

## **Decline in Diesel Vehicles - Maruti Announcement**

### **Why in news?**

Maruti Suzuki has recently announced that it will stop manufacturing diesel vehicles from April 1, 2020.

### **What are the other recent developments?**

- Mahindra & Mahindra is also working on plans to start offering petrol engine options across its entire range, except the Bolero.
- Tata Motors seems to have decided against offering the diesel option in its flagship Tiago hatchback and Tigor sedan after April 2020.
- All these firms have had strong exposure to the diesel platform.
- The announcement by Maruti, the country's largest vehicle manufacturer, is likely to mark the end of diesel cars in India.
- Diesel has also lost its shine in Europe, the world's biggest market for diesel cars.

### **What is the reason?**

- The Indian car-buyers' like for diesel powertrains lasted nearly a decade.
- In 2012-13, diesel cars accounted for 48% of passenger vehicle sales in the country.
- The main reason was the sharply lower price of diesel as compared to petrol, which was Rs 25 per litre at its peak.
- However, this changed when the decontrol of fuel prices started in late 2014.
- The price difference has since come down to under Rs 6.5 per litre.
- Consequently, diesel cars accounted for just about 22% of overall passenger vehicle sales in 2018-19.
- Also, the sentiment for diesel is not good in the wake of the Volkswagen emissions scandal.
- [Volkswagen cars being sold in America had a "defeat device" - or software - in diesel engines.
- It could detect when they were being tested, changing the performance accordingly to improve results.
- So the device appears to have put the vehicle into a sort of safety mode; but once on road, the engines switched out of this test mode.
- Resultantly, the engines emitted nitrogen oxide pollutants up to 40 times

above what is allowed in the US.]

### **Is emission norm playing a role?**

- The main reason behind Maruti Suzuki's announcement is, in fact, not the fuel price differential.
- Instead, the new emission norms that will come into effect on April 1, 2020 is a key factor. Click [here](#) to know more.
- A prohibitively high cost is involved in upgrading diesel engines to meet the new BS-VI emission norms. Click [here](#) to know more.
- The difference in the price of a petrol and a diesel car, now around Rs 1 lakh on average, could go up to Rs 2.5 lakh.
- So leading carmakers are increasingly moving away from the diesel options.

### **What are the challenges involved?**

- With the BS-VI norms, the attempt is to entirely bypass one stage - BS-V.
- The decision to leapfrog directly from BS-IV to BS-VI makes diesel unviable for both oil companies and automobile makers.
- While petrol vehicles would also need upgrades to transition, these are limited to catalysts and electronic control upgrades.
- But for diesel vehicles, the upgrades are more complicated and entail higher costs, apart from the technical difficulties.
- Carmakers, to meet stringent BS-VI norms, would have to put three pieces of equipment all at the same time. These are:
  - i. a DPF (diesel particulate filter)
  - ii. an SCR (selective catalytic reduction) system
  - iii. an LNT (Lean NOx trap)
- This is vital to curb both PM (particulate matter) and NOx (nitrogen oxides) emissions as mandated under the BS-VI norms.
- Adapting the three critical components to India-specific conditions of driving is challenging.
- It's because, the running speeds in India are much lower than in Europe or the United States.
- The optimisation and fitment of the DPFs and the SCR module could take an estimated three-four years.
- With step-by-step transition, diesel cars could have been fitted with a DPF in the BS-V stage, and with the SCR in the BS-VI state.
- But now, the entire cost will have to be borne in one go, alongside the operational difficulties.
- Besides the constraints faced by carmakers, there is also the issue of ability of the oil companies to manage the transition.

**Source: Indian Express, The Hindu**

