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This paper evaluates low-carbon urban development strategies for the transport sector in São Paulo, one of the largest cities in the world. For each mobility policy selected, we build scenarios to evaluate the potential of mitigating GHG emissions, shedding light on institutional aspects, benefits and risks of implementing each measure. Selected policies analyzed in this paper focus on: (i) reduction of frequency and distance of motorized trips; (ii) improvement of public transport; and (ii) technological issues, from improvement of fuel efficiency of all transport modes to replacement of fossil fuels by biofuels. Results show that the measures that present the highest potential to reduce GHG emissions are those that promote the use of biofuels, particularly ethanol, followed by those that favor the use of public transport. Moreover, simulations of integrated policies evidence that their effectiveness depends upon the adoption of coordinated policies at Federal, State and Local levels. Lastly, we highlight the complementary nature of the proposed policies and the contribution of scenario building to the debate on the strategic planning of integrated urban public policies to promote sustainable development in São Paulo City.

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