## VEHICLE EMISSION STANDARDS AND MONITORING IN BHUTAN



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### **Outline**

- Emission Regulation
- Emission standards
- Emission Agents
- Monitoring of emission
- Effectiveness of monitoring
- What next

### **Emission Regulations**

Road Safety & Transport Regulations (1999) - covers regulations on vehicle emissions in the country

#### 1. Purpose of the Regulations

- To preserve and promote clean and healthy environment;
- To reduce excessive auto emission level throughout the country;
- Establish uniform vehicle emission standards throughout the country;
- Create awareness on adverse effects of motor vehicle emission on human health and the environment

### Requirement for motor vehicles to undergo emission tests

Commercial Vehicles : Every Six Months

Other Vehicles : Once every 12 months

Despite the above, the RSTA or Police (Traffic) may require a motor vehicle to undergo emission test if a vehicle is emitting excessive smoke while being driven on a highway

### Vehicle Emission Standards in Bhutan

Who sets the standards?

**NEC & RSTA** 

### Emission Standards contd....

### What is the Standard?

**Diesel Vehicles:** 75% HSU for vehicles registered before 1/1/2005 & 70% HSU for vehicles registered after 1/1/2005.

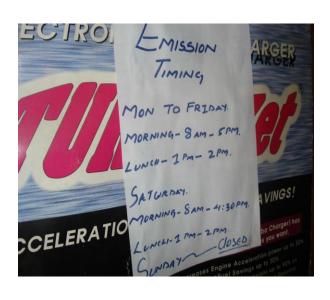
**Petrol Vehicles:** 4.5%CO for vehicles registered before 1/1/2005 & 4% CO for vehicles registered after 1/1/2005

All New vehicles imported into the country must meet euro-Il emission norms

## Who conducts the tests?

### **Private Agents (since March 2006)**

- USD Enterprise
- Yangki Automobile







# How Many Vehicles are tested? 35703

Year	No.of vehicles	Increase	% Increase (year to year)
1997	13,584		
1998	15,629	2,045	15
1999	18,288	2,659	17
2000	19,463	1,175	6
2001	22,494	3,031	15
2002	24,430	1,936	9
2003	25,003	573	2
2004	26,740	1,737	7
2005	29,914	3,174	12
2006	33,241	3,327	11
2007	35,703	2462	7

## How Many are not tested?

• GUESS???

RBA, RBG, RBP, IMTART & DANTAK Vehicles

Should we enforce emission regulations on these vehicles????

# Who Monitors Vehicle Emission Testing?

### RSTA & RBP

## How is it Monitored?

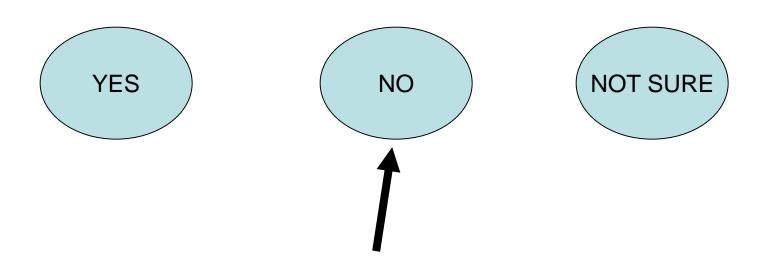
Highway Inspections

Ad-hoc inspections





# Is Monitoring Effective?



# Why Not?

- Private Agents could not expand beyond Thimphu & Phuentsholing.
- 2. Inspectors (RBP & RSTA) not trained
- 3. Lack of monitoring equipment and Vehicles for mobility
- 4. Police personnel posted in one location for very long....he/she knows everyone in the locality and everyone knows him/her.

### What are we doing?

- We are proposing for more equipment to be used as back up wherever the private agents are unable to cover
- Training of personnel for better monitoring
- Vehicles for better mobility

# THANK YOU