

# EV monthly Updates

October 2020

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# 1. New Product Launches

Table 1.1: New Product Launches in October 2020

Product	Vehicle Type	Battery Specs	Other Specs	Price
Kinetic Safar Jumbo	3-wheeler (Cargo)	<ul style="list-style-type: none"> <li>Range – 120 km</li> <li>Battery – Li-ion (swappable)</li> <li>Charging time – 3 to 4 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Top speed – 55 km/h</li> <li>Payload – 500 Kg</li> </ul>	Rs. 0.25 Million
Mahindra Treo Zor	3-wheeler (Cargo)	<ul style="list-style-type: none"> <li>Range – 125 km</li> <li>Battery – 7.37 kWh (Li-ion)</li> <li>Charging time – 3.8 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Top speed – 50 km/h</li> <li>Motor – 8 kW (peak)</li> <li>Payload – 550 Kg</li> </ul>	Rs. 0.273 Million (ex-showroom)
Mercedes-Benz EQC	SUV	<ul style="list-style-type: none"> <li>Range – 445-471 km</li> <li>Battery – 80 kWh (Li-ion)</li> <li>Charging time – 10 hrs; 1.5 hrs with DC fast charger</li> </ul>	<ul style="list-style-type: none"> <li>Top speed – 180 km/h</li> <li>Motor – 300 kW</li> </ul>	Rs. 9.93 Million (ex-showroom)

## Etrio introduces Touro range of electric 3-wheelers

The electric vehicle startup Etrio has introduced its new electric 3-wheeler product range under the brand name 'Touro'. Catering to the cargo segment, the two new variants, Max and Mini, will be mainly for intra-city logistics for last-mile delivery applications.

The passenger variants of the three-wheelers will be rolled out in a few months. It raised funding of USD 3 million last month to facilitate these launches.

## Hero Electric launches Nyx B2B scooters, prices start from INR 63,990

Hero Electric has launched a refreshed line-up of Nyx scooters under its HX series at a starting price of INR 63,990. These scooters are widely used by B2B customers for last-mile deliveries and other commercial uses. The scooter has a driving range starting from 82km to 210 km per charge. The Nyx bike can be customised with more than ten applications for any business needs and offers four levels of smart connectivity solutions from Bluetooth interface to remote surveillance and diagnostic solution.

## Upcoming Launches

### JLR to launch electric Jaguar I-PACE in India in early 2021

Jaguar Land Rover (JLR) plans to launch its electric Jaguar I-PACE sedan in India early next year. The British luxury carmaker owned by India's Tata Motors also plans to launch plug-in hybrid versions of its vehicles in coming months, including the Land Rover Defender sport-utility vehicle.

### Mahindra e-KUV100 will be available in the next three months

Mahindra and Mahindra is all set to roll out the first batch of its upcoming electric SUV e-KUV100 in the next three months. The starting price of the e-KUV100 will be ₹8.25 lakh (ex-showroom Delhi), as announced by Mahindra at the Auto Expo. The Mahindra e-KUV100 is the company's first in-house all-electric car. The SUV has been equipped with a liquid cooled battery pack that supports fast charging of up to 80% in 55 minutes.

### Exclusive! Nahak P14, India's fastest electric sportsbike launching next month: Top speed, price detailed

Nahak Motors plan to start selling P14 sports electric bike from November 2020. The P14 electric bike will be launched in India at a price of Rs 0.25 Million (approx). The bike was first showcased during the Auto Expo 2020.

## 2. Tenders and EOI

Table 2.1: Expression of Interest (EOI) issued

EOI name	Minimum no. of charging stations	Issuing authority	Type of EV Chargers mandatory	Proposal Submission End Date
Expression of Interest Inviting Proposals for availing incentives under Fame India Scheme Phase II for deployment of EV charging infrastructure on Highways/Expressways	1544	Department of Heavy Industry, Ministry of Heavy Industries and Public Enterprises	<ul style="list-style-type: none"> <li>(At every 25 kms on both sides of Highway/ Roads) at least one CCS II (Min. 50 kW) or CHAdeMO (Min. 50 kW) or higher capacity and One DC 001 (15 kW).</li> <li>(At every 100 kms on both sides of the Highway) at least one charger of minimum 100 kW for Long Range/ Heavy Duty EVs.</li> </ul>	7-Dec-2020

