The Application of LCCF

The framework will provide the elements on which the approach will be hinged on, whereas the calculator will utilize these elements and convert them into Carbon equivalents. The two should be read in conjunction with each other. The usage of both is sequential starting with the framework. Application of the overall framework and assessment system is a cyclical process which enables continuous monitoring and improvement to the identified carbon reduction strategies and measures planned. The implementation are undertaken until the ultimate target for zero carbon emission is achieved.
Foreword from the Prime Minister of Malaysia

It gives me great pleasure to introduce this publication known as the Low Carbon Cities Framework and Assessment System (LCCF). This document is the first of its kind in the region and has been produced jointly by the Ministry of Energy, Green Technology and Water (KeTTHA) and Malaysia Environment Planning Corporation (MEPC). I would like to express my deepest appreciation to the Malaysian Green Technology and Water Corporation, Malaysian Institute of Planners (MIP), Institute Sultan Iskandar (ISI, Putrajaya) and the Malaysian Institute of Town Planning (MOTP) for their hard work and dedication in producing this beneficial document.

Message from the Minister of Energy, Green Technology and Water

The Low Carbon Cities Framework and Assessment System or better known as the LCCF is a system developed by my Ministry. The purpose of this system is to assist our stakeholders such as developers, local councils, town planners, non-governmental organizations (NGO’s) and the public to lower the levels of carbon emission in our cities towards achieving sustainable urban developments. This system serves as a guide that will propel stakeholders for cities, townships and communities to reassess their priorities in the planning, developing and managing of new projects, as well as strategies that can be taken by existing cities, townships and neighbourhoods in reducing their carbon emission levels. Besides serving as a comprehensive guide, the LCCF also has an inbuilt carbon calculator with carbon equivalents that will help stakeholders assess their current baseline levels of the cities, townships and neighbourhoods and target their intended level.

I would like to express my deepest appreciation to the Malaysian Green Technology Corporation, Malaysian Institute of Planners (MIP), Institute Sultan Iskandar (ISI, Putrajaya) and the Malaysian Institute of Town Planning (MOTP) for their hard work and dedication in producing this document. I would also like to commend the editorial team involved in this publication for their dedication and hard work. I hope the publication of this book will further enlighten all relevant stakeholders on the expanding need to mitigate climate change, and the importance of responsible urban development strategies.

Why do We Need Low Carbon Cities (LCC)?

The population in urban areas has been growing at a rate of 2.2% per annum versus the rural growth rate of 1.4% over the period of 2000 to 2009. In 2008, the urban population in Peninsular Malaysia reached 67% of the total population, and this is expected to grow to 75% by 2020 as the nation develops. (Source: Census Data, 2010 & BPN 2001)

Low Carbon Cities Framework:

This document is designed to contribute towards the Prime Minister’s commitment at COP 15 in Copenhagen, December, 2009: conditional voluntary target to reduce carbon emission intensity of up to 40 per cent of Gross Domestic Product (GDP) compared to 2005 levels. A GHG reduction approach is used in this document. The carbon equivalent of each activity producing GHG (carbon dioxide) is focused on areas, identified. The elements are: Urban Environment, Urban Transportation, Urban Infrastructure and Building.

What is Low Carbon Cities Framework (LCCF)?

A national framework and assessment system to guide and assess the development of low carbon cities and to support holistic sustainable development in Malaysia. The document is divided into two components:

1. Low Carbon Cities Assessment System – an in-built carbon calculator will help a user determine their current baseline. The user will then apply the various strategies recommended in the framework to achieve a reduction level. The calculator will be used again to re-assess the carbon emission level to see if the user has obtained a good reduction level.

2. Low Carbon Cities Framework – The framework serves as a guide to uses on pertinent areas (elements) that contribute to the reduction of GHG emission. This information would help the user identify areas in which they can target an overall carbon reduction. The framework introduce and discusses the definition of low carbon cities through the four main focus that have carbon impact.

Objectives

The Ministry of Energy, Green Technology and Water (KeTTHA) has formulated a document that can assist and township lower their emissions level, which concurrently supports the Government to achieve the target of 40% carbon emission reduction per GDP per capita by the year of 2020.

The objectives of the document are:

- To encourage and promote the concept of low carbon cities and townships in Malaysia;
- To increase the compatibility of cities/township with their local natural environment;
- To guide cities in making choice/decisions towards greener solutions.

Assessment Approach To Encourage Implementation

User can opt to undertake a One-System Approach or a City-based Approach depending on their objective and capacity.

Definition

Low Carbon City can best be defined as a city that comprises of societies that consume sustainable green technology and emit relatively low carbon as compared with present day practice to avoid the adverse impacts on climate change.

Message from the Minister of Energy, Green Technology and Water

The Low Carbon Cities Framework and Assessment System or better known as the LCCF is a system developed by my Ministry. The purpose of this system is to assist our stakeholders such as developers, local councils, town planners, non-governmental organizations (NGO’s) and the public to lower the levels of carbon emission in our cities towards achieving sustainable urban developments. The Ministry of Energy, Green Technology and Water (KeTTHA) has formulated a framework and assessment system produced in the region that highlights exactly how cities can reduce their carbon emission levels. I hope this document will also serve as an important source for overall sustainability towards achieving a better quality of life for our ‘nation’.

I would like to record my appreciation to the Ministry of Energy, Green Technology and Water and its partners in producing this beneficial document.

Thank you.

MALAYSIA’s Green Commitment on Carbon Reduction, November 2009

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Assessment Approach To Encourage Implementation

User can opt to undertake a One-System Approach or a City-based Approach depending on their objective and capacity.

One System Approach

This approach is a holistic view where all criteria are considered and mitigated as stated within LCCF.

City Based Approach

This approach is a particular selected sector as described in the main criteria and not all the criteria in the LCCF will be considered and mitigated.