

Documents

Zawawi, N.H., Asmawi, M.Z., Zen, I.S.

THE PERFORMANCE OF KUALA LUMPUR'S CARBON EMISSIONS IN THE CONTEXT OF URBAN PLANNING
(2024) *Planning Malaysia*, 22 (1), pp. 334-348.

DOI: 10.21837/pm.v22i30.1444

Department of Urban and Regional Planning, Kulliyah of Architecture and Environmental Design, INTERNATIONAL ISLAMIC UNIVERSITY, Malaysia

Abstract

Cities are responsible for 70% of greenhouse gas (GHG) emissions on a global scale, and cities play an important role in reducing GHG emissions. It is essential for Kuala Lumpur to consider reducing the city's GHG emissions. The city's GHG emission inventory can track and monitor the effectiveness of the climate action plans that has been implemented. The aim of this study is to identify the performance level of GHG emissions in Kuala Lumpur between 2010 and 2019. It is also to identify the performance of Kuala Lumpur's GHG emissions in 2019 in comparison to the global and Malaysian level. Data is calculated using the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventory (GPC), which is recognised and utilised globally. Secondary data for the years 2010 and 2019 was analysed as well as the performance of the Kuala Lumpur GHG emission profile in 2019. With three (3) identified sources of emissions, Kuala Lumpur managed to reduce its GHG emission intensity from 2010 by 74.07% in 2019. The city's GHG emission was recorded at 15,675 ktCO₂eq in 2019. The stationary energy sector contributes higher GHG emission than other sector, with 12,043 ktCO₂eq (76.83%), followed by the transportation sector with 3,180 ktCO₂eq (20.29%) and the waste sector with 452 ktCO₂eq (2.88%). As of 2019, Kuala Lumpur's absolute carbon contribution to the global average is 0.03%, whereas Malaysia's absolute carbon contribution is 4.74%. Additionally, the city contributes just 0.07 kgCO₂eq/RM (30.17%) to Malaysia's total GHG emission intensity. © 2024 Malaysian Institute Of Planners. All rights reserved.

Author Keywords

Carbon Emission; Greenhouse Gas Emission; Greenhouse Gas Intensity; Gross Domestic Product; Kuala Lumpur

Correspondence Address

Zen I.S.; International Islamic UniversityMalaysia; email: zainora@iiu.edu.my

Publisher: Malaysian Institute Of Planners

ISSN: 16756215

Language of Original Document: English

Abbreviated Source Title: Plann.Malays.

2-s2.0-85186533480

Document Type: Article

Publication Stage: Final

Source: Scopus