

**17th IUAPPA World Clean Air Congress and
CAA 9th Better Air Quality (BAQ) Conference**

Convention Hall, BEXCO, South Korea.

**Session Topic: Institutionalizing Fuel Economy in Asia
Organizers: UNEP, GIZ, Clean Air Asia**

**Sri Lankan Experience:
Impacts of Fiscal Policies on Fuel
Economy**

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OUTLINE

- Road Transport Sector – An Overview
 - Active Vehicle Fleet
- Fiscal Policies
 - The Context
 - Tax system
- Impact of Fiscal Policies
 - Fuel Consumption
 - Vehicle Importation
 - Fuel Economy
- New Initiatives
 - Other Interventions.

ROAD TRANSPORT SECTOR - AN OVERVIEW

□ Transport Sector

- Dominated by road transport
- 140 billion passenger-km per year
 - ✓ 95.0% road; 5.0% rail
- 8 million ton-km per year
 - ✓ 97.5% road; 2.0% rail; 0.5% water

□ Road Transport

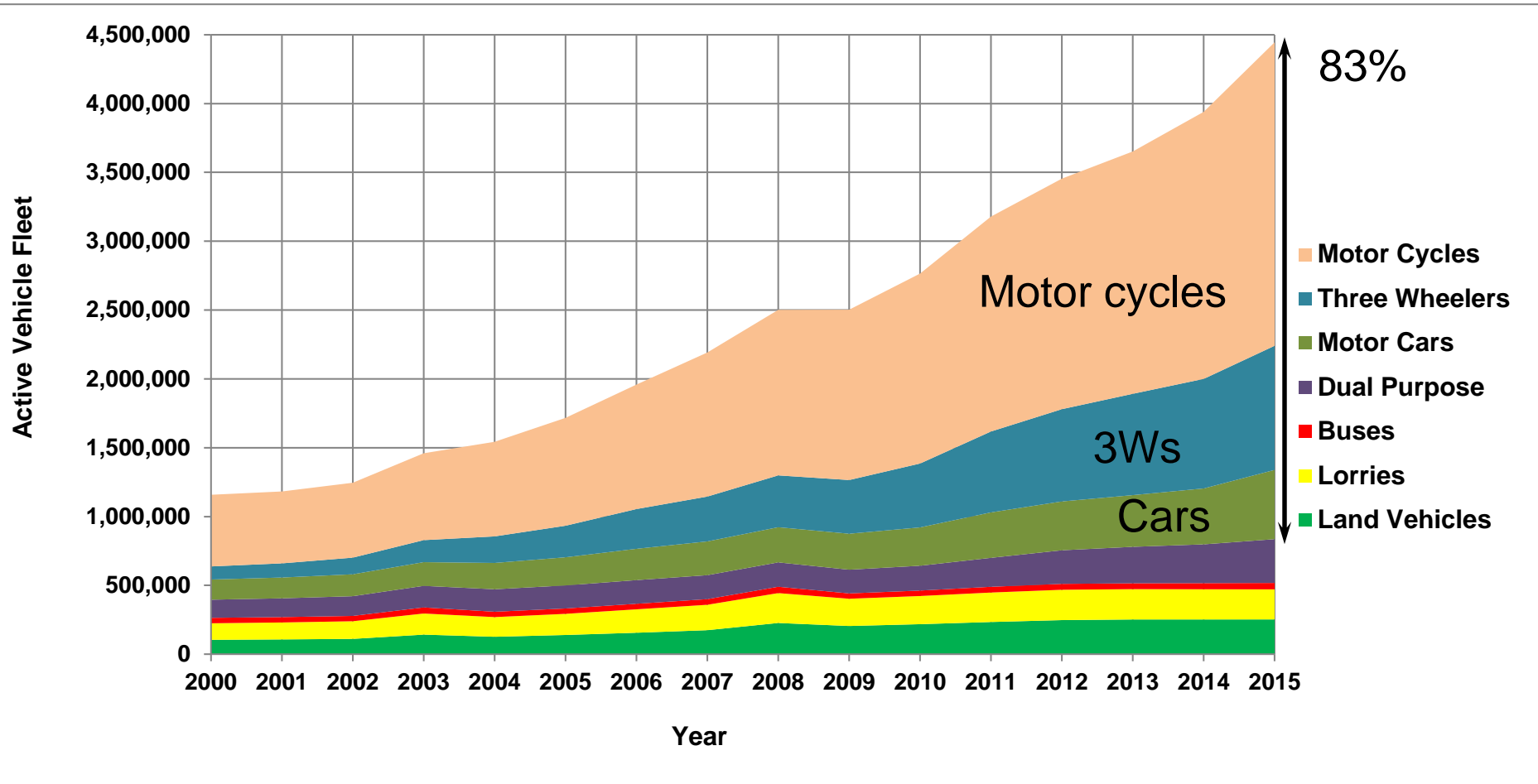
- Annual fuel consumption 3.5 million tons
 - ✓ 82.2% Passenger; 17.8% Freight
 - ✓ 68.1% Diesel; 31.9% Gasoline
- Effective fuel economy in passenger transport:
 - ✓ Based on fuel economy of vehicles and passenger capacity
 - ✓ Average: 0.02 liter/passenger-km

