E85 Fuel

Prelims: *Current events of national and international importance | Energy*

Why in News?

Recently, The Ministry of Petroleum and Natural Gas launched E85 fuel on World Environment Day.

- **E85 Fuel–** High-ethanol blend fuel, **80–85%** ethanol + **14–19%** petrol.

  Ethanol (ethyl alcohol) is a clear, volatile, and flammable liquid with a pungent taste. Primarily produced through the fermentation of biomass (like corn and sugarcane).

- **Compatibility –** Exclusively for Flex-Fuel Vehicles (FFVs).

  FFVs – Adapt automatically to blends ranging from E20 to E100.
  Non-FFVs – Cannot use E85; engine damage risk.

Key Features

- **Price Advantage –** Cheaper per litre than standard petrol.
- **Environmental Impact –** Reduces greenhouse gas (GHG) emissions by **61%** compared to fossil fuels.
- **Global Model –** Brazil has used E85 and FFVs for decades.
- **Indigenous Push – 100%** Made-in-India FFVs being launched.
- **Energy Security –** Reduces crude oil import dependence.
- **Agriculture sector –** Boosts demand for ethanol, supporting sugarcane and related sectors.

Fuel Type	Ethanol Content	Petrol Content	Vehicle Compatibility	Environmental Impact
Petrol	0%	100%	All conventional petrol vehicles	High GHG emissions

Fuel Type	Ethanol Content	Petrol Content	Vehicle Compatibility	Environmental Impact
E20	Up to 20%	80%	Current standard; all E20-compliant vehicles	Moderate reduction in emissions
E85	80–85%	14–19%	Exclusively for Flex-Fuel Vehicles (FFVs)	61% lower GHG emissions vs fossil fuels

Reference

E85 | Indian Express