## e2W firms cut on battery size after FAME subsidy reduced

## Portfolio rejig may keep prices low for customers

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lectric two-wheeler (e2W) makers are focusing on reducing the cost of batteries in their vehicles to ensure volumes amid uncertainties around the government subsidy programme.

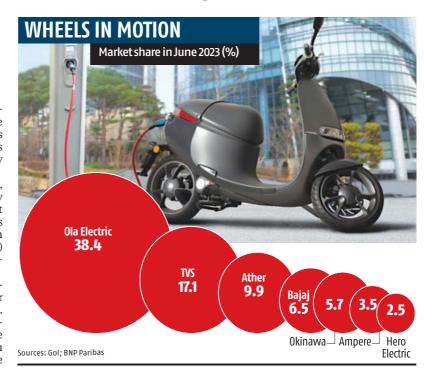
Players like Lohia Auto, Hop Electric, Ather Energy (Ather), and Simple Energy say they are working on bringing out more affordable two-wheeler models as uncertainties around Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME) in India II subsidies remain.

The Centre slashed the FAME II subsidy for e2Ws to ₹10,000 per kilowatt hour (kWh) from ₹15,000 per kWh in June. Apart from reducing the per-Kwh incentive by ₹5,000, the Centre also reduced the maximum subsidy cap of 40 per cent on the ex-factory price of the electric vehicle (EV) to 15 per cent.

Batteries make up 40-50 per cent of the cost of an e2W, and the immediate option is to reduce the battery pack size. "If one has to reduce the cost of the vehicle by tweaking other components, it would mean building another variant from the ground up," says Nikhil Bhatia, cofounder, Hop Electric. A component supplier to the e2W industry says that nearly every company is working to reduce battery sizes from 3 kWh to 2/2.5 kWh range. At 4 kWh, the range of the vehicle is 110-120 kilometre (km) on a single charge. "This is on paper. In real life, depending on the weight of the rider and terrain, this works out to 90-100 km on a single charge. When one reduces the battery pack to 2 kWh or 2.5 kWh, the range is not more than 70 km on a single charge," says an industry insider.

At present, the price of an e2W battery pack varies between ₹18,000 and ₹150,000 (between 1 kWh and 10 kWh), depending on the size and state in which it is being sold. The e2W makers, however, have set the ball rolling to realign their portfolios.

"We started planning — from a 2.5 kWh battery pack, we came up with a 2



kWh battery. We launched this variant in April this year. The reduction in battery size results in at least 20–25 per cent savings for the customer," says Bhatia, adding that Hop Electric has planned its portfolio for a no-subsidy situation.

Sources at Ather say they are going to launch a more affordable variant next month. "We have battery packs of 3 kWh and 4 kWh. We don't want to drop below 3 kWh," says a source. He adds that Ather has gone back to the drawing board to design an affordable vehicle from square one.

Lohia Auto, too, is designing a vehicle from scratch. Ayush Lohia, its chief executive officer (CEO), says that reducing battery packs is a way to ensure volumes keep flowing in. "We are designing a model that will be more affordable, and we are targeting a January launch. But reducing battery size also reduces the range, and we need to be careful here," he adds.

Simple Energy will launch an affordable scooter by September. "We have started deliveries of the Simple One, but by September we will have a more affordable variant, similar but with lower specifications," says Suhas Rajkumar, co-founder

and CEO, Simple Energy.Companies like Hero Electric are not considering any revisions to their battery pack sizes.

"We have always been cautious about using just the right size of the battery and not increasing capacity just to get a higher subsidy. We are mindful of the replacement cost of batteries, which are neither subsidised nor have a reduced 5 per cent goods and services tax. In some of the escooters in the market, the replacement cost of batteries may be as high as ₹70,000, and such e-scooters will never have the advantage of 'total cost of ownership'," says Sohinder Gill, director general, Society of Manufacturers of Electric Vehicles, and CEO, Hero Electric.

The e2W makers are also looking at other options on the battery front to reduce cost.

Take the case of Coimbatore-based Bharat New-Energy Company (erstwhile Boom Motors). Until last year, the company was depending on third-party suppliers for its batteries. However, the FAME subsidy fade-out and one fire incident last year forced the company to rethink its strategy.