

## Road ahead for EVs

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The April vehicle sales numbers indicate a slowdown in momentum after a record-breaking year that propelled India into being one of the world's largest markets for electric vehicles (EVs).

The two-wheeler segment, which helped propel sales in 2022, was also the reason for the slowdown in April. Nearly 20,000 fewer units were sold in April. One of the reasons for this is said to be the controversy related to companies claiming subsidies without meeting requirements for sourcing parts locally. This resulted in overall vehicle sales falling by a fifth (chart 1).

The pause comes after surging EV sales cut down the share of petrol-only vehicles to below 80 per cent in 2022 (chart 2). Two-wheeler buyers led the shift driven by a large cost advantage. The total cost of ownership for electric two-wheelers is 43 per cent lower than those running on internal combustion engines. Three-wheelers follow close

behind, while the least savings are for four-wheelers (chart 3). Unsurprisingly, EVs are projected to account for only 15 per cent of four-wheelers even by 2030. It varies for other segments and is as high as 90 per cent for three-wheelers (chart 4).

The effect on electricity consumption due to additional EVs is negligible as a share of overall consumption. It constituted just 0.1 per cent of demand in 2022. It will be less than 2 per cent (1.7 per cent) by 2030, according to projections from the Paris-based International Energy Agency (chart 5).

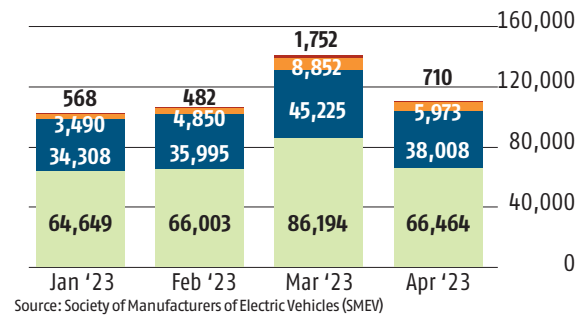
The increased EV penetration for cars, vans, trucks and buses backed by government action is expected to reduce oil use. Two-wheelers are not included in the calculation to reduce errors. India imports more than 85 per cent of its crude oil needs. Oil displacement is higher for countries such as the US and China, which are expected to adopt EVs faster. India is expected to save 80,000 barrels a day as per current projections (chart 6).

India's current demand stands at over 5 million barrels a day.



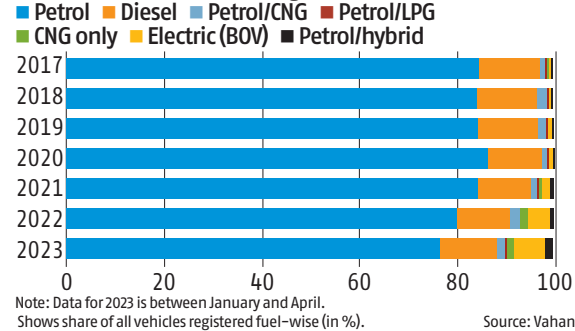
### 1: DROP IN EV SALES LED BY TWO-WHEELERS

Shows the number of vehicles sold; ■ Two-wheelers ■ Three-wheelers ■ Four-wheelers ■ Buses



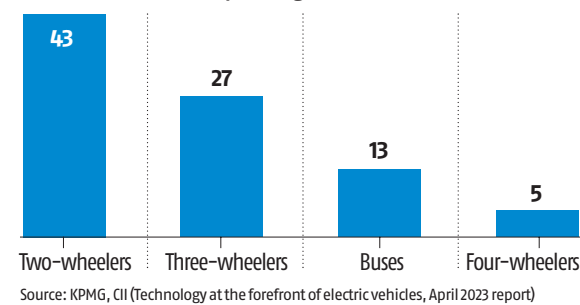
### 2: ELECTRIC PUSH CAUSED PETROL-ONLY VEHICLE SHARE TO DROP BELOW 80% IN 2022

Shows share of all vehicles registered fuel-wise (in %)



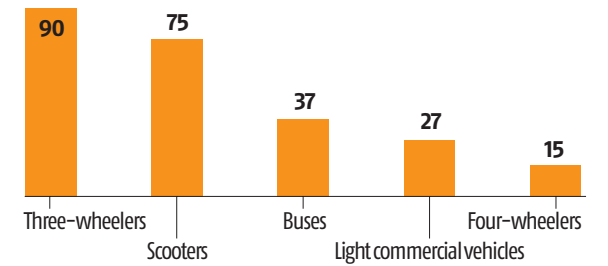
### 3: TWO-WHEELER EVs MAKE MOST ECONOMIC SENSE

Total cost of ownership savings in EVs (in %)



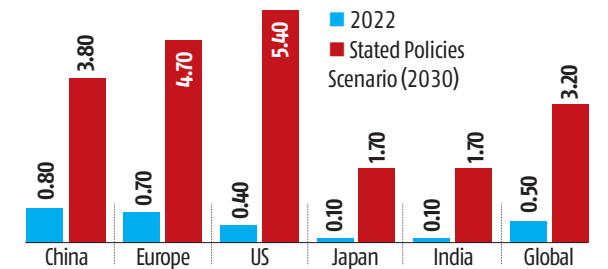
### 4: ELECTRIC FOUR-WHEELER PENETRATION EXPECTED TO LAG FOR YEARS

Forecasted penetration by 2030 (in %)



### 5: MINIMAL EFFECT ON OVERALL ELECTRICITY CONSUMPTION

Share of EVs in electricity consumption (in %)



### 6: 80,000 BARRELS OF OIL TO BE SAVED DAILY BY 2030

Expected oil use avoided by EV adoption (in thousands of barrels per day)

