



New Perception Survey on Vehicular Pollution Shows Citizens of Pune and Pimpri Chinchwad would Switch to Cleaner Vehicles If Polluting Ones Are Discouraged

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Pimpri Chinchwad and Pune: At a time when urban pollution levels are at dangerously high levels across the city, and vehicular emissions are emerging to be a key source of the same, a new study showcases that, if a daily pollution charge is imposed on high polluting vehicles it will discourage 96% of vehicle users from using their high polluting vehicles.

The new study, conducted by ITDP India, surveyed 2000 citizens from Pune and Pimpri Chinchwad Municipal corporation limits (personal two-wheeler and four-wheeler users) to understand their perception towards air pollution and their change in travel behaviour if the city were to ban or charge a daily pollution charge on usage of high-polluting vehicles. The study was conducted between the months of September-October 2025.

Key findings

1. Citizens' change in travel behaviour in case of a ban on high polluting vehicle

Citizens were asked to choose top two travel mode choices, in case a ban was imposed on the movement of high polluting vehicles

1. 96.5% of respondents said they would shift to a less polluting or zero pollution private vehicle as one of the options (such as an EV or BS-6 vehicle).
2. 24.5% said public transport, walk or cycle, would be a one of the options for them—an encouraging sign that stricter emission standards could nudge more private-vehicle users toward public transport.

2. Citizens change in travel behaviour if the high polluting vehicles could be still allowed by paying a daily pollution charge, instead of banning

Respondents were also given another option where they would be able to use their high polluting vehicle by paying a daily pollution charge of Rs. 75 for two wheelers and Rs. 150 for cars, instead of a ban. Only 4% respondents agreed to pay daily cess as it would allow them to travel occasionally or during emergency situations, however, 96% respondents would still stick to the earlier option chosen in case of a ban and prefer to switch to a less polluting or EV vehicle, instead of paying.

This demonstrates that a policy, that discourages the use of high polluting vehicles along with encouraging cleaner modes, can encourage faster shift to a less polluting vehicle or EV.



“Our research suggests both ban and pricing are effective in discouraging highly polluting vehicles. However, pricing polluting vehicles can allow people to continue using their vehicles in emergencies and occasional use. It gives time to transition to cleaner vehicles. However, it is important that the resultant revenue be only invested to further strengthen public transport, walking and cycling infrastructure, and support incentives for cleaner vehicles,” said Parin Visariya, Programme Manager, ITDP India.

Citizens’ Broader Perception on Air Pollution:

1. 82% believe air pollution is a major problem in the city, with vehicles and industries perceived as the major contributors.
2. 60% report experiencing health issues they believe could be due to air pollution.

What is a Low Emission Zone?

These findings point to a clear insight: when polluting vehicles are discouraged through a policy intervention, people would shift to cleaner alternatives. This behavioural response opens up a powerful opportunity for cities to adopt proven global strategies that leverage exactly this travel behaviour change.

One such strategy is the **Low Emission Zone (LEZ), which global cities** like London, Seoul, Brussels are turning to. A Low Emission Zone (LEZ) is a designated zone where highly polluting vehicles are either banned or charged a daily pollution charge, to ensure that only cleaner or less polluting vehicles enter. Thus, LEZs encourage cleaner mobility, reduce harmful pollution, and are often supported by improvements in public transport, walking, and cycling infrastructure.

Why LEZs now?

It may be recalled that previously, [ITDP India](#) and [ICCT](#) had conducted vehicular surveys in 2023-2024 in the regions of Pune and Pimpri Chinchwad to identify what are the types of vehicles plying in the city.

In PCMC, it was found that nearly 70% of the internal combustion engine (ICE) vehicles (petrol, diesel, and CNG vehicles) plying in PCMC are of BS-4 model and lower. These are far more polluting than the BS-6 and EV vehicles. It is crucial to note that, PM 2.5 emissions in BS-6 diesel vehicles are upto 80% lower than BS-4 diesel vehicles, as per recent studies. In Pune, this translated as, about 71% of Internal Combustion Engine (ICE) vehicles being BS-4 and below.

The survey was further backed with modelling studies conducted by ITDP India and ICCT in 2023, which found that if the city of Pimpri Chinchwad discouraged the used of BS-4 and older vehicles, Particulate Matter emissions from vehicle tail pipe will fall by 78%-83%, in just 4-5 years, if all those users switch to BS-6 vehicles. In the same time frame, if the users of BS-4 and older vehicles all



switched to EV, the particulate matter emissions from vehicles could fall by 85%-91%! Similarly, if Pune discourages the use of BS-4 and older vehicles, the particulate matter emissions from vehicles will fall by 81%-84% if all those users shift to BS-6 vehicles.

“Our three years of research in Pune and Pimpri Chinchwad clearly shows that discouraging the use of BS-4 and older vehicles in the phased manner by implementing a citywide LEZ, is an impactful step the city can take to clean up the air. Cities must work towards a plan to phase out BS-4 and older vehicles, and encourage shift to public transport, walking or cycling, and lesser polluting vehicles,” said Siddhartha Godbole, Senior Associate, ITDP India.

Info points:

Total 2000 Responses

Female respondents: 787

2W respondents: 555

4W respondents: 232

MALE: 1213

4W respondents: 520

2W respondents: 693

Survey conducted in 20 locations

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Access the full insights of the perceptions survey [here](https://itdp.in/resource/insights-pune-pimpri-chinchwad-perception-study/)- <https://itdp.in/resource/insights-pune-pimpri-chinchwad-perception-study/>

About ITDP India

ITDP India provides a wide range of technical and strategic support to national, state, and city governments—helping them design and implement people-centric transport systems. Our expertise spans technical advisory, data-driven research, knowledge publications, and capacity-building programmes. We focus on enabling cities to develop efficient, high-quality public transport systems—including electric mobility solutions—while also prioritising safe and accessible infrastructure for walking and cycling. Our work supports traffic reduction mechanisms, low



emission zones, and the development of integrated mobility plans that promote cleaner air, reduced congestion, gender responsive mobility, and improved quality of life.