

### **INDIAN AUTOMOBILE INDUSTRY**

Auto OEMs unlikely to face major challenges to comply with proposed ethanol blending norms

**JANUARY 2023** 



## Highlights (1 of 2)



Petrol is likely to remain the fuel of choice over the next few years. But the proportion of CNG, EVs and hybrid vehicles would witness sharp growth and their share is estimated at 20-30% of new vehicles sales over the next five years.

As petrol-based vehicles would account for a large share of new PV sales, it is imperative to reduce emissions to meet CAFÉ norms and strategise towards achieving carbon neutrality over the long-term.

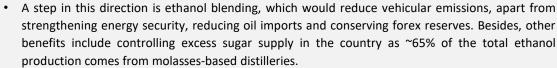


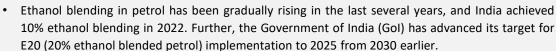


- The viability of diesel vehicles has sharply reduced in recent years (from 40% in FY2018 to 19% in FY2022), amidst stricter emission norms and narrowing price gap between petrol and diesel.
- CNG vehicles have also gained prominence in recent years, aided by lower emissions, favourable
  running cost, improving penetration of CNG dispensing stations across the country and enhanced
  product offerings by original equipment manufacturers (OEMs).
- Electric vehicle (EV) demand has risen exponentially in the last two years with Government's push, increasing awareness and launches. However, its share in the overall PV industry is low (~1%).



- ICRA expects the proportion of CNG, EVs and hybrid vehicles to increase to 20-30% of new vehicles sales in the next five years. Nevertheless, petrol-based vehicles will continue to account for a significant portion of new PV sales.
- This makes it imperative to reduce emissions from petrol-based vehicles to meet the Corporate Average Fuel Economy (CAFÉ) norms, besides adoption of alternate powertrains, and start the trajectory towards achieving carbon neutrality over the long-term.







## Highlights (2 of 2)



ICRA believes that the readiness of the auto industry and the OEMs to meet E20 blending norms is unlikely to be a major challenge.

In ICRA's view, a cohesive approach from all stakeholders will facilitate the E20 transition within the targeted timelines.







- ICRA believes that the readiness of the auto industry and the OEMs to meet E20 blending norms is unlikely to be a major challenge. No major design changes are required from a vehicle standpoint, except material recalibration.
- The overall impact on the vehicle cost is estimated at less than 1% for passenger vehicles and ~2-3% for two-wheelers. Further, no major capital spend is envisaged.
- Loss of fuel efficiency is expected as vehicles transition from the E10 to E20 compliant design and this would increase the total cost of ownership (TCO). However, OEMs are looking at technological improvements like light-weighting to offset the impact.
- Operating E10-compliant vehicles with E20 fuel would result in corrosion of certain engine components, and there would be requirements to replace the corroded parts during the vehicle lifecycle.
- Making adequate ethanol available pan-India and addressing portability challenges would be imperative.
- The GoI has been providing relatively fast environmental clearances and financial assistance in the form of interest subvention to facilitate capacity addition and ensure adequate ethanol availability for seamless transition. A few states have also announced incentives to attract investments.
- Tripartite agreements are being signed among oil marketing companies (OMCs), project proponents and banks to facilitate timely debt repayments by ethanol producers.
- Overall, in ICRA's view, a cohesive approach from all stakeholders will facilitate the E20 transition within the targeted timelines.



## Agenda



**Evolving Powertrain Mix in Passenger Vehicles in India** 

**Overview of Ethanol Blending Norms in India** 

**E20 Implementation from Auto OEM Perspective** 

**Global Landscape** 

**Key Takeaways** 

**Annexure** 



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