

New Made-In-India EV Charging Standard

Source: IE

Why in News?

The **Bureau of Indian Standards (BIS)** has recently approved a groundbreaking charging connector standard for **Light Electric Vehicles (LEVs)**, including scooters, bikes, and rickshaws.

What is India's New EV Charging Standard?

- About:
 - Named ISI7017 (Part 2/Sec 7): 2023, this standard is a result of collaboration among <u>NITI Aayog</u>, the Department of Science and Technology, Ather Energy (a private firm), and other stakeholders.
- Unique Features of India's New EV Charging Standard:
 - Remarkable feature of India's new EV charging standard is its ability to combine alternating current (AC) and direct current (DC) charging for LEVs.
 - This approach, akin to globally established standards for electric cars, enhances interoperability and compatibility among various EV models and charging infrastructure providers.
- Consequences of Diverse Charging Standards:
 - India's EV manufacturers, unlike those in some other countries, are not obligated to adhere to a specific charging standard. This results in different charging standards for EVs from different companies, paralleling the past situation of Apple and Android smartphones.
 - For example, Ola Electric, Ather Energy, and Ultraviolette Automotive all employ distinct charging standards for their EVs.

What are Different Charging Standards Worldwide?

- China:
 - China uses a national standard for EV charging connectors that is called GB/T,

effectively addressing range anxiety with a dense network of charging stations.

- United States:
 - While **there isn't a national standard**, collaboration between EV manufacturers like Ford and General Motors aims to establish common standards.
- Europe:
 - The Combined Charging System (CCS) standard dominates in Europe, backed by the <u>European Union</u>, promoting uniformity.
- Japan:
 - Japan employs the CHAdeMO standard, though it's being phased out in North America in favor of more common standards.

PERSPECTIVE: MARKET SIZE OF EV COMPONENT INDUSTRY IN 2025

ELECTRIC VEHICLE VALUE CHAIN IN INDIA IS EXPECTED TO REACH \$4.8 BILLION IN 2025



What are Some Government Initiatives to Promote EV Adoption?

- The Faster Adoption and Manufacturing of Electric Vehicles (FAME)scheme II
- The National Electric Mobility Mission Plan (NEMMP)
- Vision The National Mission on Transformative Mobility and Battery Storage
- Production Linked Incentive (PLI) scheme
- The Vehicle Scrappage Policy
- Go Electric campaign
- Global EV30@30 campaign
- The Ministry of Power, in its revised guidelines on charging infrastructure (MoP Guidelines), has prescribed that at least one charging station should be present in a grid of 3 km and at every 25 kms on both sides of the highways.
- The Ministry of Housing and Urban Affairs has also amended the <u>Model Building Bye-laws, 2016</u> (MBBL) to mandate setting aside 20% of the parking space for EV charging facilities in residential and commercial buildings.

UPSC Civil Services Examination, Previous Year's Question (PYQs)

Prelims:

Q. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct? (2016)

- 1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
- 2. The Agreement aims to limit greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2°C or even 1.5°C above pre-industrial levels.
- 3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$ 1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code given below:

(a) 1 and 3 only

(b) 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

Ans: (b)

Mains:

Q. How is efficient and affordable urban mass transport key to the rapid economic development in India? **(2019)**

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The Vision