Developing Integrated Emission Strategies for Existing Land Transport (DIESEL)

List of Technologies and Measures to Test

Dr. Supat Wangwongwatana
Deputy Director General
Pollution Control Department

Activities – Inspection and Maintenance

- Vehicle Maintenance
  - Routine tune-ups (e.g. injector cleaning, air filter, fuel filter and oil filter cleaning / replacement)
  - Adjusting Air-Fuel Ratio
  - Using certified spare parts
- Training/ Awareness-building

Pilots – Inspection and Maintenance

- Lab: Testing of effectiveness of different types of tune-ups
- In-Situ: Test opacity, rapid loaded test for emissions, fuel efficiency survey
- Analytical: Model performance improvements of in-use vehicles

Activities – New Technologies, Cleaner Fuel

- Retrofit in-use Vehicles
  - Oxidation Catalysts, Particulate Traps, Alternative Fuel Kits
- Move to Cleaner Fuels/Lube
  - Inspections/ Reporting to Reduce Adulteration, Low S Diesel, Alternative fuels (incl. CNG/LPG), Lube substitution, Fuel additives
- Adjust Registration Cost
- Improve In-use Vehicle Emission Standards

Pilots – New Technology, Cleaner Fuel

- Lab: Testing of effectiveness of selected retrofit and cleaner fuel options
- In-Situ: Test in-situ performance of selected retrofit/ cleaner fuel option (e.g. through driver survey, periodic tests)
- Analytical: Model retrofit/ cleaner fuel options

Summary

- In-use vehicles
  - Emission standards
  - (Targeted) enhanced inspection system
  - Vehicle upgrade and scrappage
  - Retrofit programs
  - Operational misuse (over-loading, over-fueling)
  - Pilot testing corrective measures
- New vehicles
  - Emission standards