclusion, And For Other Purposes. However, this policy is focused on social inclusion in government organizations, particularly the prevention of social exclusion (from employment, training, education, recruitment and promotion in the hierarchy) on account of gender, sex, ethnicity, and other diversity characteristics.

Two alternative policy options are explored in this study: one, explicit articulation of GEDSI in sector policies and local government policies; and two, utilization of GEDSI as an indicator of organizational performance in the public sector.

**One**, while existing social policies emphasize elements of social protection and prevention of discrimination and violence, they are not yet bundled as GEDSI. Moreover, the treatment of disability primarily leans on particular impairments (of persons with disabilities) rather than disability as a universal experience. In the context of climate-sensitive urban development, it is one thing to give attention to particular impairments that can lead to exclusion and discrimination, and general disability with regard to collective needs and rights (e.g., clean air, clean water, transit and walkability of places of work and recreation, among others).

The collectiveness of GEDSI emphasizes the intersectionality of gender equality, disability,

**Three**, monitoring (as a continuous function) and evaluations (on a periodic basis) both require budgetary allocations. The work of the PMCs should be included in the regular budgets of LGUs. Such budgets can be embedded in the local budget appropriations.

Four, the DENR is the mandated agency for developing and implementing the MRV system. The effectiveness of the system can be enhanced through localization and active participation of LGUs (and the private sector). A prior requirement is MRV capacity at the individual and organizational levels.

and social inclusion in a continuum of needs and rights of the general population and the vulnerable and marginalized sectors.

The new transport policy, for example, highlights universal accessibility of public transportation infrastructure as much as particular attention to PWDs who may be discriminated and marginalized.

**Two**, GEDSI, as a collective term, could be used as an indicator of organizational performance. There may be conditions where organizations are strong on gender equality but less on inclusion related to ethnicity, religious affiliation, or particular impairments of individuals.

## Circular Economy in Cities

This policy area involves two inter-related concepts: CE and SCP. The former is a general economic concept that focuses on technology and solutions to reduce waste and residuals to achieve circularity of use of materials and resources (ADB, 2020). The latter is linked to the global consensus on sustainable development, particularly SDG 12: ensure sustainable consumption and production.

In the Philippine context, CE is an approach woven into the PAP4SCP centering on the production and consumption of “green” economic goods. As stated in the SCP action plan, the goal is “More Filipinos produce and consume green goods and services to accelerate the shift towards sustainable and climate-smart practices and lifestyles” (PAP4SCP, p. 29). Cities are particularly important because of high levels of population concentrations and the production and consumption of economic goods.

The PAPRSCP prioritizes four action nodes, namely: (a) policy and regulation; (b) research and development, innovation, and technology; (c) infrastructure; and (d) promotion and education. These action nodes are programmed over the short (2022-2023), medium (2024-2030), and long term (2031-2040). LGUs are cited as key players in the action nodes on policy and regulation, and infrastructure.

Four alternative policy options are explored in this study: one, integration of ecological solid waste management (ESWM) as climate action in the LCCAP; two, identification of climate risks and specification of climate outcomes in local solid waste management plans (SWMPs); three, for NEDA to roll-out and strengthen local capacity for implementation of Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP); and, four, green financing for local implementation of the PAP4SCP.

These options are founded on the following logic:

**One**, ESWM is, by far, the country’s longest and richest experience related to circular economy with direct relevance to climate change mitigation and adaptation. It is the most tangible platform for promoting sustainable consumption and production. It should be integrated into the LCCAP as a continuing climate-oriented program.

**Two**, identification of climate risks and specification of climate outcomes in the SWMP. The 2010 National GHG Inventory indicates that waste contributed 15.559 mmtCO<sub>2</sub>e (10.8%) to total non-LUCF emissions. However, the current state of SWMPs does not include an accounting of GHG emissions and outcomes related to reduction and avoidance. The 2010 NSWMC guidebook for the formulation of SWMPs does not include climate considerations in the plan structure.<sup>17</sup> Plan outputs mainly include the volume of waste collection and estimates of waste

reduction at source, waste diversion, and waste recycling, as well as efficiency measures such as collection rate and waste diversion rate. Climate-sensitive SWMP can help account for ESWM contributions to GHG inventory management and NDC implementation.

**Three**, roll-out of the PAP4SCP. In the timeline, cascading, budgeting, and programming were supposed to happen in 2022. Many LGUs may not even be aware of the PAP4SCP.

**Four**, green financing for local implementation of the PAP4SCP. The PAP4SCP has identified potential sources of green financing for the implementation of relevant projects (see Table 13). Cities (and LGUs in general) could be encouraged to sustain CE in SWMP and implement local PAP4SCP projects if they are made aware of the financing

<sup>17</sup> See: NSWMC. (2010). Guidebook for Formulation of Solid Wastes Management Plan. Retrieved from <https://nswmc.emb.gov.ph/wp-content/uploads/2017/09/FSWMP-Proof-Layout.pdf>

opportunities. These would include knowledge on eligibility requirements, process

flows and mechanisms.

**TABLE 13. Potential Sources of Green Financing**

Fund	Description	Purpose
Renewable Energy Trust Fund (RETF)	<ul style="list-style-type: none"> <li>Established under the Renewable Energy Act of 2008</li> <li>Administered by the DOE as a special account in any government financing institution (GFI)</li> </ul>	<ul style="list-style-type: none"> <li>Research, development, demonstration and promotion of RE systems</li> <li>Development and operation of new RE sources for power and non-power applications</li> </ul>
Energy Regulation (ER) 1-94	<ul style="list-style-type: none"> <li>Mandates power generation companies and/or energy resource developers to set aside one centavo per kilowatt-hour (PHP 0.01/kWh) of total sales as financial benefits to host communities</li> </ul>	<ul style="list-style-type: none"> <li>Can be tapped by LGUs to fund projects specific to electrification, development and livelihoods, reforestation, watershed management, health and environmental enhancement.</li> </ul>
Air Quality Management Fund (AQMF)	<ul style="list-style-type: none"> <li>Created under the Clean Air Act of 2009</li> <li>Sourced from fines and damages awarded by the Pollution Adjudication Board and proceeds from licenses and permits issued by the DENR, emission fees, and donations and endowments,</li> </ul>	<ul style="list-style-type: none"> <li>Finance the containment, removal, and clean-up operations of the Government in air pollution cases and guarantee the restoration of ecosystems and rehabilitate areas affected by the acts of violators of the Act</li> <li>Support research, enforcement and monitoring activities, and capabilities of the relevant agencies and provide technical assistance to the relevant agencies</li> </ul>
Clear Water Management Fund	<ul style="list-style-type: none"> <li>Created under the Clean Water Act of 2004</li> <li>Similar to the Air Quality Management Fund, funds are sourced from fines, damages, fees, donations and endowments</li> </ul>	<ul style="list-style-type: none"> <li>Similar to the Air Quality Management Fund, support containment, removal and clean-up of areas affected by violations of the Clean Water Act</li> </ul>
DOST Grants-in-Aid (GIA) Program	<ul style="list-style-type: none"> <li>Agency appropriation</li> </ul>	<ul style="list-style-type: none"> <li>Grants for the implementation of R&amp;D initiatives that lead to local and appropriate technologies with socioeconomic benefits for the people</li> <li>Support proposals that forge linkages among industry, the academe, and government to ensure the success of research undertakings and the development of demand-driven technologies</li> </ul>
Innovation Fund	<ul style="list-style-type: none"> <li>Created pursuant to the Philippine Innovation Act of 2019 (RA 11293)</li> <li>Grant funds administered by the National Innovation Council</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen entrepreneurship and enterprises engaged in developing innovative solutions, benefiting the poorest of the poor</li> </ul>
Global Environment Facility (GEF)	<ul style="list-style-type: none"> <li>Financial mechanism for various multilateral environmental agreements (MEAs)</li> </ul>	<ul style="list-style-type: none"> <li>Grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants</li> </ul>
Green Climate Fund (GCF)	<ul style="list-style-type: none"> <li>USD 10.3 billion funding support facility established under the UNFCCC</li> </ul>	<ul style="list-style-type: none"> <li>Help developing countries limit or reduce GHG emissions and adapt to the adverse impacts of climate change by financing low-emission and climate-resilient projects and programs developed by both the public and private sectors.</li> </ul>
10YFP Trust Fund	<ul style="list-style-type: none"> <li>Principal means of collecting and allocating financial resources to implement SDG 12.<sup>18</sup></li> </ul>	<ul style="list-style-type: none"> <li>Supports the implementation of the six thematic programs of the 10YFP and innovative SCP projects that address national and regional priorities of developing countries and countries with economies in transition.</li> </ul>

