

### GST on electric vehicle batteries

Transitioning to cleaner mobility solutions is critical for achieving Indian’s Nationally determined contributions wherein India has pledged to improve the emissions intensity of its GDP by 33 to 35 percent below the 2005 levels by 2030. In India, the transport sector contributes close to 10% of the total national GHG emissions, with road transport contributing about 87% (MoEFCC). Electrifying the road transport sector has the highest energy savings potential of around 40% in 2030, which is largely driven by ambitious adoption of electric vehicles and a shift from private to shared modes.

While the users and Government agree that electric vehicles in 2-3 and 4-wheeler category are essentially required for India to transition into a cleaner based transport system, it is equally important that such options are made viable economically for the common man to adopt. The current challenge apart from the cost of batteries are the different rates of levy on a battery as well as battery swap models especially in the 2 and 3-wheeler segments that have a huge potential to make this sector viable and affordable.

Recommendation	Rationale
<p><b>Addressing the inverted GST structure:</b> Battery and chargers for the automotive sector use are essentially automotive components hence GST rates should remain consistent across EVs as a whole and its components (batteries, chargers, bulk chargers) etc.</p>	<p>The current rate of 18 percent on lithium ion batteries leads to an inverted duty structure since EVs are taxable at 5 percent, and this further results in increase in cost of doing business considering batteries make up for a significant share i.e. almost 40 – 50 percent of the total cost of EV.</p> <p>This difference in GST rates is a major cost deterrent since it increases operational cost of procuring additional batteries as back up for the consumer as well as for companies desirous of offering battery swap as a model that would make such EVs affordable.</p> <p>Also, given that during the life of the vehicle battery needs to be replaced, a higher GST for new battery would act as a dis-incentive and would hamper its adoption. Similarly, chargers are taxable at 5 percent but does not acknowledge its use in battery swapping; which requires bulk chargers (capable to charge multiple batteries to power multiple vehicles).</p>
<p><b>GST waiver on charging/swapping service:</b> Further, GST waiver on charging and swapping services would offer the much-needed fillip to the electric mobility ecosystem of the country without creating a burden on the exchequer.</p>	<p>This also aligns with NITI Aayog report on Zero Emission vehicles where it has recommended tax incentives to energy operators for deploying a dense network of charging and swapping stations.</p>

Hence, we recommend that

1. **Batteries sold outside an EV for use in an EV should be brought down from 18% to 5%**
2. **Since Swapping as a Service is an important feature of EVs especially in the 2 and 3-wheeler segment the rate of 18% should be lowered to 5% GST.**

These measures would incentivise greater EV adoption in commercial/shared mobility applications by way of reduced operational costs under battery swapping arrangements and thereby positively affecting livelihood of masses.