

Stages of Ethanol Compatible Vehicles

Different stages of rollout of ethanol compatible vehicles

Phase	Blend Level	Key OEM adaptations	Actual Timeline
Phase I E5 Readiness	Up to 5% Ethanol	- Minor tweaks to fuel lines & seals - Base-level compatibility testing	2003-2010
Phase II E10 Compliance	Up to 10% Ethanol	- ECU reprogramming - Upgraded materials to prevent corrosion	2011-2020 <i>Majority of vehicles produced post 2010</i>
Phase III E20 vehicles	Up to 20% Ethanol	- Advanced engine calibration for ethanol combustion - Labelled E20-ready vehicles	2021-2025 <i>E20-compliant vehicles post April 2023</i>
Phase IV FFV development	Up to E85 / E100	- New engine architecture (higher compression ratios) - Dynamic ECU - Ethanol sensors	2022 onwards <i>FFVs produced by multiple OEMs</i>



Mahindra XUV 300



Maruti Suzuki Wagon R



Bajaj RE Compact



Royal Enfield Classic 350

Majority Auto OEMs (2Ws & 4Ws) already developed FFV Models and prominently showcased them at last few editions of Bharat Mobility Global Expo, New Delhi.