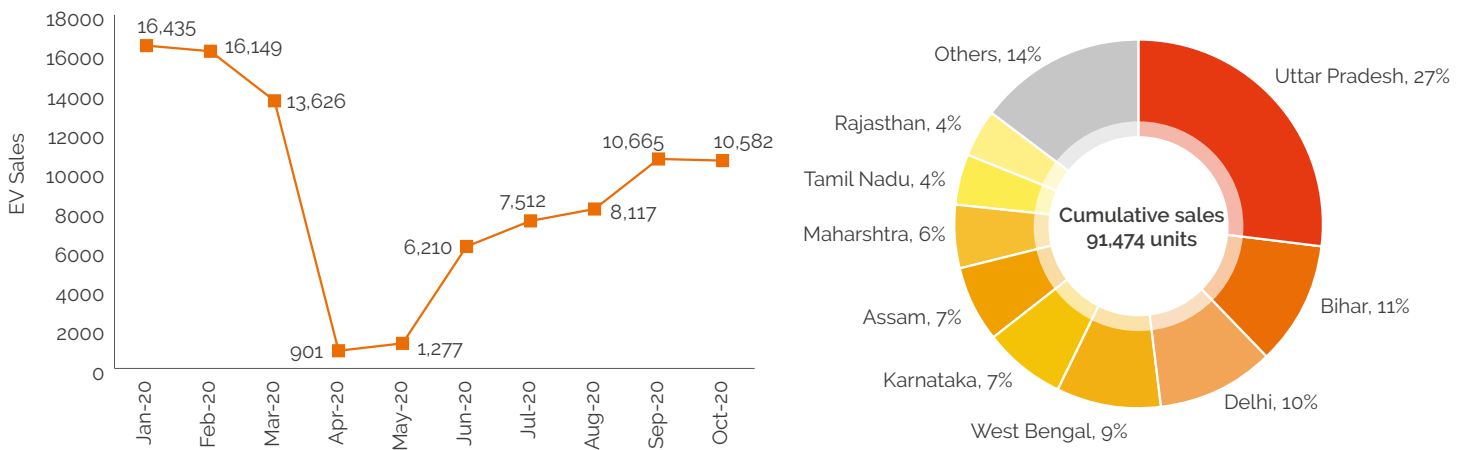
Table 2.2: Tenders in October 2020

Tender name	Tender Value	Tender Authority	Bid submission End date
Construction of Charging Station, Shed, other respective works for Operating 50 Nos Electric Buses at Distt-Ghaziabad.	Rs. 4,01,23,000	UP Jal Nigam, Ghaziabad	11/13/2020
Construction of charging station for operating 100 no electrical buses at Kanpur Nagar (U.P.)	Rs. 5,12,28,000	UP Jal Nigam, Kanpur Nagar	11/10/2020
Construction of Charging Station for operating 25 Nos. Electric Bushes at District Gorakhpur	Rs. 4,60,80,000	UP Jal Nigam, Gorakhpur	11/2/2020
Construction of Electric Bus Charging Station for 50 Buses at Prayagraj U P	Rs. 4,91,87,000	UP Jal Nigam, Prayagraj	10/31/2020
Rfp for selection of bus operator for supply operation and maintenance of 150 nos of 12 m ac BRT compliant electric buses and development of allied infrastructure on gross cost contract basis under the FAME india scheme phase II	-	Pune Mahanagar Parivahan Mahamandal Ltd.	11/9/2020

# 3. EV Sales Trends

The October sales of EVs have dropped by 0.8% from previous month's sales to register 10,582 units. The cumulative sales of registered EVs from Jan-Oct 2020 is about 91,474 units. In the region-wise category, Uttar Pradesh has the maximum registered EV sales (27%) in India among all the states/ UTs, followed by Bihar (11%) and Delhi (10%).

