



Big Push for Inclusive, Sustainable and Smart Cities in Latin America

Economic Commission for Latin America and the Caribbean

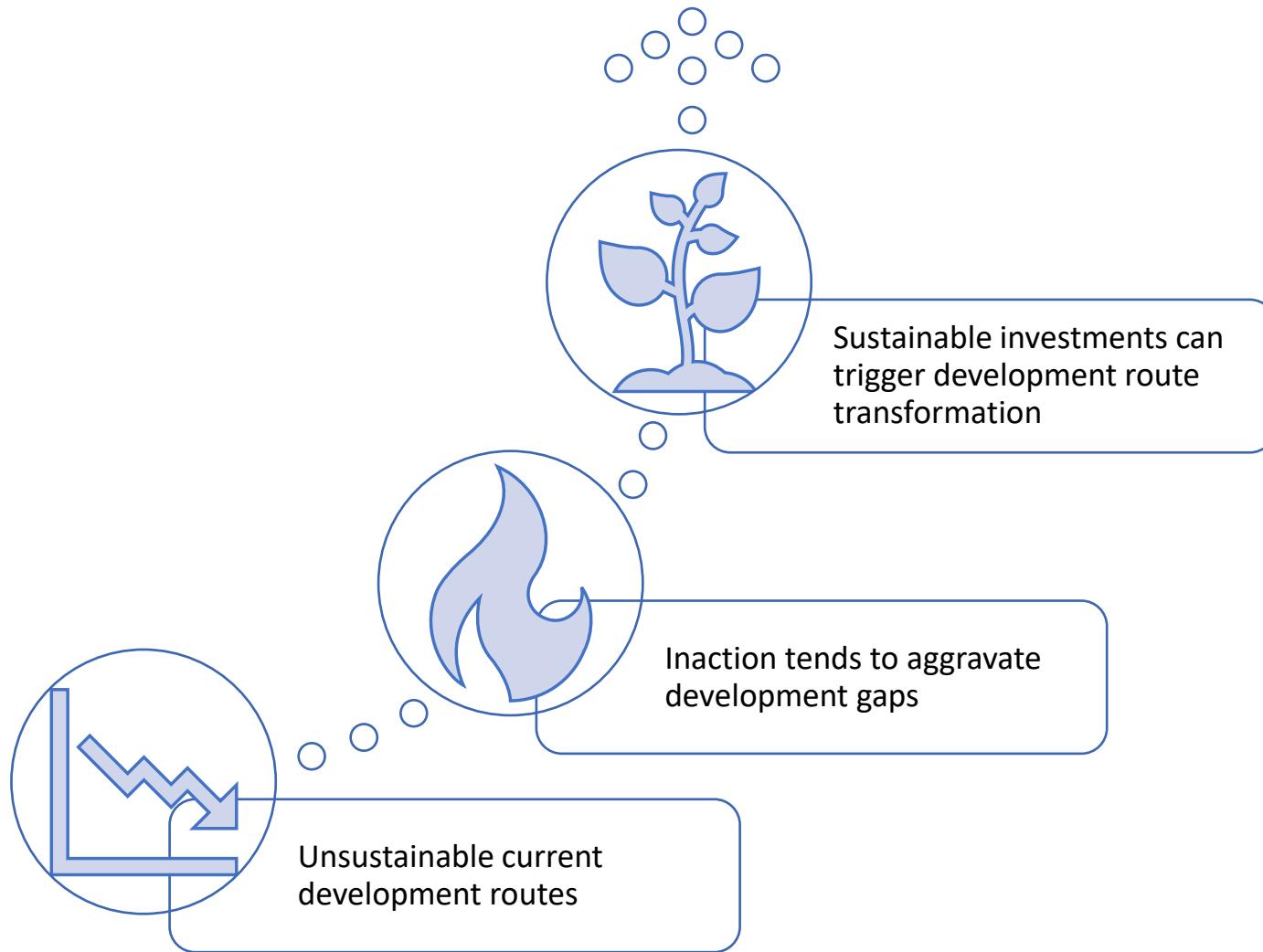


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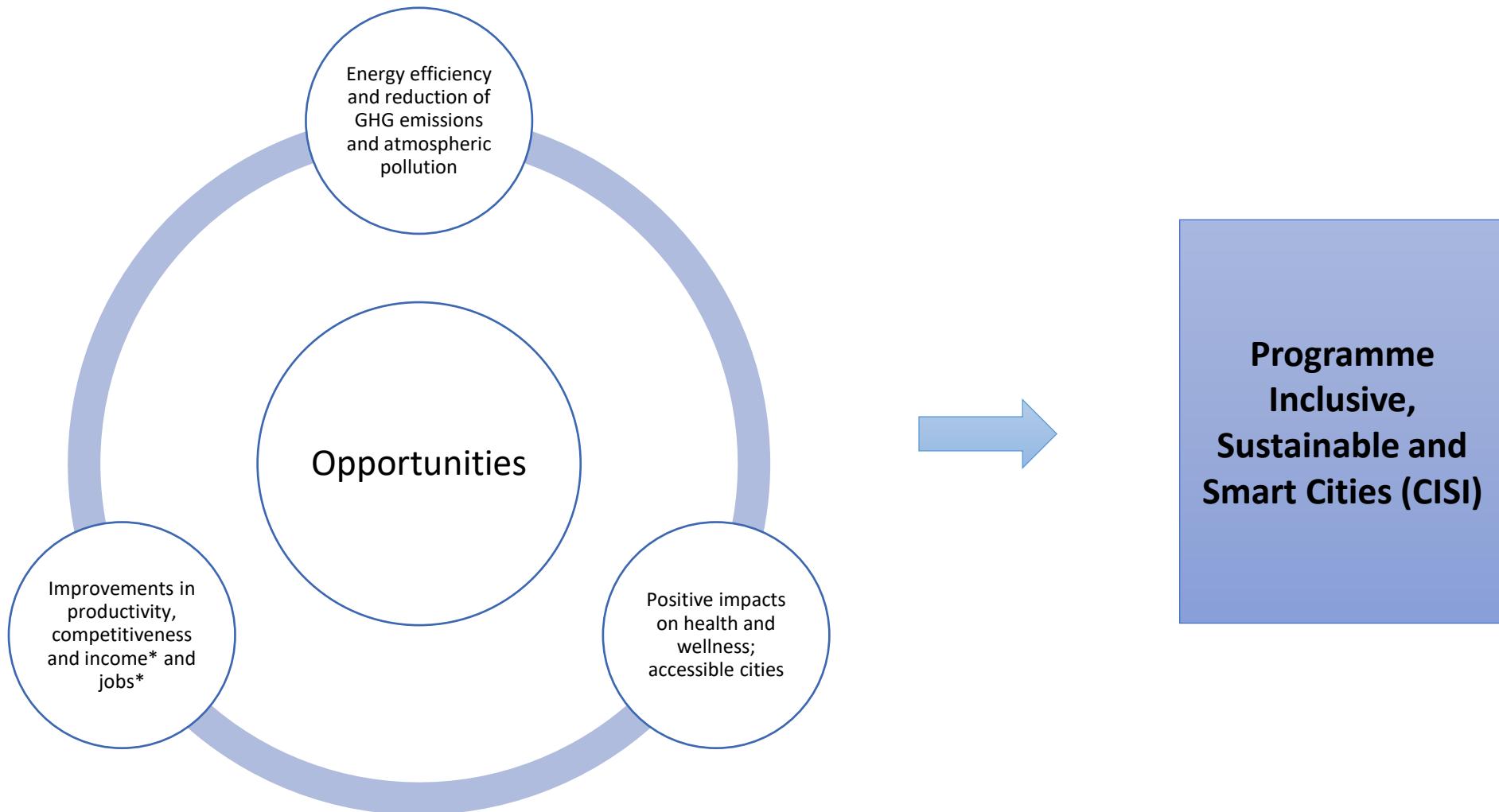
ECLAC

