Driven by Standards: Indo-German Cooperation Promotes Electric Mobility

Electric mobility is of growing importance for India's future transportation system. Environmental pollution, traffic congestion, and a growing population compels the subcontinent to advance a safe, clean, connected and affordable mobility system. In 2017, 4 percent of new vehicle sales in India were for electric powered transportation. Indian government initiatives are promoting electric mobility, especially for two-, three-wheelers and buses.

Standards are an important enabler on the road towards electric mobility. They ensure the compatibility of charging systems, safety of batteries, and the security of payments for charging. India and Germany collaborate on international standards for electric mobility through the Indo-German Working Group on Quality Infrastructure.



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GLOBAL PROJECT *Quality Infrastructure*

The Global Project Quality Infrastructure (GPQI) of the German Federal Ministry for Economic Affairs and Energy (BMWi) engages in technical and political dialogues with Brazil, China, India, Indonesia, and Mexico to reduce technical barriers to trade, enhance product safety, and strengthen consumer protection.

GPQI serves as a platform to improve the mutual understanding of policies and regulations, and to jointly develop positions and solutions for international technical harmonisation. Common bilateral interests are the basis for the cooperation on challenges and opportunities on standardisation, conformity assessment and accreditation, legal metrology, and market surveillance with a wide range of stakeholders. These include ministries, regulators, public agencies, standards and accreditation bodies, industry experts, associations, companies, and technical and scientific institutions.

BMWi has commissioned the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH – the German Agency for International Cooperation – to support the implementation of GPOI. The project coordinates stakeholder inputs on draft regulations and standards, expert exchanges, delegation visits, and sectoral cooperations, and releases technical publications.

The Global Project Quality Infrastructure (GPQI) of the German Federal Ministry for Economic Affairs and Energy (BMWi) brings together experts from both governments, industry, and standardisation bodies to promote electric mobility. At a January 2018 workshop in New Delhi, a closer cooperation on promotion of electric mobility through standardisation was discussed. As a result, India and Germany later took on the leadership of a task force on electric mobility at the International Electrotechnical Commission (IEC). The task force developed a report which identifies central questions for standards development, such as the creation of a new Standardization Evaluation Group "Future of Mobility" for coordination of new and cross-cutting standardisation topics. Furthermore, it recommended the identification of certification needs for charging infrastructure.

Through the bilateral cooperation, government officials and industry experts from both countries engage in technical exchanges and get first-hand insights through visits of demonstration sites. Both sides exchanged on the widely accepted Combined Charging System (CCS), a key solution for open and universal charging systems for electric vehicles which is followed in the European Union and many other countries worldwide. CCS provides a single system that allows fast and normal charging for any type of electric vehicle – no need for adaptors while being safe and simple to use. Based on the exchanges at the international and national level, India has decided to refer to CCS in its new Indian Standard IS 17017 on general requirements for electric vehicle charging systems – an important first step towards internationally aligned standards. A standard in just one country or in just one car brand is not a real standard. CharIN therefore actively drives the discussions for one world standard for charging of electric vehicles. Thanks to the Global Project Quality Infrastructure (GPQI) and its close interaction with CharIN, we made a big step forward to establish the global charging system CCS in India. GPQI supported the involvement of government bodies and facilitated a close alignment with the industry.

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