

# Battery capacity lowered due to EV target scale-down

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India's requirement for advanced chemical cell batteries to power a much more moderate growth in electric two-wheelers and passenger vehicles till 2030 will require around 40 Gwh of battery capacity, according to electric vehicle makers.

This figure is half of what would have been required for the government's earlier ambitious target for EV penetration by the end of the decade.

The government's plan for building battery capacity envisages the creation of 145 Gwh of capacity, partly through a Production Linked Incentive scheme (PLI) for advanced chemical cell batteries (50 Gwh out of which 40 Gwh is for mobility) and partly from private companies who had envisaged setting them up without PLI support.

Electric vehicle makers say the reason for lower battery capacity is the substantial scaling down of EV penetration targets. Earlier, the government had aimed to reach 70-80 per cent penetration in electric two-wheelers and 30 per cent in passenger vehicles by 2030.

A recent presentation made by ICRA in January to SIAM has cut this drastically to half: 12-15 per cent for passenger

## BATTERY POWER FOR E-TWO-WHEELERS AND CARS

■ **Vehicle makers say requirement for battery cells envisaged earlier in Gwh will come down**

■ **Targets for penetration of EVs in passenger vehicles and E2W cut substantially for 2030**

■ **Cell capacity being made under PLI might be enough for requirements till 2030**

■ **However, vehicle companies say imports of cells will continue as those buying large volumes might get better pricing.**

Also, localisation will take time to reduce production costs



vehicles and only 25 per cent for electric two-wheelers.

Based on ballpark figures, it requires a 3 Gwh capacity battery plant (at an average 3 Kwh battery per electric two-wheeler) for 1 million electric scooters.

To reach the latest lower capacity of 5 million by 2030 requires a total capacity of 15 GWH. The earlier target would have needed over 45 Gwh of capacity.

In passenger cars, at an average of 40 kwh per vehicle, 250,000 vehicles required 10 Gwh of capacity. With penetration now pegged at only 15 per cent, this translates into 0.6 million cars (assuming a car market of 4 million plus) which is approximately 24 Gwh of capacity. Under the earlier target, it would have been 48 GWH.

In short, the total capacity requirement for passenger vehicles and electric two-wheelers under the earlier target would have required around 100 Gwh. Consequently, EV players need to invest around ₹28,000 to ₹30,000 crore to set up the desired capacity – not the ₹70,000 crore anticipated earlier. “Yes, one can buy battery cells from India, provided the price is competitive and it is customized to our needs. But imports will always be a choice, though the 100 per cent import will end,” said an electric vehicle maker executive. The current requirement can clearly be met by the PLI scheme with a total allocation of ₹18,100 crore. Three players have already been declared eligible — Ola Electric, Rajesh Exports and Reliance — and they add up to 30 Gwh of capacity. Ola is expected to roll out the cells by the middle of this year for its own captive needs and is beginning with 5 Gwh capacity.