

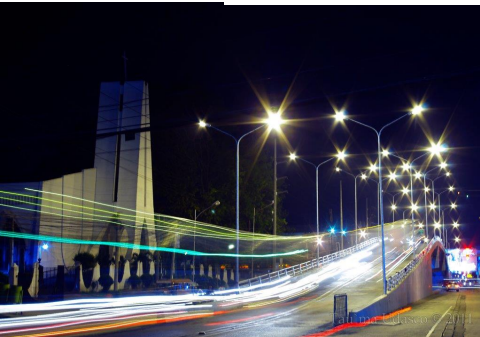


EXPLORING INNOVATIVE WAYS OF FINANCING CLIMATE COMPATIBLE DEVELOPMENT IN SECOND TIER ASIAN CITIES





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Rationale: Second-tier Cities

Why They are Important

Produce nearly **40%** of the global GDP



of the world's
population lives
in settlements
of less than
500,000 people



Metropolitan City
Clusters

Economic
support
systems for
large cities



Subnational Urban
Centers

Responsible for
critical planning,
governance, and
development



Economic Corridors

Linkage points
in regional and
global supply
chains

BUT

many lack resources and capacity to:

- Manage rapid urbanization
- Secure investment
- Combat poverty

Increasing efficiency and connectivity
of secondary cities could

**Double or
Triple Global
GDP**

Sources:

Roberts (2014). Managing Systems of Secondary Cities. Cities Alliance/UNOPS, Brussels.

Cobbett, W. (2015). [Verbal presentation]. Presented at the Woodrow Wilson Center. Washington, DC.

Infographic by: Jessica Wiggins, Intern, Urban Sustainability Laboratory, Wilson Center

Rationale: Financing Climate Compatible Development

Meeting Sustainable Development Goals

Goal 11: Make Cities Inclusive, Safe, Resilient and Sustainable

Three "Baskets of Challenges" Facing Secondary Cities
that Must be Addressed to Implement **SDG #11**

William Cobbett, Cities Alliance



Approximately
65%
of Sustainable
Development Goals
(SDG's) will require local
government involvement

William Cobbett, Cities Alliance

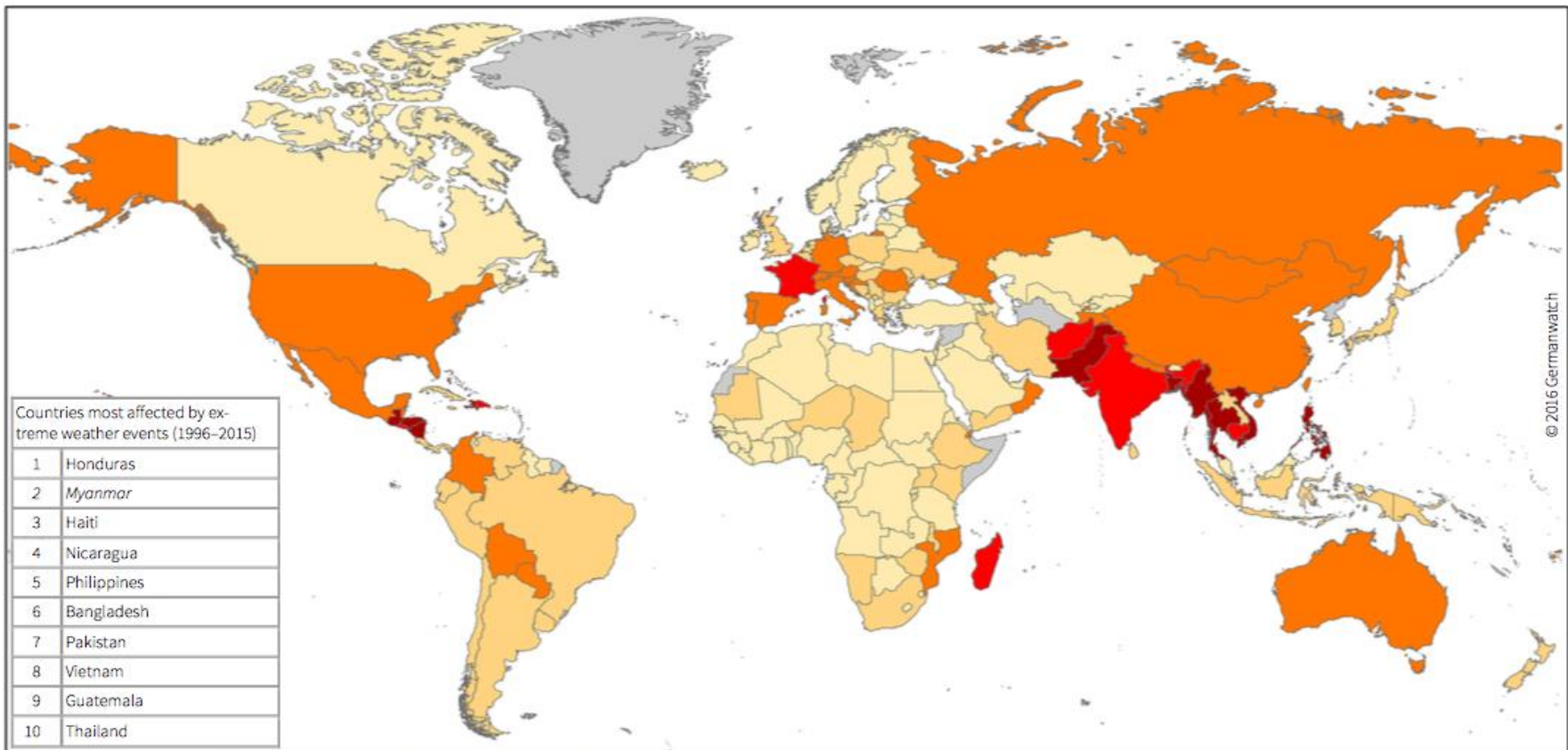
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Climate Risk Index for Southeast Asia 2017



Climate Risk Index: Ranking 1996–2015

1–10

11–20

21–50

51–100

>100

No data

Figure 1: World Map of the Global Climate Risk Index 1996–2015

Source: Germanwatch and Munich RE NatCatSERVICE

Climate Financing in ASIA

- **17 countries in Asia received almost a quarter of all public climate finance from dedicated climate funds :USD 3.35 billion for 422 projects and programs in the region (CFU, 2015).**

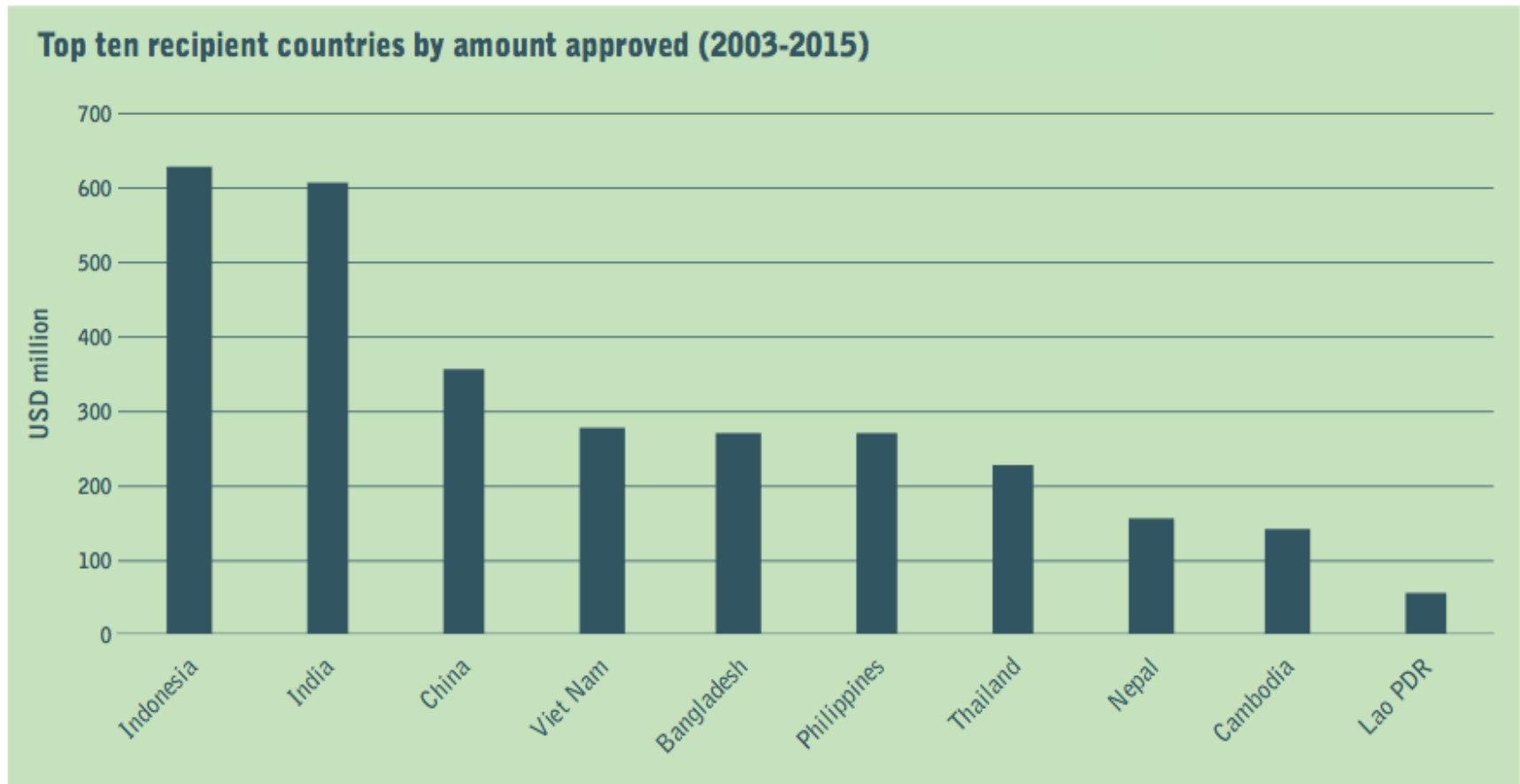
Funds supporting Asia (2003-2015)