Source: PAP4SCP

<sup>18</sup> SDG 12: Ensure sustainable consumption and production patterns.



## PRIORITIZED POLICY OPTIONS

Using the deliberative policy analysis approach, stakeholders in pilot cities jointly determined priority policy areas and alternative policy options based on their contexts. Each FGD group determined top three priorities:<sup>20</sup>

In Tagbilaran (30-31 July 2024), two groups separately rated the priority alternative options. The first group (6 persons) comprised representatives from the federation of tricycle drivers, jeepney transport group, power distribution company, and real estate board. The second group (9 persons) comprised representatives from local legislative council, city engineering, city traffic management

office, city disaster risk reduction and management office, and city planning and development office.

In Bacolod City (11 July 2024), the rating was conducted by a mixed group (28 persons) composed of representatives from local government departments (city planning and development office, transportation, environment and natural resources, budget, social services, disaster risk reduction and management, engineering), legislative council, people's organization and a representative from the Land Transportation Office (LTO).

**TABLE 14. Prioritized Alternative Policy Options**

Pilot City	Policy Area	Alternative Policy Options
Antipolo	Green housing and settlements	<ul style="list-style-type: none"> <li>Green housing and settlements as mandatory</li> <li>Third-party rating and certification of green housing and settlements</li> <li>Fiscal incentives for green housing and settlements</li> </ul>
	Climate finance	<ul style="list-style-type: none"> <li>Enhance LCCET to include monitoring of actual climate expenditures</li> <li>Formulate medium-term local climate investment program</li> </ul>
	NDC implementation and GHG inventory management	<ul style="list-style-type: none"> <li>Vertical coordination between LGUs and NDC TWG and sector agencies</li> <li>Build local capacity for MRV on GHG</li> <li>Green financing for local NDC policies, activities and measures (PAMs)</li> </ul>
Bacolod	Local transportation planning and management	<ul style="list-style-type: none"> <li>Local public transportation as LGU enterprise</li> <li>Enhanced coordination between LGUs, LTFRB and LTO</li> </ul>
	Green housing and settlements	<ul style="list-style-type: none"> <li>Green housing and settlements as mandatory</li> <li>Third-party rating and certification of green housing and settlements</li> <li>Fiscal incentives for green housing and settlements</li> </ul>
	Climate finance	<ul style="list-style-type: none"> <li>Enhance LCCET to include monitoring of actual climate expenditures</li> <li>Formulate medium-term local climate investment program</li> </ul>
Tagbilaran	Local transportation planning and management	<ul style="list-style-type: none"> <li>Local public transportation as LGU enterprise</li> <li>Enhance coordination between LGUs, LTFRB and LTO</li> </ul>
	Green housing and settlements	<ul style="list-style-type: none"> <li>Green housing and settlements as mandatory</li> <li>Third-party rating and certification of green housing and settlements</li> <li>Fiscal incentives for green housing and settlements</li> </ul>
	NDC implementation and GHG inventory management	<ul style="list-style-type: none"> <li>Vertical coordination between LGUs and NDC TWG and sector agencies</li> <li>Build local capacity for MRV on GHG</li> <li>Green financing for local NDC policies, activities and measures (PAMs)</li> </ul>
	Climate finance	<ul style="list-style-type: none"> <li>Enhance LCCET to include monitoring of actual climate expenditures</li> <li>Formulate medium-term local climate investment program</li> </ul>

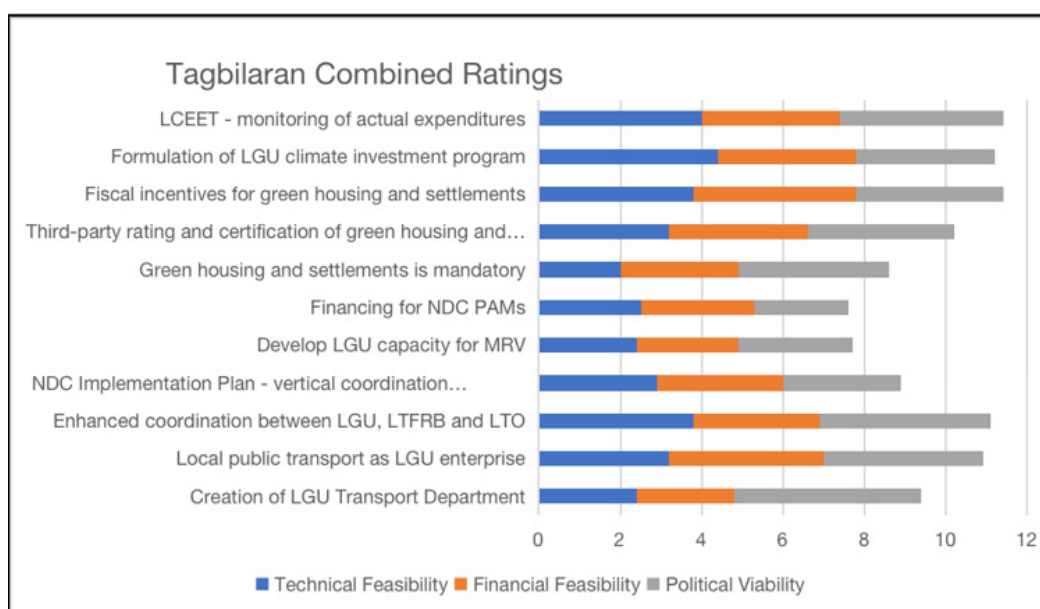
<sup>19</sup>Tagbilaran stakeholders added a fourth priority: NDC implementation plan and GHG inventory management.

