



Brazil

Strengthening Quality Infrastructure for Renewable Energies and Energy Efficiency II

Objective	To support the development of renewable energy sources and improve energy efficiency in Brazil through demand-oriented quality infrastructure services, thus contributing to the successful implementation of national policies in the energy sector.	
Approach	Coordinated by Brazil's National Institute of Metrology, Quality and Technology (Inmetro), this project aims to promote the sustainable use of renewable energy sources, guarantee the quality and security of the energy supply, and encourage energy efficiency measures based on reliable measurements. Activities include providing training to Inmetro's technical and managerial staff and to other relevant stakeholders both at PTB and at other leading quality infrastructure institutions around the globe. It further offers technical expert consultancy, seminars, workshops, conferences, study trips, and intercomparisons. The project promotes the development of new and improved quality infrastructure services, demand for which is increasing due to the energy transition, and which include calibration work and measurement technology in the fields of wind energy, photovoltaics, biogas, and grid monitoring. The project also explores innovative themes and technologies related to sustainable energies, such as green hydrogen or electric cars. It further aims at improving the interface between Inmetro and its stakeholders in the private sector and society through innovative communication and cooperation formats. Additionally, the project supports the reform and modernisation of the Brazilian Energy Efficiency Labelling Programme (PBE).	
Impact	<p>Brazil has a high share of renewable energies in its energy mix, mainly due to its large hydroelectric plants. However, the country's hydropower sector has faced increasing instability related to periods of drought, and supplies of energy have become limited during the dry season. To meet the growing demand for energy while combatting climate change, the Brazilian government is committed to expanding other renewable energy sources, primarily wind power, but also photovoltaics, biomass, and green hydrogen. Ensuring the quality of these technologies requires measurement and testing, for example, of radiation intensity, wind speed, and gas flow. Making such reliable measurement services available nationally facilitates the expansion of these technologies and guarantees the safety, performance, and durability of renewable energy production facilities.</p> <p>Energy efficiency is another issue addressed by the project. Labels are a key political instrument for incentivizing sustainable energy consumption, and Brazil's energy efficiency labelling programme (PBE) covers electrical products from household appliances to lamps and solar modules, and provides consumers with information on energy efficiency and safety. Working in cooperation with the relevant stakeholders, the project supports Inmetro in optimising the processes and services surrounding the labelling program.</p>	
Cooperation	The project is part of the Cooperation for Sustainable Development between Brazil and Germany in the priority area of renewable energies and energy efficiency. It is implemented in close coordination with the other modules of this programme, which are carried out by GIZ and KfW development bank.	
Financing	Federal Ministry for Economic Cooperation and Development (BMZ), Germany	
Term	2021–2025	
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