# Promoting Cleaner and More Efficient Vehicles

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#### KEY CHALLENGES



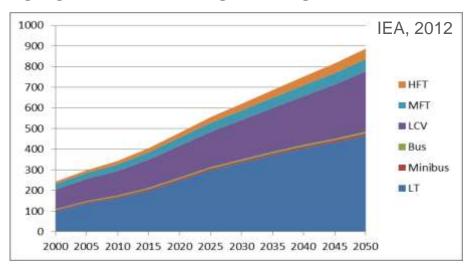
#### **Small Particulate Matter**

- PM 2.5 responsible for ~3.2 mln premature deaths/yr
- black carbon is the second most important climate pollutant – diesel vehicles priority

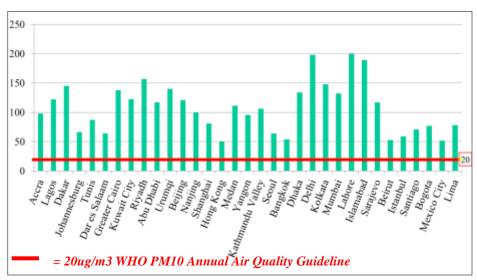
#### **Carbon Dioxide**

- CO2 emissions transport increasing faster than any other sector
- Global fleet to triple –
  emissions need to at least
  half (IPCC, G8)

#### **GROWTH HEAVY DUTY DIESEL FLEET**



#### PM levels in cities well above WHO standard

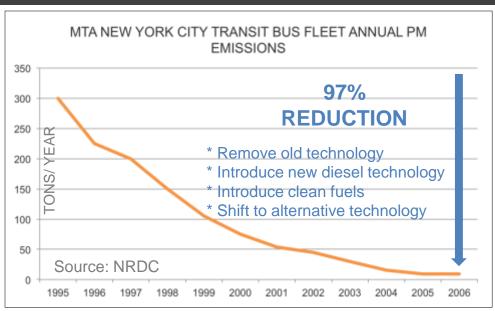




#### THE ROLE OF TECHNOLOGY



- ASI approach
- Technology not only needed for "Improve", also essential for "Shift"
- Existing technologies can reduce PM/BC by 90%+
- Existing technologies can reduce CO2 emissions by at least 50%



## Fuel Economy Trends (I/100 km)

(IEA/GFEI 2012)

	2005	2008	2011 Tre	end%
OECD	8.1	7.6	7	-2.4
non- OECD	7.5	7.6	7.5	-0.1
Global	8	7.6	7.1	-1.8



#### TECHNOLOGY INTERVENTIONS



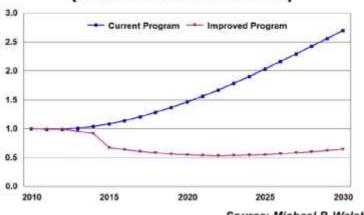
# Reducing Small PM pollution:

- Introduce low sulfur fuels
- And vehicles emissions standard
- Using a systems approach
- Address existing fleet

# Reducing CO2 emissions:

- Clean fuels & vehicles standards
- Technology transfer
- Targeted national policies including fuel taxation, labeling, fiscal incentives; import used vehicles

### Particulate Emissions From Road Vehicles in India (Normalized to 2010)



Source: Michael P. Walsh



#### PROGRESS



# Reducing Small PM pollution:

- Introduction low sulfur starting priority- first moversneed to increase scale
- Vehicles emissions standards scattered picture much to be done- systems approach
- existing fleet challenges

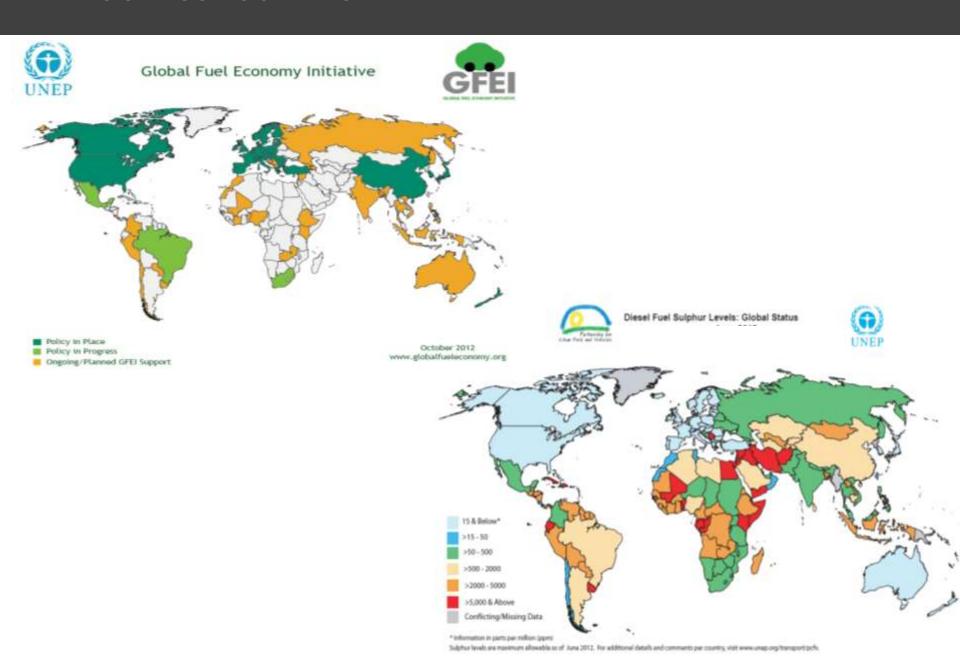
# Reducing CO2 emissions:

- Clean fuels major obstacle for introducing vehicles standards
- Much interest (energy/ fuel savings) need to adapt, replicate and support

# Key Initiatives from Rio+20:

- ▶ GFEI RIO+20 VC, PCFV RIO+2- VC
- CCAC

# ▶ PROGRESS - CONTINUED



# Question for this afternoon

- How can we speed up technology uptake from developed to developing countries?
- How can we link SHIFT and AVOID interventions with technology interventions?
- How can we access climate financing for transport technology projects?

# **THANK YOU**

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