Four policy areas were prioritized, including NDC implementation and GHG inventory management added by Tagbilaran stakeholders. Across these policy areas are ten (10) alternative policy options. Each alternative policy option was examined to assess the chances of operationalization based on three criteria:

- Technical feasibility - availability and access to technical guidelines, local capacity, availability of capacity development support, knowledge products.
- Financial feasibility – affordability of the cost of implementation, expected benefits, chances of budgetary support.
- Political viability – will and vision of the local chief executive, political considerations (anticipated public support or resistance).

Each criterion was weighted on a scale of 1 to 5: 1 = very low; 2=low; 3=high; 4=very high; and, 5= extremely high. The overall rating is the weighted averages of the three criteria.

FIGURE 11. COMBINED RATINGS: TAGBILARAN



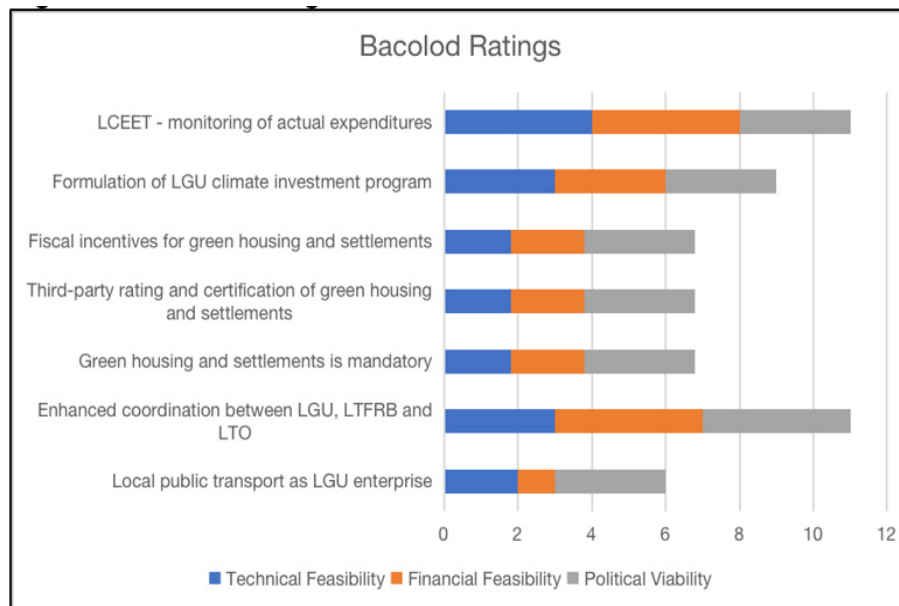
### Tagbilaran Ratings

Tagbilaran stakeholders gave “very high” (combined) ratings of feasibility and political viability (score of 3.6 and above) on LCCET enhancement (monitoring of actual expenditures), fiscal incentives for green housing and settlements, formulation of LGU climate investment program, enhanced coordination between LGU, LTFRB and LTO and local public transport as LGU enterprise. Only one alternative policy option – financing for local NDC PAMS – is on the “low” side. All others are on the “high” side (score of 2.6 to 3.5).

There are alternative policy options where the political criterion is relatively more significant than the technical and financial criteria (e.g) local public transportation planning and management, and green housing and settlements.

On the other hand, there are alternative policy options where the technical criterion is higher than the financial and political criteria (e.g., LCCET enhancement and formulation of the local climate investment program).

FIGURE 12. BACOLOD RATINGS

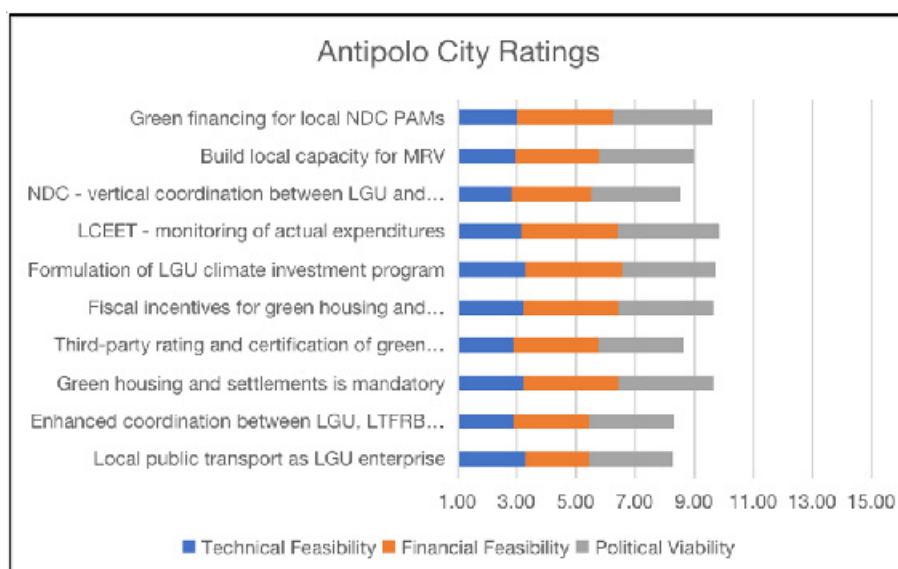


### Bacolod Ratings

Bacolod stakeholders gave “very high” ratings (3.6 and above) on enhanced coordination between LGU, LTFRB, and LTO, and, LCCET monitoring of actual climate expenditures. On the “high” side is the formulation of the LGU climate investment program. All other alternative policy options are on the “low” side

of feasibility and political viability. In all alternative policy options, the political criterion is relatively higher than the financial and technical criteria. FGD participants cited the vision and political desire of the LCE as bases.

FIGURE 13. ANTIPOLO RATINGS

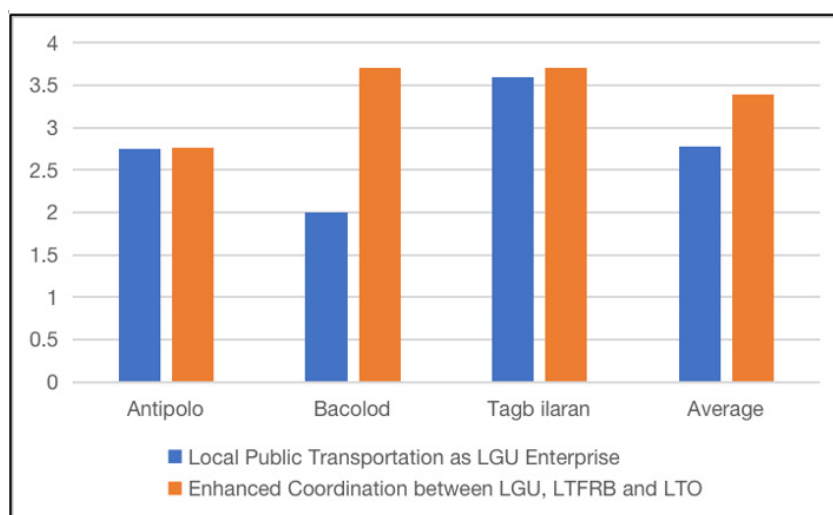


### Antipolo Ratings

Two FGDs were conducted in Antipolo City, one with the DILG and the other with LGU officials and LGU partners from the academe

and private sector. The rating exercise was done only during the second FGD.