Fund or Initiative	Amount Approved (USD millions)	Projects approved
Clean Technology Fund (CTF)	1207.07	20
Global Environment Facility (GEF4)	362.58	69
Global Environment Facility (GEF5)	324.81	70
Pilot Program for Climate Resilience (PPCR)	271.32	21
Germany's International Climate Initiative	263.02	72
Least Developed Countries Fund (LDCF)	136.94	32
UK's International Climate Fund	111.99	27
Australia's International Forest Carbon Initiative	96.40	4
Adaptation for Smallholder Agriculture Programme (ASAP)	67.00	6
Special Climate Change Fund (SCCF)	58.20	15
Other 14 contributors	457.10	89

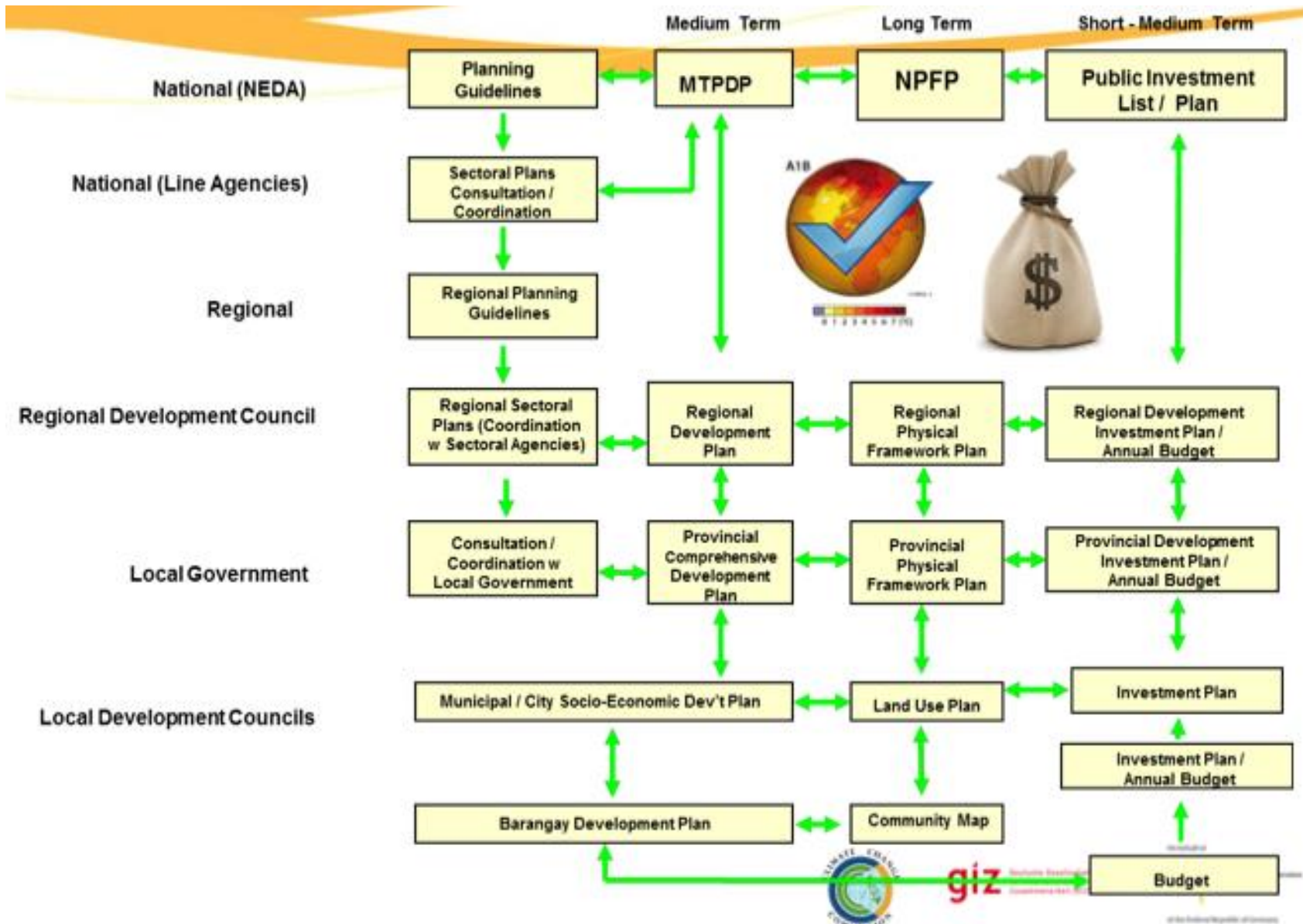
Source: Climate Finance Regional Briefing: Asia (CFU, 2015)

Climate Financing in ASIA

- India, Indonesia and China received 50% of the funding approved for mitigation projects since 2003.

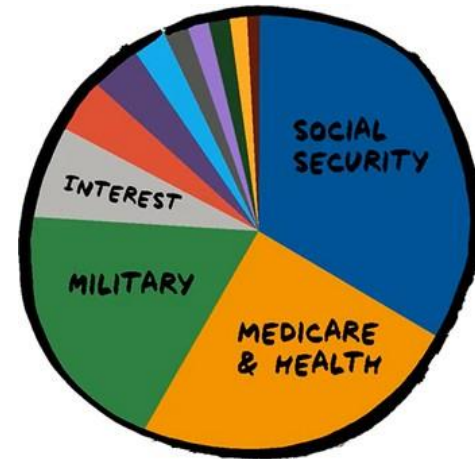


Climate Change Planning in the Philippines





Where is the money?



National Government Funds



Green Climate Fund

- The Green Climate Fund is a fund established in 2010 within the framework of the UNFCCC as an operating entity of the Financial Mechanism to assist developing countries in adaptation and mitigation practices to counter climate change.
- GCF accredited in October 2018 the Land Bank of the Philippines as a conduit in financing climate change mitigation and adaptation programs and projects of national and local government agencies, business enterprises, communities, as well as local and civil society organizations.
 - LANDBANK was accredited as the country's first Direct Access Entity (DAE) by GCF

Research Objective

- Determine the financing options of a second-tier city in the attainment of a climate compatible development.

Conceptual Framework

- Climate Finance Readiness
- “The capacities of countries to plan, access, deliver, monitor and report on climate finance, both international and domestic, in ways that are catalytic and fully integrated with national development priorities and the achievement of the MDGs.”

— UNDP (2012)

Methodology

- Science-based Stakeholder Dialogues
 - dialogues are structured communication processes linking researchers with societal actors, such as representatives of governments, non-government organizations (NGOs), private sector and the wider public
 - composed on three major workshops
 - World Café Techniques
 - Paired comparison technique
 - Structured Stakeholder Analysis

Methodology

- Focus Group Discussions (FGDs)
- Key Informant Interviews
- Document analysis of BDFs
- Descriptive analysis of existing secondary data

