

# Efficient Driving Systems (PROMOB-e)

## Promoting efficient driving systems in urban mobility

### The Challenge

Following the UN Climate Conference (COP21) in Paris, Brazil announced its commitment to reduce greenhouse gas emissions by 43% by 2030 (compared to 2005 levels).

In addition to increasing the use of renewable energy, Brazil aims to enhance its energy efficiency by 10%. Currently, the transportation sector accounts for more than half of Brazil's consumption of fossil fuels and for 46% of greenhouse gas emissions by the energy sector. The Brazilian Energy Research Company (EPE) forecasts that the country's car fleet will triple in size by 2050—of which 10% are expected to be battery-powered electric vehicles. The growth of battery-powered vehicles and plug-in hybrids in the Brazilian market, however, has not been living up to its potential.

The Energy Research Company (EPE) predicts that the car fleet will triple in size by 2050, of which 10% will be battery-powered electric vehicles. However, so far, only six battery-powered models are offered, which, as in other markets, are comparatively more expensive than models with internal combustion engines. The number of new hybrid cars, plug-in hybrid, and battery electric licensing remains low at around 4,000 units in 2018 and 2019 (0.2% market share).

In public transport so far, only a few electric buses have been tested in pilot projects. Many cities are interested in the introduction of electric buses and are preparing to integrate this new technology, but there are still no continuous operating experiences and no specific financial support mechanisms.

In this context, through the German Clean Technology Initiative (DKTI) and on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), GIZ supports the Brazilian Ministry of Economy (ME) in implementing the project Efficient Driving Systems (PROMOB-e). The project contributes to developing the conditions necessary to promote mobility in Brazil and operates in three areas:

- Public policy;
- Norms and Regulations; and
- Innovative Business Models.

As a central element, Brazilian government, business and civil society partners are working towards the establishment of the National Electric Mobility Platform (PNME), which aims to develop policy proposals

Project	DKTI — Efficient Driving Systems — PROMOB-e
German Commissioning Party	Federal Ministry for Economic Cooperation and Development (BMZ)
Country	Brazil
Brazilian Political Partner	Ministry of Economy (ME)
Brazilian Implementing Partners	Ministry of Science, Technology, Innovation and Communications (MCTIC), Ministry of Mines and Energy, Ministry of Regional Development, Brazilian Electricity Regulatory Agency (ANEEL), The Brazilian Development Bank (BNDES) and the National Institute of Metrology, Quality and Technology (INMETRO)
Term	2017—2020
Budget	Up to € 5,000,000.00

and implement technical studies and financing instruments.

### Achievements

ANEEL approved a regulation, in June 2018, which allows the implementation and provision of electric vehicle recharge service not only by energy suppliers, but by any interested company. In May 2019, ANEEL published the Strategic R&D Project Call - Developing Efficient Electric Mobility Solutions. In September 2019, 30 projects were approved by ANEEL, with a total volume of BRL 468 million (approximately € 104 million). The newly created Electric Sector Innovation Network (RISE) aims to promote networking between applied research projects and the development of products and services to offer in the market.



*Electric cars are part of the solution.  
Smart mobility integrated to public transportation.*

The Ministry of Regional Development (MDR) discusses different criteria for electric buses as part of the Urban Collective Public Transportation Fleet Renewal Program (Refrota). In September 2019, the São Paulo Transport Authority (SPTrans) signed contracts for the operation of about 14,000 city buses. The concessions set ambitious targets for reducing emissions of greenhouse gases, NOx and particulate matter by 2028-2038. To achieve these goals, public bus operators will use low emission technologies, including electric buses, in the coming years.

The Brazilian Association of Technical Standards (ABNT) has developed a project for the classification of light vehicles (including electric bicycles, electric scooters and new electric vehicles such as scooters and unicycles) that is pending approval for publication. ABNT also participated in discussions on the new ISO 4210-10, Bicycles (Bicycle Safety Requirements - Part 10: Electric Bicycle Safety Requirements (EPACs)) to create a national standard for electric bicycles.

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