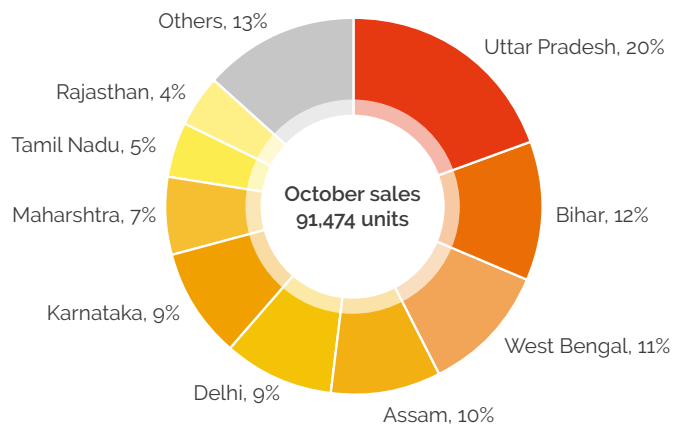
Fig 3.1: Registered EV sales in India (Jan – Oct 2020)



Source: Vahan Dashboard, JMK Research  
 Note: Sales figure represent EVs registered across 1251 RTOs in 33 states/ UTs.

Also, during October 2020, Uttar Pradesh (20%) recorded the highest registered EV sales. Bihar (12%) holds the second position in this list, closely followed by West Bengal (11%).

Fig 3.2: (State/ UT) Region-wise registered EV sales - October 2020

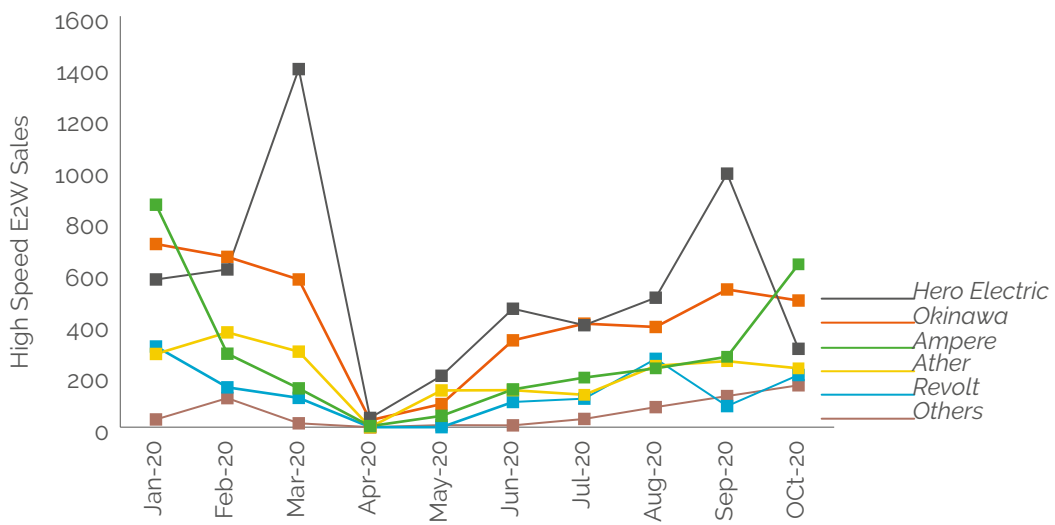


Source: Vahan Dashboard, JMK Research  
 Note: Sales figure represent EVs registered across 1251 RTOs in 33 states/ UTs.

## High-Speed Electric Two Wheeler (E2W)

In the high-speed (HS) E2W segment, the cumulative sales of Ampere, Ather, Hero Electric, Okinawa and Revolt in October 2020 is 1,864 units, dipping 13% from the corresponding September sales mark. With respect to October sales, Ampere has taken the lead, followed by Okinawa and Hero Electric in the HS-E2W segment.

