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2-Stroke Ban in Kathmandu

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Clean Energy Nepal

**Regional Workshop for Reducing Vehicle Emissions:
Reduction of Emissions from 2-3 Wheelers
Hanoi, Veitnam**

6 September 2001

Kathmandu: An Introduction

- Kathmandu Valley: Population - 1.5 M
- Kathmandu City: Capital & Economic Centre
- Rapid & haphazard growth (6%/annum)
- Deficiency in urban infrastructure & Degradation of Environment
- Air Pollution: Particulate matters (TSP & PM₁₀) above WHO guidelines

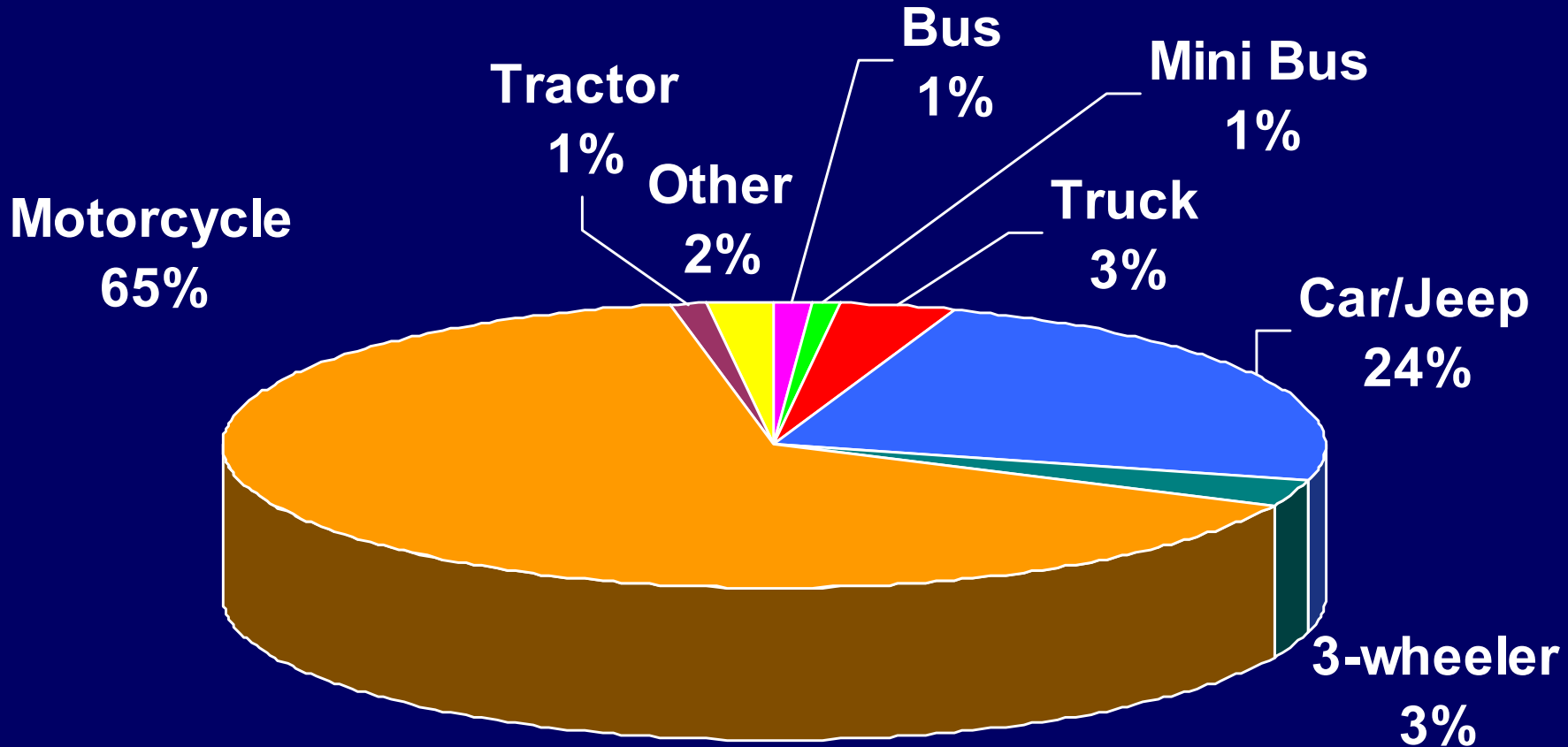
Vehicle Emission in Kathmandu

- Major sources of air pollution - Cement Factory, brick kilns and vehicle emission
- 171,678 vehicles in 1260 km of road
- Increasing at 21%/ year in past two years
- Highest increase in two-wheelers (25%)
- About one third of 2-wheelers have 2-stroke engines

