

“Air That We Breath”
First National Symposium on
Air Resource Management in Sri Lanka

Mitigation of Urban Air Pollution
through
Implementation of Successful
Vehicular Emission Testing Programme:
Issues and Strategies

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CONTENT

- **Vehicular Emission & Urban Air Pollution**
- **Emission Control Options**
- **VET Programme in Sri Lanka**
- **Issues & Strategies**

1. VEHICULAR EMISSION & URBAN AIR POLLUTION

- **Vehicular Emission Processes**

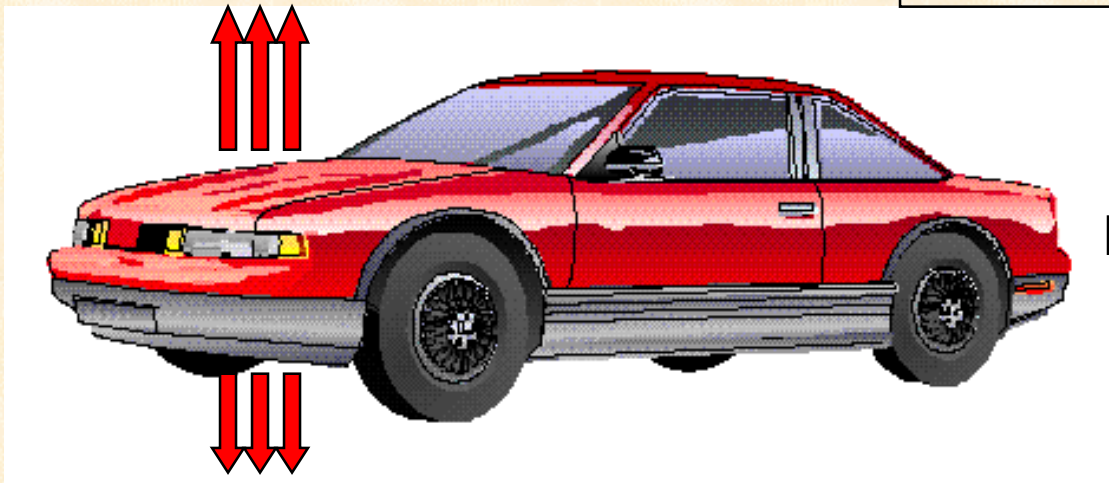
Evaporative Emissions

(HCs)

Exhaust Emissions

PM, CO, HCs

SO_x, NO_x, CO₂



Leaks (A/C, Ref.)

HFC, PFC

1. VEHICULAR EMISSION & URBAN AIR POLLUTION

• Vehicular Emission Characteristics

➤ Main Contributor of Urban Air Pollution in Sri Lanka

- Importation of used vehicles
- use of vehicles for longer period than recommended lifetime
- Poor maintenance & repair

➤ Very complicated in urban areas

➤ Depends on many technical and non technical factors

Technical Factors:

- Vehicle Type
- Fuel Type
- Age
- Emission Control Technology
- Gross Vehicle Weight

Non Technical Factors :

