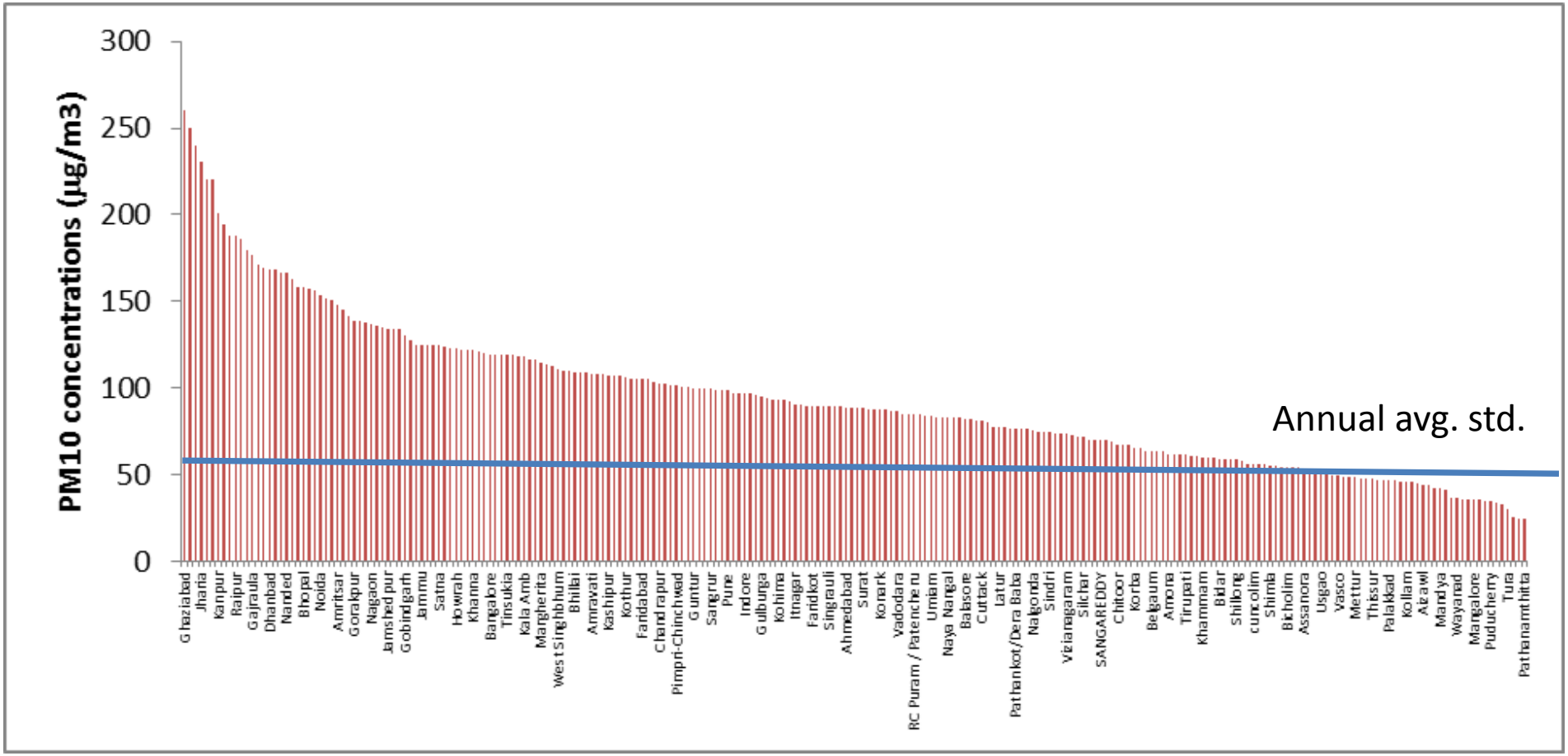
Enabling Cleaner and Greener India Progressing Towards BS VI Norms