5 September 2022

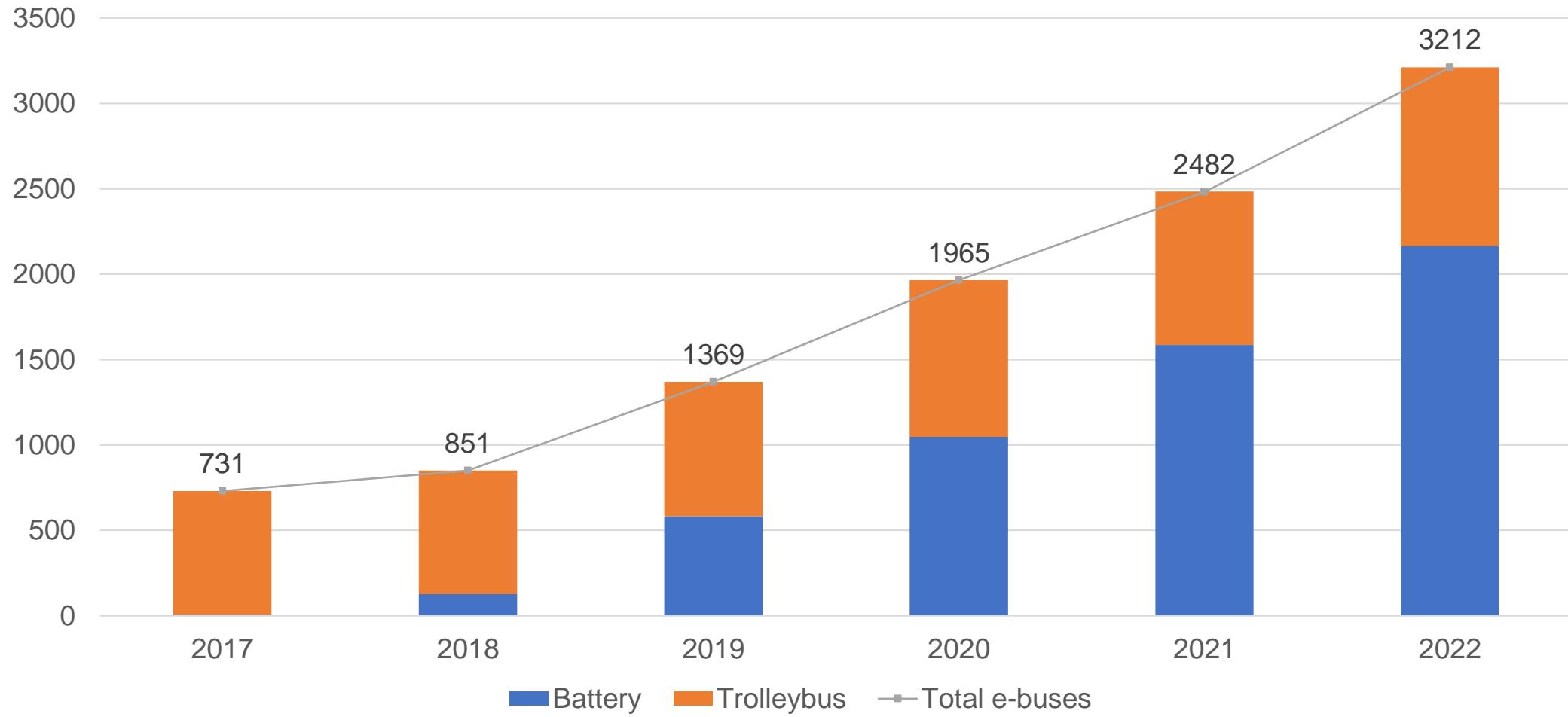
A transformative recovery based on a Big Push for Sustainability



Sustainable mobility and electrification of public transport are strategic for a Big Push for Sustainability