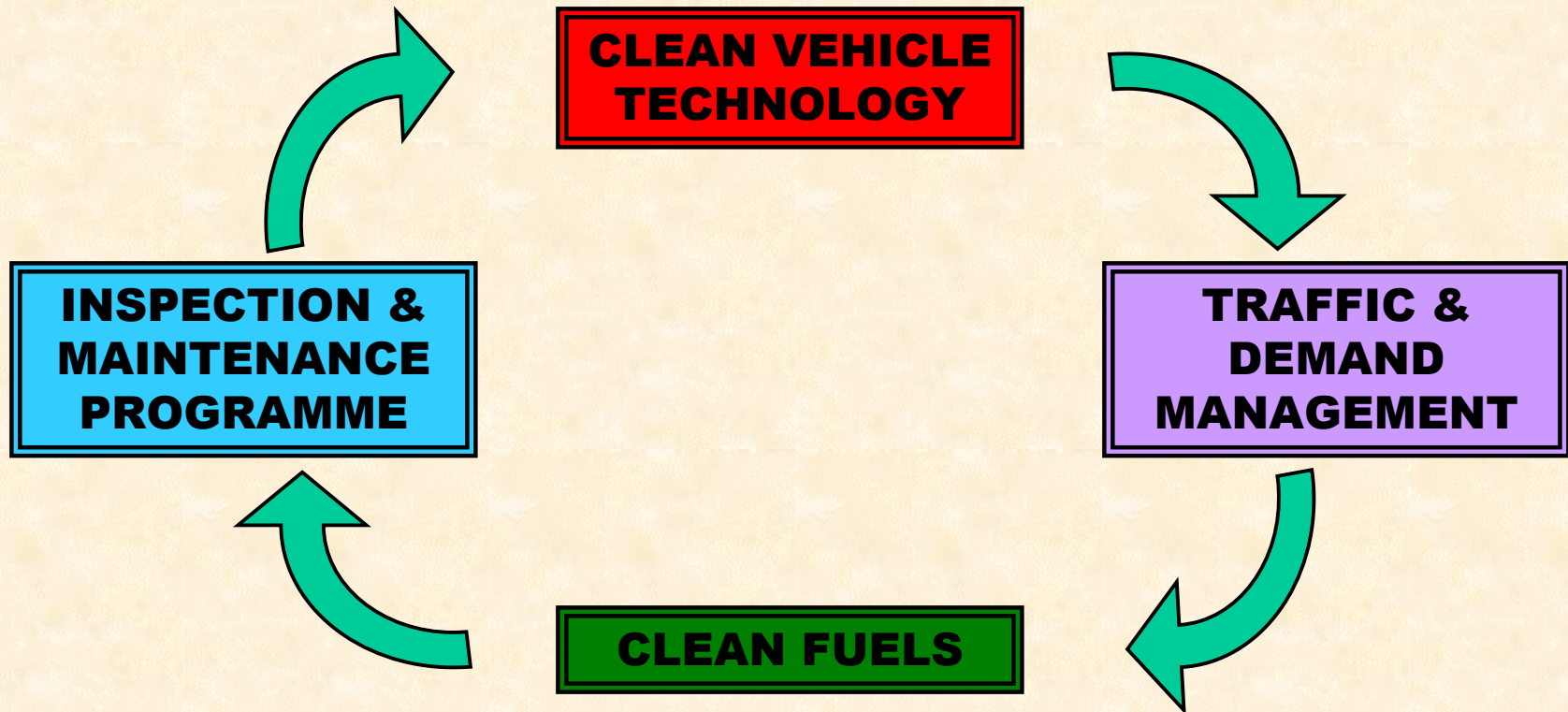
- Driving Habits
- Traffic Condition
- Transient Behavior
- Level of Maintenance
- Tempering & Misfueling

As a result, emissions from different vehicles can vary by multiple orders of magnitude.

