

## **Bharat Stage VI is a significant technological development challenge: Wheels India MD**

Adaptation of Euro VI norms to Bharat Stage VI is not a minor challenge. It's a significant technological development challenge, feels Srivats Ram, Managing Director of Wheels India, a TVS Group company.

The Centre has recently announced that India will leapfrog from the Bharat Stage (BS) IV emission norms that are now in force to the BS VI norms by 2020. Introduced in 2000, the Bharat norms are emission control standards put in place by the government to keep a check on air pollution. Based on the European regulations (Euro norms), these standards prescribe specifications/limits for the release of air pollutants from equipment using internal combustion engines, including vehicles. Implementation of the BS V standard was originally scheduled for 2019. This has now been skipped. BS VI, originally proposed to come in by 2024, has now been advanced to 2020 instead.

Even for Europe, the transition from Euro 5 to Euro 6 norms took a lot of time, Mr. Srivats Ram said. "Technologies had to be adapted, innovations relating to manufacturing had to be done, and, more importantly, testing and validation to the new standards had to be performed," he pointed out. The climatic conditions, driving habits and road conditions, leave alone fuel conditions and maintenance practices, were significantly different in India compared to Europe, he said. Significant developments in terms of automotive technology and pace of innovation must happen first if the industry had to meet the target that had been set for Bharat Stage VI, he said.

To a question, he admitted that pricing was one of the concerns in adapting Bharat Stage VI norms. "With the new regulations, there are a lot of technological changes that need to be made in the vehicles which will have an impact on pricing. And that will not be an insignificant impact. The price part, however, is one part of the equation. But leaving aside the price part, the technology and the adaptation of technology to Indian road conditions need to be done," he said. "Everything said, India is a price-sensitive market. They have to see how to adapt the technology to make it affordable," he added.

To a specific question, he said "Some of these features that we talk about have come about in the West only after the regulations have been announced". Be it Euro norms or crash test norms, vehicle firms in Europe started implementing these standards only after these had come into force. "I don't think India in that sense is any different from any other market. The difference between India and the other markets is that other markets have had time to actually develop the technology and implement it. India seems to be on a fast path judging by the current road map that has been laid out," he said.