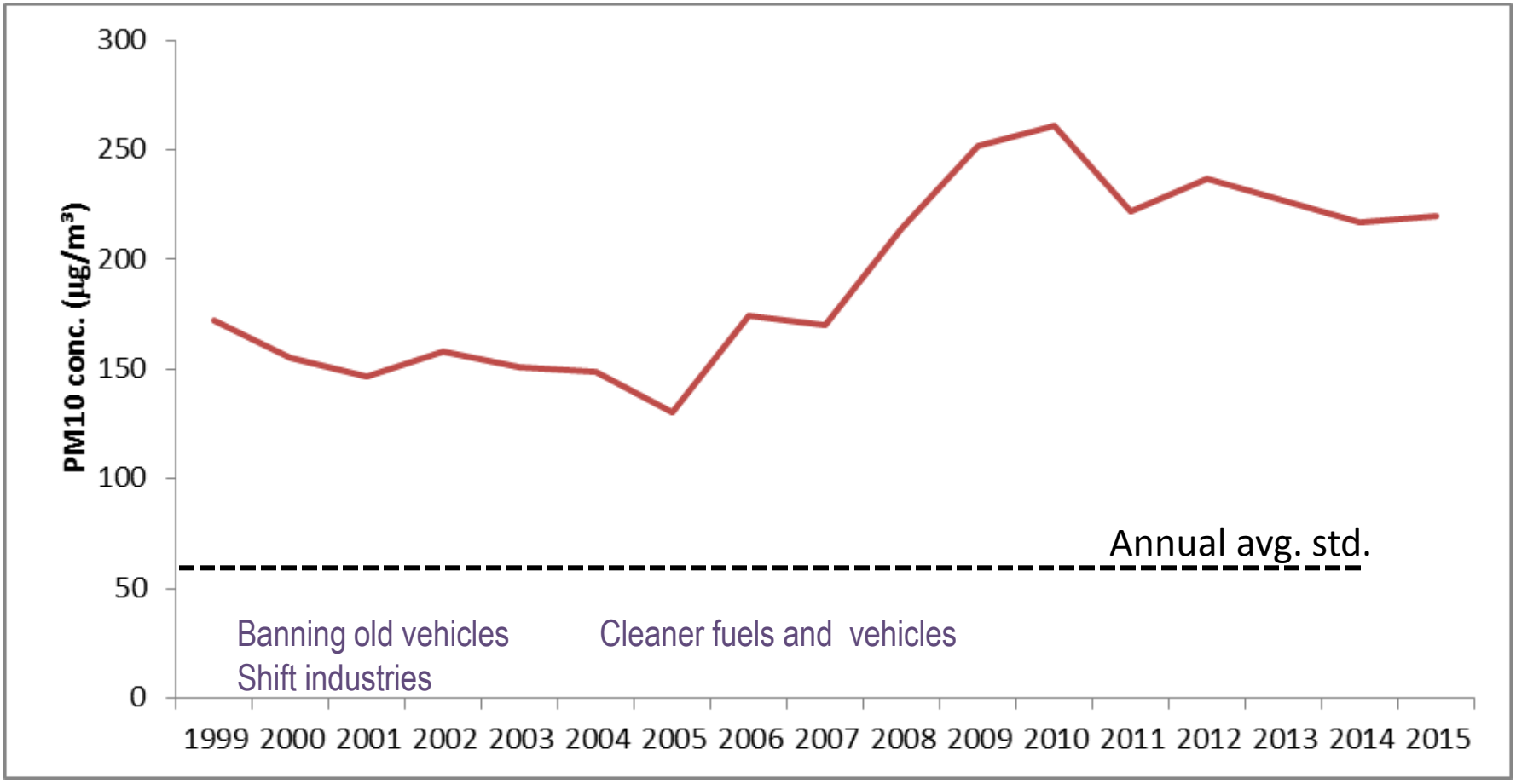
PM10 concentrations in Indian cities (2015)