Bus : 0.01 liter/passenger-km
Car : 0.05 liter/passenger-km
Van : 0.03 liter/passenger-km
3 W : 0.04 liter/passenger-km
2 W : 0.02 liter/passenger-km

ROAD TRANSPORT SECTOR - AN OVERVIEW

□ Active Vehicle Fleet

■ 2000 – 2015

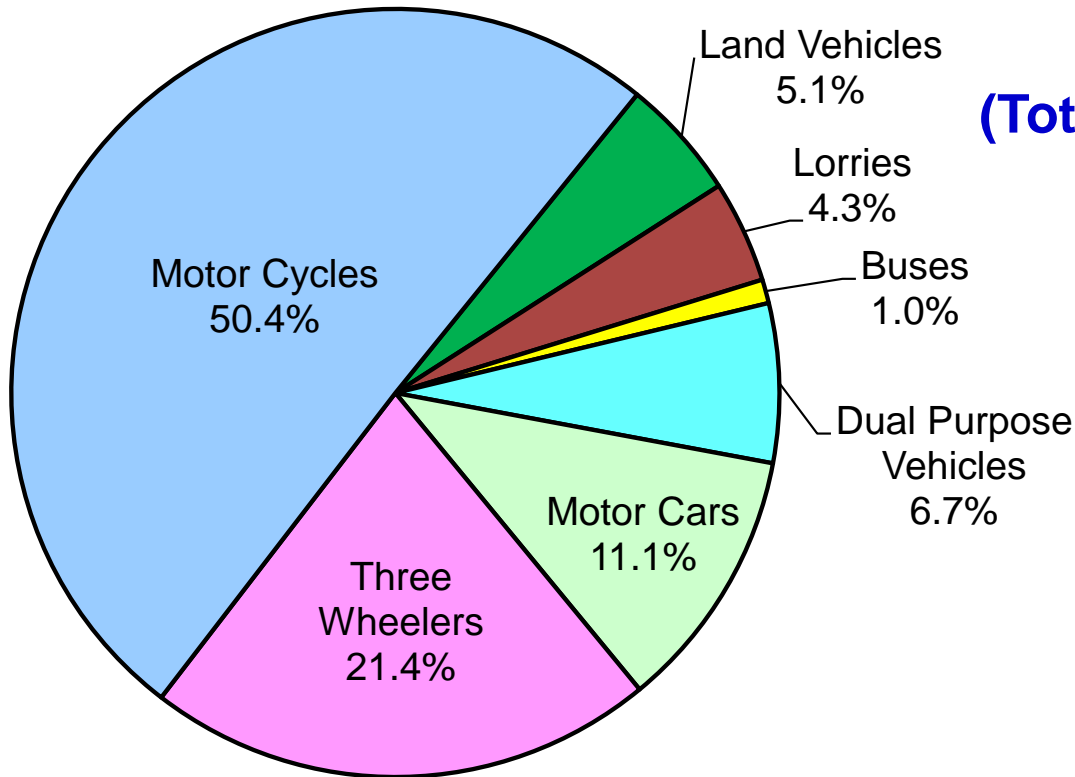


→ Accelerated growth of private vehicles (2W, 3W & Cars)