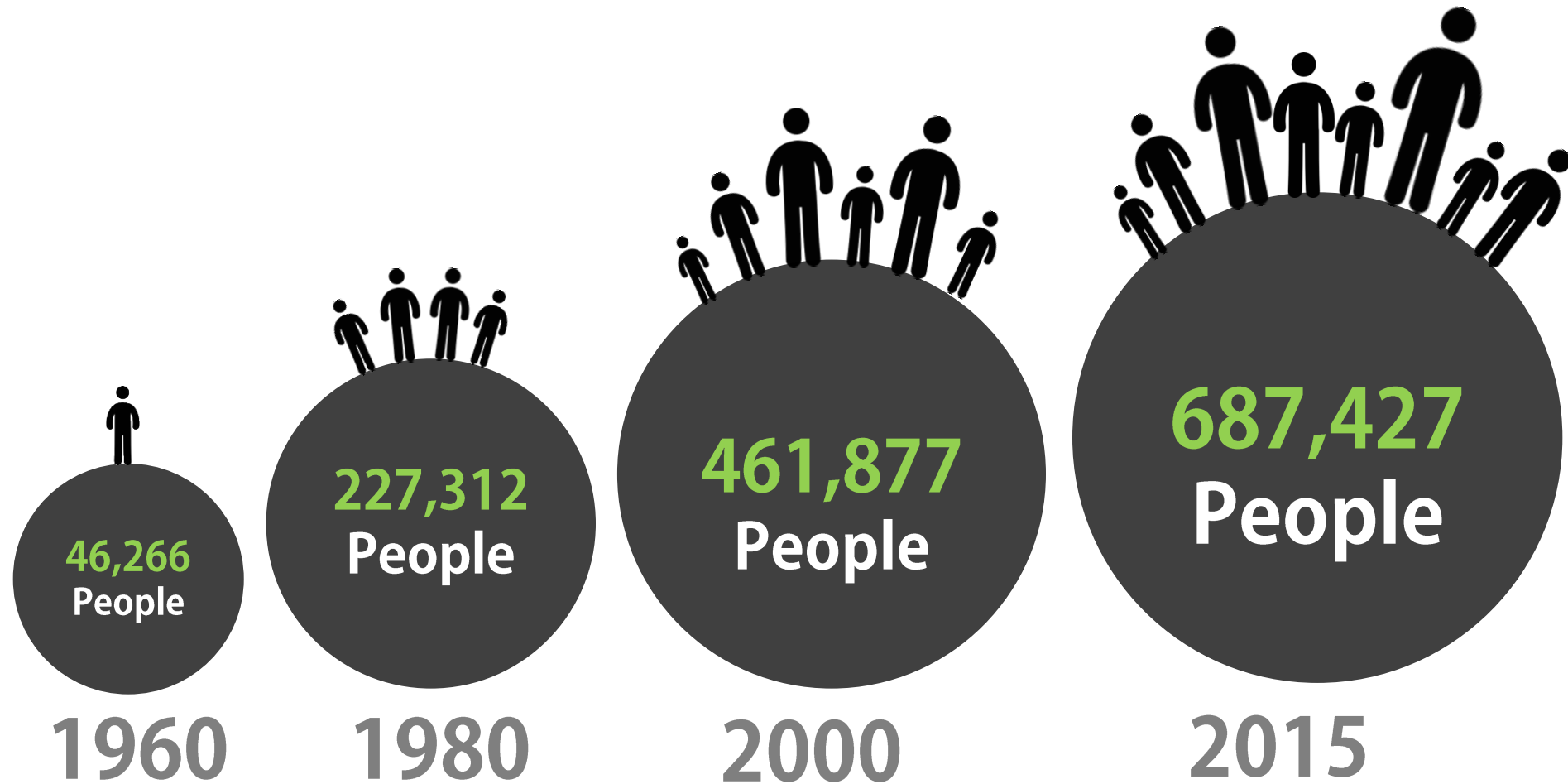
Located in the northern part of Mindanao is the City of Golden Friendship, Cagayan de Oro



Source: <http://cdn.cnn.com/cnnnext/dam/assets/111217115713-philippines-storm-map-story-top.jpg>

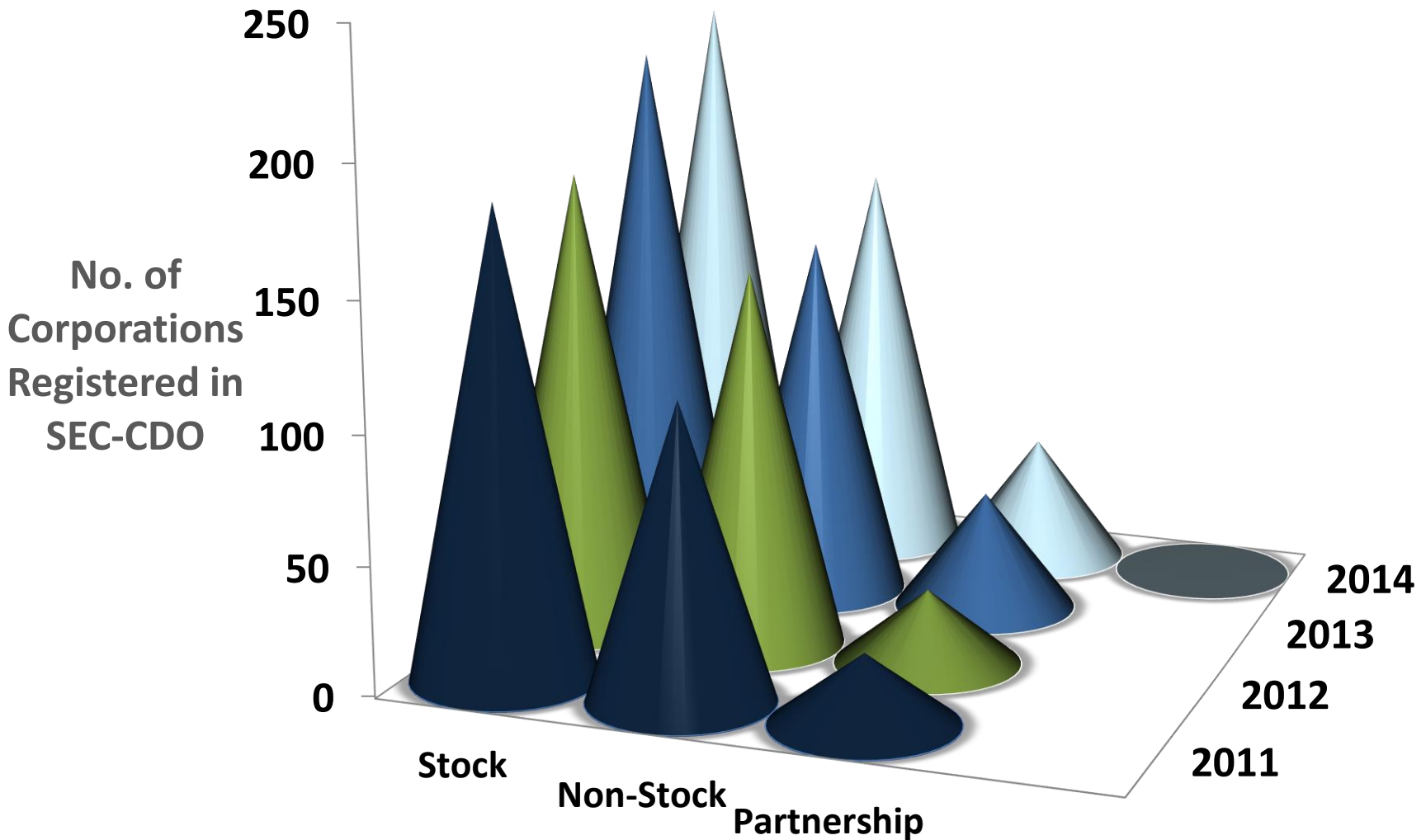
**How is development
taking place in CDOC?**

Population Trends (Actual)



