

International regulation of vehicle emissions control rules and its influence on academic engine development experimental study and vehicle manufacturing

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ABSTRACT

In this century, global on-road passenger vehicles raised rapidly with concerns regarding of air pollutions, greenhouse, climate change, economical and human life safety. However, what are the new vehicles emission standards implementation regulation involved? How can new emission regulation impact vehicle performance and environment pollution reductions? What is (Worldwide Harmonized Light Vehicle Test Procedure - WLTP)? How can (WLTP) regulation promote improvement to vehicle quality in reduction of emission to lower level possible and add more performance to the vehicles for open market? What is the real-world on-road (Real world Drive Emission- RDE) test new emission regulation and its demand? Why vehicle manufactures should present both emission level of laboratorial engine emission level and vehicle (RDE) emission level in EU? Presenting an accurate vehicle pollutant determination due to new EU regulation procedure of (WLTP) will help the consumer identifying the regulation cost fee and tax in registration the vehicle. Methodology based on comparative EU regulation assessment and (WLTP) regulation vehicle emission control technologies assessment. The paper focus on viewing, the potential of pollution regulation (WLTP) for vehicle emissions reductions. Provide an outline of the status of the EU vehicle pollution emission regulations information and identify priorities options and recommendations to the introduction of the (WLTP). Offering information gridline data for researchers in future study for the strict pollution regulation adopted by European countries and its impact on future academic study of vehicle emission experimental process in non-applicable countries, contribute the procedure process of (RDE) emission implementation test within (WLTP) to be familiar by researchers for future intended joining the regulation.

KEYWORDS:

International regulation; Vehicle emissions; Academic engine development