FIGURE 14. COMPARATIVE RATINGS OF ALTERNATIVE POLICY OPTIONS ON LOCAL TRANSPORTATION PLANNING AND MANAGEMENT



### Priority Policy Area 1: Local Transportation Planning and Management

Two alternative policy options were examined according to technical and financial feasibility and political viability: (a) local public transportation as an LGU enterprise; and (b) enhancing coordination between LGUs, LTFRB, and LTO through data-driven local transportation planning and management. A third option, creation of an LGU transportation management office as a full-fledged transport department, was discussed only in Tagbilaran City.

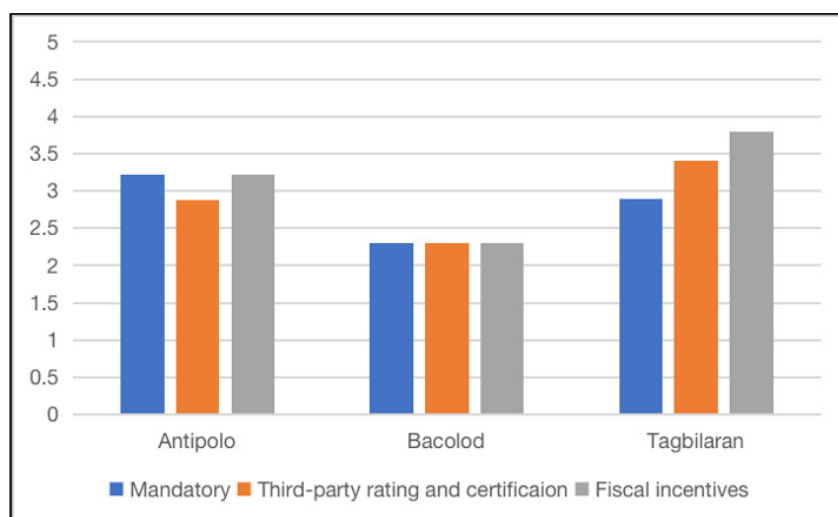
The topic was no longer discussed in Bacolod City since the city council has already passed a resolution creating a local transport authority. No rating was conducted in Antipolo City, but, during the FGD on 29 August 2024, stakeholders highlighted the need for stronger local ownership including, devolution of franchising authority in some parts of the city.

All pilot cities gave a high rating on the enhancement of vertical coordination between LGUs and the LTFRB and LTO. This is primarily anchored on the logic that local transportation management can only be effective if LGUs have access to data (presently in the hands of the LTFRB and LTO) for data-driven decision making.

Tagbilaran and Antipolo offer a welcoming attitude to the entry of LGUs in provision of transportation services but suggest further examination. Bacolod City is particularly skeptical based on potential negative impacts on private sector investments in the transportation sector and probable displacement of small transport operators. In fact, Bacolod City recently received a donation of nine electric vehicles but has not yet decided whether to operate the vehicles as a business enterprise.



FIGURE 15. COMPARATIVE RATINGS OF ALTERNATIVE POLICY OPTIONS ON GREEN HOUSING AND SETTLEMENTS



## Priority Policy Area 2: Green Housing and Settlements

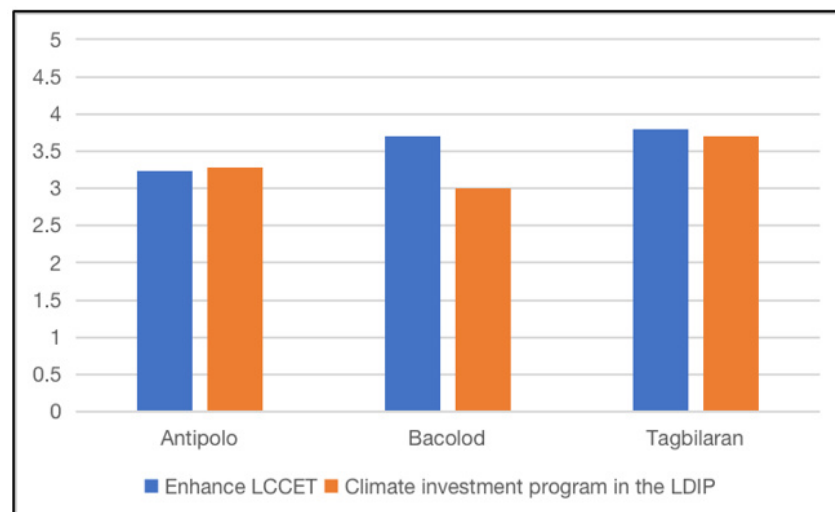
Although the DHSUD has officially adopted the green housing and settlements framework, as yet there are no specific guidelines on how this framework would be implemented. International best practice suggests that green housing and settlements is market driven where standards of rating and certification are conducted by independent entities such as multi-stakeholder green building councils.

Notwithstanding absence of clear policy, three alternative policy options were examined: (a) green housing and settlements as mandatory; (b) third-party rating and certification; and, (c) provision of fiscal incentives for voluntary and market-driven green housing and settlements.

Among the three pilot cities, Tagbilaran gave highest ratings for third-party certification and rating and fiscal incentives for green housing and settlements. In comparison, Bacolod gave relatively lower ratings for all three alternative policy options.

The consensus among stakeholders in both cities suggests that it would be difficult to implement a mandatory policy on green housing and settlements on account of development costs, availability of materials and purchasing power of buyers. Cities, and the whole government in general, are still grappling with the housing gap and intermittent need for low-cost housing for the homeless, families living in hazard zones and those displaced by disasters.

FIGURE 16. COMPARATIVE RATINGS OF ALTERNATIVE POLICY OPTIONS ON LOCAL CLIMATE FINANCE



### Priority Policy Area 3: Climate Finance

This policy area was deliberated upon in the context of existing advances in climate policy where climate considerations have been mainstreamed in planning, programming and budgeting. On the other hand, there is no explicit policy on how much government should invest on climate actions except for the PHP 1 billion People's Survival Fund (PSF) hypothecated for local climate adaptation actions. The Climate Change Expenditure Tagging (CCET) system does not yet equate to a climate investment policy that hypothecates investments beyond annual budget tagging.

Two alternative policy options were examined and rated: (a) enhancement of the LCCET to include monitoring of actual expenditures; and, (b) inclusion of a medium term climate investment program in the Local Development Investment Program (LDIP). The first option takes into account the current limitations of the LCCET which relies on intended budgets based on what is tagged in the Annual Investment Program (AIP). The actual approved budget is only known when the local legislative council enacts the budget appropriations ordinance. It is possible to track actual climate expenditures by consolidating relevant figures in the annual accomplishment reports of LGU agencies.

