

VEHICLE EMISSION STANDARDS VERSUS EURO TECHNOLOGIES IN SRI LANKAN CONTEXT

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Abstract

Despite very limited use of emission control techniques, motor vehicles are emerging as the largest source of urban air pollution in the developing world. Therefore, reduction and control of vehicular emissions involve comprehensive strategies, which requires emission standards for new vehicles, cleaner fuels, inspection & maintenance programme for in-use vehicles, vehicle importation policies, traffic and demand management measures. This also include institutional development, awareness, education and training. The Government of Sri Lanka introduced the Vehicle Emission Testing (VET) programme as mitigation option for vehicular emission in 17th November 2008.

The main objective of this study is to explore the improvements of the current vehicle emission standards compared to EURO standards and see how it can be adapted in the Sri Lankan Context. Important points were gathered from the analysis of VET data and they are considered when analysing and identifying the gathered data along with the research objectives. The information collected under the study is mainly focused to examine the present state of the VET according to the current standards and to identify the factors with related to EURO technologies when applying in to Sri Lankan Context. Based on the petrol and diesel engine vehicle population in Sri Lanka, the adoption of the EURO technology would cause very important reductions of the total emissions of nitrogen oxides and particulate matter. With quality diesel, together with unleaded gasoline, the use of the catalyst and emission controls on motor cycles and motor tri-cycles would reverse the increasing trend of emission due to the significant growth of vehicle population in Sri Lanka.

Therefore these findings are much helpful for policy makers to make further improvements in the advanced regulatory directives. Improving fuel quality and the possible adaptations of more advanced vehicle emission control technologies in conjunction with fuel reformulation, can give much larger emission reductions,

particularly in the long run and increase the contribution to lower vehicle emissions for better air quality.

Keywords: Air Quality, Vehicle Emissions, Vehicle Emission Standards