

Greenhouse gas emissions profiles of neighbourhoods in Durban, South Africa – an initial investigation

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ABSTRACT:

Because current emissions accounting approaches focus on an entire city, cities are often considered to be large emitters of greenhouse gas (GHG) emissions, with no attention to the variation within them. This makes it more difficult to identify climate change mitigation strategies that can simultaneously reduce emissions and address place-specific development challenges. In response to this gap, a bottom-up emissions inventory study was undertaken to identify high emission zones and development goals for the Durban metropolitan area (eThekweni Municipality). The study is the first attempt at creating a spatially disaggregated emissions inventory for key sectors in Durban. The results indicate that particular groups and economic activities are responsible for more emissions, and socio-spatial development and emission inequalities are found both within the city and within the high emission zone. This is valuable information for the municipality in tailoring mitigation efforts to reduce emissions and address development gaps for low-carbon spatial planning whilst contributing to objectives for social justice.