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Low Carbon City (LCC) Governance through Administrative and Operational Approaches by Malaysian Local Government

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Abstract. In Malaysia, the current practice of delivering low-carbon city approaches usually is administered and managed by the planning department in each local authority. However, this current practice may also lead to the problem of unorganized institutional administration and management. Simultaneously, the Malaysian government, through Low-carbon City Master Plan, has mentioned the need for governance restructuring for low-carbon city delivery. Therefore, this paper aims to evaluate the practice of Low Carbon City (LCC) in terms of administrative and operational practices. Three (3) objectives were established for this study; (i) assessing the governance for low-carbon city approaches and; (ii) examining the operational practices of LCC initiatives at the local level, and (iii) determining the application of policies and strategies for low-carbon development by the local authority. The study applies the purposive sampling approach, using the technique of an in-depth interview with two (2) core local authorities endeavoring on low-carbon development in the state of Selangor; Shah Alam City Council (MBSA) and Subang Jaya City Council (MBSJ). The result of this study shows that the governance of low-carbon cities can be categorized into three (3) main dimensions: administrative, operational, and policy application. From the administration feature, the findings indicated that the current administration practice needs to be restructured to enable a more effective delivery system. Moreover, the current way of delivering a low-carbon city was ineffective due to long-standing systems, coordination among the agencies, and the feasibility of the strategies planned to achieve the low-carbon status. Since this study converges on the governance aspect from the perspective of the local authority, future research may look deeper into the whole framework involving the delivery support system, contributing to the effectiveness of low-carbon delivery practices.

1. Introduction

Climate change is the foremost factor derived from the importance of addressing and developing more sustainable cities. United Nations mentioned that human activities from various sectors in development (i.e. energy, industry, transport, agriculture, etc.) contribute to weather and world temperature changes [1]. Similarly, the Malaysian Meteorological Department and the Ministry of Energy, Green Technology and Water stated that these activities caused greenhouse gas trapped in the atmosphere and caused global warming and change in climate conditions [2]. Since 2007 as mentioned by Solomon et al. and also cited by Werndl (2016) in her study, climate change has been seen as average weather over a very long period