Fig 3.3: Player-wise high-speed E2W sales trend



Source: Vahan Dashboard, JMK Research

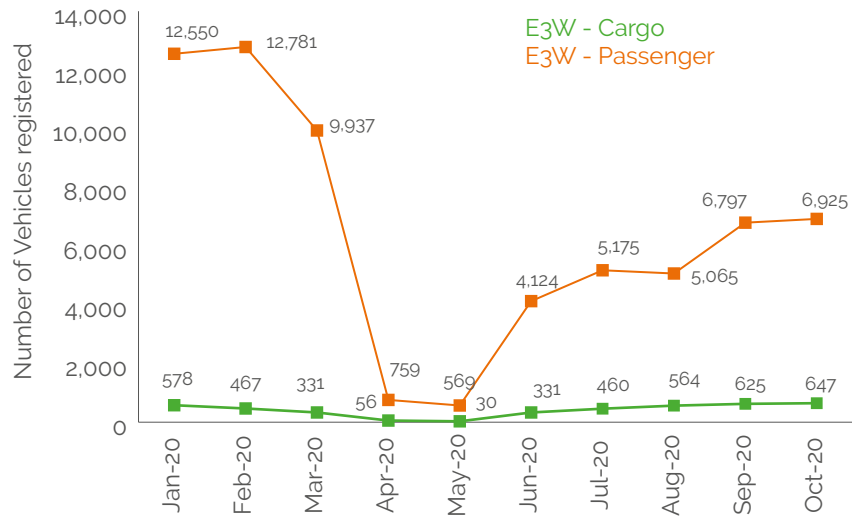
Note: Sales figure are for only high range E2W models with speed higher than 25kmph. Sales figure represent E2Ws registered across 1251 RTOs in 33 states/ UTs.



## Electric Three Wheelers (E3W)

The combined sales of both passenger and goods-type (registered) E3Ws in October have grown by about 2% over September sales to reach 7,572 units. The passenger-type E3W accounted for 91.5% of the total E3W sales for October. The cumulative sales of cargo and passenger (registered) E3Ws during Jan-Oct 2020 is 68,771.

Fig 3.4: Sales trend of cargo E3W and passenger E3W



Source: Vahan Dashboard, JMK Research

Note: Sales figure represent E3Ws registered across 1251 RTOs in 33 states/ UTs.

## 4. Policies

### Telangana releases the 'Electric Vehicles and Energy Storage Systems Policy 2020-2030' document

The state of Telangana launched the new policy document on October 30th. The 'Telangana Electric Vehicle & Energy Storage Policy 2020-2030' is applicable for a period of 10 years from the date of notification of the policy. The framework consists of promoting EV adoption for end users, setting up of Charging Infrastructure and promoting manufacturing of EV & ESS Components in the State.

### Karnataka proposes to offer 20% subsidy on installation of EV charging stations

The Karnataka government has proposed a subsidy of 20% or Rs. 1 Million (whichever is higher) to individuals willing to set up public charging stations for electric vehicles. The proposal of offering subsidy is a part of the guidelines for charging infrastructure for EVs that the state is coming up with, on the lines of the specifications that the Centre had laid down in October 2019.

### States seek inputs for revising clean vehicle policies; EVs may get cheaper

Gujarat, Maharashtra, and Uttar Pradesh are considering floating purchase incentives in line with the Centre's flagship EV policy that gives direct subsidies to buyers and have therefore reached out to manufacturers and experts to seek views on how to implement such a policy.

### Battery operated vehicles exempted from registration fee in Delhi

The Delhi government has exempted all battery operated vehicles from registration fee under its electric vehicle policy. Previously, the government had waived road tax on all electric vehicles.

Chief Minister Kejriwal had in August launched the Electric Vehicle Policy announcing incentives of up to Rs 1.5 lakh on the purchase of four-wheelers, Rs 30,000 on two-wheelers, auto-rickshaws, e-rickshaws and freight carriers, besides promising waiver of road tax and registration fee.

### **Delhi govt approves over 100 models for subsidy under new electric vehicles policy: Gahlot**

The Delhi government has approved more than 100 models of vehicles, including 45 makes of e-rickshaw, 14 of two-wheelers and 12 of four-wheelers, for subsidy under the new electric vehicles policy. Also, 36 manufacturers have been registered with a network of 98 dealers across the city.

Vehicles priced up to Rs 15 lakh will be eligible for the purchase incentive (subsidy), besides exemption of road tax and registration fee. Electric vehicles having a price over Rs 15 lakh will not get subsidy but will be eligible for road tax and registration fee exemptions.