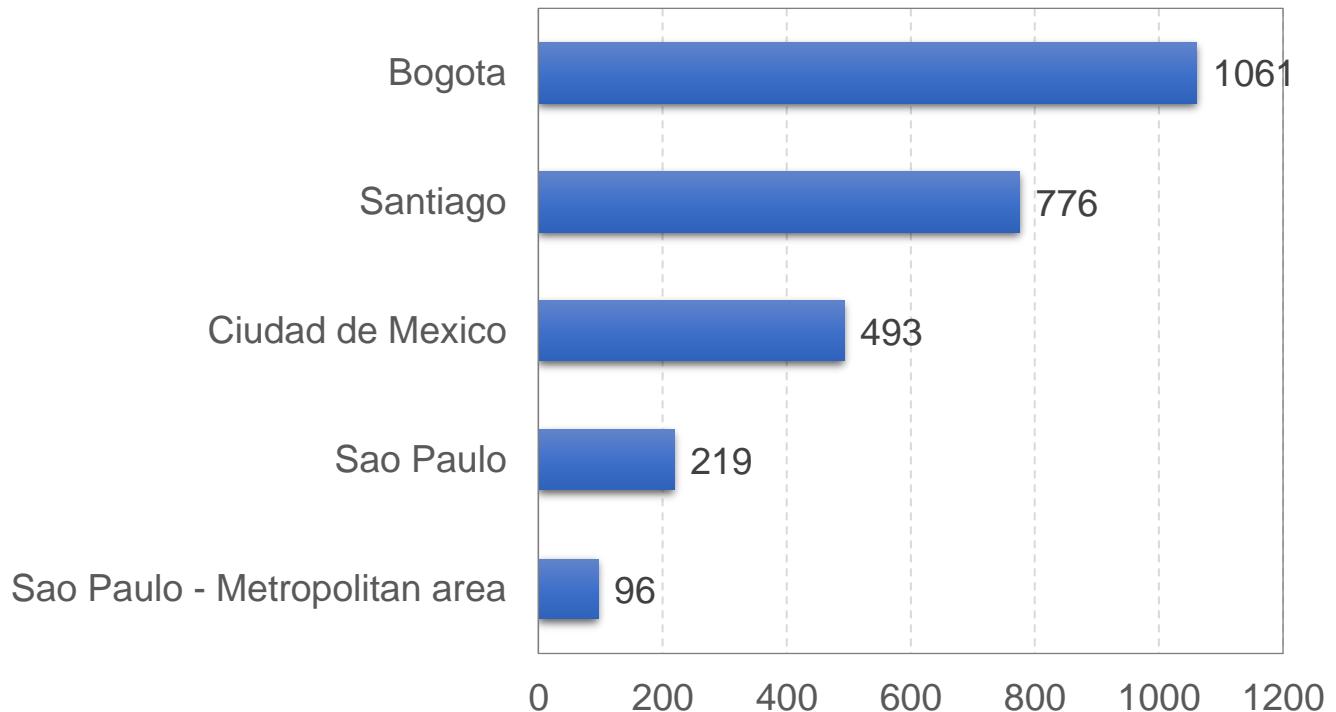
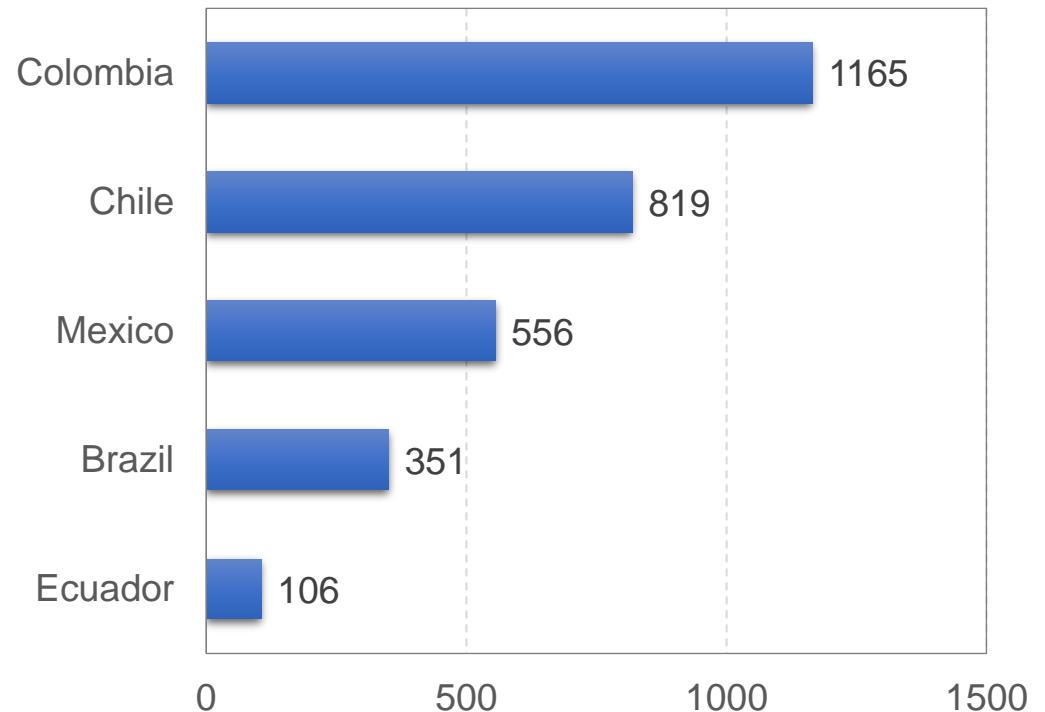


Evolution of e-buses in Latin America (2017-2022)



Source- E-BUS RADAR.

Total e-buses in Latin America by country and by city (2022)