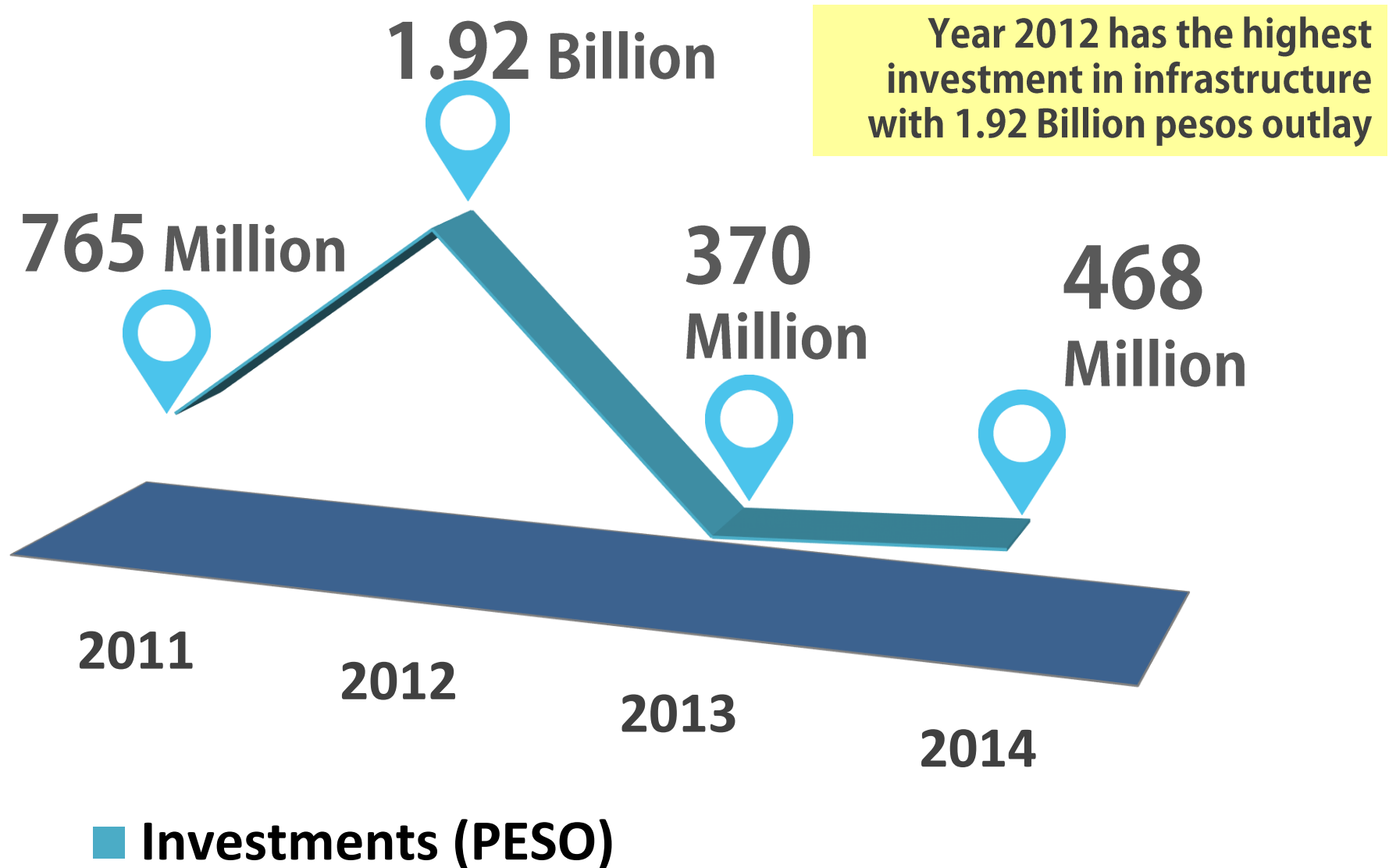
Investment Trends

Source: Securities and Exchange Commission, Region X



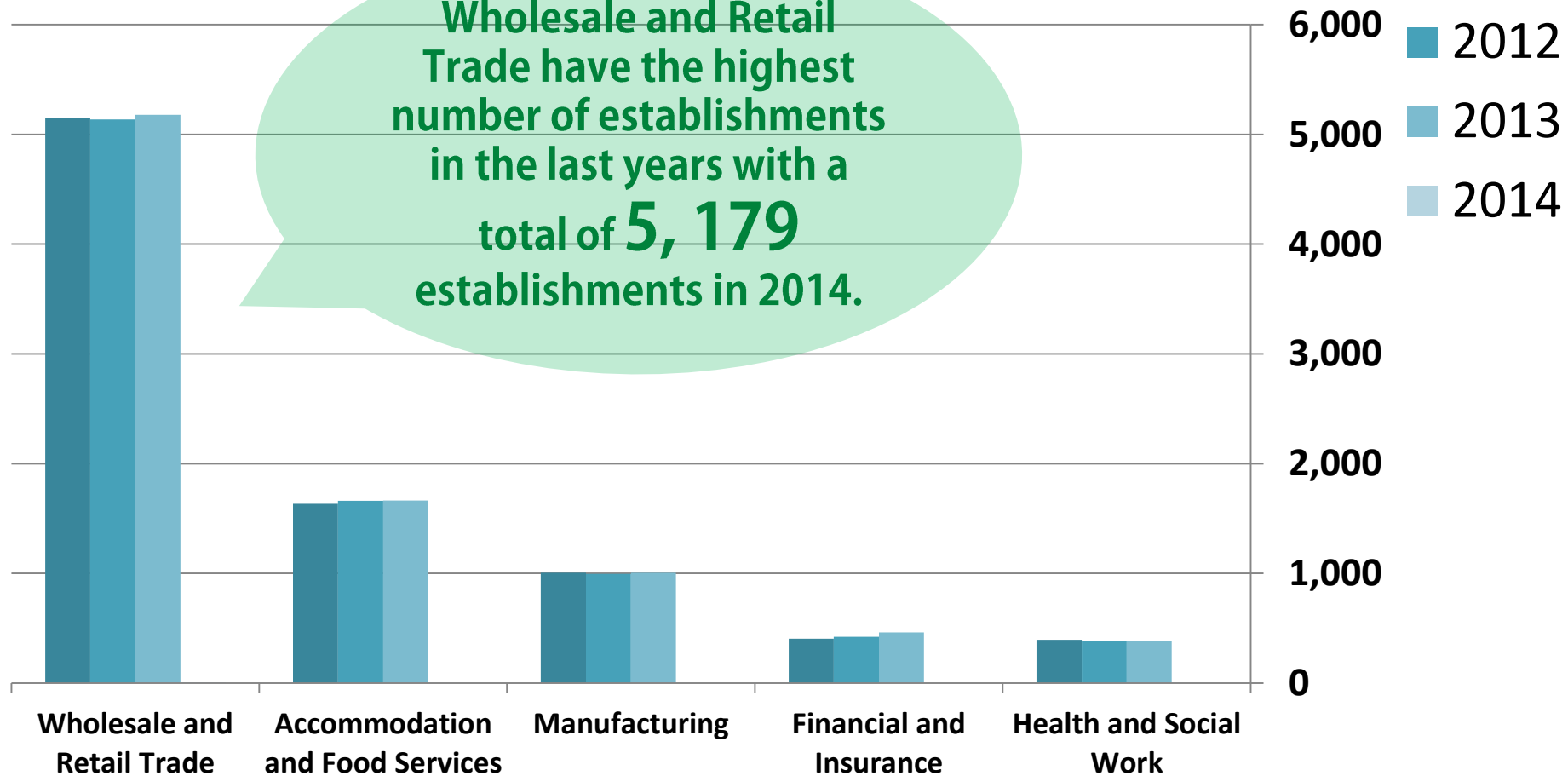
Annual Investment in Infrastructure by LGU

Source: Source: National Competitiveness Council



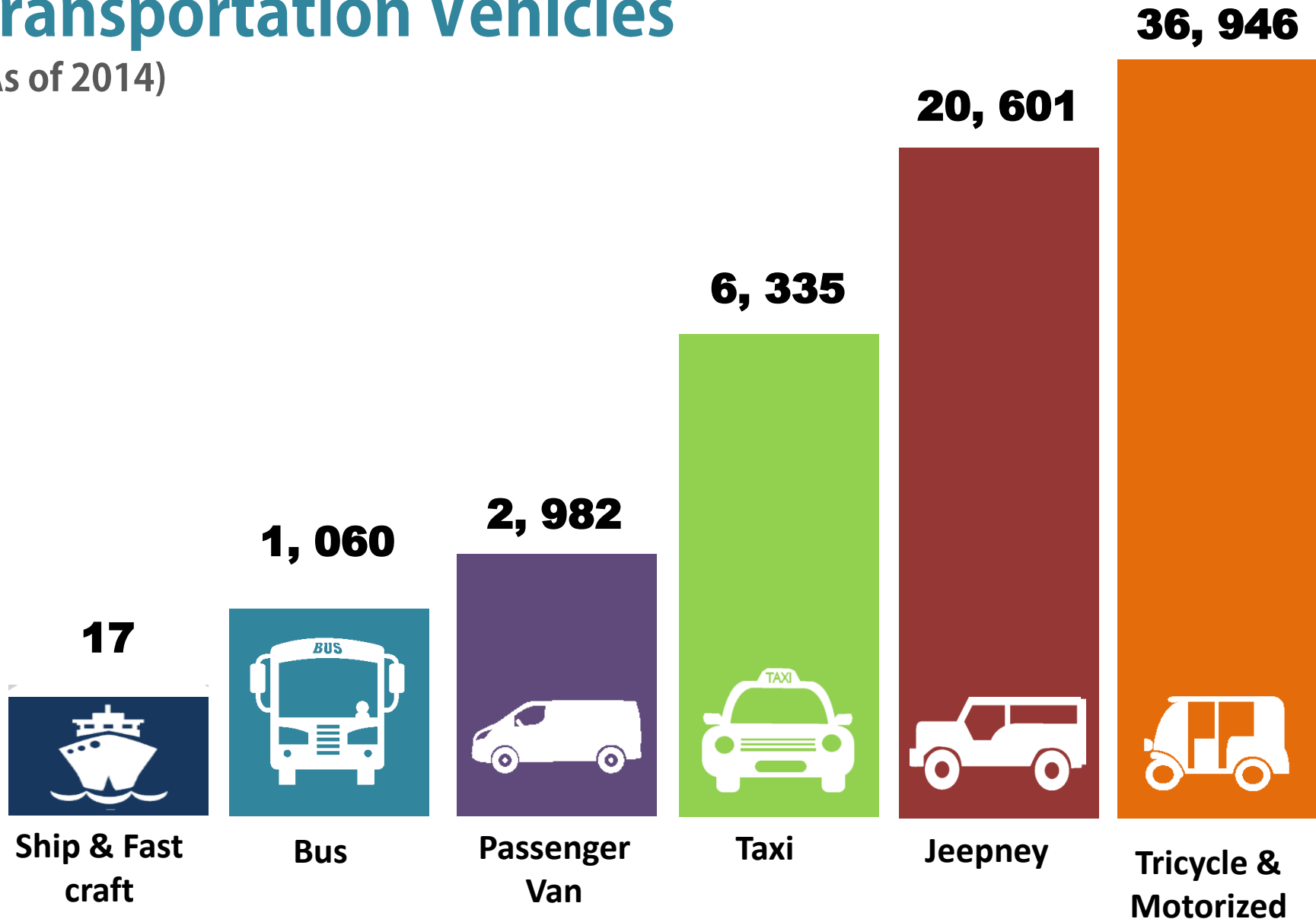
Number of Establishments (Trend)

Wholesale and Retail Trade have the highest number of establishments in the last years with a total of **5,179** establishments in 2014.