About 70-80% cities violate the standards of PM10

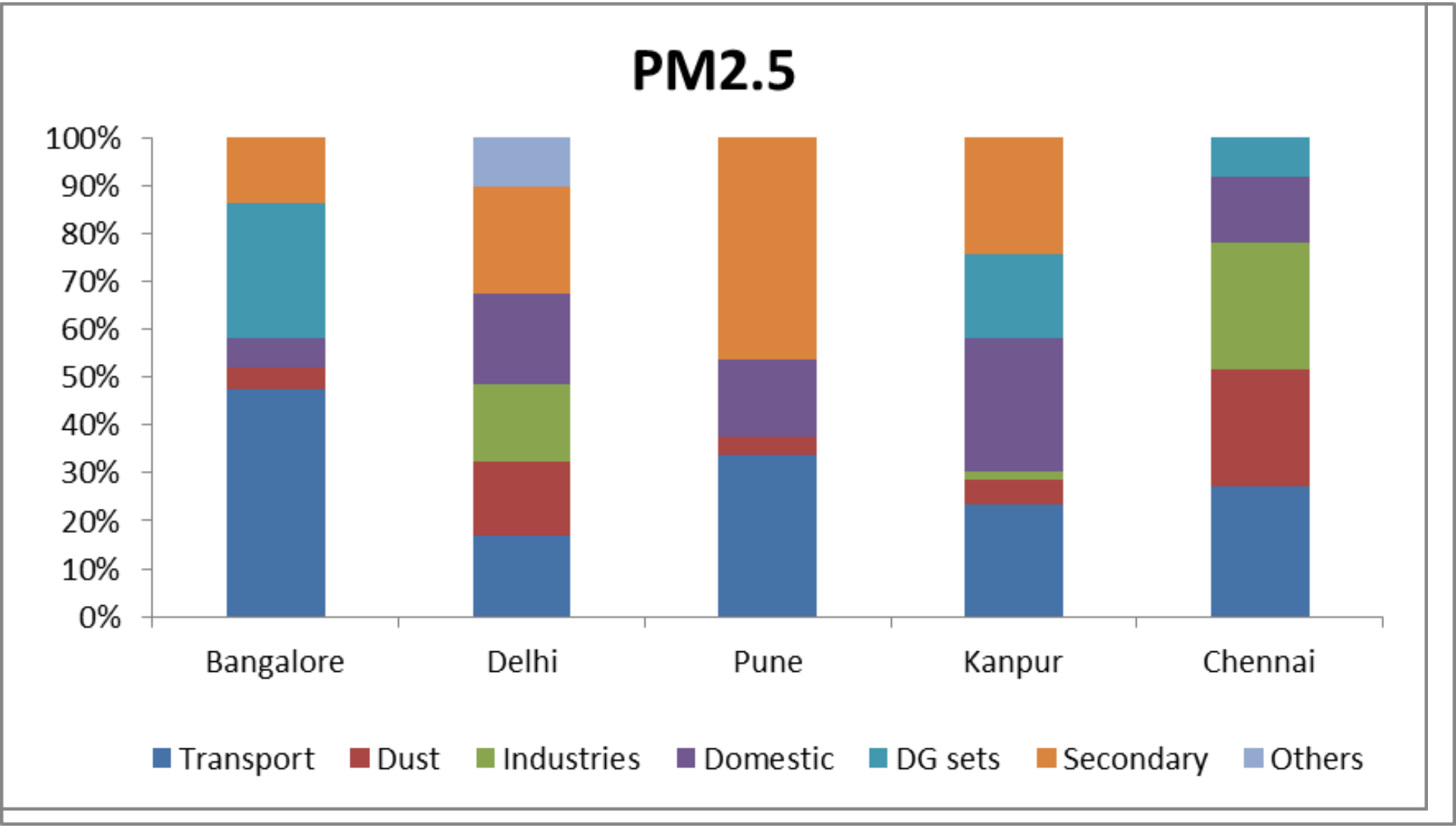
Source: CPCB, NAMP data

Urban air quality (Delhi)- PM10



Based on CPCB NAMP data

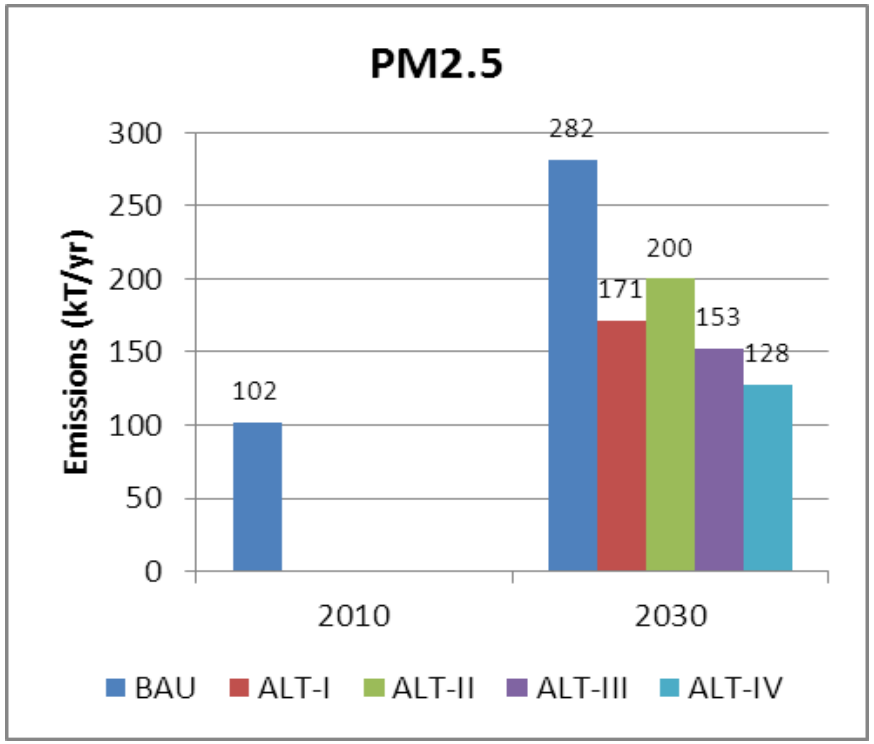
Source contributions in Indian cities