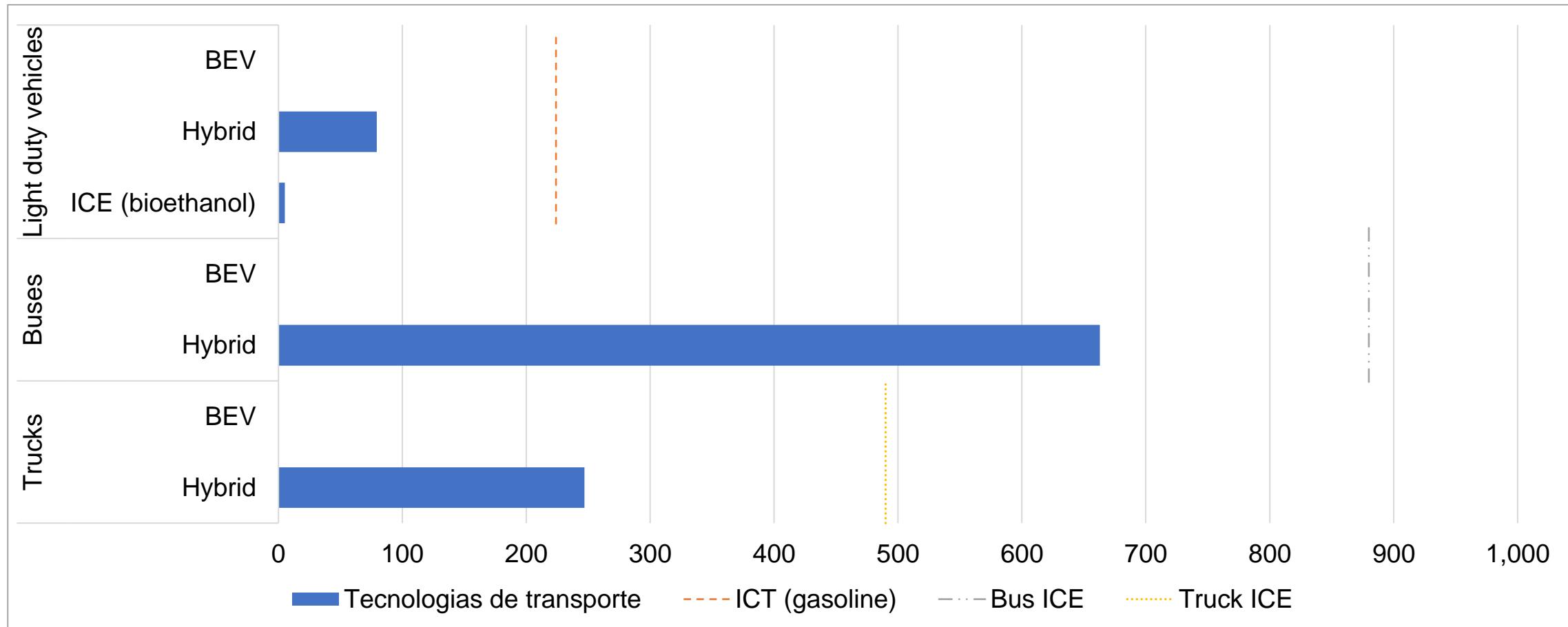


Source- E-BUS RADAR.



GHG emission by transport technology

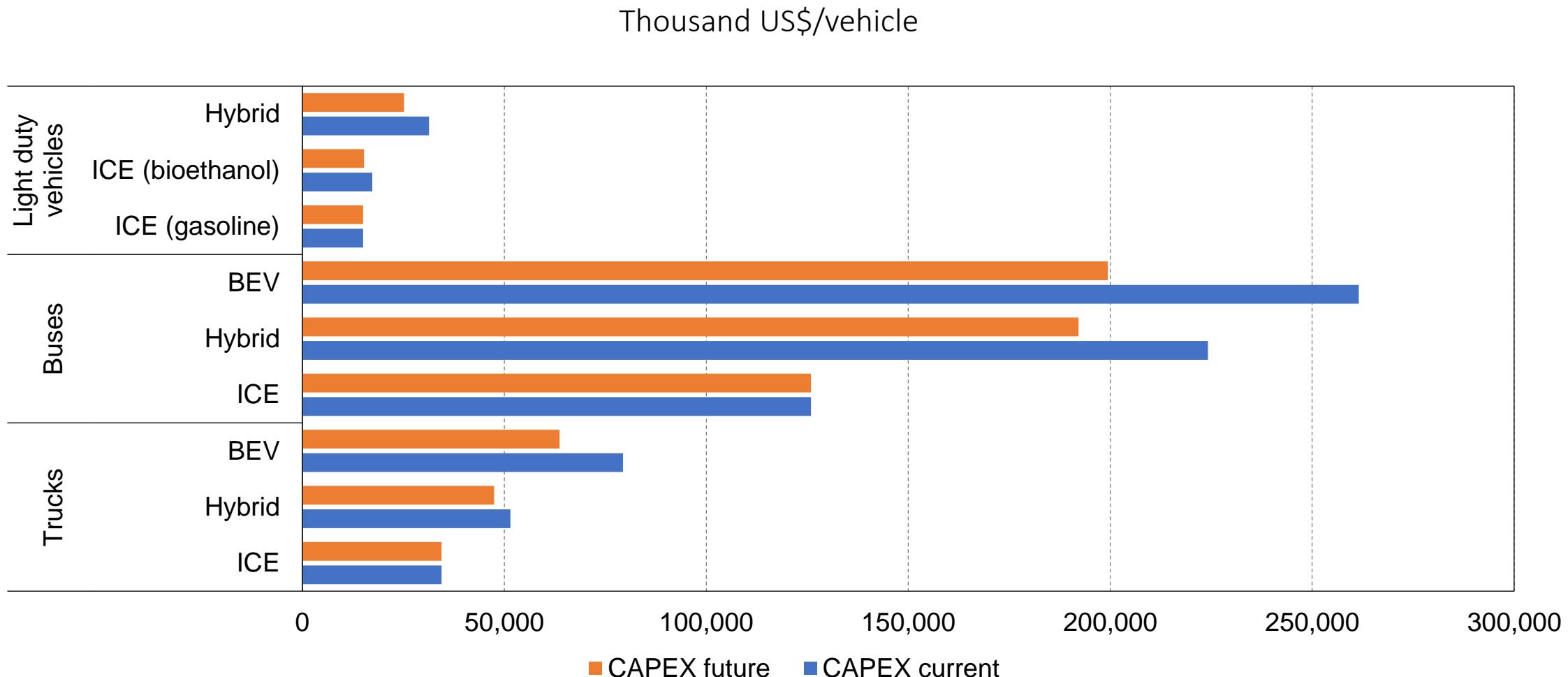
gCO₂e/km



Source: Economic Commission for Latin America and the Caribbean (ECLAC)/Center for Strategic Studies and Management (CGEE), "Performance indicators associated with low-carbon energy technologies in Brazil: evidence for an energy big push", Project Documents (LC/TS.2020/73; LC/BRS/TS.2020/5), Santiago, 2020.