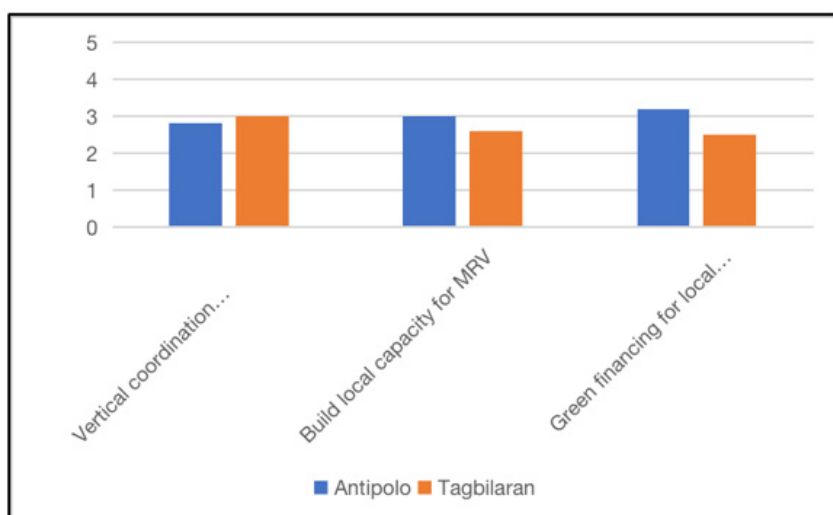
The second option pertains to programming of medium-term investments. Local governments are mandated to prepare LDIPs. They

can include climate investments in the LDIP, not necessarily as autonomous budgets but as proportion of climate budgets to the total budget. This approach is within the framework of mainstreaming climate change in planning, programming and budgeting. What needs to have is a clear logic – the climate risk being addressed and the expected climate outcome/s. These data should be available in the Climate and Disaster Risk Assessment (CDRA) and the Local Climate Change Action Plan (LCCAP).

Bacolod and Tagbilaran both gave “very high” ratings on the enhancement of LCCET to include monitoring actual expenditures. There is variance between the two on the inclusion of climate investment in the LDIP. Tagbilaran gave a “very high” rating on the formulation of an LGU medium-term climate investment program. In comparison, Bacolod gave a relatively lower rating on this option.

Antipolo's interpretation of LCCET enhancement is explicitly addressed to the existing system itself – that the LCCET does not capture data on actual climate expenditures of LGUs. Instead, it raises the idea of developing an alternative system and abandoning the existing mode of tagging budget lines in the AIP of LGUs. It also raises concerns that LGUs might submit LCCET reports only for compliance.

FIGURE 17. TAGBILARAN AND ANTIPOLLO COMPARATIVE RATINGS OF ALTERNATIVE POLICY OPTIONS ON NDC IMPLEMENTATION AND GHG INVENTORY MANAGEMENT



## Priority Policy Area 4: NDC Implementation and GHG Inventory and Management

Alternative policy options for this policy area were examined only by Tagbilaran and Antipolo stakeholders. The deliberations took into consideration the NDC Implementation Plan 2023-2030 and the Philippine Greenhouse Gas inventory and Management System (PGHGIMRS) by virtue of EO 174, s. 2014. Guidelines for localization of the NDC Implementation Plan and PGHGIMRS are not yet available. On the other hand, stakeholders are cognizant of the need to have a clear GHG inventory as reference for targeting GHG emissions reductions in the NDC by 2030. While policy suggests primacy of roles of sector agencies and the private sector, actual GHG inventories and emissions occur locally – whether in transport, energy, agriculture, forestry, solid waste and other sectors.

Local governments can play a role in GHG inventory, management and reporting and implementation of NDC policies, activities and measures (PAMs).

Three alternative policy options were examined and rated: (a) vertical coordination between LGUs and the NDC TWG and sector agencies; (b) building local capacity for MRV of GHG; and, (c) green financing for local NDC PAMs.

The two pilot cities gave high ratings on the three alternative policy options. The perceptions are based on the idea that these options are 'must-have' conditions for LGUs for participate in NDC implementation and GHG inventory management.

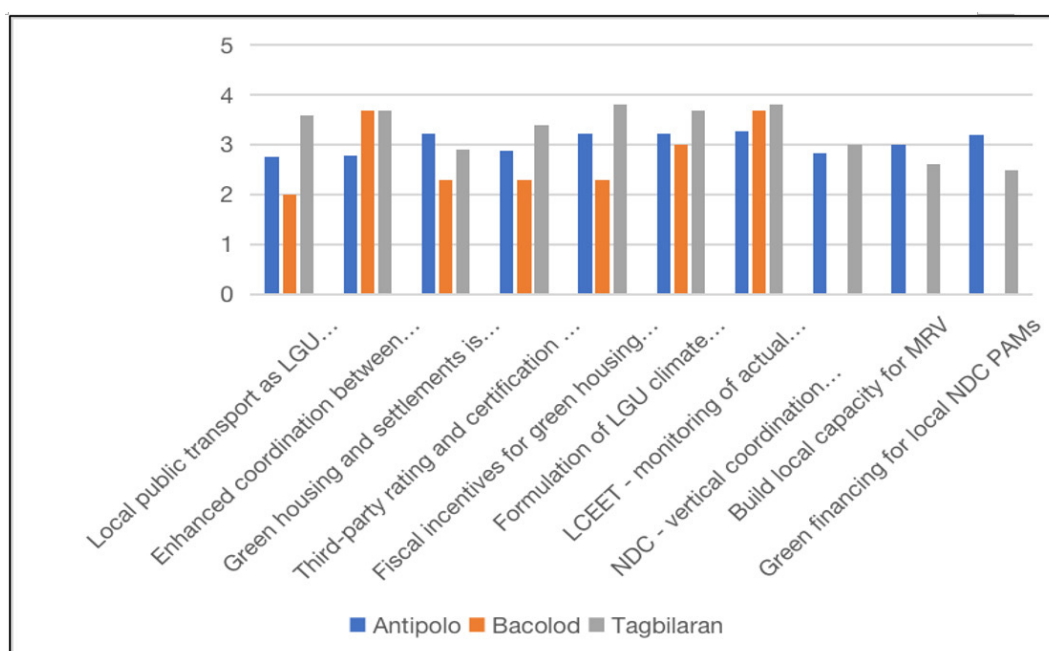
### Synthesis of Prioritized Alternative Policy Options

The rating exercises enabled determination of common and differentiated priorities of pilot cities. They also facilitated delineation of boundaries between options on the high priority list and those in the low priority list. In this regard, priority refers to estimation of probability that the proposed alternative policy options can be translated to actual policy direction and action.

Four alternative policy options with high scores are on the list of all pilot cities:

- Formulation of local climate investment program as part of the LDIP;
- Enhancement of the LCCET, particularly monitoring of actual expenditures;
- Provision of fiscal incentives for green housing and settlements; and,
- In local transportation planning and management, enhanced coordination between LGUs, LTFRB and LTO.

FIGURE 18. PILOT CITY PRIORITY OPTIONS: COMPARATIVE RATINGS



There are other alternative policy options that are on the high side of probability, namely:

- a) Local public transport as LGU enterprise
- b) Green housing and settlements as mandatory
- c) Third-party rating and certification
- d) Fiscal incentives for green housing and settlements
- e) NDCs – vertical coordination between LGUs and NDC TWG and sector agencies
- f) Building local capacity for MRV; and,
- g) Green financing for local NDC PAMs

They are categorized as differentiated priorities mainly because they do not appear in the high priorities of Bacolod City. However, they are common priorities of Antipolo and Tagbilaran. The rating exercises in Bacolod City did not include deliberation on the NDC implementation plan and GHG inventory management.

