

Mahindra
Rise.

Mahindra REVA

A brief introduction to India's first and only electric mobility solutions company

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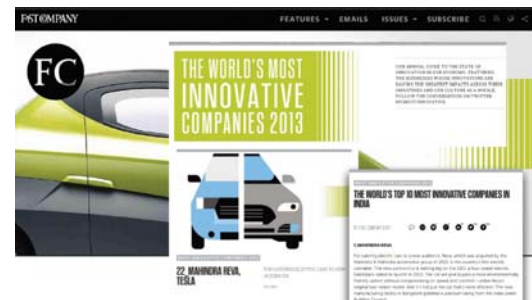
- Founded in 1994, MREV is a global pioneer and India's sole electric car manufacturer.
- History of continuous sales since 2001.
- Invested heavily in developing indigenous R&D and supply chain capabilities, and into developing public charging infrastructure in the country.
- Core focus – *innovation for affordable electric mobility*
- India's first IGBC Platinum rated manufacturing facility with a production capacity of 30,000 vehicles per annum.
- World class R&D team of more than 150 people; 50 patent applications
- Sold more than 5,500 electric cars to happy customers in 22 countries across the globe, driven >250 M kms.
- Led to a saving of more than 25 Million liters of fossil fuel¹ and reduction of 33,000 tons of CO₂ emissions².

1) City Driving Mileage of a petrol automatic hatchback car – 10 kmpl

2) Average CO₂ emission for a hatchback car – 130 gm/km

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e2o Future of Mobility



In sale in 8 major cities in India, Nepal & other countries.

5 technologies/features introduced for the first time in the world and 10 technologies/features introduced for the first time in India



- Light-weight, high strength steel space frame technology provides high levels of passenger safety & vehicle efficiency.



- In-house developed lithium ion battery pack and BMS for unparalleled reliability, safety and longer life



- In-house developed low cost, high efficiency drivetrain with software for hill-hold, etc.



- Built-in telematics system allows remote monitoring, diagnostics & user control via smartphone

3 Platforms for different applications

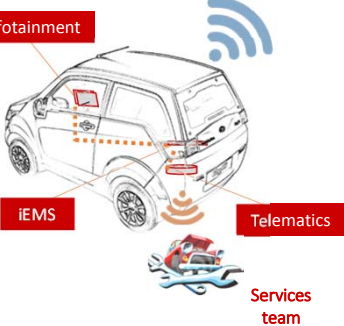


Type	4-seater/Hatchback	5-seater/Sedan	8-seater/Minivan
Range (km)	120	110	120
Top Speed (kmph)	81	86	60
Charging Time (@ 15A, 220V)	5.5 hrs	8 hrs 30 min	8 hrs 30 min
Fast Charging Time (full charge)	~60 min	~90 min	~90 min (optional)
Applications	Personal commuting, Govt./Corporate employee commuting	Personal commuting, Govt./Corporate employee commuting, Intra-city taxi	Intra-city public commuting, Metro/BRTS feeder, Tourist vehicle at Heritage/Eco tourism places

Specifications for eVerito & eMaxximo are indicative and may change in future


4 EV Ecosystem Technologies

Infotainment




Connected Car Technology
Remote monitoring, diagnostics & user control

QUICK² CHARGE




Quick2Charge™
DC Fast Charging –

- Full charge in an hour's time.
- Effectively increases daily driving distance to 300 km



Sun2Car™
Low-cost solar EV charging solution



Car2Home™
Technology for Vehicle-to-Grid/Home energy transfer*

*Technology demonstrator available. Not for commercial sale yet.

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5 Ways to achieve NEMMP 2020 goals

We at **Mahindra** aim to partner with Government, academia & industry to enable India to **Rise** to a new era of sustainable mobility by:

1. Creating cutting-edge electric mobility technologies and platforms for India and for exports to mature European markets (starting with the UK) to support Government's "**Make in India**" program
2. Building awareness on benefits of mass adoption of electric mobility to the nation through **EV based public commuting pilots**.
3. Overcoming EV-related myths and alleviating hindrances to EV-adoption such as 'range-anxiety' phenomenon by **creating EV charging infrastructure** with the support of the government.
4. Exploring electrification opportunities for products and fast charging protocols.
5. **Promoting use of solar powered charging** to align with the **National Solar Mission** and promote 100% green transportation in India.

6 Ideas to get the ball rolling

1. Partner with state utility companies such as BSES, Tata Power, etc. and create an extensive network of regular AC & DC Fast charging stations in urban conglomerations such as Delhi-NCR, Bangalore, Mumbai, Pune, etc and enable to urban community to adopt electric mobility for personal commuting.
2. To enable inter-city EV drives, build EV corridors by installing DC Fast charging stations at highway stretches between two major cities such as Delhi-Agra, Bangalore-Mysore, Mumbai-Pune, Delhi-Chandigarh, Delhi-Jaipur, etc.
3. The mass rapid transit medium such as Delhi Metro, Bangalore Metro, Ahmedabad BRTS, Mumbai Local, Mumbai Mono-Rail, Chennai Metro, etc. to be complemented with electric feeder services to enable first & last-mile connectivity.
4. Tourist & heritage places at cities such as Agra, Jaipur, Delhi, Bodh-Gaya, Hampi, Ajanta, etc. to be made 'Zero Emission Zones' (ZEZs) and only electric vehicles to be allowed to ply commuters in such corridors.
5. Under the 'Smart Cities' initiatives, mandate all the commercial buildings and residential apartment complexes to have EV charging and parking facilities.
6. Solar-powered EV charging to be promoted under the National Solar Mission & National Urban Renewal Mission

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Thank you!

Driven by Consumer Insights, Ideas & Technology



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