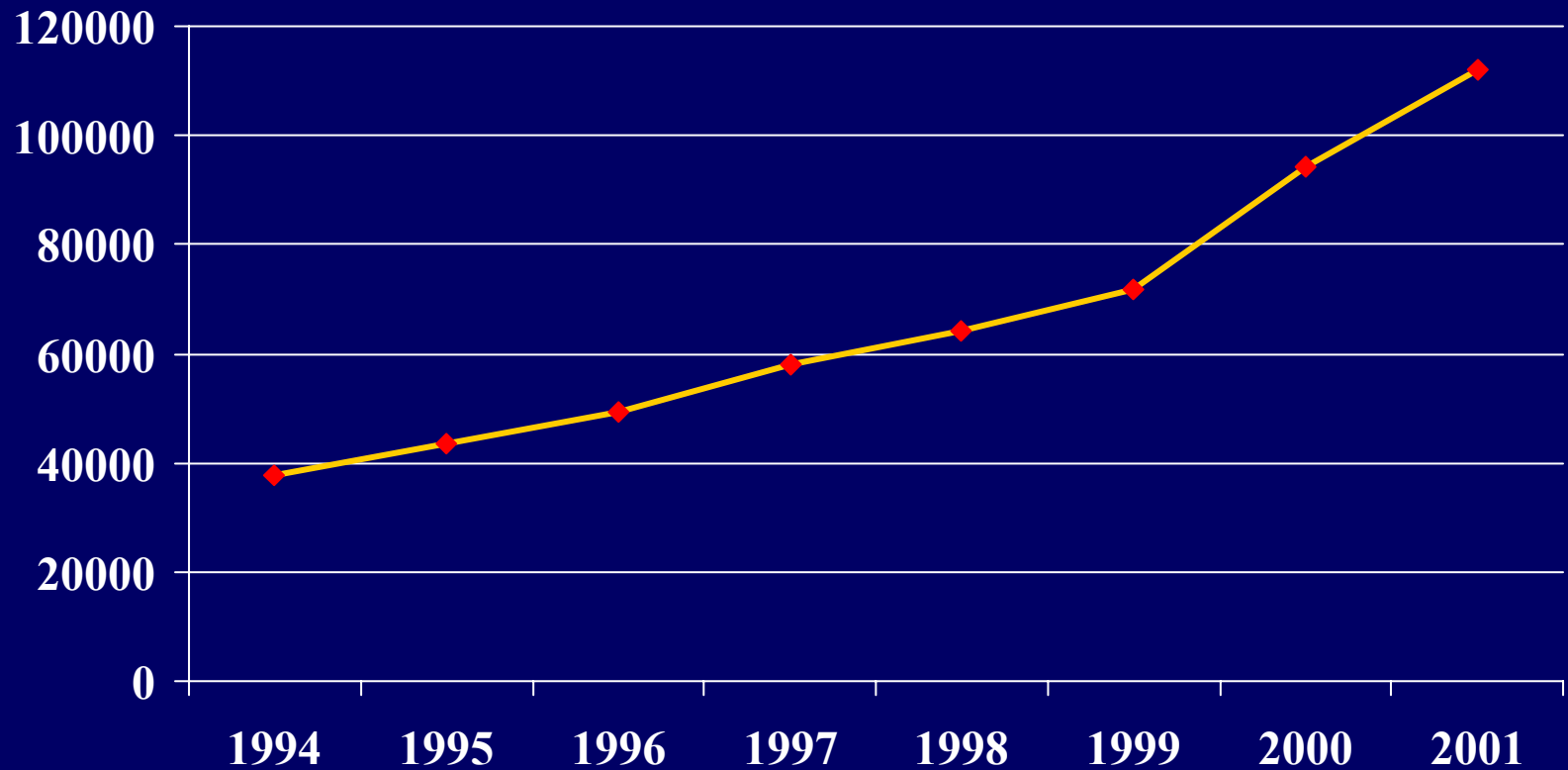
Government Response

- 1991: Ban on new Three-wheelers
- 1995: Emission standard
 - 65 HSU for diesel & 3% CO for petrol vehicles
 - Standard relaxed in 1998
- 1999: Ban on diesel three-wheelers and import of two-stroke engines in Kathmandu
- 2000: Incentive to 650 diesel 3-wheelers
- 2000: NVME Standards (Euro 1)
- 2001: Linked tax with age of vehicle

Vehicles in Kathmandu



Motorcycles in Kathmandu



2-Stroke Ban

- Effective from 16-11- 2001 all 2-stroke 3-wheelers will be banned in Kathmandu
- One year advance notice
- 2528 three-wheelers will be effected
- Opposition from Vehicle Owners
- Support from Environmental Groups
- High-Level Committee to review the decision

Views of Vehicle Owners

- Old Vehicles and 2-stroke engines are not necessarily polluting and should not be removed
- Enforce emission based standards
- Socio-economic costs
- If vehicles are removed from Kathmandu, same incentives as those given to diesel three-wheelers should be provided.

Views of Environmental Groups

- Two-stroke & old vehicles are polluting
- PM_{10} - Major Problem in Kathmandu
- Carrying Capacity of Kathmandu exceeded by 30,000 vehicles
- Similar policies in other countries (India)
- Recommendations of World Bank Study
 - Ban old 2-strokes vehicles from urban areas
 - Ban new 2-stroke vehicles

Views of Environmental Groups

- Only 3% of total vehicles affected
- Cleaner options are available at reasonable cost
- Banned vehicles can be used outside Kathmandu
- Most are past their economic life
- Cost of air pollution is very high
 - Price of PM_{10} in 1990 was over Rs. 200,000,000
- Government has made a decision and given a one year advance notice - stick with it

Other Suggestions

- Incentives for clean vehicles
- Promote zero-emission electric vehicles
- Tie tax with age of vehicles
- Tax of Rs. 0.50 per liter of petrol/diesel
- Control fuel adulteration
- Effective enforcement of emission standards
- No vehicles with red stickers in Kathmandu
- Strategy & Plans for Air Pollution Control

The Way Ahead ?

- Implement the decision despite opposition
- Scarp the decision
- Provide incentives requested by vehicle owners
- Provide incentives for clean vehicles only
- Postpone the ban and make it a part of an overall plan to control vehicle emission

For now, let the Committee do its work!