



ADVANCED VEHICULAR EMISSIONS AND FUEL QUALITY NORMS ARE THE NEED OF THE HOUR, SAYS A TERI STUDY

New Delhi: 15th January, 2014: To raise public awareness and engage policymakers, The Energy and Resources Institute (TERI), TERI University and The International Council on Clean Transportation (ICCT), today unveiled the findings of the three studies conducted on vehicular emission control in India.

Vehicles are an important source of the air pollutants like carbon monoxide, nitrogen oxides, particulate matter (PM), volatile organic compounds, and greenhouse gases emissions. Many of these pollutants undergo further reactions in the atmosphere, which leads to increased smog levels; and this substantially affects human health and the environment at large.

Dr. R. K. Pachauri, Director General of TERI said "With the rapidly escalating growth of population of vehicles in India, air quality as a result of emissions from vehicles is deteriorating rapidly in our towns, cities and highways. A stringent approach for controlling vehicular emissions through benchmarking of technology and regulation can bring about major improvements, which would also carry significant health benefits for the population that is being exposed increasingly to mounting emissions of harmful gases from vehicles throughout the country. The proposed forum would draw on the experiences, particularly from other parts of the world, where significant gains in air quality have been achieved through a mix of policy measures and regulation".

Dr. Leena Srivastava, Vice Chancellor, TERI University said "The question is not whether we can afford better quality auto fuels or vehicles! The question is: Can India afford a sick and ailing population suffering from prolonged exposure to unacceptable, but avoidable, levels of carcinogenic and other pollutants?"

Dr. B. Sengupta, Former Member Secretary, Central Pollution Control Board, Ministry of Environment and Forests, Govt. of India said "We need integrated approach to reduce air pollution to protect health of the people".

Dr. Dinesh Mohan, Professor, IIT Delhi said "The discussion clearly shows that the fuel policy standard in India needs to be implemented uniformly across the country and in line with the best international norms within 5 years. If the government don't deliver this, they will be responsible for increased deaths of Indians in next 10 years"

Key highlights of the finding release are:

- ***Benefits of advancement of vehicular emissions and fuel quality norms in India: Air quality in Indian cities is deteriorating.*** The study reveals that vehicular emissions are going to grow manifolds and will offset the impact of control measures taken in the past. The

resulting emissions will only make the air quality worse than the current levels which are already alarmingly high. Various scenarios analyzed in the current study shows that the reductions could be achieved through advancement of current emissions and fuel quality norms to more stringent levels. Advancement of these norms could save more than 18000 lives each year after 2030. Benefits of these norms outweigh the costs associated with their implementation.

- **India Retrospective study** is a comprehensive survey of past, present, and potential future vehicle emissions control program, in the context of international experiences and assesses technology costs versus health and economic benefits under several scenarios. The analysis found that particulate emissions (PM) from vehicles, which have declined since 2003 but nevertheless cause some 40,000 premature deaths each year in Indian cities alone, will return to 2003 levels within five years if new controls are not mandated. Emissions of nitrogen oxides (NOx), which indirectly cause and exacerbate cardiopulmonary illnesses, have continued to rise over the past decade, and the rate of increase is accelerating. Numerous factors influence trends in pollution from the transportation sector and associated health impacts. The existence of parallel standards, one for major cities and another, less stringent, for the rest of the country, has undermined efforts to address urban air quality problems and weakened the integrity of overall policy. A lack of effective inspection and maintenance programs, and of in-use compliance testing, undercuts new-vehicle emissions standards over time. Inadequate registration data complicates efforts to regulate the vehicle fleet. The steady growth in passenger car market share of diesel vehicles drives increases in PM and NOx emissions. Adoption of ultra-low sulfur fuels (10 ppm) and Bharat VI standards is critical in reducing vehicular air pollution in India.
- **Impact of alternative options of vehicular emission control on health** analyses the impact of integrated mass rapid transit system (IMRTS) and other policy interventions on the pollutant emissions from vehicular sources. To assess the impact on human health, the concentration response functions were developed for Delhi using primary mortality and incidence data collected for Delhi region. Finally, the pollutant concentration has been used to assess the impact of the increase in incidence of cardiovascular and respiratory mortality and morbidity in Delhi.

During the course of the event an open house was conducted, wherein inputs from experts on future Auto Fuel Policy for India was discussed. TERI and ICCT have jointly submitted to the Auto Fuel Policy Vision Committee the following recommendations:

- a) Implementation of BS-IV fuel quality and vehicle emission standards by 2015 across the country
- b) Adoption of BS-V fuels and vehicular emission standards by 2017
- c) Adoption of BS-VI vehicular emission standards by 2019
- d) Commissioning of an effective I&M system across country to replace or enhance the current PUC system
- e) Move towards world harmonized driving cycles

f) Development of a fleet modernization programme

g) Measures for reducing energy demand from the sector

h) Advancement to Euro norms (Euro-4 and 5) for two- and three-wheelers and adoption of separate norms for HC and NOx

ABOUT TERI

The Energy and Resources Institute (TERI) is an independent, not-for-profit research organization deeply committed to every aspect of energy, environment, and sustainable development. From providing environment-friendly solutions to rural energy problems, to helping shape the development of the Indian oil and gas sector; from tackling global climate change issues across many continents to enhancing forest conservation efforts among local communities; from advancing solutions to growing urban transportation and air pollution problems to promoting energy efficiency in Indian industries, the emphasis has always been on finding innovative solutions to make the world a better place to live in. All activities at TERI move from formulating local and national-level strategies to suggesting global solutions tackling critical energy and environment related issues.

Headed by Dr. R.K. Pachauri, also the chairperson of the Nobel Peace Prize winning climate change body, IPCC, TERI has emerged as an institution of excellence for its path-breaking research, and is a global brand widely respected by political leaders, policy makers, corporate entities as well as the civil society at large.

For more information, please click: <http://www.teriin.org>

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