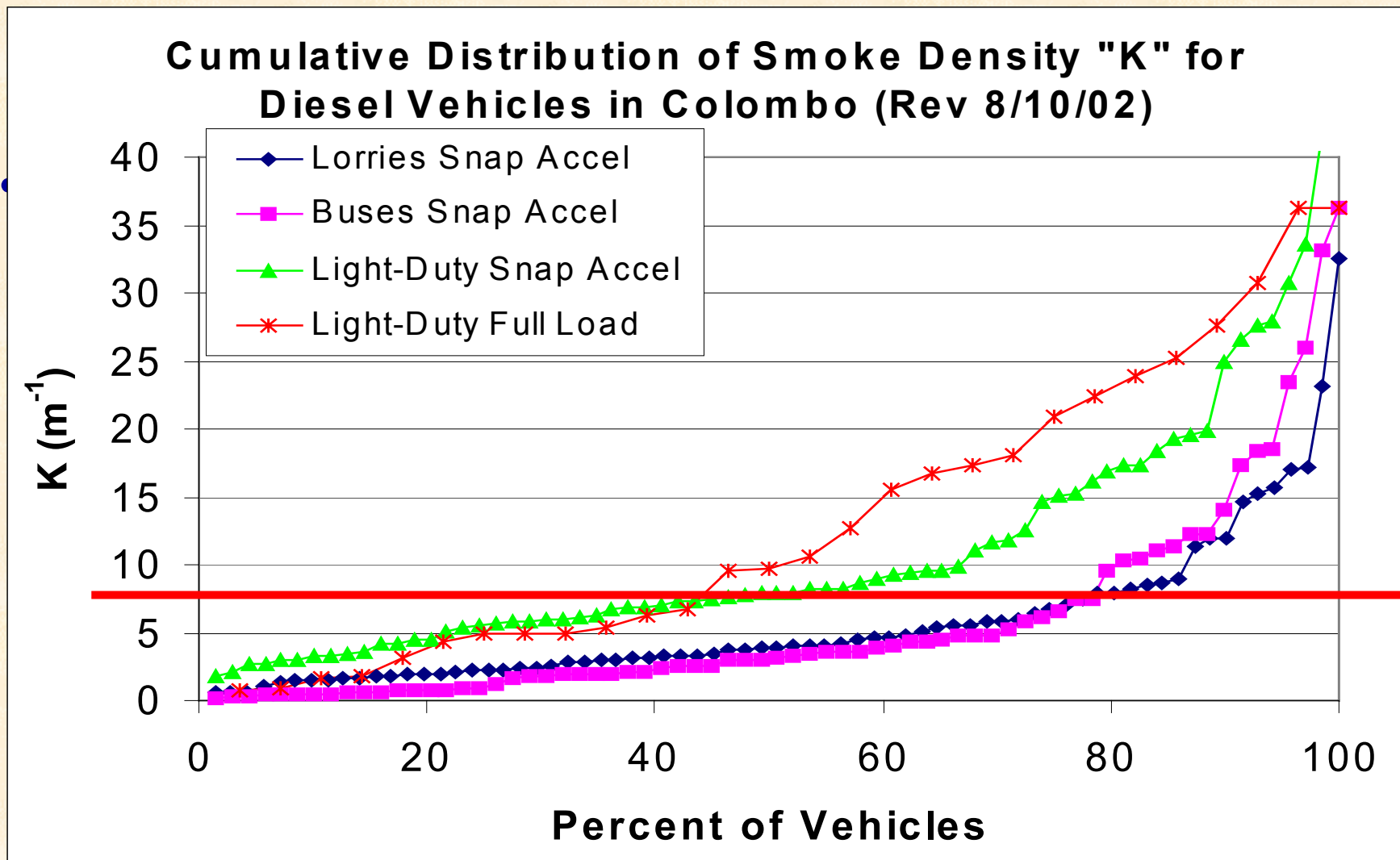
2. EMISSION CONTROL OPTIONS

Control Strategies

- Needs Comprehensive Strategy



2. EMISSION CONTROL OPTIONS



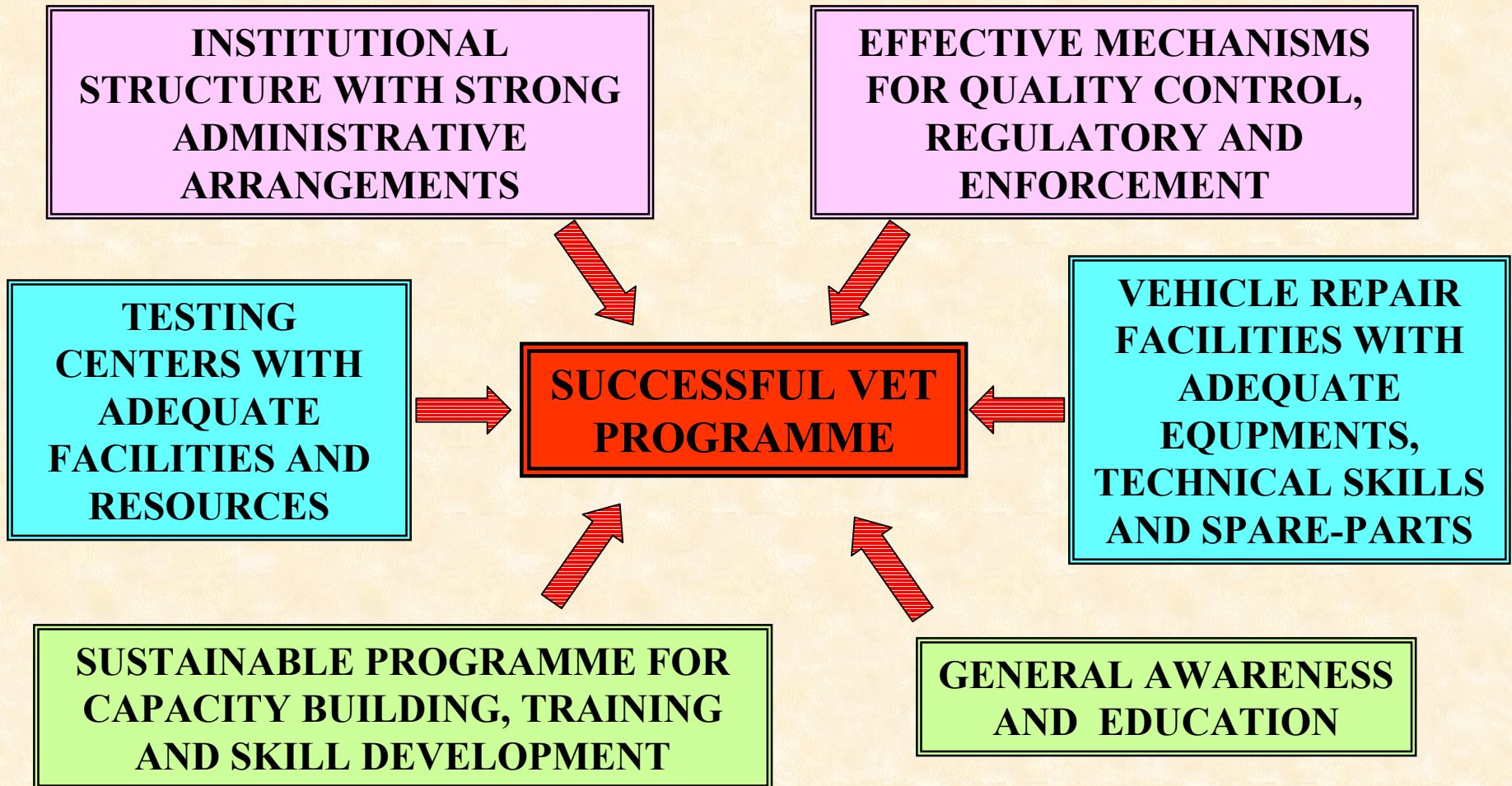
3. VET PROGRAMME IN SRI LANKA

Activities

- **Establishment of vehicle emission standards**
- **Development of emission testing procedures**
- **Establishment of emission testing centers**
- **Development of institutional & administrative set-up**
- **Strengthening the regulation setup and legislation**
- **Training and awareness programmes**
- **Roadside emission testing**

4. ISSUES & STRATEGIES

• Essential Elements



4. ISSUES & STRATEGIES

- **R & D Needs**

- **Establishment of An Information Center**
- **Development of Emission Inventory Database**
- **Development of Laboratory Facilities – Air Pollution / Vehicle Emission Testing**
- **Transport Planning / Traffic Management**

THANK YOU