CAPEX for transport technologies

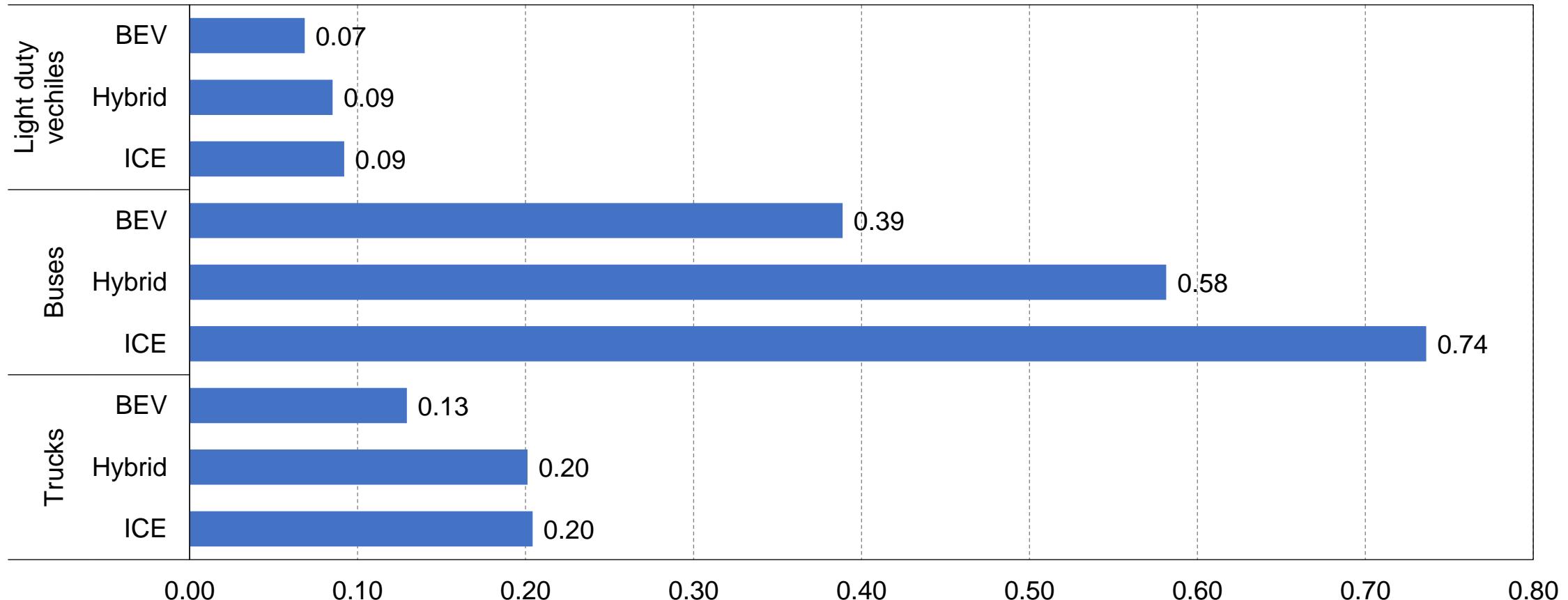


Source: Economic Commission for Latin America and the Caribbean (ECLAC)/Center for Strategic Studies and Management (CGEE), "Performance indicators associated with low-carbon energy technologies in Brazil: evidence for an energy big push", Project Documents (LC/TS.2020/73; LC/BRS/TS.2020/5), Santiago, 2020.



