

Abstract Reducing the negative effects of vehicle emissions is one of the main priorities for governments worldwide. Comprehensive understanding of the costs and impacts associated with emissions would help government decision makers establish policies that allow their citizens to make decisions to reduce vehicle use externalities and maximize the overall benefits to government and society. Countries worldwide have pre-set goals regarding maximum average emissions. However, these goals are nearly impossible to realize without market interventions. Therefore, many governments have introduced taxes to guide people towards reducing vehicle emissions. The purpose of this study was to explore the mediating role of driver motivations in the effect of the following tax-related emission factors on vehicle exhaust emissions: (progressive engine size tax, progressive vehicle emissions tax, progressive vehicle age tax, and progressive vehicle kilometres travelled tax). The study used a quantitative approach of two questionnaires-one paper-based and one internet-based-to collect primary data. Smart PLS 3.2.7 was then used to analyse the data. The study found that the progressive taxes on engine size, vehicle age, and vehicle emissions, if imposed, will increase driver motivations to buy vehicles with smaller engines, replace or maintain old polluting vehicles, or fix vehicle emission problems. This study contributes to the literature by achieving its theoretical and practical objectives of providing a clear message to governmental practitioners and any related bodies that progressive taxes can increase driver motivations to reduce vehicle emissions.