# LOW CARBON CITIES IN MALAYSIA:



By GTALCC Project Team

# WHY IS THERE A NEED FOR LOW CARBON CITIES IN MALAYSIA?

Climate change is impacting earth's ecosystems and causes extreme weather in many parts of the world. The changes are occurring faster than predicted due to massive carbon emissions globally. The Intergovernmental Panel on Climate Change (IPCC) provides the scientific basis for climate change, its impacts and risks, as well as options for adaptation and mitigation.

Low carbon cities (LCC) are an effort to reduce carbon emissions and mitigate global warming and climate change. It refers to cities planned with sustainable principles and features as well as initiatives that preserve the environment and reduce the negative impacts of human activities on the environment. Important components of LCC include reductions of usage on energy, water, and solid waste in cities.

### FOCUS GROUP DISCUSSION (FGD) ON THE INSTITUTIONAL FRAMEWORK FOR LCC

On August 13-14, 2018, the Green Technology Application For The Development Of Low Carbon Cities (GTALCC) project in Malaysia organised a focus group to discuss the institutional framework for LCC. The objectives of the FGD were to identify issues, obstacles, and challenges that come with implementing LCC in the country. The findings of the FGD is summarised below.

## REVISITING THE INSTITUTIONAL FRAMEWORK

All stakeholders at the FGD opined that there should be a specialised body to coordinate all green and low carbon initiatives in their respective cities. The most relevant and best model to emulate, currently, is the State of Malacca's Green Technology Corporation which falls under the purview of the Chief Minister's Office. Similarly, at the federal level, there should be the same portfolio under the Prime Minister's Department. This is because the current National Green Technology and Climate Change Council has so far not been able to ensure nationwide implementation of LCC.

Another concern for the present institutional framework is the mismatch or misalignment of jurisdictions or authorities. This refers to the fact that SEDA, a federal agency involved in developing relevant LCC policies and providing funding for LCC initiatives by local authorities, is under the purview of the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC). However, local authorities are under the purview of the Ministry of Housing and Local Government (KPKT), mandated to instruct and coordinate the activities of local authorities.

While Malaysia is committed to reducing 45% of its carbon emissions intensity by 2030, there are no clear instructions on how much carbon is to be reduced at the state and local levels. It is thus suggested that KPKT be consistently consulted in meeting the country's international commitment. This is because there are different types of local authorities in a State and the carbon emissions of a city council like Ipoh is much higher than a district council like Gerik. On that note, the role and direction of the City Mayor / Council President should be strengthened to 'mainstream' LCC in their city's development.

There must also be a clear system of power delegation or instruction from the federal, to the State, and then to the local authorities. Currently there have been instances where a federal agency is dealing directly with local authorities without going through the state government. This is also due to the fact that there is no specific agency at the state level in charge of LCC. It is suggested that a state agency be created, perhaps in a similar form to Green Technology Corporation. Thus, the federal agency will only deal with the corporation, and this ensures clear reporting from the local authority to the corporation before going to the



federal level. The corporation will also be in a better position to strategise the LCC agenda for all local authorities, to facilitate its initiatives and provide a clear, comprehensive, and cross-departmental policy for LCC in the State.

If there is a dedicated agency at the federal and state levels to implement LCC, there must also be a dedicated department in local authorities for implementing LCC. The department or unit will consist of officers from various disciplines as LCC covers many aspects besides town planning. This shall reduce the present burdens of the Planning Department which has to plan and collect data for LCC.

### EMPOWERING LOCAL AUTHORITIES AS THE LCC AGENT

There was a general consensus among the FGD participants that capacity building is needed for local authority officers. In the case of Majlis Perbandaran Hang Tuah Jaya (MPHTJ), a special unit on LCC has been formed with officers trained in climate change and LCC. Hence the same is suggested for other local authorities. The appointed field expert can act as the 'climate change communicator' and train other officers to facilitate LCC implementation in the local authority.

Another capacity development aspect is the ability of the officer to ensure effective enforcement of laws and regulations pertaining to LCC. In this respect, annual training or refresher courses are needed, not only for top level officers also officers implementing the work. This will increase the diversity of expertise as well as encourage expertise-sharing that can later improve the overall enforcement of relevant policies and regulations.

It is also important that capacity building extends to final users, i.e. the general public. In particular, public awareness should be consistently heightened through both conventional and social media. Information can also be shared during town hall sessions or religious events / activities. To spur the interest of future generations, effort is needed to include information on LCC environmental issues and climate change in school curricula. The state government through the State Economic Planning Unit (UPEN) needs to work with local authorities to increase awareness of LCC among the general public.



#### **ENABLING ENVIRONMENTS**

) Finance

When all factors point to local authorities as the driving agent for more LCC in Malaysia, there is an urgent need to focus on their financial and technical capacities to implement LCC. At the moment, the agencies at the federal or ministerial level are receiving and holding funds that will later be allocated to selected local authorities. During the FGD, most of the stakeholders have raised concerns on the manner of recipient selection and fund distribution between

local authorities. As such, there should be a system for ensuring fair distribution among local authorities. There is also a need for a system to identify international funds and a special fund at the local authority level to ensure the success of their LCC programme.

ii) Recognition

There is a need to recognise stakeholders for their initiatives towards LCC. For private developers, acknowledgement through green labeling and awards should be given regardless of the size of the company or the scale of the development. This will further motivate them to be more innovative towards green and sustainable developments. For householders practicing the low carbon lifestyle by installing renewable energy systems or energy efficiency appliances, they should be entitled to tax rebates. Last but not least, there should be similar incentives for all local authorities that introduce LCC initiatives, rather than being selective.

iii) Data

One notable aspect of the LCC framework is that data mining is needed for evidence of low carbon initiatives. In this regard, local authorities must provide relevant data that shows energy or waste reduction that translates to greenhouse gas (GHG) emission reduction or carbon reduction for the transportation sector. This data, however, must be retrieved from relevant agencies; not all are willing to share data for various reasons. It is thus suggested that providing date be made compulsory for all agencies, or, alternatively, the Ministry is required to provide baseline data and foster "big data sharing."

#### THE WAY FORWARD

Various strategies have been developed in the pursuit of making Malaysian cities low carbon. To ensure this objective is achieved, it is important for Malaysia to establish a clear and comprehensive institutional framework to support LCC implementation. Through this framework, it is hoped that all parties, especially local authorities, can play more effective roles in ensuring that LCC planning and development are achievable. It is pertinent that local authorities are empowered to ensure the effective implementation of LCC in Malaysia. Hence, the federal and state governments should establish the appropriate institutional framework to support LCC implementation at the local levels.

Note: This article is written by Assoc. Prof. Dr. Rasyikah of UKM which were based on the feedbacks of stakeholders' workshop on the subject. It is part of a series of articles commissioned under the GTALCC project.