

## Abstract

We compile a detailed road transport inventory for greenhouse gases and air pollutants to explore energy emissions from alternative policy scenarios for the Kenya road transport sector. In 2010, road transport emissions accounted for 61% of total nitrogen oxides emissions in Kenya, 39% of fine particulate matter, 20% of carbon dioxide. In the business as usual scenario, road transport emissions increase between 4 and 31-fold from 2010 to 2050, with projected increases of motorcycles accounting for nearly all the increased pollutant emissions. Improved vehicle emission and fuel economy standards, fuel shift and investment in public transport are shown to be effective mitigation options to meet Kenya's climate change goals with the additional benefits of better air quality and improved health.