

# BS VI Emission Norms

February 17, 2021

## WHAT ARE BS-VI NORMS ?

- Bharat stage (BS) emission standards are laid down by the government to regulate the output of air pollutants from internal combustion engine and spark-ignition engine equipment, including motor vehicles.
- The central government has mandated that vehicle makers must manufacture, sell and register only BS-VI (BS6) vehicles from April 1, 2020.
- The first emission norms were introduced in India in 1991 for petrol and in 1992 for diesel vehicles.
- Followed these, the catalytic converter became mandatory for petrol vehicles and unleaded petrol was introduced in the market.

## Difference Between BS4 and BS6

- Both BS-IV and BS-VI are unit emission norms that set the maximum permissible levels for pollutants that an automotive or a two-wheeler exhaust can emit.
- Compared to the BS4, BS6 emission standards are stricter. Whereas makers use this variation to update their vehicles with new options and safety standards, the biggest modification comes in the permissible emission norms.

## What are unit BS I, BSII, BSIII, BSIV, and BSVI emission norms?

- The abbreviation BS, as mentioned above, refers to 'Bharat Stage'. It is prefixed to the iteration of the actual emission norms.
- The primary rules with the sobriquet Asian nation 2000 were introduced in the year 2000, with the second and third iterations being introduced in 2001 and 2005 with

- the sobriquet BSII (BS2) and BSIII (BS3), respectively.
- The fourth iteration, BSIV, was introduced in 2017 and therefore the delay between the introduction of BS3 and BS4 resulted in fast-tracking the BSVI or BS6 emission norms rather than BSV (BS5) norms.
  - On 29 April 1999, the Supreme Court of India ruled that all vehicles in the country had to meet Euro I or India 2000 norms by June 1, 1999, and Euro II would be mandatory in the National Capital Region (NCR) from April 2000. Carmakers were not prepared for this transition and in a subsequent judgment, the implementation of Euro II was deferred.
  - In 2002, the government accepted the report submitted by the Mashelkar committee, which proposed a road map for the rollout of Euro-based emission norms in India. It also recommended a phased implementation of future norms, with regulations being implemented in major cities first and extended to the rest of the country after a few years.
  - Based on the recommendations of the committee, the National Auto Fuel policy was announced officially in 2003. The road map for the implementation of the BS norms was laid out until 2010. The policy also created guidelines for auto fuels, reduction of pollution from older vehicles and R&D for air quality data creation and health administration.
  - The standards and the timeline for implementation are set by the Central Pollution Control Board under the Ministry of Environment, Forest and Climate Change.
  - Since October 2010, Bharat Stage (BS) III norms were enforced across the country. BS-IV emission norms were put in place in 13 major cities from April 2010, and the entire country from April 2017.
  - In 2016, the government announced that the country would skip the BS-V norms altogether and adopt BS-VI norms by 2020.
  - In a recent judgment, the Supreme Court banned the sale

and registration of motor vehicles conforming to Bharat Stage IV emission standard in the entire country from 1 April 2020.

- On 15 November 2017, the Union petroleum ministry, in consultation with public oil marketing companies, decided to bring forward the date of BS-VI grade auto fuels in NCT of Delhi with effect from 1 April 2018, instead of 1 April 2020.

### **Bharat Stage Emission Standards**

- The Bharat Stage (BS) are emission standards instituted by the Government of India to regulate the output of air pollutants from motor vehicles.
- The Environment Ministry is responsible for deciding the fuel standard in the country. The Central Pollution Control Board implements these standards.
- The BS regulations are based on the European emission standards.
- Companies can come up with new vehicles with BS VI fuel standards even before the April 2020 deadline. But after the deadline, vehicles that do not comply with BS VI standards will not be registered.
- With the implementation of new norms, pollution levels are expected to come down significantly as the particulate matter (PM) will decrease. About one-third of the air pollution is caused by cars and motor vehicles.