## **5. Charging Infrastructure**

### **Ather Energy mega-EV charging infra to take off by year-end**

Ather Energy, an EV startup based in Bengaluru and backed by The Hero MotoCorp, said the first phase of its plans of setting up charging grid over 135 locations in India is expected to be complete by 2020 end. The charging network, capable of charging the Company's Ather 450X scooter at 15 km in 10 minutes, can be used by all electric two-wheelers and electric four-wheelers.

### **Bengaluru startup launches EV charger for small businesses at Rs 10,000: Compatible with 2,3 & 4-wheelers**

Kirana Charzer, a bengaluru-based startup has introduced an EV charger that can be installed at small shops and businesses. The Charzer app will enable the EV owners to locate these charging stations, reserve, pay, and operate them. The Kirana Charzer, available for installation at Rs. 10,000, will allow Kirana owners and other small business owners to have an additional source of income.

### **Magenta Power to set up 10,000 e-2wheeler charging stations in Maharashtra**

Magenta Power, operating into the EV charging space and backed by Hindustan Petroleum, Shell, and Microsoft, plans to set up 10,000 electric two-wheeler charging stations in Maharashtra in key urban centres including the Mumbai-Pune region. Of the 10,000 charging stations planned to be set up by 2023, 500 will come up very shortly across the Mumbai metropolitan region. EV two-wheeler rental startup eMatrixmile will be the partner here and the charging stations so installed will be used primarily by eMatrixmile but others can use the infrastructure as well.

### **MG Motor, Tata Power open first superfast EV charging station in Nagpur**

MG Motor India and Tata Power Corporation Limited has recently inaugurated the first superfast EV charging station in Nagpur. It is part of MG's partnership with Tata Power for the deployment of 50 KW DC superfast charging stations across the country.

The public EV charging station is available to all vehicles compatible with CCS/ CHAdeMO fast-charging standards. MG claims that its electric SUV ZS EV can be charged up to 80% in 50 minutes at such facilities.

## **6. Partnerships, JVs & Expansions**

### **Tata Technologies, GKN Automotive tie-up for e-mobility software engineering centre in Bengaluru**

Tata Technologies entered into partnership with GKN Automotive of Germany to set up a global e-mobility software engineering centre in Bengaluru for the development of next-generation of electric vehicles. GKN Automotive has operations across 21 countries, including four independent facilities in India.

### **CredR partners with Gemopai Electric for 2-wheeler exchange programme**

CredR, a platform for the used two-wheelers, announced its collaboration with Gemopai Electric for a two-wheeler exchange programme under which users can exchange any petrol-based two-wheeler with a Gemopai electric scooter. The programme currently available only in Delhi-NCR, Hyderabad and Jaipur, is soon to be expanded across India. CredR has tied up with Ather and Ampere EV for similar two-wheeler exchange programme.

### **Ampere Electric partners with eBikeGO for performance electric scooters**

Ampere Electric, the wholly-owned electric mobility subsidiary of Greaves Cotton Ltd., has announced a business partnership with eBikeGO for B2B last-mile mobility. The initial orders are placed for 2,000 Ampere electric scooters.

### **Hero Electric to supply e-scooters for Zipp Electric's last-mile delivery**

Hero Electric has announced its partnership with Gurugram-based startup Zipp Electric to change its last-mile deliveries from petrol to electric vehicles. Zipp Electric aims to deploy an initial fleet of 1000 e-scooters in the next five months and intends to electrify 100% last-mile delivery by 2025. Under this partnership, an initial order of 1,000 customised Nyx-HX B2B scooters has been placed for catering to Zipp Electric's business consumer base across major cities.

### **Uber aims green run via tie-up with electric vehicle operator**

Uber entered into partnership with electric vehicle fleet operator Lithium Urban Technologies to deploy over 1,000 electric vehicles, all sedans, across Uber rentals and premier in Mumbai, Delhi-NCR, Hyderabad Bengaluru, and Pune. It plans to scale it up to 2,000 electric vehicles on its platform by 2021.