Table 15. Comparative Priorities of Pilot Cities

	Antipolo	Bacolod	Tagbilaran
<b>Common High Scores</b>	a) Formulation of local climate investment program as part of the LDIP b) LCCET Enhancement – monitoring of actual expenditures c) Fiscal incentives for green housing and settlements d) In local transportation management, enhanced coordination between LGUs, LTFRB and LTO		
<b>Differentiated High Scores</b>	<ul style="list-style-type: none"> <li>• Local public transport as LGU enterprise</li> <li>• Green housing and settlements as mandatory</li> <li>• Third-party rating and certification</li> <li>• Fiscal incentives for green housing and settlements</li> <li>• NDCs – vertical coordination between LGUs and NDC TWG and sector agencies</li> <li>• Building local capacity for MRV</li> <li>• Green financing for local NDC PAMs</li> </ul>		<ul style="list-style-type: none"> <li>• Local public transport enterprise</li> <li>• Green housing and settlements as mandatory</li> <li>• Third-party rating and certification</li> <li>• Fiscal incentives for green housing and settlements</li> <li>• NDCs – vertical coordination between LGUs and NDC TWG and sector agencies</li> <li>• Building local capacity for MRV</li> <li>• Green financing for local NDC PAMs</li> </ul>



## 7. COURSES OF ACTION, PROBABLE OUTCOMES AND POTENTIAL BENEFITS

Although the policy analysis highlights issues, gaps and challenges in the existing enabling environment, the alternative policy options are solutions oriented. As Bellinger (2007) argues, the goal of policy is allocative

efficiency (that maximizes the difference between total costs and expected benefits), equity and political practicality. The latter emphasizes availability of political support for institutionalization of policy.

### Localization of Climate Finance and Investment Policy

#### Formulation of local climate investment program as part of the LDIP

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>Inclusion of climate investment in the LDIP</li> <li>Use LCCET budget experience to estimate proportion of LDIP for climate investments</li> <li>Use LCCET budget experience to determine priority investments in line with the strategic priorities of the NCCAP</li> </ul>	<ul style="list-style-type: none"> <li>Non-inclusion of the climate investment program in the LDIP (if it does not form part of the ELA or priority of the LCE).</li> <li>Continuation of the annual climate budget tagging.</li> </ul>	<ul style="list-style-type: none"> <li>Multi-year climate investment programming beyond 3 years if financed through local PPP, local sources of revenue or other sources of green financing.</li> </ul>	<ul style="list-style-type: none"> <li>Increased adaptive capacity of communities and natural ecosystems.</li> <li>Reduction of vulnerability (of populations and ecosystems).</li> <li>Contributed to national GHG inventory management and NDC implementation.</li> </ul>

#### Enhance LCCET Guidelines to include monitoring and reporting of actual climate expenditures

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>CCC, DBM and DILG revise DBM-CCC-DILG JMC 2015-01 on LCCET.</li> <li>Local PMCs consolidate climate expenditures from annual accomplishment reports of LGU line agencies/departments.</li> </ul>	<ul style="list-style-type: none"> <li>No or delayed revision of DBM-CCC-DILG JMC 2015-01.</li> </ul>	<ul style="list-style-type: none"> <li>LGU mobilizes PMC to monitor actual climate expenditures using data from annual accomplishment reports of LGU agencies/departments.</li> </ul>	<ul style="list-style-type: none"> <li>More accurate and transparent monitoring of LGU climate expenditures.</li> <li>Actual expenditures form stronger basis for public communication of climate budgets.</li> </ul>

## Localization of Transport Planning and Management

### Improved coordination and data exchange between LGUs, LTFRB and LTO

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>Improve LGU access to LTFRB and LTO digital information system</li> </ul>	<ul style="list-style-type: none"> <li>Slow transition from local traffic management to local transportation management.</li> <li>Bureaucratic and fiscal hurdles in upgrading local traffic management office to a full-fledged local transportation management office.</li> </ul>	<ul style="list-style-type: none"> <li>LGUs upgraded local traffic management office to a transport planning and development office</li> <li>Automated data interface between LGU, LTFRB and LTO on franchises and licenses</li> </ul>	<ul style="list-style-type: none"> <li>Improved capacity for local transport planning and management.</li> <li>Evidence-based allocation of franchises and routes.</li> <li>Improved LGU capacity for GHG inventory and management in the transport sector.</li> <li>Data-informed local transportation sector</li> <li>LPTRP integrated to the Local Transportation Management Plan (LTMP)</li> </ul>

### Local public transportation as LGU enterprise

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>Local Sanggunian authorizes LCE to establish local public transportation services as an enterprise.</li> </ul>	<ul style="list-style-type: none"> <li>Possible resistance from the local Sanggunian.</li> <li>Possible protest actions from private transport operators.</li> <li>Potential displacement of private transport operators and investors.</li> </ul>	<ul style="list-style-type: none"> <li>LGU invests in local public transportation through local PPP.</li> <li>Local public transportation enterprise forms part of the LDIP.</li> </ul>	<ul style="list-style-type: none"> <li>Increased public dominance in the local public transportation system.</li> <li>Enhanced readiness to pre-empt transportation crisis in the event of market failure.</li> </ul>

## Green Housing and Settlements

### Green housing and settlements as voluntary (self-regulation)

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>DHSUD-DPWH JMC or Presidential Executive Order promulgating green housing and settlements as voluntary.</li> </ul>	<ul style="list-style-type: none"> <li>Non-operationalization of green housing and settlements and green buildings frameworks for lack of clear guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Philippine Green Building Council promotes self-regulation of green housing and settlements and green buildings in collaboration with DHSUD, DPWH and real estate developers and construction companies.</li> </ul>	<ul style="list-style-type: none"> <li>Resilient and green housing and settlements introduced in the real estate and construction markets.</li> <li>Philippine real estate developers and construction companies adopted international best practices of the World Green Building Council.</li> </ul>

### Third-party rating and certification of green housing and settlements

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>DHSUD-DPWH JMC or Presidential Executive Order promulgating green housing and settlements as voluntary includes provision on third-party rating and certification.</li> </ul>	<ul style="list-style-type: none"> <li>Non-operationalization of the green housing and settlements and green buildings frameworks for lack of standards jointly developed with the private sector.</li> <li>No public support for green housing and settlements and green buildings due to perceptions of high cost.</li> </ul>	<ul style="list-style-type: none"> <li>Philippine Green Building Council spearheads development of standards of green housing and settlements.</li> <li>New market for green housing and settlements spurred research and development of green housing and construction materials.</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced climate sensitivity of urban housing and settlements.</li> <li>Applied international standards on green housing and settlements to local contexts.</li> </ul>

### Fiscal incentives for green housing and settlements

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>DHSUD-DPWH JMC or Presidential Executive Order promulgating green housing and settlements as voluntary includes provision on fiscal incentives for private sector investments in green housing and settlements and green buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Private sector hesitance to accept fiscal incentives in view of uncertainties in upfront costs for research, development and supply of green materials as well as probable lack of demand.</li> </ul>	<ul style="list-style-type: none"> <li>Private developers and construction companies accessed green finance.</li> <li>High returns on investment for green housing and settlements and green buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced climate sensitivity of urban housing and settlements.</li> <li>Mobilized green financing for green housing and settlements and green buildings.</li> <li>Appreciation of real estate price per unit of floor area of housing and buildings.</li> <li>Market-driven expansion of green housing and settlements.</li> </ul>

