

GOVERNMENT OF INDIA
MINISTRY OF HEAVY INDUSTRIES
LOK SABHA
UNSTARRED QUESTION NO. 2154
ANSWERED ON 14.03.2023

BATTERY SWAPPING TRANSFORM URBAN MOBILITY

**2154. SHRI KURUVA GORANTLA MADHAV:
DR. BEESETTI VENKATA SATYAVATHI:**

Will the Minister of HEAVY INDUSTRIES भारी उद्योग मंत्री be pleased to state:

- (a) whether battery swapping transform urban mobility would bring a shift in favour of Electric Vehicle adoption;
- (b) if so, the initiatives of the Government and Public Sector Undertaking (PSU) in this regard;
- (c) whether battery swapping will lead to increase in generation of electronic waste and if so, the manner in which the Government proposes to deal with the issue; and
- (d) if not, the reasons therefor?

ANSWER
THE MINISTER OF STATE FOR HEAVY INDUSTRIES
(SHRI KRISHAN PAL GURJAR)

(a) & (b): Sir, NITI Aayog has uploaded a draft policy on their website for stakeholders' consultation for implementing the battery swapping policy. With battery swapping policy, faster adoption of EVs will take place which will increase public confidence in EVs.

Battery swapping is generally used for smaller vehicles such as 2Ws and 3Ws with smaller batteries that are easier to swap, compared to 4 wheelers and e-buses, although solutions are emerging for the latter segments as well. Battery swapping offers three key advantages relative to charging: it is time, space, and cost efficient, provided each swappable battery is actively used.

(c) & (d): As per the information received from Ministry of Environment, Forest and Climate Change, Government of India published the Battery Waste Management Rules, 2022 on 24th August, 2022 for environmentally sound management of waste batteries, including EV batteries.

The rules provide Extended Producer Responsibility framework for producers of batteries to recycle/ refurbish the waste batteries as per the prescribed timelines. Further, the rules mandate the recyclers to recover the minimum percentage of materials from waste batteries.