ROAD TRANSPORT SECTOR - AN OVERVIEW

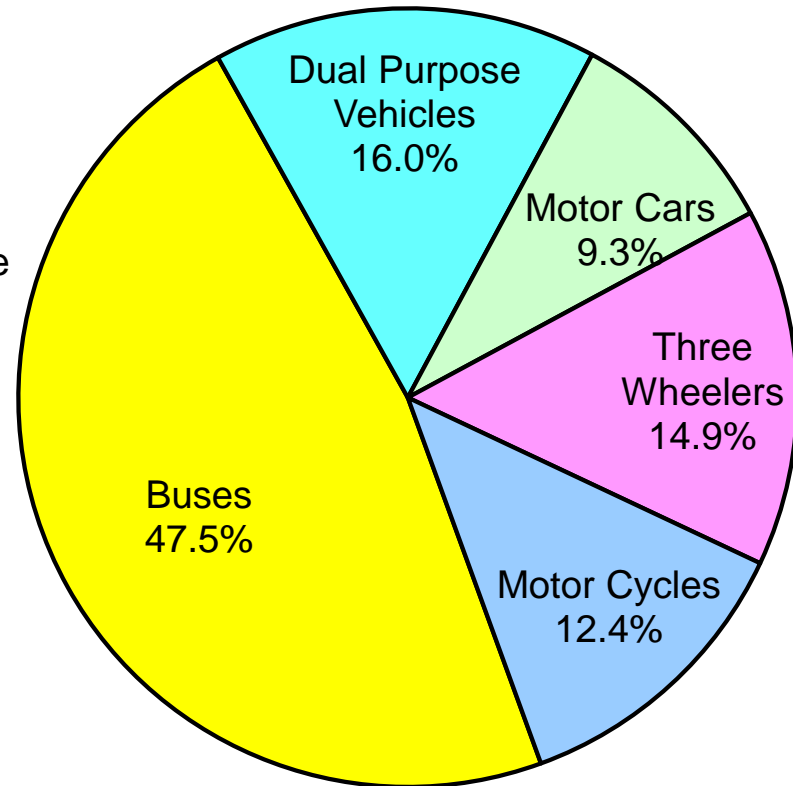
- Active Vehicle Fleet

- Contribution from different modes - 2015



**Vehicle Fleet Share
(Total 4.45 Million Vehicles)**

**Modal Share
(Total 134.5 Million Passenger-km)**



FISCAL POLICIES

□ The Context:

- Sri Lanka neither has a local vehicle manufacturing industry nor petroleum resource base.
- Thus the transport sector is heavily influenced by the fiscal policies related to the importation of both vehicles and fuels.
 - ✓ The tax system in the country has been a complicate one.
 - ✓ There were frequent changes in the tax structure and the rates, leading to a further complexity.
 - ✓ Another issue is the irrationality in formulating taxes, leading to wide-ranging economic consequences.
 - ✓ Such impacts are well recognized in the transport sector, particularly with differential taxes imposed on fuels (diesel vs gasoline) and vehicles (age, engine capacities and vehicle categories), etc.

FISCAL POLICIES

□ Vehicle Importation Taxes:

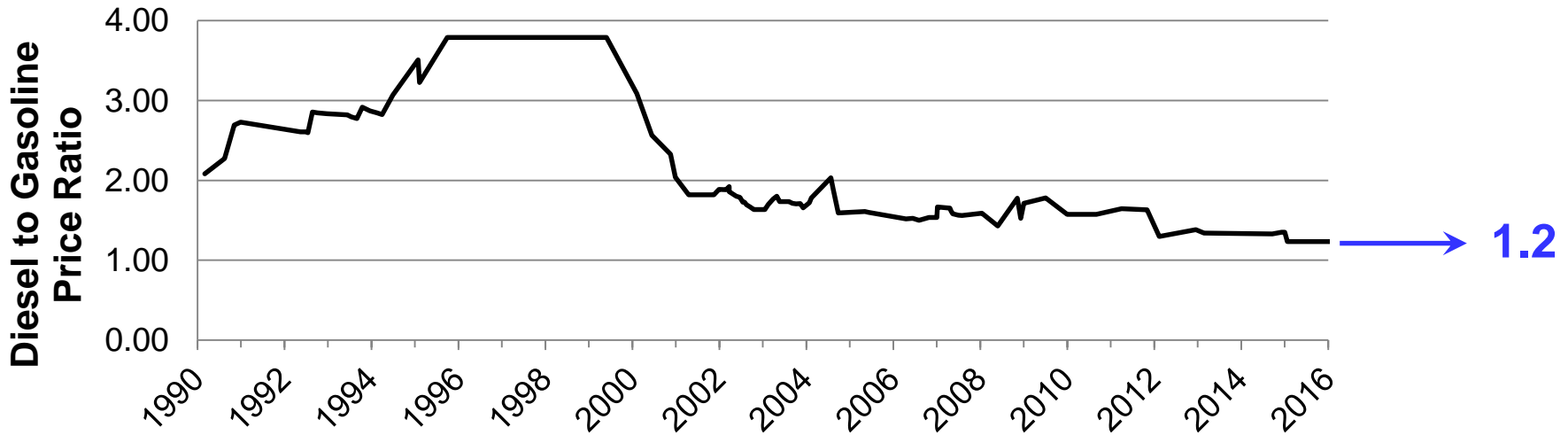
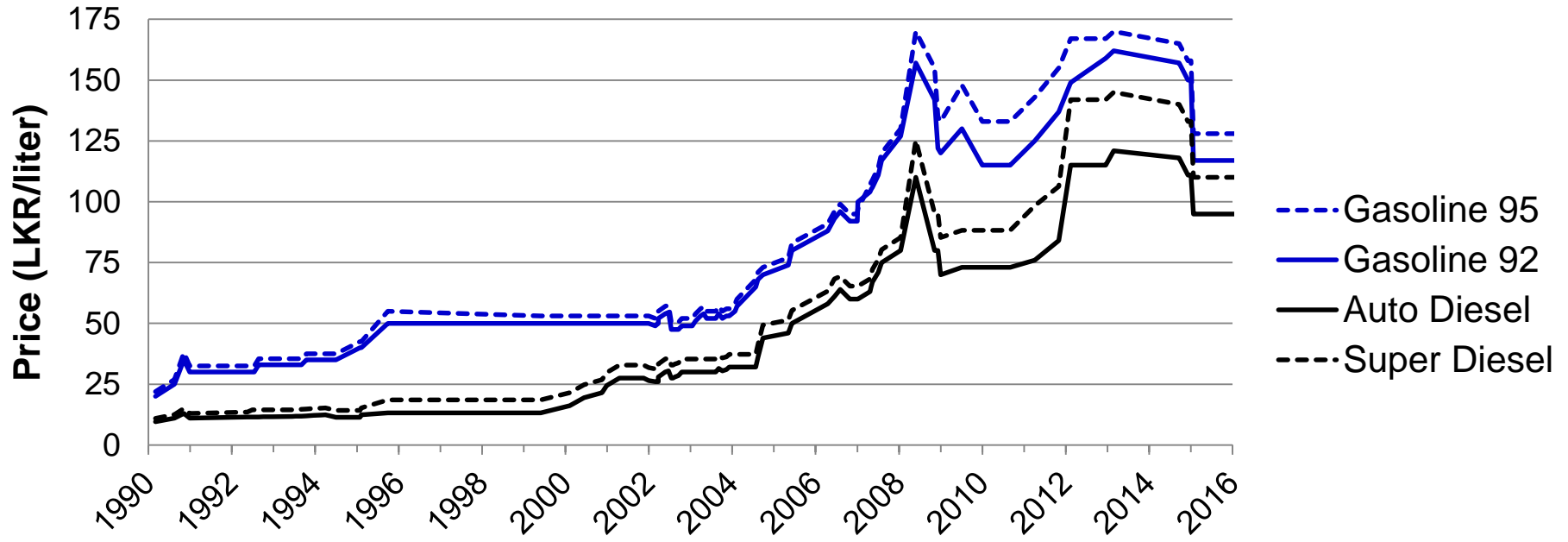
- Prior to 2015, there were nine taxes and levies in effect, but the present (simplified) tax system for importation of motor vehicles includes only three items.
- Depends on Engine Capacity; Age; Fuel type / Technology
 - ✓ LDVs:

Engine Capacity (CC)	Total Tax (% of FOB) - Present (Previous)		
	Gasoline	Diesel	Hybrid
< 1000	195 (180)	245 (245)	97 (77)
1000 - 2000	205 (191.6)	270 (262.6)	117 (104.9)
2000 - 2500	265 (247.5)	297.5 (287.5)	178.5 (143.5)
> 2500	295 (267.5)	337.5 (347.5)	228.5 (188.5)

- ✓ Three-Wheelers: 120%
- ✓ EVs: 20% (<3yrs), 30% (>3yrs)
- ✓ E3Vs: 12.5% (<3yrs), 20% (>3yrs).