Number of Public Transportation Vehicles

(As of 2014)



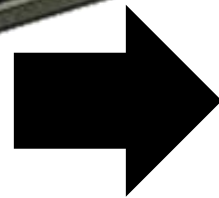
ROAD DENSITY

Road density is the ratio of the length of the country's total road network to the country's land area.

A black asphalt road with white dashed lines, curving from the bottom left towards the top right, serving as a background for the infographic.

1.53

2011



1.56

2014

CDO gets these energy sources from the different power companies in the city.



Diesel



Solar

These power companies are Minergy Power Corporation, Kerahon Solar Energy Power Corporation, CEPALCO, Bubunawan Power Corporation, National Power Corporation, Therma South and Cabulig Hydroelectric Power Plant.

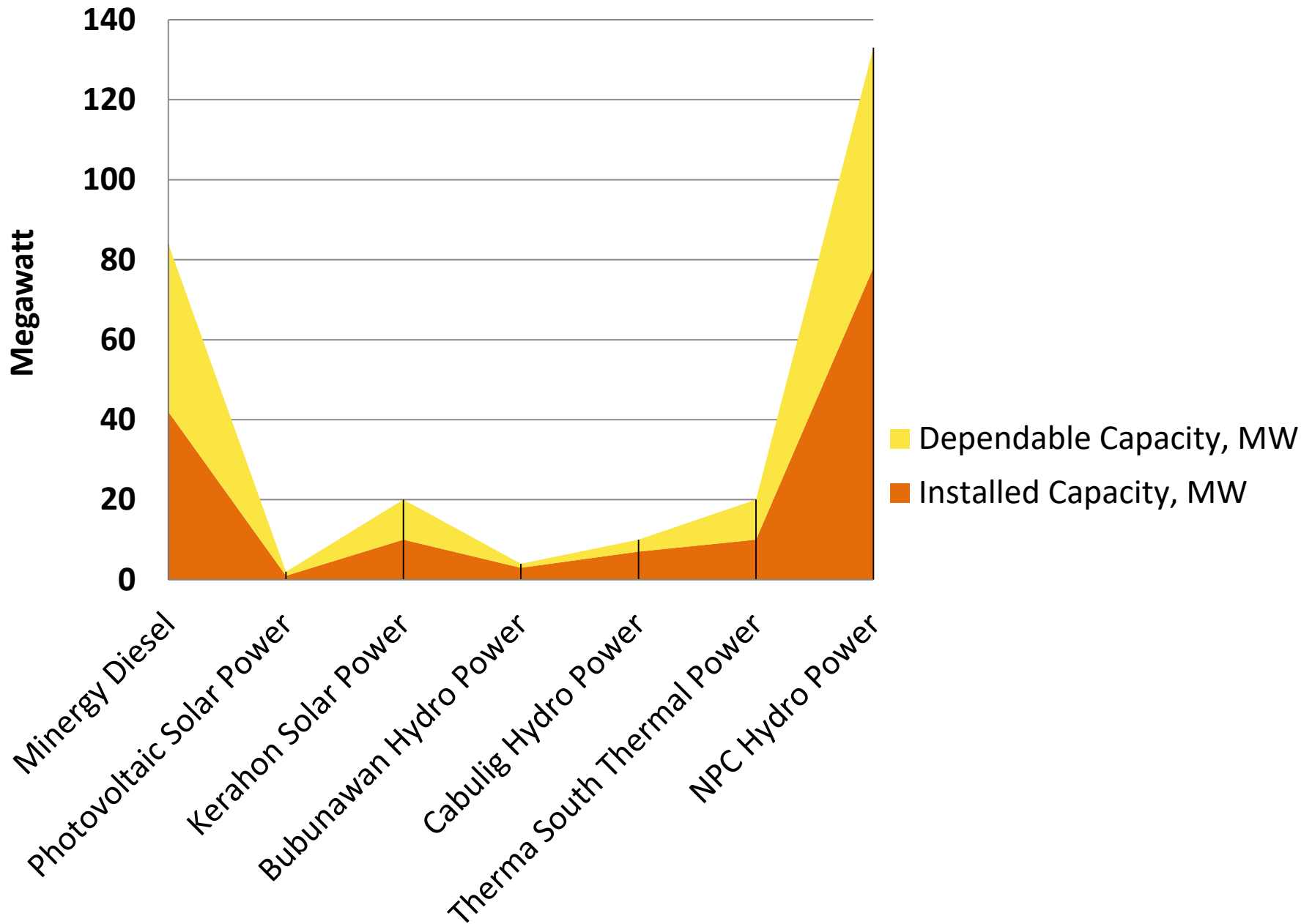


Hydro



Thermal

Power Generation Mix of CEPALCO as of December 2015



Results of the SBS Dialogues

What are the challenges?

Power Shortage

Water Shortage

Solid Waste Management

Housing

Employment

The power companies have been keeping up with the energy demands of the city.

Due to the shortage in supply of power distribution , CEPALCO has been constrained to increase the length of rotating power interruptions.

Some parts of the city experience 3 to 4 hours rotating brownout **DAILY**.





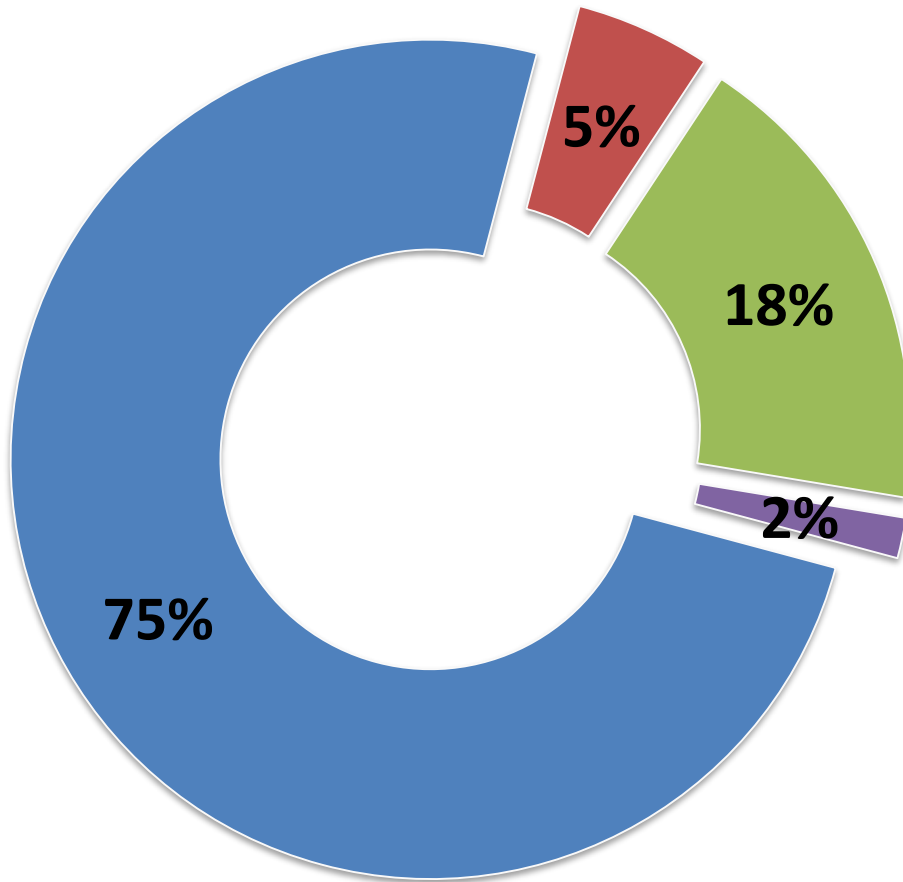
Water Shortage

As of 2013, Cagayan de Oro Water District (COWD) provides water to 64 out of 80 barangays in the City.

The average production per month is **4, 763, 019 cubic meters** and the water consumption per liter per day is **122**.

The average water consumption of the entire city is about **2, 059,561 cubic meters**.

