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Addressing GHG emissions from land transport in a developing country (Conference Paper) (Open Access)

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Abstract

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The number of motor vehicles in Malaysia is growing at a significant rate, from around 15 million in 2005 to around 25 million in 2014. Based on the National GHG Inventory as reported to UNFCC, as a whole the transport sector has consistently remained the second largest GHG emitting sector in the country, accounting for 20% of the country's total GHG emissions in 2014 of which about 18% comes from road transportation. In this paper, a possible approach in addressing the GHG emissions from the land transport sector is presented. The avoid-shift-improve strategy is employed to determine the possible measures to deal with mitigating the GHG emissions. Computation of GHG emissions for 2014 revealed that car is the vehicle with the biggest contribution, due to its large numbers and also VKT. Motorcycles, on the other hand, have relatively lower GHG contribution despite its huge numbers, while goods vehicle have significant GHG contribution despite its small number of vehicles. Public transport (both rail and bus) can significantly reduce GHG emission for each passenger-kilometer compared to other alternatives. Opting for smaller vehicle can also reduce GHG emissions. Another potential solution towards lower GHG emission is adoption of electric mobility and alternative fuel. © 2019 Published under licence by IOP Publishing Ltd.

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