## Fiscal incentives for green housing and settlements

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>DHSUD-DPWH JMC or Presidential Executive Order promulgating green housing and settlements as voluntary includes provision on fiscal incentives for private sector investments in green housing and settlements and green buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Private sector hesitance to accept fiscal incentives in view of uncertainties in upfront costs for research, development and supply of green materials as well as probable lack of demand.</li> </ul>	<ul style="list-style-type: none"> <li>Private developers and construction companies accessed green finance.</li> <li>High returns on investment for green housing and settlements and green buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced climate sensitivity of urban housing and settlements.</li> <li>Mobilized green financing for green housing and settlements and green buildings.</li> <li>Appreciation of real estate price per unit of floor area of housing and buildings.</li> <li>Market-driven expansion of green housing and settlements.</li> </ul>

## Local NDC Implementation and GHG Inventory Management

### Decentralize GHG inventory management

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>CCC and sector agencies to disaggregate GHG inventory by city.</li> <li>CCC and sector agencies to assist development of city-based GHG inventory management and reporting system.</li> </ul>	<ul style="list-style-type: none"> <li>Unsorted policy gap with regards localization of GHG inventory management and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>CCC and sector agencies transfer GHG inventory management capacity to cities.</li> </ul>	<ul style="list-style-type: none"> <li>Cities could data-inform M&amp;E and planning of climate mitigation actions.</li> <li>Cities could establish city-specific database of GHG inventory that could be used for accessing climate funds.</li> </ul>

## Interface NDC Implementation Plan and GHG Inventory Management

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>CCC and National NDC TWG formulates guidelines on harmonization of NDC implementation and GHG inventory management and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>Delay in formulation of harmonization guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Harmonization guidelines accompanied by local capacity development.</li> <li>DENR-EMB rolls-out GHG inventory manual.</li> </ul>	<ul style="list-style-type: none"> <li>NDC programming and M&amp;E informed by hard data from GHG inventory.</li> </ul>



## Green financing for local NDC PAMs

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>DOF, DBM, DILG and CCC collaborate to develop and disseminate guidebook on green financing for LGUs.</li> </ul>	<ul style="list-style-type: none"> <li>Oversight agencies take time to initiate action on the guidebook.</li> </ul>	<ul style="list-style-type: none"> <li>DILG takes proactive measures in developing a guidebook on green financing for LGUs.</li> </ul>	<ul style="list-style-type: none"> <li>Cities (and LGUs in general) are properly guided in developing NDC PAMs financing strategies.</li> </ul>

## Articulation of GEDSI in Social Policy

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>Legislative action to enact law to consolidate existing social policies under the umbrella of GEDSI.</li> <li>Presidential EO enjoining all national government agencies and local government units to adopt GEDSI.</li> </ul>	<ul style="list-style-type: none"> <li>Policies on social protection, inclusion and anti-discrimination remain fragmented.</li> </ul>	<ul style="list-style-type: none"> <li>Senate and/or House bill on GEDSI.</li> <li>Presidential EO on GEDSI.</li> </ul>	<ul style="list-style-type: none"> <li>Fragmented policies on social protection, inclusion and anti-discrimination consolidated under one omnibus guidelines on GEDSI.</li> </ul>

## Further elaboration of guidelines for local PPPs

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>NEDA, DBM and DILG collaborate to expand coverage of the NEPF and RBMES to include locally-funded projects.</li> <li>DENR and CCC collaborate with DILG to promote local capacity development for MRV.</li> </ul>	<ul style="list-style-type: none"> <li>NEPF and RBMES guidelines remain unchanged.</li> <li>MRV capacity remains at the national level.</li> </ul>	<ul style="list-style-type: none"> <li>Local PMCs include locally-funded projects in M&amp;E.</li> <li>M&amp;E activities of local PMCs provided with regular budget.</li> <li>Local PMCs develop capacity for MRV.</li> </ul>	<ul style="list-style-type: none"> <li>Cities (and LGUs in general) enhance M&amp;E with MRV data on GHG (emissions, avoidance and reduction).</li> </ul>

## M&E and MRV of Local Government Projects

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>NEDA, DBM and DILG collaborate to expand coverage of the NEPF and RBMES to include locally-funded projects.</li> <li>DENR and CCC collaborate with DILG to promote local capacity development for MRV.</li> </ul>	<ul style="list-style-type: none"> <li>NEPF and RBMES guidelines remain unchanged.</li> <li>MRV capacity remains at the national level.</li> </ul>	<ul style="list-style-type: none"> <li>Local PMCs include locally-funded projects in M&amp;E.</li> <li>M&amp;E activities of local PMCs provided with regular budget.</li> <li>Local PMCs develop capacity for MRV.</li> </ul>	<ul style="list-style-type: none"> <li>Cities (and LGUs in general) enhance M&amp;E with MRV data on GHG (emissions, avoidance and reduction).</li> </ul>

## Circular Economy and Climate Action in Cities

Courses of Action	Possible outcomes in view of uncertainties	Possible outcomes in view of opportunities	Potential benefits
<ul style="list-style-type: none"> <li>Cities integrate ESWM/SWMPs in the LCCAP and specify climate risks (and outcomes) of ESWM.</li> <li>NEDA to roll-out PAP4SCP with guidance of integration of ESWM/SWMPs.</li> <li>NSWMC to include climate considerations in the SWMP guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Delay in PAP4SCP roll-out</li> <li>SWMP guidelines do not include climate considerations.</li> </ul>	<ul style="list-style-type: none"> <li>DILG supports LGUs in the integration of ESWM in the LCCAP.</li> <li>Cities (and LGUs in general) include climate outcomes in the M&amp;E of SWMP implementation</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes of ESWM/SWMP highlight climate considerations.</li> <li>SWMP implementation forms part of PAP4SCP localization.</li> </ul>

## 8. CONCLUSION AND RECOMMENDATIONS

The Stocktake Report suggests that the current enabling environment for urban development is less than perfect for enabling conflict sensitivity of the urban development process. In addition, new development frameworks have been introduced albeit still lacking specific guidelines. These include green housing and settlements, transit-oriented development and the new national transport policy. Findings of the Stocktake Report were echoed and validated by stakeholders in pilot cities in two rounds of FGDs.

There are gaps in the enabling environment. One fundamental gap is climate finance and investment policy. This gap leaves a shadow on the ways and means of achieving the goal and expected outcomes of the NCCAP (and LCCAPs of LGUs), NDC targets by 2030 and hurdles of ushering private sector participation in privatized sectors such as energy and transportation, which are the major contributors of GHG emissions. New frameworks, such as green housing and settlements, TOD and circular economy, all require clear policy guidance on financing and investments.

Taking into account the enabling requirements for climate sensitivity of urban development, pilot cities have identified four (4) policy areas and ten (10) alternative policy options. They also have Antipolo's interpretation of LCCET enhancement is explicitly addressed to the existing system itself – that the LCCET does not capture data on actual climate expenditures of LGUs.

Instead, it raises the idea of developing an alternative system and abandoning the existing mode of tagging budget lines in the AIP of LGUs. It also raises concerns that LGUs might submit LCCET reports only for compliance.