CDO Solid Waste Management



How wastes are disposed in the city:

75% collected by dump trucks

18% burned

5% dumped in individual pits

2% composted in individual pits



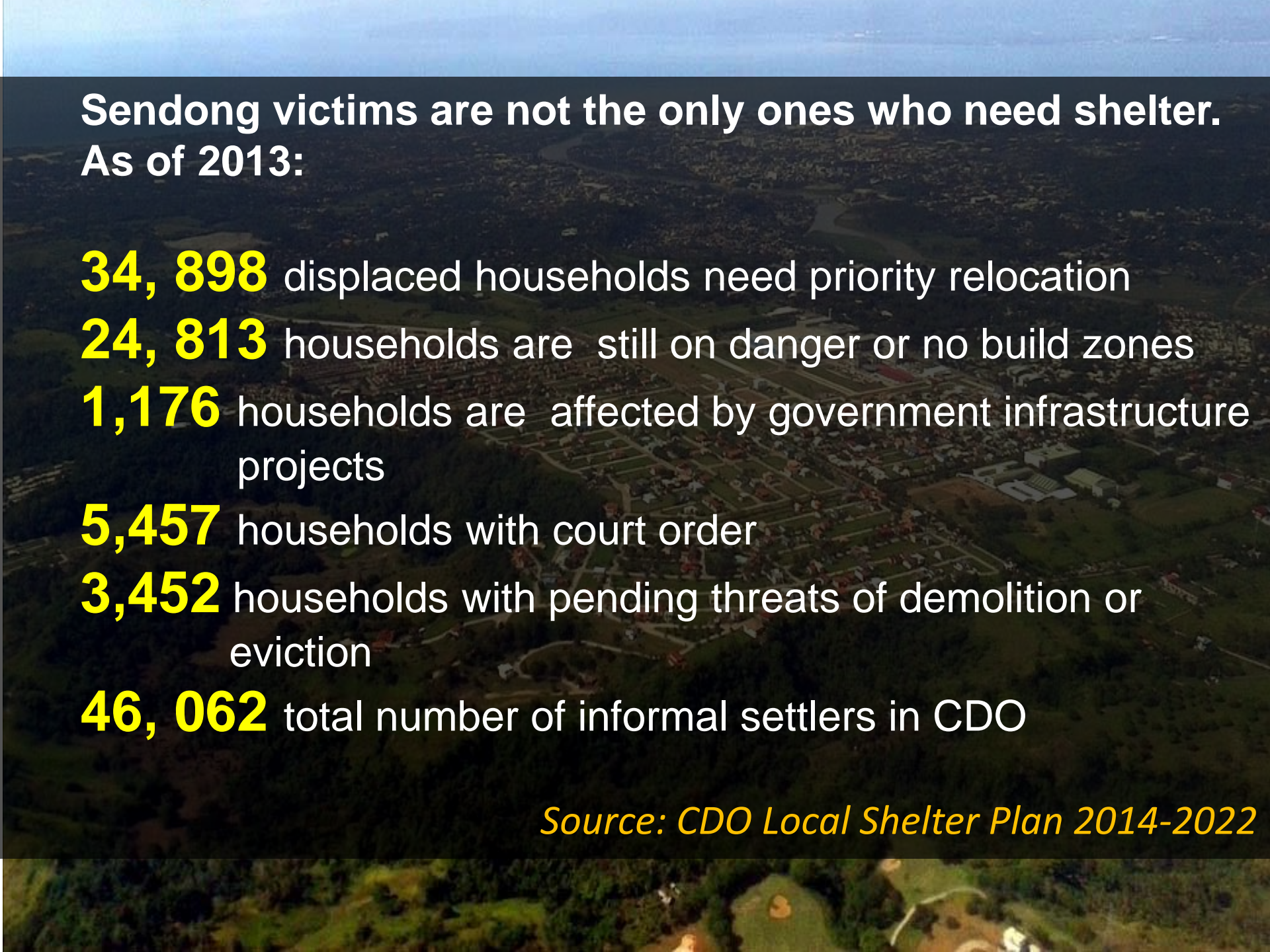
On December 16, 2011, Tropical Storm Washi, also known as “Sendong”, struck Cagayan de Oro City

The storm left a total of **12,525** damaged houses

892 persons were reported dead

4,594 people were injured

1,141 people are still missing



Sendong victims are not the only ones who need shelter.
As of 2013:

34, 898 displaced households need priority relocation

24, 813 households are still on danger or no build zones

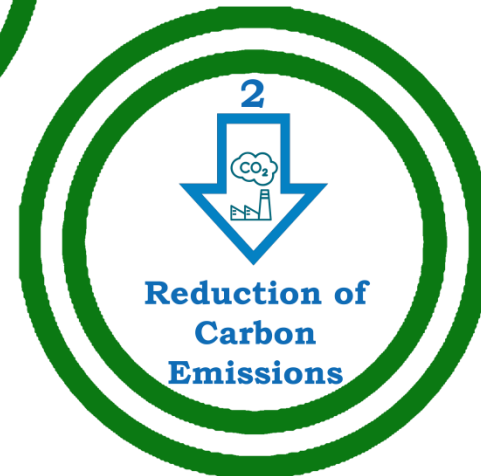
1,176 households are affected by government infrastructure projects

5,457 households with court order

3,452 households with pending threats of demolition or eviction

46, 062 total number of informal settlers in CDO

Source: CDO Local Shelter Plan 2014-2022



**Current
Mitigation
Measures**

Current Adaptation Measures

1



**Disaster Risk
Reduction**

2



**Policy
Creation**

3



**Engineering
Solutions**

4



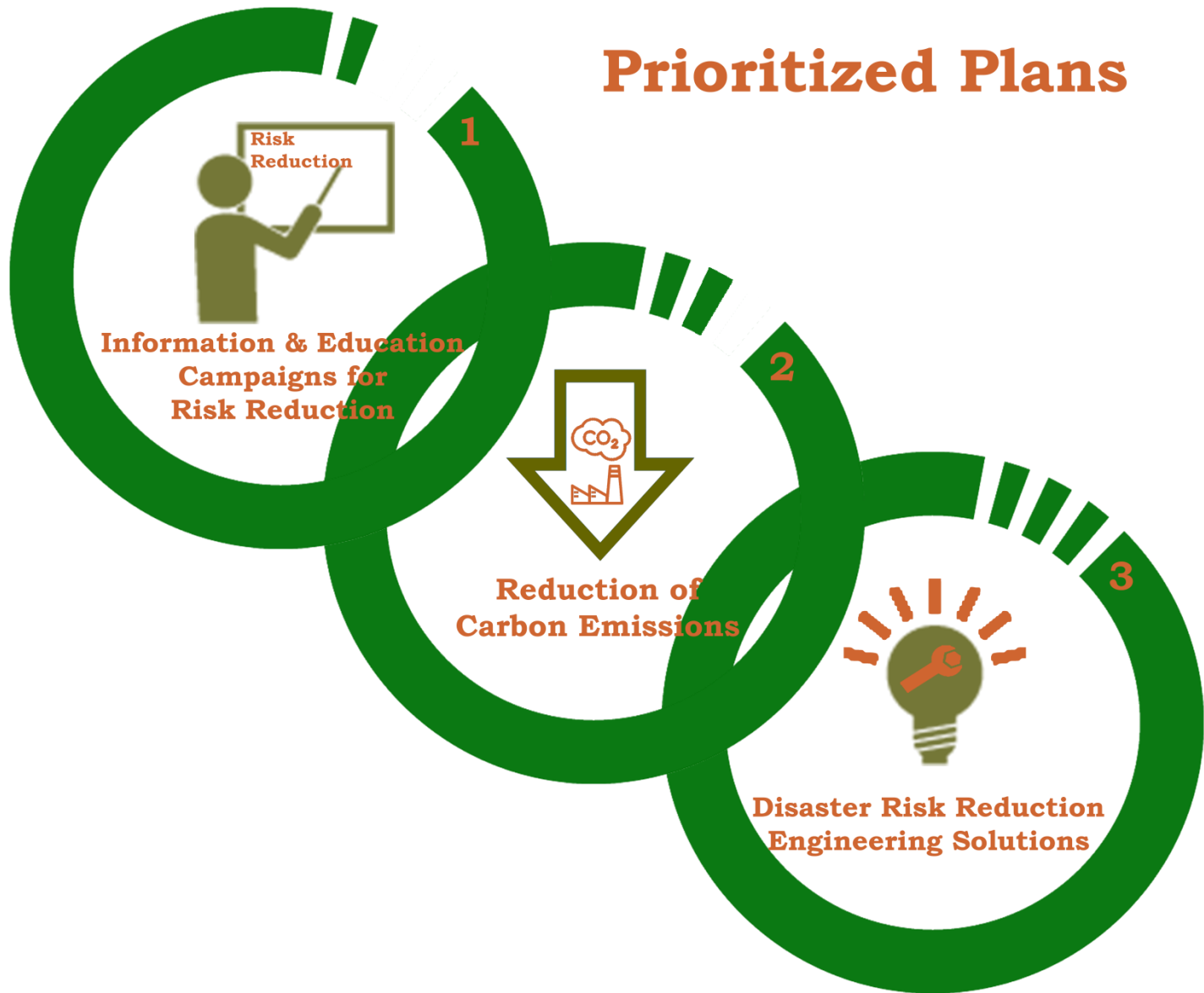
**Environmentally
Friendly
Alternatives**