OPEX for transport technologies

US\$/km

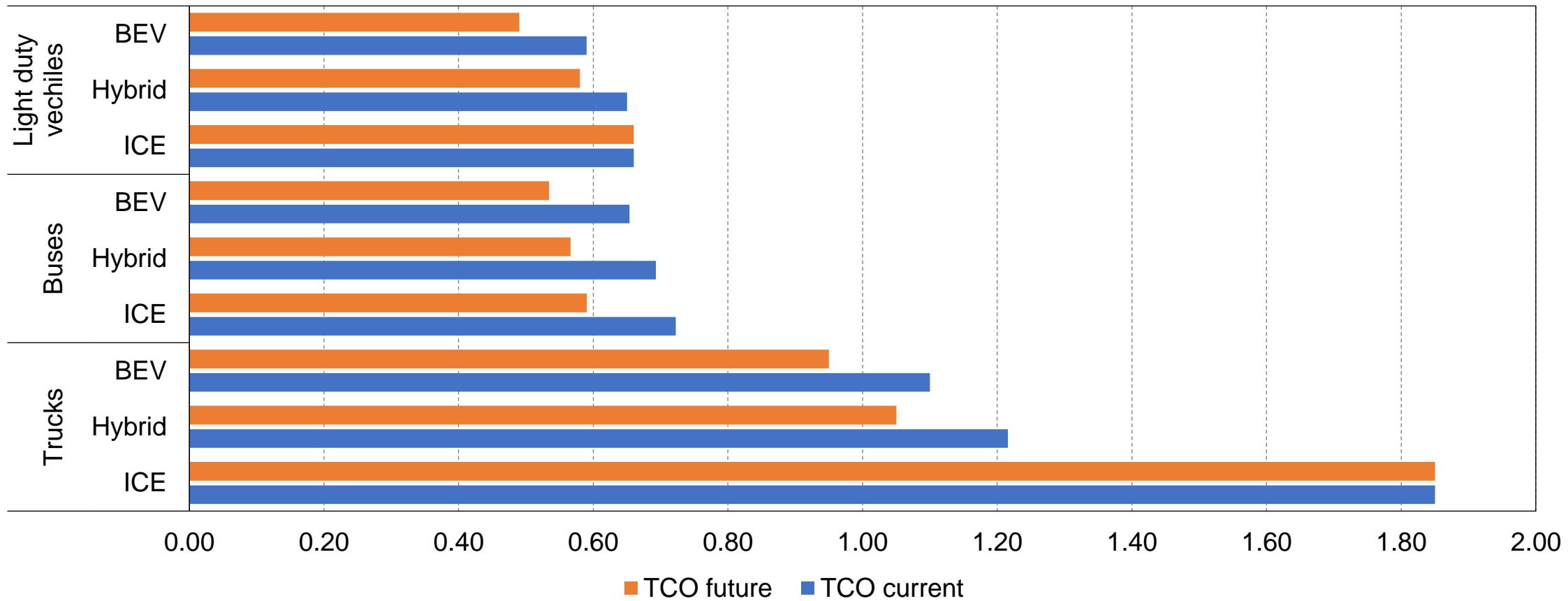


Source: Economic Commission for Latin America and the Caribbean (ECLAC)/Center for Strategic Studies and Management (CGEE), "Performance indicators associated with low-carbon energy technologies in Brazil: evidence for an energy big push", Project Documents (LC/TS.2020/73; LC/BRS/TS.2020/5), Santiago, 2020.