### General Recommendations

This study recommends the following courses of action:

1. For pilot cities, through the DILG and League of Cities, to engage in policy dialogues with the DBM, DOF, CCC and concerned sector agencies;
2. For oversight agencies and concerned sector agencies to give feedback on the alternative policy options; and,
3. For GIZ, through the Urban-Act Project, to support policy dialogues as well as explore funding possibilities for pilot actions related to the alternative policy options.

The following table elaborates possible courses of action and the specific roles of pilot cities, concerned national government agencies and GIZ.

Table 16. Suggested Specific Courses of Action

Alternative Policy Options	Pilot City LGU Actions	National Government Actions	GIZ Actions
<b>Climate finance policy</b>			
Enhance LCCET to include monitoring of actual expenditures	<ul style="list-style-type: none"> <li>Utilize annual accomplishment reports as basis for accounting of actual climate expenditures.</li> <li>Local PMC to consolidate data on actual climate expenditures.</li> </ul>	<ul style="list-style-type: none"> <li>Revise DBM-CCC-DILG JMC 2015-01</li> </ul>	<ul style="list-style-type: none"> <li>Support enhancement of LCCET guidelines.</li> </ul>
Inclusion of climate investment program in the LDIP	<ul style="list-style-type: none"> <li>LDC to formulate climate investment program for inclusion in the LDIP.</li> <li>Sanggunian to approve climate-sensitized LDIP.</li> </ul>	<ul style="list-style-type: none"> <li>DILG and DBM to provide guidance on climate investment programming.</li> </ul>	<ul style="list-style-type: none"> <li>Support formulation of climate investment programming in pilot cities.</li> </ul>

Alternative Policy Options	Pilot City LGU Actions	National Government Actions	GIZ Actions
<b>Transport Policy</b>			
Improve coordination and data exchange between LGUs, LTFRB and LTO	<ul style="list-style-type: none"> <li>Engage LTFRB and LTO on automation of data exchange on franchises and licenses</li> <li>Incorporate land transportation route plan in the CLUP and ZO.</li> </ul>	<ul style="list-style-type: none"> <li>LTFRB and LTO to engage pilot city LGUs on automated data exchange in aid of local transport planning and management</li> </ul>	<ul style="list-style-type: none"> <li>Support IT requirements for data exchange.</li> </ul>
Upgrading of local traffic management office (LTMO) to a full-fledged local transportation department	<ul style="list-style-type: none"> <li>Sanggunian Resolution and Local Ordinance</li> <li>LCE Executive Order</li> </ul>	<ul style="list-style-type: none"> <li>DOTr devolution transition plan</li> <li>DBM, DILG and CSC joint guidelines on creation of local transportation department.</li> </ul>	<ul style="list-style-type: none"> <li>Support formulation of local transport master plan (LTMP) in selected pilot city.</li> </ul>
Local public transportation as LGU enterprise	<ul style="list-style-type: none"> <li>Mass transit oriented local public transportation as local PPP with existing transport organizations</li> <li>Safety nets and alternative livelihoods for displaced transport operators and workers</li> <li>Programmed disposal of old and high-emission vehicles</li> </ul>	<ul style="list-style-type: none"> <li>DOTr guidelines on equity conversion and disposal of old and high-emission PUVs</li> </ul>	<ul style="list-style-type: none"> <li>Support feasibility of local public transportation as LGU enterprise.</li> </ul>



Alternative Policy Options	Pilot City LGU Actions	National Government Actions	GIZ Actions
<b>NDC Implementation and GHG Inventory Management</b>			
Clarify LGU responsibility in GHG inventory management and reporting and vertical coordination with the NDC NTWG	<ul style="list-style-type: none"> <li>Engage NTWG and/or sector agencies on data data sharing and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>NTWG and/or sector agencies to support LGUs in GHG inventory management and reporting.</li> </ul>	<ul style="list-style-type: none"> <li>Support local capacity development for MRV and GHG inventory and management.</li> </ul>
Build local capacity for MRV	<ul style="list-style-type: none"> <li>Demand capacity development support for MRV.</li> </ul>	<ul style="list-style-type: none"> <li>CCC and sector agencies to support LGU capacity for MRV on GHG emissions reduction and avoidance.</li> <li>DENR-EMB to popularize the 2016 GHG Inventory Manual</li> </ul>	<ul style="list-style-type: none"> <li>Support knowledge sharing and disseminate international best practice.</li> </ul>

Alternative Policy Options	Pilot City LGU Actions	National Government Actions	GIZ Actions
<b>NDC Implementation and GHG Inventory Management</b>			
Financing for local NDC PAMs	<ul style="list-style-type: none"> <li>Develop pilot projects related to GHG emissions reduction and avoidance.</li> <li>Collaborate with private sector to develop local PPPs related to climate change mitigation.</li> </ul>	<ul style="list-style-type: none"> <li>CCC and NDC TWG to provide guidelines on formulation of local NDC PAMs.</li> <li>CCC and DOF to facilitate access to green finance.</li> </ul>	<ul style="list-style-type: none"> <li>Support development of concept notes and project proposals for financing.</li> </ul>

Green Housing and Settlements			
Mandatory or voluntary	<ul style="list-style-type: none"> <li>Continue dialogues with DHSUD and DPWH on the viability of a mandatory policy.</li> </ul>	<ul style="list-style-type: none"> <li>For DHSUD and DPWH to interface GHSF and the National Green Building Code</li> <li>For DHSUD and DPWH to formulate a joint policy on green housing and settlements.</li> </ul>	<ul style="list-style-type: none"> <li>To facilitate knowledge exchange between DHSUD, DPWH and international green building councils.</li> <li>Produce knowledge products from the experience of global and regional green building councils.</li> </ul>
Third-party rating and certification	<ul style="list-style-type: none"> <li>Initiate dialogues with national housing agencies and private sector firms involved in real estate development and construction.</li> </ul>	<ul style="list-style-type: none"> <li>For DHSUD to facilitate dialogues between LGUs, national housing agencies, private sector and the Philippine Green Building Council.</li> </ul>	
Fiscal incentives	<ul style="list-style-type: none"> <li>Engage the DOF, through the DILG and League of Cities, for policy dialogue on fiscal incentives for green housing and settlements.</li> </ul>	<ul style="list-style-type: none"> <li>For DOF, DHSUD, NEDA and DILG to engage private sector firms involved in real estate development and construction.</li> </ul>	

Parallel to the recommended actions pertinent to the perspectives of pilot cities, this study also recommends the following:

- Formulation of a long-term climate investment program in line with the Climate Change Act of 2009, as amended, and to support long-term plans such as the NDC Implementation Plan, National Adaptation Plan, PAP4SCP and other relevant plans;
- Creation of green jobs derivative of climate-oriented policies, plans and programs. Pre-existing plans, such as SWMPs of LGUs and the long-running National Greening

Program already set the pace in green job creation. In line with the Philippine Green Jobs Act of 2016, the database of DOLE and Philippine Statistics Authority should include not only a database of available green careers and opportunities but also a database of green jobs already created; and,

- Adoption of GEDSI as overarching framework of social policies to complement existing social and environmental safeguards. The DILG and Local Government Academy can look into the possibility of including GEDSI as a criterion in social governance and the SGLG.

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