## 7. Investments

Table 7.1: Investments in Sep 2020

Date	Company name	Company type	Deal type	Investor(s)	Deal value (in INR Mn)	Details
Oct-20	Ultraviolette Automotive	E2W OEM	Equity	GoFrugal Technologies	Undisclosed	Ultraviolette Automotive raises capital from GoFrugal Technologies in Series B funding

## 8. Other Interesting Reads

### Mobility startup Bounce places order for 3,000 Ampere scooters

Mobility startup Bounce ordered for 3,000 Ampere scooters as part of the initial roll out of its partnership with Ampere Electric. Post Covid, Bounce has transitioned all its offerings to electric solutions.

### Citroen India to enter mass market EV space by 2022, to bring in flexi-fuel cars by 2021

Groupe PSA, through its Citroen brand, plans to focus on electric powertrain and SUVs in the Indian passenger vehicle market. The Company is already working on a small electric SUV, codenamed eCC21, meant for mass market and likely to be priced around Rs 0.8 Million and hit the Indian roads in 2022.

### Telangana in race to attract Tesla-like EV giants

Telangana government officials have confirmed that the state has shown interest in the EV space recently with approvals being given to Singapore-

based ChargeXO and Greenko Energy Holdings for setting up 1 gigawatt battery storage units each at investments of nearly Rs 3,000 million per unit. The state is also targetting for mega EV investments worth US\$4 billion by 2030.

### **Grinntech to establish EV battery manufacturing facility in TN**

Grinntech, a start-up specialising in lithium-ion batteries for EVs and energy storage systems, signed an MoU with the Tamil Nadu government for establishing a battery as well as battery management system manufacturing facility in the State. It is one of the 14 MoUs totalling ₹10.055 crore signed by the Tamil Nadu government with various industries.

### **Toyota-Suzuki's battery EV plan for India still on: Masakazu Yoshimura, MD, Toyota Motor**

Toyota Kirloskar Motor Managing Director, Masakazu Yoshimura, said that the Company still plans to introduce battery electric vehicle (BEV) in the Indian market with its alliance partner Suzuki Motor Corporation (SMC). He further added that the carmaker has the technology to develop a product suited for the Indian market. However, if volumes remain low, the company may not be able to manufacture it locally and would have to import it into the country.

### **Electric SUV from MG Motor India hits Coimbatore roads**

MG Motor India, the Indian car maker, has expanded its electric SUV - MG ZS - in 10 cities, including Coimbatore. Through this expansion, MG ZS EV will now be available in 21 cities across the country. MG will simultaneously develop the EV ecosystem across the cities through the deployment of superfast charging infrastructure and extension of on-road charging facilities.

### **Ather Energy rolls out assured buyback scheme for e-scooter model**

Electric vehicle maker Ather Energy has rolled out an "assured" buyback scheme, the first of its kind in the domestic EV space, for its 450X e-scooter model, which is set to hit the road next month. Under the assured scheme, aimed at accelerating EV adoption in the country, Ather Energy will buy back Ather 450X e-scooter at Rs 85,000, at the end of three years.

### **EESL to invest in Thailand's e-mobility player SWAG**

State-owned Energy Efficiency Services Ltd (EESL) is planning to invest in SWAG EV, which uses clean energy to provide swappable batteries for electric motorbikes in Thailand. By using e-bikes with swappable batteries, most of which will be charged by solar power, they can drive the transformation to healthier cities while fighting climate change.

The e-bike batteries will increase the capacity of the power grid to incorporate a higher share of renewable energy in its energy mix and trigger decarbonization in Thailand. This concept is replicable across the world and this project will serve as the basis for implementation in India.



# 9. Global Market Updates

## AMG, Maybach and G to double up Mercedes' electrification drive from 2021

Mercedes-Benz has planned for the electrification of its sub-brands AMG, Maybach, and G starting 2021. In addition, Mercedes-Benz, under the 'Electric First' strategy, has announced four new electric vehicles based on its upcoming platform Electric Vehicle Architecture (EVA).

The EQS luxury sedan is set for launch in 2021 followed by EQE, EQS-SUV and the EQE-SUV. The second stage of the massive electrification drive, to be used for compact and mid-sized cars, will begin in 2025 based on the upcoming Mercedes-Benz Modular Architecture (MMA).