5

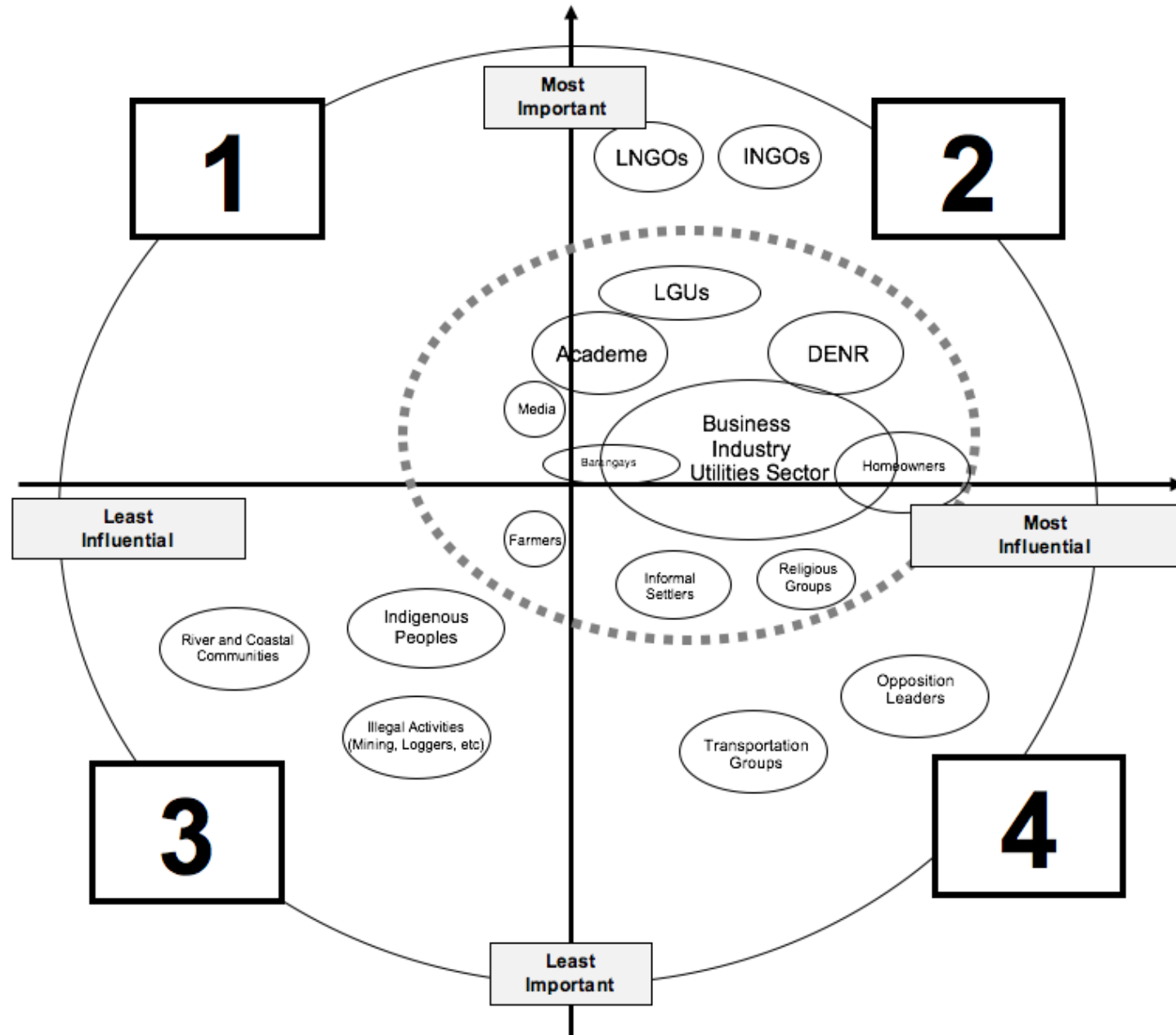


**Relocation of
Communities**

Prioritized Plans



Stakeholders' Degree of Importance and Influence



Cagayan de Oro won in the Government Center or Evacuation Center category for the Sustainable City Planning 2014

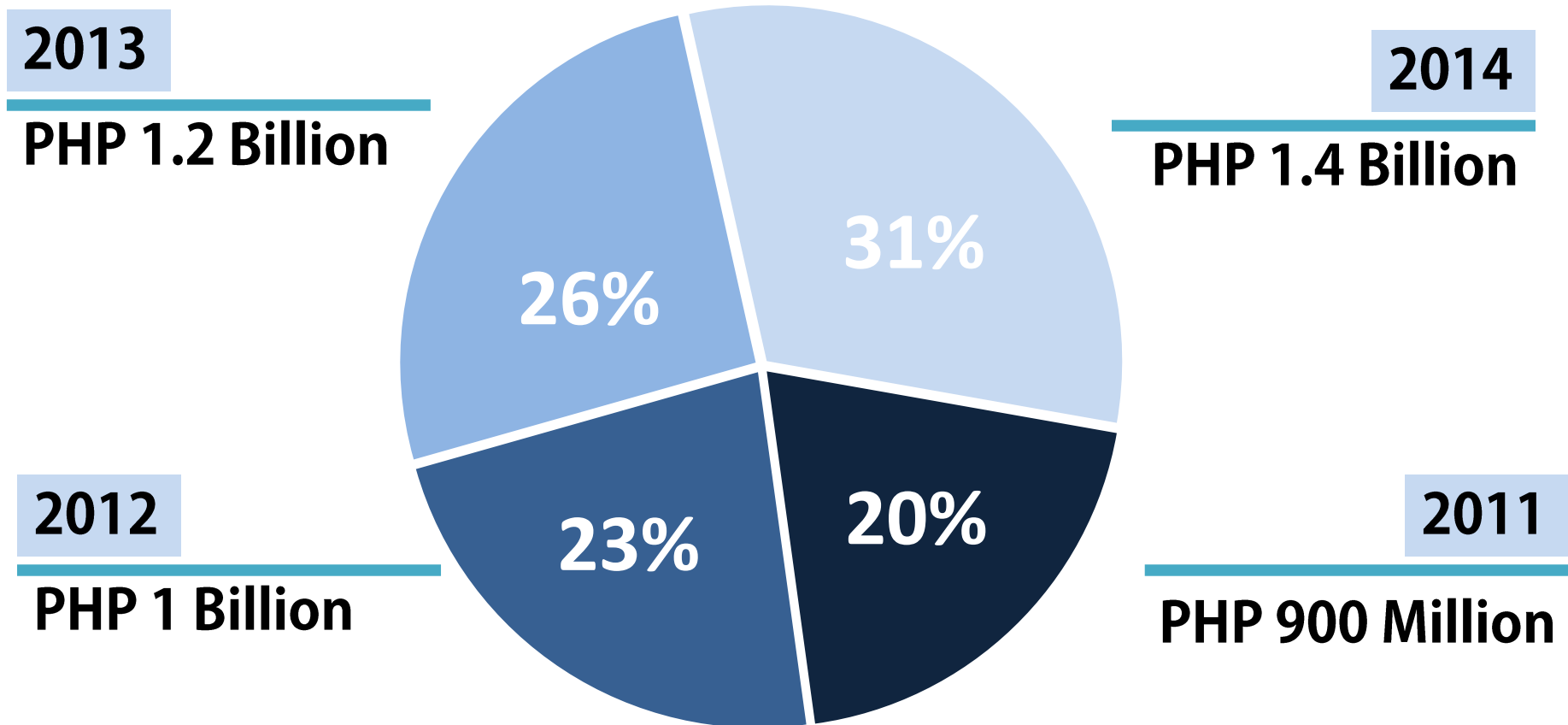


ORO CENTRAL. Cagayan de Oro's plan for a school that doubles as an evacuation center also features green design. Image courtesy of Monette Sagara