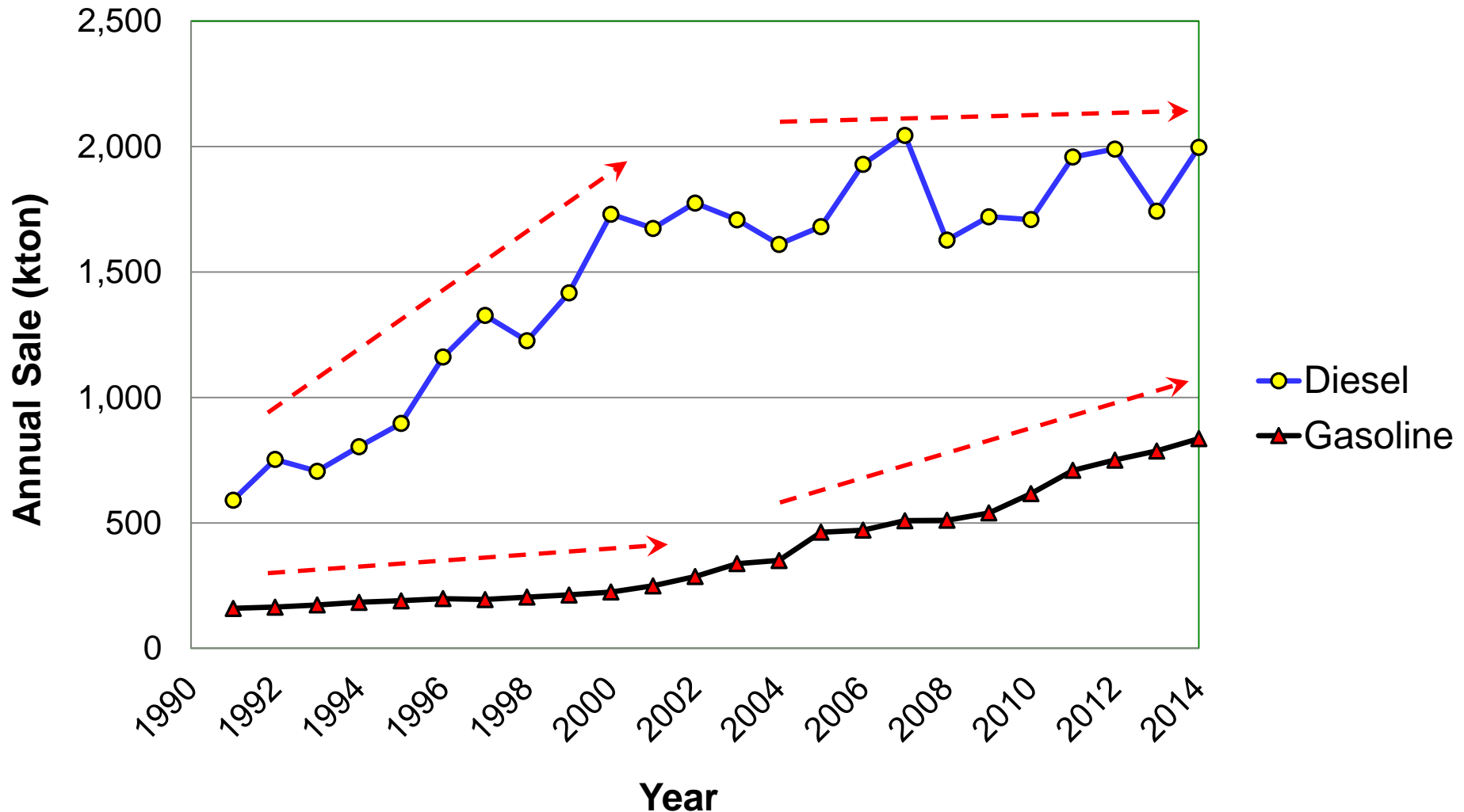
FISCAL POLICIES

□ Fuel Prices:



IMPACTS OF FISCAL POLICIES

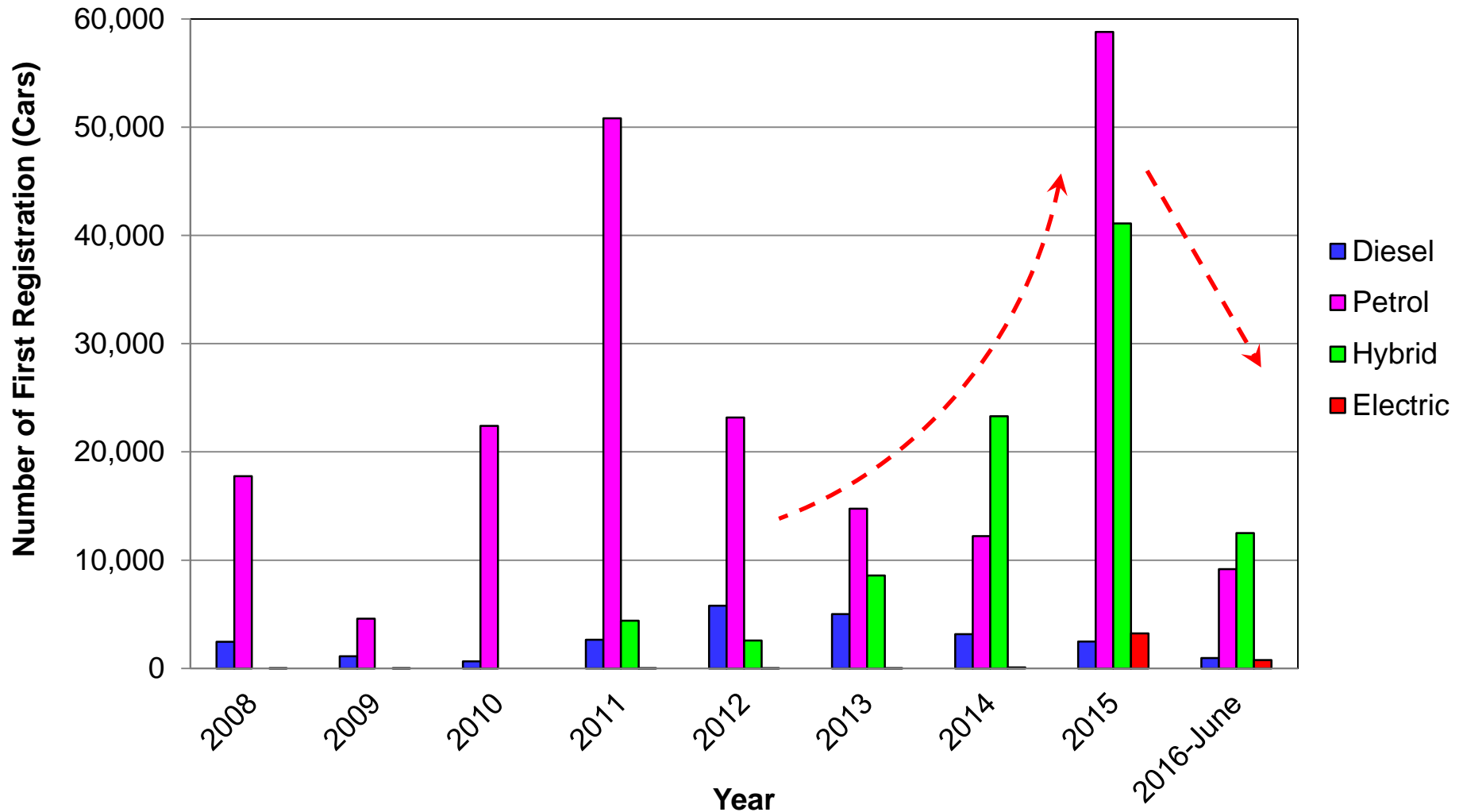
- Fuel Consumption in the Road Transport Sector
 - Demand for transport fuels by type: 1990 - 2014