TCO for transport technologies

US\$/km

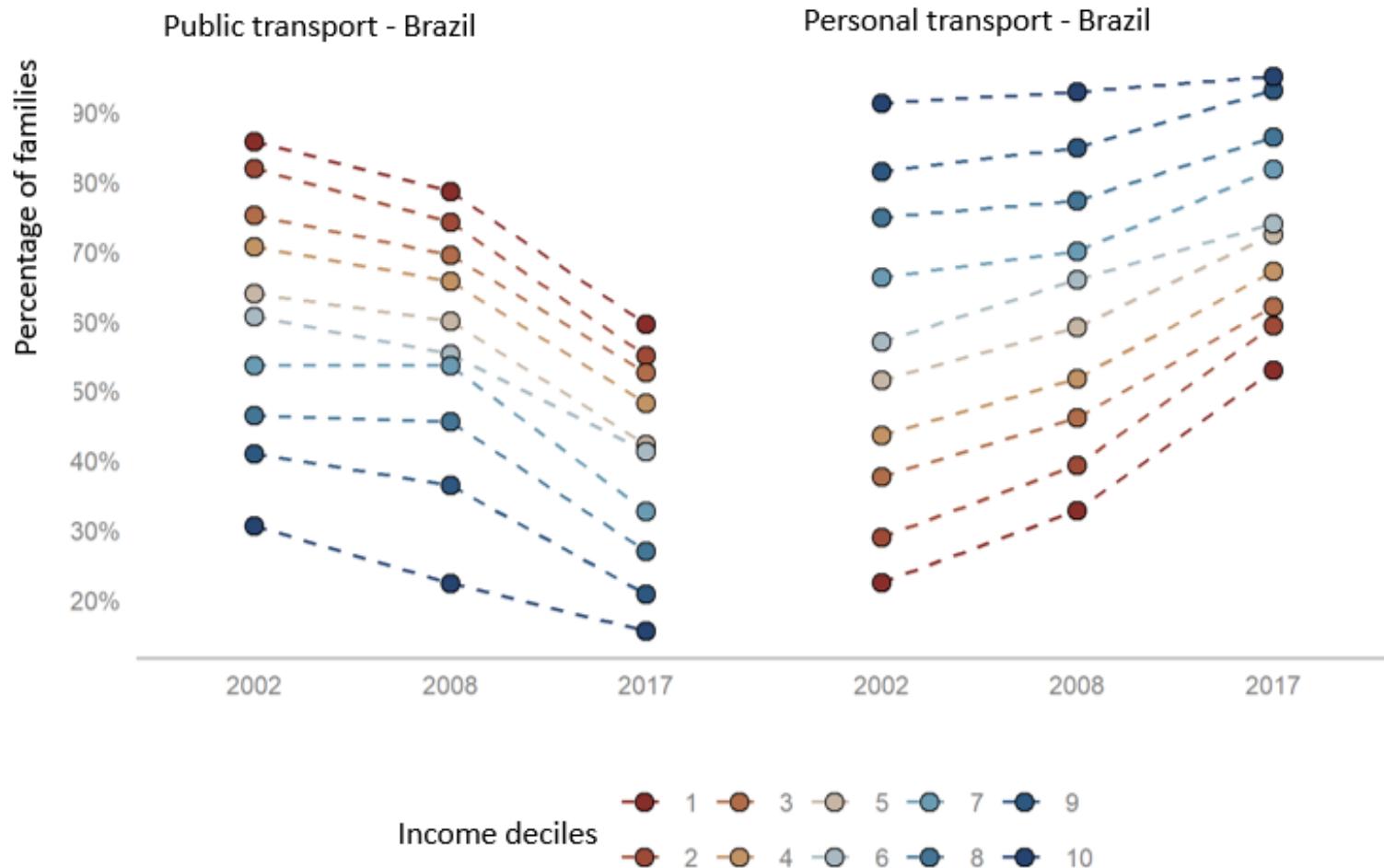


Source: Economic Commission for Latin America and the Caribbean (ECLAC)/Center for Strategic Studies and Management (CGEE), "Performance indicators associated with low-carbon energy technologies in Brazil: evidence for an energy big push", Project Documents (LC/TS.2020/73; LC/BRS/TS.2020/5), Santiago, 2020.



Evolution of the share of families with urban transport expenses by income bracket in Brazil from 2002 to 2017

Percentage (%)



Source: Pereira, Rafael e outros (2021), "Tendências e desigualdades da mobilidade urbana no Brasil I: o uso do transporte coletivo e individual", Texto para discussão IPEA, N° 2673, Brasília.



Scenarios for e-buses in Brazil

Impact by 2050

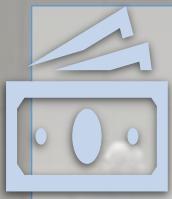
	Business as Usual (BAU)	Moderate scenario	Acceleration scenario
Scenario description	Few urban centers adopt e-buses and marginal increments of productive capacity.	Municipalities that have already signaled or started projects would electrify the fleet and increase production capacity by the main agents.	Different spheres of government are articulated to accelerate the electrification of the fleet and the production chain would strengthen and incorporate new agents.
Jobs in the e-bus sector	+813 jobs	+4.274 jobs	+21.056 jobs
Jobs in the diesel bus sector	-876 jobs	-2.334 jobs	-13.537 jobs
Jobs in the rest of the economy	+46.857 jobs	+115.388 jobs	+554.466 jobs
Total jobs in the economy	+46.794 jobs	+117.328 jobs	+561.985 jobs
Income	+R\$ 12,8 billion	+R\$ 25,9 billion	+R\$ 128,4 billion
Taxes (revenue raised)	+R\$ 5 billion	+R\$ 9,4 billion	+R\$ 44,4 billion
Added value	+R\$ 26,3 billion	+R\$ 52,3 billion	+R\$ 256,8 billion
Output	+R\$ 75,0 billion	+R\$ 137,8 billion	+R\$ 648,3 billion
GDP	+R\$ 31,2 billion	+R\$ 61,7 billion	+R\$ 301 billion

Source: E. Barassa and others, "Oferta de ônibus elétrico no Brasil em um cenário de recuperação econômica de baixo carbono" Documentos de Projetos (LC/TS.2022/9), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2022.



Match-making:

Creating opportunities for demand to meet supply



Financing and fiscal
incentives for
investments



Demand coordination
and planning



Strengthening of
national industry



Harmonization of
technical specifications
and technical support



New business models



Awareness of society
and responsible
transition

Further reading

Oferta de ônibus elétrico no Brasil em um cenário de recuperação econômica de baixo carbono



Big Push para a Mobilidade Sustentável: cenários para acelerar a penetração de veículos elétricos leves no Brasil



Building a New Future: Transformative Recovery with Equality and Sustainability



O Big Push para a Sustentabilidade



Investimentos transformadores para um estilo de desenvolvimento sustentável: Estudos de casos de grande impulso (Big Push) para a sustentabilidade no Brasil





Thank you

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