

UNIVERSITI TEKNOLOGI MARA

**AN EVALUATION OF LOW
CARBON CITIES FRAMEWORK
(LCCF) IMPLEMENTATION IN A
LOCAL AUTHORITY: THE CASE
STUDY OF SUBANG JAYA
MUNICIPAL COUNCIL**

SITI KARTINA BINTI JUHARI

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ABSTRACT

Climate change is affecting the world. Our world is like an ice cream melting because of human activities produce the carbon footprint. Cities as a huge effect from yesterday, today and tomorrow became the environmental degradation. Sustainable development is about "cradle to the grave". Hence, the effort of the leaders to achieve the sustainable development is from New Urban Agenda (NUA), Sustainable Development Goals (SDG's) and local authorities. The implementation of Low Carbon Cities Framework (LCCF) covers four (4) main areas: Urban Environment, Urban Infrastructure, Urban Transportation and Buildings as guidance to local authorities. The LCCF Checklist is the minimum requirement which include the passing score in order to gauge whether a particular project is ready or not to commit in the development. The LCCF Checklist is applied in planning permission process to assess the effect to the communities' satisfaction achievement in the aspect of economy, environment and social towards sustainable development. This research aimed to explore the implementation of LCCF Checklist in the planning development control procedure. The case study is Subang Jaya Municipal Council. The scope and limitation in the implementation of LCCF are LCCF Checklist (LCCFC), planning development control procedure, readiness and community reception. The methodology applied was a mixed-method of qualitative and quantitative research. The qualitative research involved the experts survey from Local Authority (LA) officers and stakeholders via face-to-face interview. The quantitative research involved the community reception with 400 respondents examining the case study consisted of six (6) neighbourhood areas in Subang Jaya Municipal Council jurisdiction namely is BPK1.1: USJ-Sunway, BPK 1.2: USJ-Subang Jaya, BPK 3.1: Putra Heights, BPK 5.1: Bandar Puteri, BPK 5.2 Puchong Perdana and BPK 6.1: Taman Equine; by answering questionnaire survey forms. The analysis for qualitative data is by Atlas Ti. Meanwhile for analysis quantitative data by SPSS and PLS-SEM to identify relationship between the communities' satisfaction level in the implementation of LCCF Checklist. The findings showed that the implementation LCCF checklist in the local authority concerned is not ready and suggested for improvement strategies with communities' satisfaction. It is recommended for an action plan and strategies in implementation programme of LCCFC by local authority resulted from the validation in acceptance of the conceptual framework in achieving community satisfaction. The contribution of implementation LCCF Checklist must be reviewed and to continue with improvement that have been contribution to knowledge as a new approach with GIS-based. It is recommended to be used as reference by other local authorities as quantum leap towards the sustainable development.

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

In mitigating the extreme effects of global climate change, Malaysia is inspired to apply the Low Carbon Cities Framework (LCCF), an opportunity to reduce carbon emissions while offering tremendous economic opportunities (Lee, 2019). The resulting environmental degradation of the global system is from the people's carbon footprint (Jones et al., 2018). However, within the boundaries of intense industrialisation under Industry 4.0, it is observed that the LCCF implementation measures in local authorities are slow moving. Local authorities implement LCCF to achieve green city status by enhancing sustainable developments in cities (Hunter et al., 2019). Chris Bateman (2017) analogised the world to an ice cream and which deteriorates due to global warming as the earth is getting warmer every year. It is referred to as the observed scale, increasing the temperature. The international system of environmental management that focuses on lifestyles and industrialisation is moving slowly in the right direction (Ho Chin Siong, 2015). Global warming or climate change has been affecting the world. If the earth is melting, our planet will be in ruins (Chris Bateman, 2017).

According to the United Nations (2020), environmental problems have been recognised and acknowledged at the United Nations Conference on the Environment and Development (UNCED) held in Rio de Janeiro in 1992 (UNCED, 1992). This recognition resulted in the adoption of Agenda 21 implementation which was accepted by 178 governments in 1992. However, the United Nations Environment culminated with the World Summit on Sustainable Development (WSSD) into a sustainable development framework (Panels et al., 2020). As a result, the melting of the world from yesterday, today, and tomorrow have become worse and came to be called environmental degradation (Shepherd E. et al., 2016 ; Scopelliti et al., 2018). The Sustainable Model by William McDonough (2010), which is the concept of cradle to grave, is the perspective on the environmental approach (Khan, 2020). The cradle is where you start life, and, of course, the grave is where you end it (Braungart, 2020).