IMPACTS OF FISCAL POLICIES

□ Car Importation

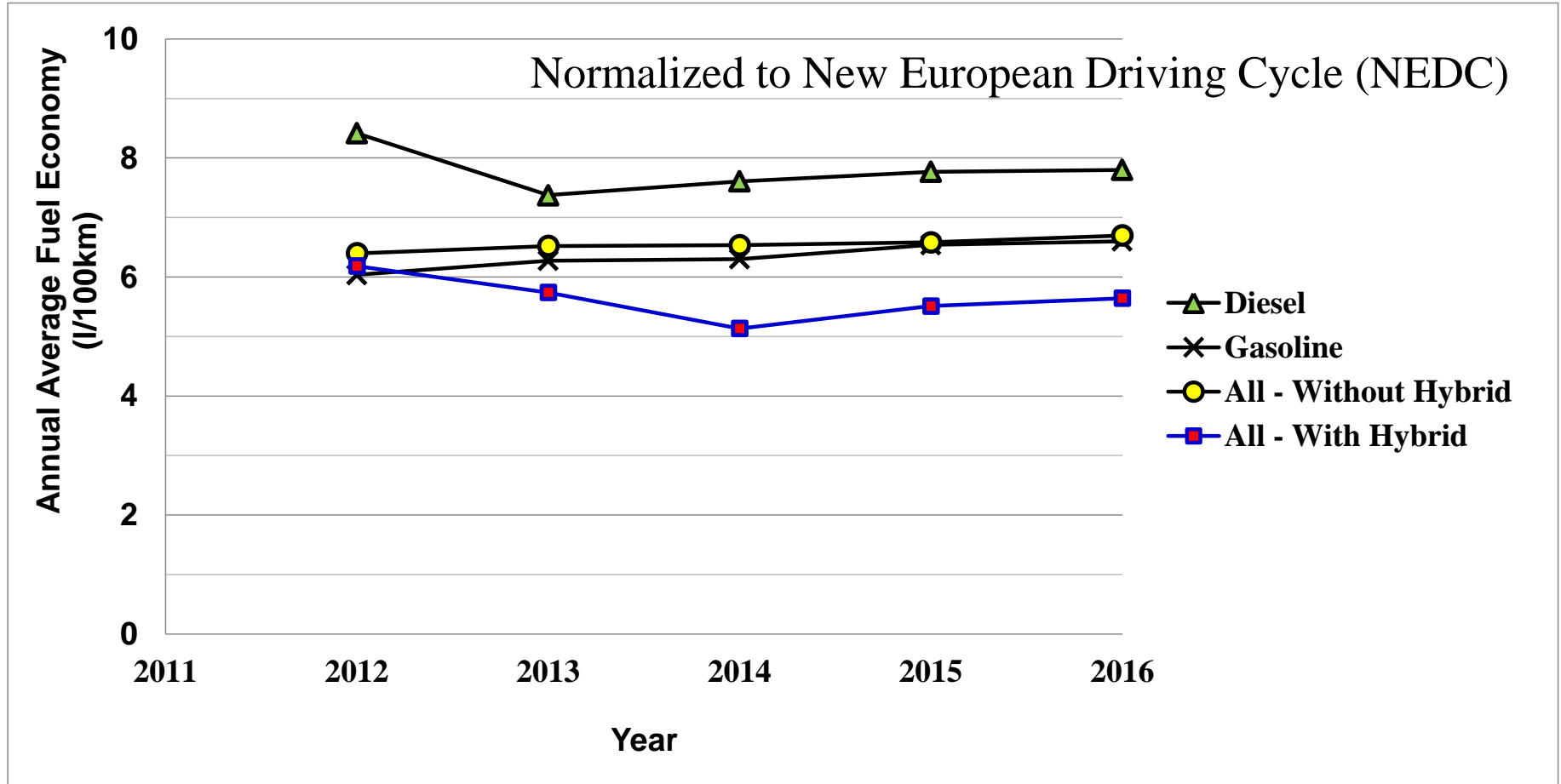
- Emergence of hybrid and electric vehicles



