

Conclusions and Recommendations

Representatives from government, the private sector, academia, and NGOs agree that the following are salient issues to be carefully considered when assessing and implementing Inspection and Maintenance policies. These policies should be taken under the broader context of pollution controls and overall transport policy aimed at safety, fuel efficiency, and lower emissions.

Obstacles / Common Problems:

1. There is a need for better coordination among institutions responsible for the various aspects of the design and implementation of I&M policy in many Asian countries. There also exists a need for improved capacity within various government agencies in terms of the technical knowledge needed to design and implement effective I&M programs.
2. There is a widespread problem of fraud and corruption. In addition to an auditing system, computerization of certification may be a way to alleviate this problem.
3. There exists a need for greater transparency and accountability throughout the I&M system. Use of an independent auditor can be useful to ensure the integrity of the system. The roles of stakeholders should also be clarified.
4. There exists a need for greater public awareness of the need for and benefits of a proper inspection and maintenance regime.
5. In a number of countries, there exists a lack of infrastructure in terms of number of centers, and the growth of inspection facilities is often not in line with the growth of the vehicle fleet.
6. Trained technicians are needed for testing and a need for capacity building in this regard exists, as well as a need for more trained mechanics, certification of repair stations and proper tools and equipment for inspection and maintenance of vehicles.
7. There exists a need for better and more appropriate data. This includes data on the characteristics of the existing vehicle fleet such as number of vehicles, their age, types of engines and emissions. There is a need to better understand emission characteristics in reference to driving cycles as well as to develop a common evaluation methodology of the environmental impact from the vehicle fleet and initiatives undertaken throughout the region.

Designing Effective I&M Policy

General

8. Fuel standards are important and should be based on environmental considerations and considered in parallel with I&M policies. Strict enforcement of these standards is important to ensure compliance of refineries and importers.
9. Over-arching ambient air quality standards should also be considered in conjunction with these policies. Current base line measures of ambient air quality should be established.
10. Regulations to ensure that noise levels do not exceed internationally accepted limits should be set and strictly implemented.

11. Social welfare and issues of poverty should be taken into consideration when designing I&M policy.
12. Regional cooperation may be useful for programs aimed at sharing data information and successful experiences, technical training and capacity building, and consideration for fuel and vehicle standards.
13. Although loaded tests are relatively expensive, they are ideal for post Euro I vehicles. However I&M systems should be designed to address current fleet characteristics.

Setting Standards

14. Overarching, federal standards should exist, but states and cities should also have flexibility to determine standards specific to their needs.
15. Policy makers should take a targeted approach to inspection regulations in terms of pollutants and vehicle types.
16. Implementability should be considered when setting standards and regulations. Policies should be achievable and in line with the reality of the existing fleet, and policy makers should ensure that regulations are not so stringent that a high percentage of the fleet could meet them
17. Two and three wheel vehicles are prevalent in the region and will continue to be a major mode of transport in the future. There exists an urgent need to address this problem. When considering standards for two and three wheelers, international norms may not be relevant or available. Special efforts should be undertaken with regard to assessing emissions, setting standards and developing regulations for these vehicles.
18. More stringent standards should be introduced and adopted at different speeds according to the specific needs of the country.
19. There exists a general sentiment that the banning of technology is not ideal or effective and phasing out based on performance is more strongly recommended.

Fiscal Considerations

20. Fiscal measures, such as tax incentives or penalties, play an important role in ensuring compliance and promoting the phase-out of undesirable technology.
21. Earmarking of tax revenue can prove useful for enhancing and improving both the I&M system and other aspects of transport policy. Implementation of an annual registration tax is recommended.
22. Scrappage should be linked to fiscal incentives.

Implementation

23. Coordination among government agencies involved in the I&M system is critical.
24. I&M should be linked to a strong periodic registration system and/or franchising system for public utility vehicles to ensure compliance.
25. Education and public awareness campaigns play a critical role in ensuring public support for I&M programs as well as compliance.
26. Centralization of testing centers is preferred over a decentralized network as a centralized system is less costly and less open to fraud.

27. There should be a separation of inspection and maintenance facilities.
28. The private sector should be involved in testing and maintenance systems.
29. The inspection test centers should be self-sustaining.
30. Idle, free acceleration testing is appropriate for pre-Euro I standard vehicles to control emissions but loaded tests are more effective for Euro I compliant vehicles. Idle testing can be a useful indicator of gross polluters in all vehicles.
31. Warranties for emissions, parts, and roadworthiness on new vehicles should be considered and their implementation should be strictly observed. Manufacturers should be held accountable for ensuring that warranties are honored.