## Canada announces Can\$590 mn investment in Ford electric car plant

The government of Prime Minister Justin Trudeau and the province of Ontario announced investments of Can\$295 million (US\$223 million) in a Ford factory touted as the largest electric vehicle plant in North America. The assembly plant, located in Oakville, Ontario, is to be repurposed as part of a deal announced in September between the Ford Motor Company and the Canadian union Unifor, for building five new electric vehicle models and the batteries that will power them. The government has planned a total investment of Can\$590 million as the first step towards building a next-generation auto industry.

## BlackRock invests \$118 million in UK electric vehicle startup Arrival

BlackRock Inc. invested \$118 million in British electric vehicle startup Arrival engaged in the development of electric commercial vehicles, including buses and vans.

## Volkswagen eyes 90% electric car sales in Norway next year

Volkswagen AG's local importer Harald A. Moeller AS said that it is expected that electric cars will likely make up 90% of Volkswagen AG's sales in Norway by 2022. It is also expected that could completely replace diesel and petrol engines in the Norway by 2023. This comes on the lines

of the country's 2025 goal of becoming the first country to end the sale of fossil-fueled cars.

### **Hyundai begins building electric vehicle hub in Singapore**

Hyundai Motor Co. of South Korea started construction on an R&D centre in Singapore that will house a small-scale EV production facility, due for completion by end 2022. The facility, utilizing technologies such as artificial intelligence and robotics, aims to be carbon neutral by using solar and hydrogen energy, and will include a test drive track for customers. The centre is part of Hyundai's vision of enabling future vehicle buyers to customize and purchase vehicles online using a smartphone, thereby allowing production to be on-demand.

### **Tesla working on India entry process begins in January: Musk**

Elon Musk, CEO of Tesla – the electric car maker, announced that the process to bring Tesla cars to India will begin in January 2021. Musk expects that the order configurator will be released in Jan, 2021 meaning that Tesla sales teams are working on building custom sales as well as production orders for the India market, thereby ensuring orders are complete and validated once the configuration is finished.

### **BMW to roll out 25 electric or hybrid products by 2023**

German luxury marque BMW is waiting for better clarity on the electric vehicle infrastructure and policy road map in India before taking a call on introducing electric cars from its global portfolio on Indian roads. Vikram Pahwah (President, BMW Group India) said that BMW would roll out 25 electric/hybrid products by 2023 globally.

### **Fiat Chrysler to invest up to \$1.5 bln to build EVs at Canadian plant**

Fiat Chrysler Automobiles NV will invest between \$1.35 billion and \$1.5 billion in its Windsor assembly plant in Canada to build electric vehicles as part of a tentative deal with Canadian autoworkers. FCA would invest in a state-of-the-art vehicle platform that will enable the assembly of plug-in hybrid and battery electric vehicles, with at least one new model in 2025.

### **China's BYD, Japan's Hino announce electric truck venture**

Chinese electric car brand BYD Auto and Japanese truck maker Hino Motors are jointly setting up a company to develop battery-powered trucks and buses. The venture is one of a series of tie-ups between Chinese and foreign automakers to share the multibillion-dollar costs of electric development. BYD Auto Industry Co., a unit of battery producer BYD Ltd., and Hino Motors Ltd. said each would supply 50% of the investment for the company.

### **Fiat's 500 BEV to have entry price of 19,900 euros in Italy, including incentives**

Fiat Chrysler's new electric 500 will have an entry price of 19,900 euros (\$23,550), including a 6,000-euro incentive offered by Italy's government. The group would also offer two more expensive versions of the 500 BEV at 23,700 euros and 25,200 euros, including the incentive.

The 500 BEV, which is part of a plan announced in 2018 to invest 5 billion euros in Italy up to 2021, is FCA's first major step into electric-powered driving.

### **Electric cars to triple market share in Europe amid COVID-19, researchers say**

Electric vehicles made up 8 per cent of car sales in Europe in the first half of 2020, putting them on track to triple their market share this year, according to analysis by the NGO Transport & Environment (T&E). While the novel coronavirus pandemic has seen overall car sales plummet, sales of electric cars - which T&E defined as both battery and plug-in hybrid models - have increased.



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