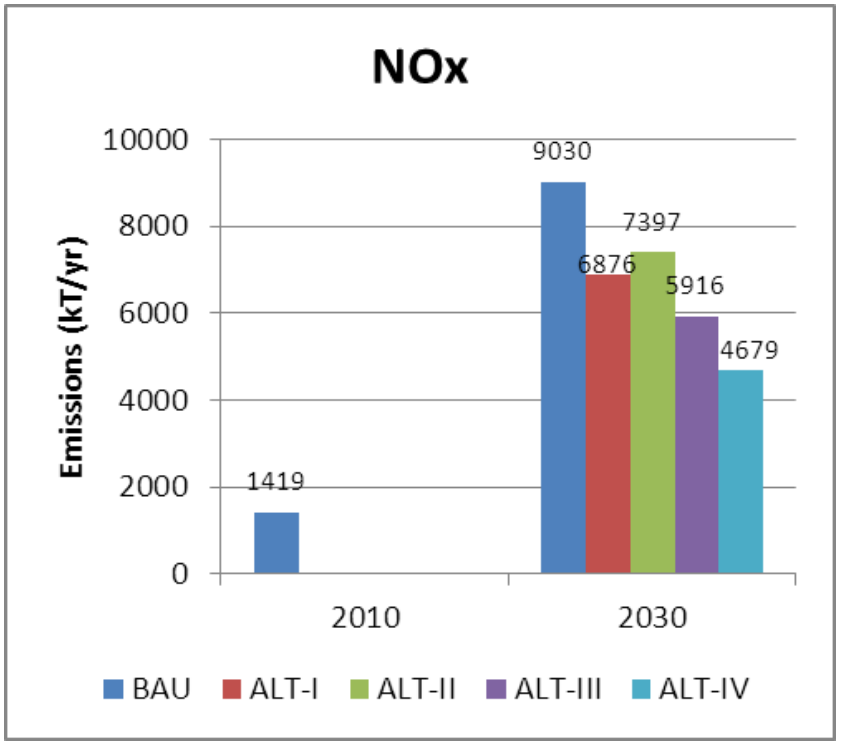


Transport is not the only but an important source in cities

Source: CPCB, 2010 and other studies

Effect of advancement of norms on emissions from road transport in India (2010-2030)