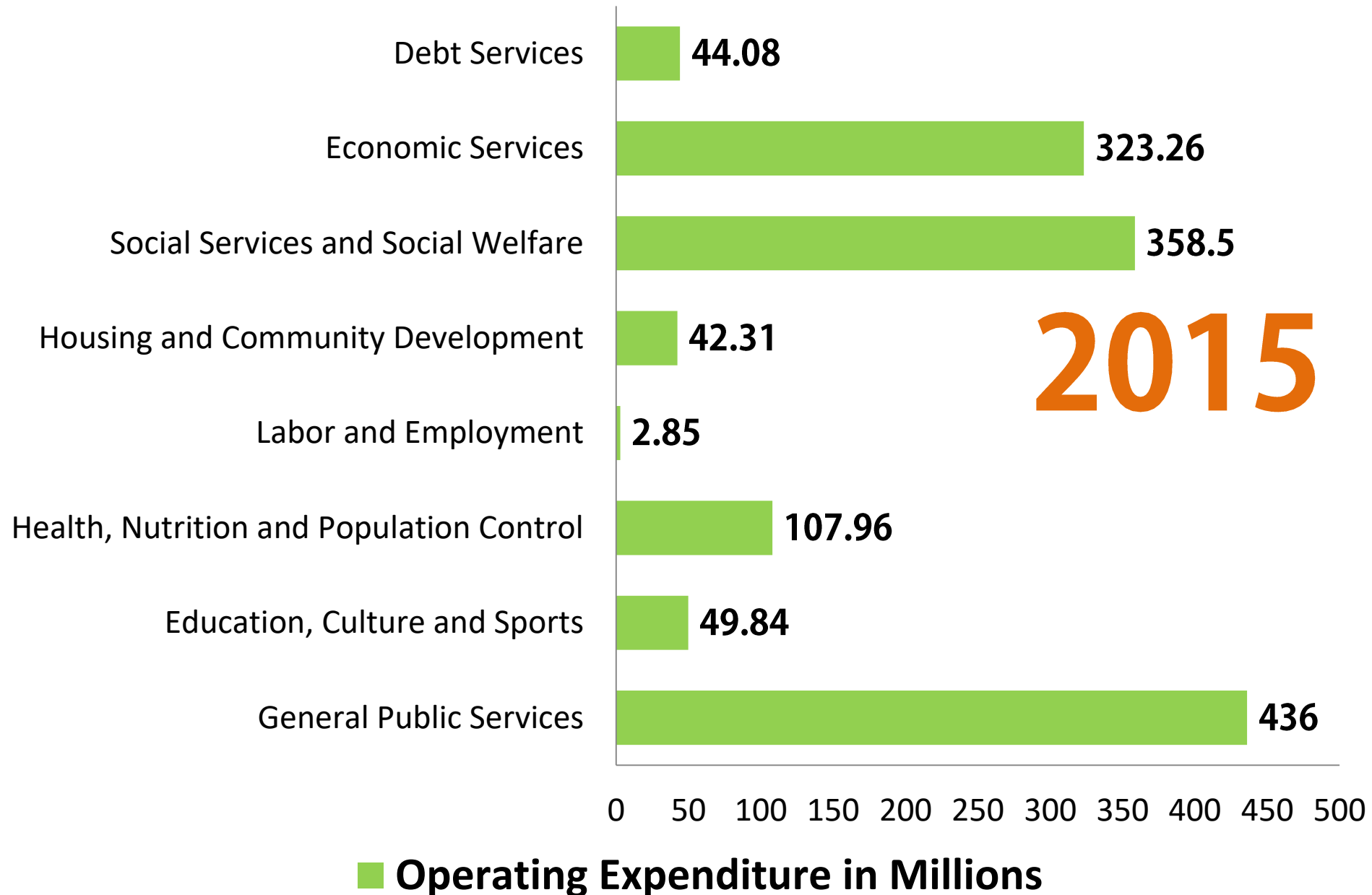
Financial Status

Income form Tax Revenue

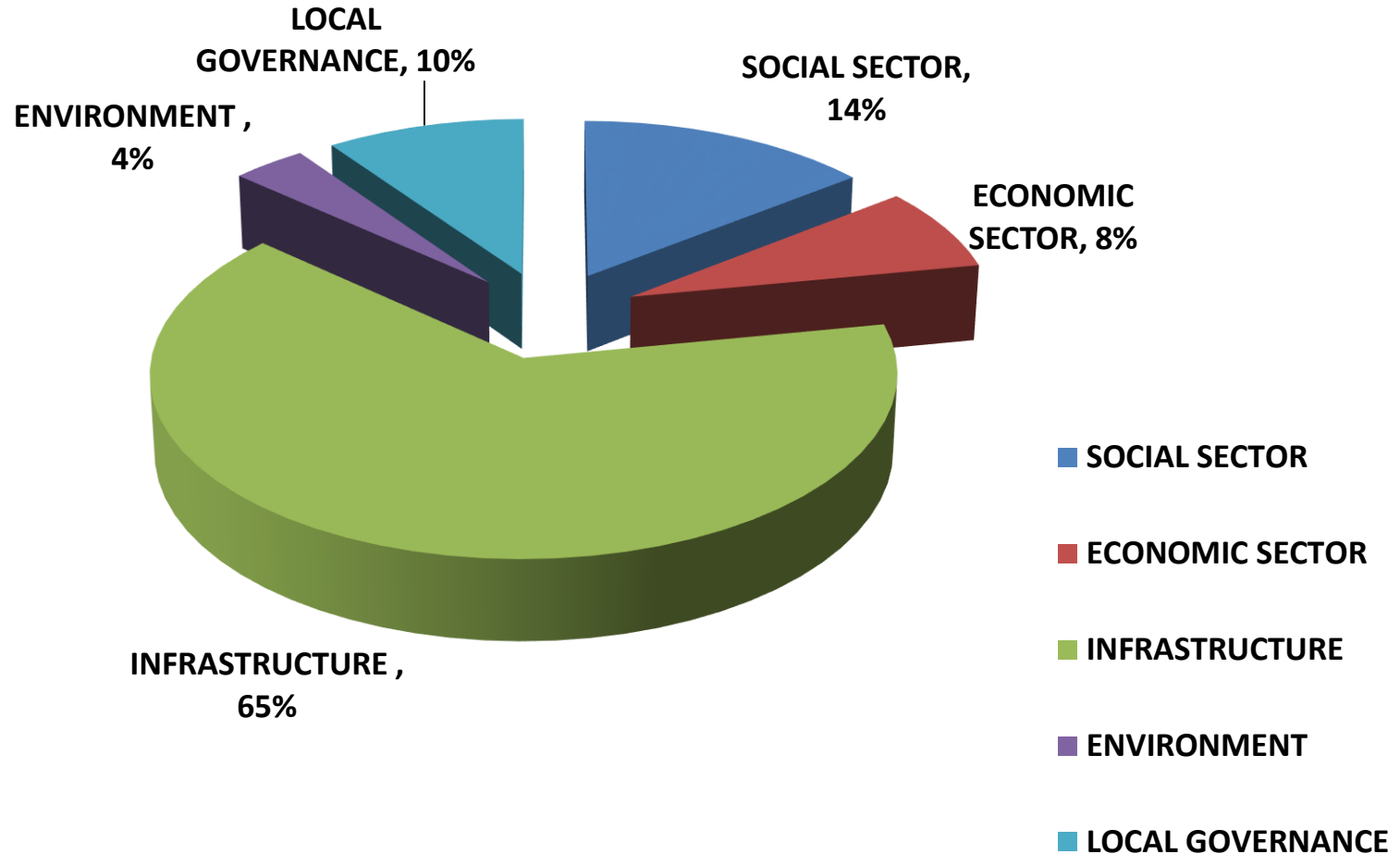
Source: Bureau of Local Government Finance



City Government Budget allocation



Barangay Development Funds (BDF), 2015



Sectoral Allocation of the BDF in Cagayan de Oro City

PAPs Related to Climate Change Adaptation and Mitigation

Projects, Activities and Programs	Urban Barangays (n=36)	Rural Barangays (n=31)	Total
Solid Waste Management	32	24	56
IECs	18	21	39
Landscaping	23	11	34
Flood Control	18	14	32
River Protection	14	16	30
Tree growing	9	21	30
Clean-up Drive	11	9	20
Air Polution Control	9	0	9
Codificationof National and Local Laws	5	3	8
Coastal Protection & Rehabilitation	7	0	7
Coastal Livelihood Programs	6	0	6
Forest Protection & Rehabilitation	0	5	5
Climate Change Awareness Program	4	0	4
Consultation with CSOs	3	0	3
Pollution Task Force	2	0	2

Options for Financing Climate Change in Cagayan de Oro City



Source: <http://wowcdo.com/wp-content/uploads/2012/09/ecobag-cdo.jpg>

Local Legislation

Inters-sectoral Collaboration



Source: <https://newcapp.wordpress.com/2014/05/25/pes-launching-in-cdo-with-denr-minda-newcapp/>

Payment for Ecosystem Services

Projects Funded through International Agencies

Projects	Funding agency	Current related activities/initiatives
Decentralized Framework for Sustainable Natural Resources and Rural Infrastructure Management	ADB	Watershed management, Rural infrastructure, Agroforestry based livelihoods and enterprises
EWWP	European Union	Promotion of PES, Biodiversity Conservation, Procurement of (5M) 2013 Satellite Images
B+ WISER	USAID	Ecological Governance, PES
INREM	ADB	Infra support, PES, Watershed Planning
NewCAPP	WB-GEF	PA sustainable financing, PES
Safer River, Life Saver Foundation Inc.		Protection and /or enhancing the ecology of the Cagayan River
Project Climate Twin Phoenix	USAID/ UNDP	Community's adaptive capacity ; mainstream climate change adaptation and DRRM in local development and land use plans and into the national policy framework
WQMA	DENR	Decentralized management system for water quality protection of river systems

Conclusion

Climate Finance

- *Local Planning and Budgeting*
 - the autonomy of the local government to decide upon their budgets is influenced by the decentralization and the structure budgetary appropriation

Conclusion

Climate Finance Readiness

- *Access: Capacity to Access Climate Finance*
 - incapacity in the funding procedures
 - institutional, financial and political capacity
 - weakness in the use of legislative authority to generate funds on environment-enhancing PAPs

Conclusion

Climate Finance Readiness

- *Enabling Institutional Environment*
 - Dependence on the City government for decision-making
 - Coordination failure
 - Absence of comprehensive tracking system

Thank You!