

RIO DE JANEIRO CITY – MITIGATION SCENARIOS FOR THE TRANSPORT SECTOR UNTIL 2025

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Abstract:

The city of Rio de Janeiro will host two very important events on the next few years, The 2014 World Soccer Cup and the 2016 Olympic Games. To be able to host those big events, the city has committed to improve the transportation sector. Along with that the city also announced a voluntary commitment to reduce the emission of GHG gases until 2020.

This article presents all the plans of the city related to the transport sector, showing in detail each mitigation option, which includes an expansion of the subway (both in length and number of cars), implementation of three BRT systems, two BRS systems, increment the total extension of bikeways in more than 280 km inside the city, and also an inspection and maintenance program for light vehicles.

Each one of the mitigation options cited above has a positive impact on energy consumption, local pollution, and, of course, emission of GHG gases. This article will analyze each option in detail, showing its impacts on energy consumption and GHG emissions.

As a result, this article will present three scenarios of GHG emissions of the transportation sector of the city of Rio de Janeiro, with a 2025 time horizon. The first scenario or Scenario A will present the BAU energy consumption and GHG emissions of the transportation sector. Scenario B will present the energy consumption and GHG emissions of the city if all those mitigation options were implemented correctly. And Scenario C proposes more advanced mitigation options, showing its positive impacts on reducing energy consumption and GHG emissions.