

Review on the LCT Planning of Davao City

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Findings on the LCT Planning of Davao City (1)

Characteristics of the town:

- ✓ *Davao City, located in Mindanao Island, is the third largest city of the Philippines after Metro Manila and Metro Cebu, and is the center of politics, economy and culture in Southern Philippines.*
- ✓ *Population: 1,633,000 (2015)*
 - *Average growth of population is 2.82% in 5 years (2010 – 2015)*
- ✓ *Size of town: 244,000 ha*
- ✓ *The priority industrial sectors in the coming years are:*
 - *Agriculture and Agro-industry*
 - *Information and communication technology*
 - *Tourism*

[Source: Nomination Sheet and Wikipedia]

Findings on the LCT Planning of Davao City (2)

On-going projects related to “low-carbon town”:

- ✓ *Bayaheng Do30: Initiative for cleaner and healthier city*
- ✓ *IM4Davao 2045: Infrastructure and capacity building project*
- ✓ *Comprehensive Land Use Plan (CLUP) 2013-2022: Vision, mission and goals of the development sectors*
- ✓ *Disaster Risk Reduction Management Plan: City-wide commitment to reduce greenhouse gases and to increase resiliency*
- ✓ *Local Climate Change Action Plan: (Same as above)*

[Source: Nomination Sheet]

Evaluation on the Application of the LCT- I System

Question	Excellent	Good	Average	Below Average	Poor
Information of the LCT-I Volunteer Town		✓			
Understanding of each LCT-I System indicators			✓		
Explanation (evidence) provided for the self-evaluation				✓	
Collection of data necessary for the evaluation			✓		
Calculation of CO2 emissions		✓			

Feedback on the Self-Evaluation (1)

Tier 1	Tier 2	Tier 3	Comments
Demand	Town Structure	<ol style="list-style-type: none"> 1. Adjacent Workplace 2. Land Use 3. TOD 	The target area of the city is based on the mixed-use concept, while efficient land use is misunderstood.
	Buildings	<ol style="list-style-type: none"> 1. Energy Saving Construction 2. Green Construction 	While the evaluations on thermal performance and natural energy are low, there should be efforts towards the green buildings and their constructions.
	Transportation	<ol style="list-style-type: none"> 1. Promotion of Public Transportation 	Plans and measures to promote the use of public transportation are referred to.
		<ol style="list-style-type: none"> 2. Improvement in Traffic Flow 	Varied measures are being taken to improve traffic flow, although the scorer misunderstood the definition of transportation demand management.
		<ol style="list-style-type: none"> 3. Promotion of Efficient Use 	It cannot be verified if the plans fit the concept of efficient use of vehicles of LCT-I.

Feedback on the Self-Evaluation (2)

Tier 1	Tier 2	Tier 3	Comments
Supply	Area Energy System	Area Energy	Area energy systems cannot be planned independent to urban planning and land use plans.
	Untapped Energy	Untapped Energy	Bio-diesel fuel is not one of untapped energy sources, and w2e concept should be introduced along with the plan of solid waste management.
	Renewable Energy	Renewable Energy	Half of current energy source is hydraulic.
	Multi-Energy System	Multi-Energy	Having multiple energy sources promotes the improvement in resilience of cities in tropical areas in such disasters as storms and earthquakes.

Feedback on the Self-Evaluation (3)

Tier 1	Tier 2	Tier 3	Comments
Demand and Supply	Energy Management	Energy Management of Building / Areas	These indicators are not suitable to evaluate current situations in developing economies, as the self-evaluation results of Davao clearly show.
Environment and Resources	Greenery	Securing Green Space	The high scores in this section cannot be verified as no comments (evidences) are given.
	Water Management	Water Resources	This section is also unverifiable due to the lack of evidence.

Feedback on the Self-Evaluation (4)

Tier 1	Tier 2	Tier 3	Comments
Environment and Resources	Waste Management	Waste Products	Although there are no comments (evidences) on waste management, it has been reported that w2e concept is being implemented, while the efforts in reduction of waste are not tangible.
	Pollution	<ol style="list-style-type: none"> 1. Air 2. Water Quality 3. Soil 	Comments (evidences) should be given to prove the high scores of self-evaluation in these items.
Governance	Policy Framework	1. Efforts toward a Low-Carbon Town	Comments (evidences) should be given to prove the high scores of self-evaluation in these items.
		2. Efforts toward Sustainability	Comments (evidences) should be given to prove the high scores of self-evaluation in these items.
Governance	Education & Management	Life Cycle Management	It seems rather awkward to see relatively low score in this section in contrast with the high scores in policy frameworks

For the Improvement

	Tier 1	Tier 2 (No. of Tier 3 indicators)
Directly Related	Demand	1. Town Structure (3) 2. Buildings (4) 3. Transportation (6)
	Supply	4. Area Energy System (1) 5. Untapped Energy (1) 6. Renewable Energy (1) 7. Multi Energy System (1)
	Demand & Supply	8. Energy Management System (3)
Indirectly Related	Environment & Resources	9. Greenery (2) 10. Water Management (3) 11. Waste Management (2) 12. Pollution (3)
	Governance	13. Policy Framework (4) 14. Education & Management (2)

1. Promotion of the use of public transportation should be focused under the forecast of population growth and current traffic congestions, based on IM4Davao report.

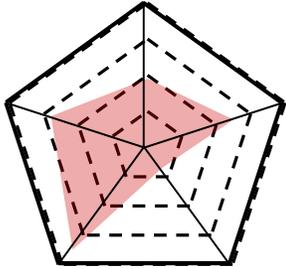
2. Davao has been in waste management under cooperation with Kita-Kyushu, Japan, and is on its way to introduce w2e (waste to energy) plants.

✓ The advanced implementation should be accelerated to make Davao as a model in this segment in ASEAN Smart City Network, in which Davao is one of pilot cities.

Ideas for the LCT Development

Demand Side

- Promotion of public transportation, including railways in mind

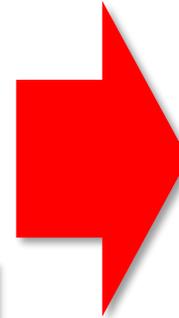


Current Score

- Transportation is a critical issue for big cities like Davao with expected growth of population.

Supply Side

- Establishment of the status of “Lead Model of w2e in ASEAN”
- Introduction of untapped energy as well as improvement of sanitary and independence from land fill practices



- Changes in lifestyles of travel and waste management
- Approaches to LCT from the aspects close to the people