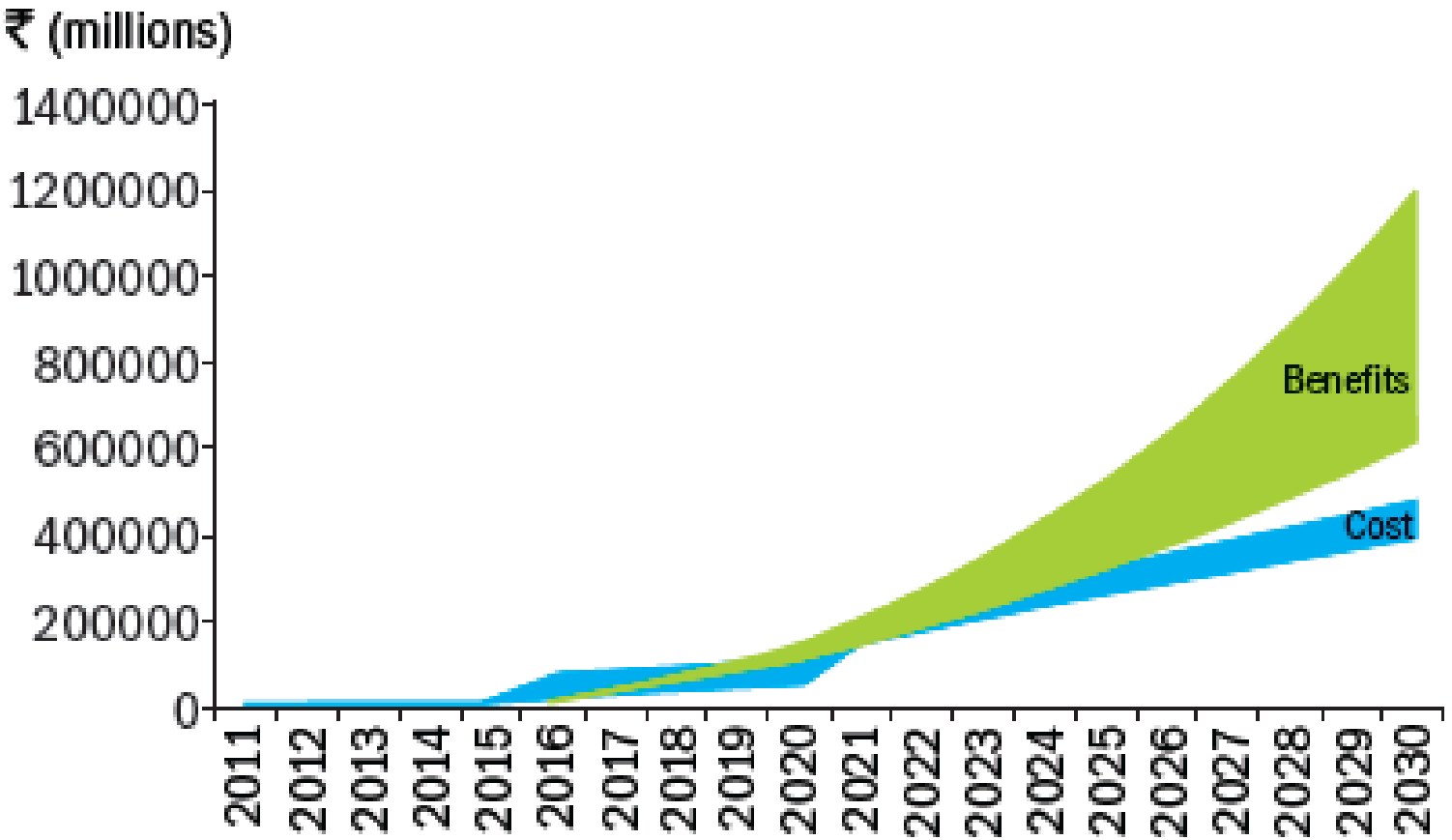




Scenario	Description
BAU	Based on the current plans and policies of the government without any further intervention. BS-III all across the country and BS-IV in 13 cities
ALT-I	Introduction of BS-IV all across the country by 2015
ALT-II	Introduction of BS-IV all across the country by 2020
ALT-III	Introduction of BS-IV all across the country by 2015 and BS-V in 2020
ALT-IV	Introduction of BS-IV all across the country by 2015 and BS-VI in 2020

TERI estimates
Sharma et al, 2014

Health benefits (PM2.5 reduction) outweigh the costs of implementation of BS-VI norms in India



TERI estimates
Sharma et al, 2014

Conclusions

- Air quality in Indian cities is bad and further deteriorating.
- Transport sector is one of the important source contributing to finer fractions of PM, and NOx in cities
- The poor air quality has negative effects on health, agriculture, and climate.
- Faster adoption of BS-VI standards can reduce air pollution and associated health impacts in cities.

Additional measures required

- Enhancement of public transport systems
- Electric mobility
- Commissioning of an effective I&M system across country
- Relook at driving cycles to prescribe emission norms
- Development of a fleet modernization programme
- Measures for reducing energy demand from the sector