IMPACTS OF FISCAL POLICIES

□ Fuel Economy

■ LDVs – New importations



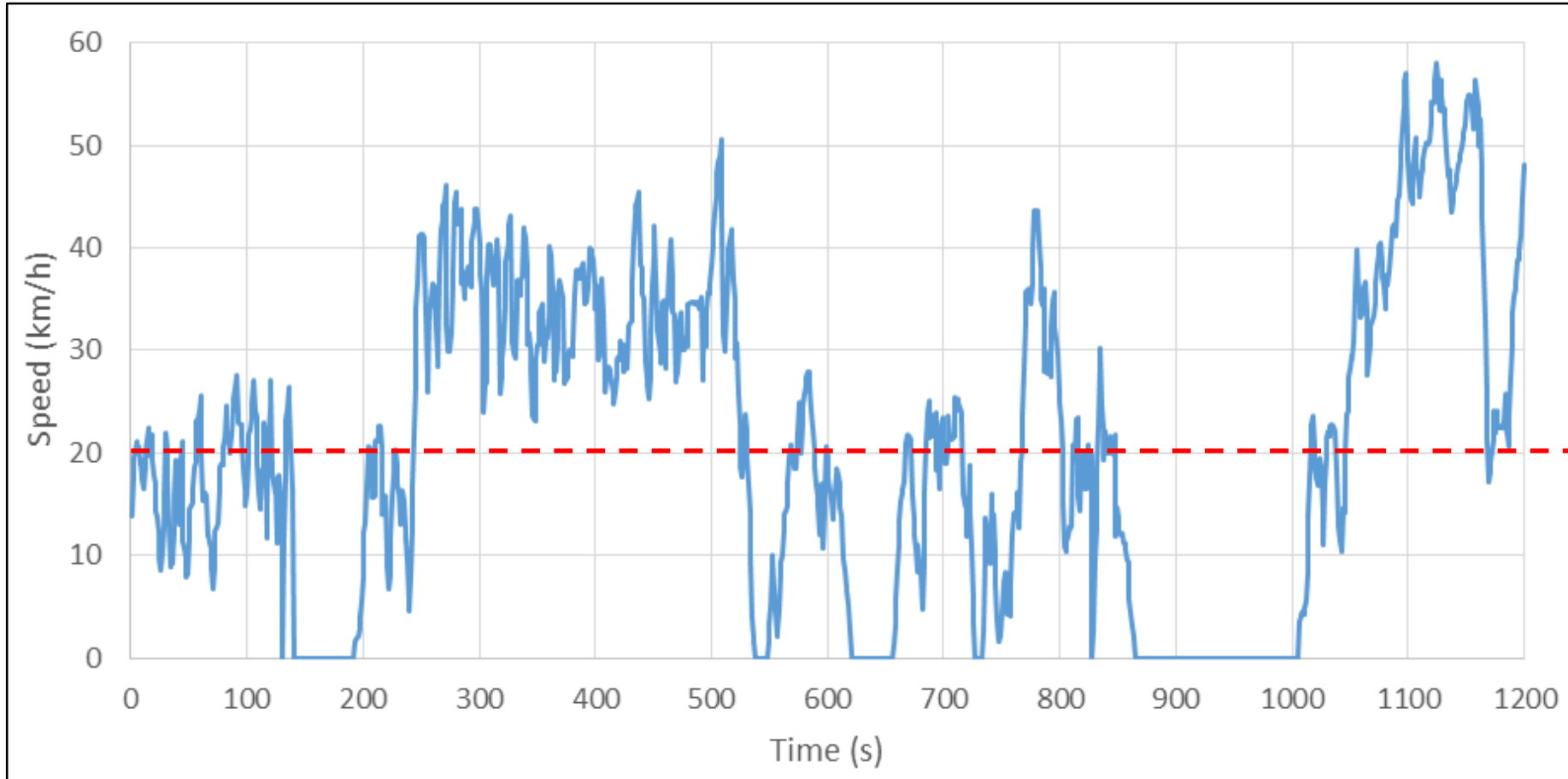
→ Without Hybrid: Average FE = 6.7 l/100-km (Global Average = 7.1 l/100-km)

→ With Hybrid: Average FE = 5.6 l/100-km (15% Reduction)

IMPACTS OF FISCAL POLICIES

□ Fuel Economy

■ Driving cycle (Colombo – 2013)



→ Average speed has decreased from 20 to 14 km/hr within 03 years!

NEW INITIATIVES

❑ Other Interventions

- New transport sector development proposal (W/Province)
 - ✓ Public Transport Improvement
 - Restructure of Public Bus Service
 - Light Rail Transit (LRT)
 - Electrification of railway.
- Cleaner Fuel (& Vehicle) Roadmap (with specific targets)
- Clean Air 2025 Action Plan
 - ✓ Energy efficient & environmentally sustainable transport system.
- Intended Nationally Determined Contributions (INDCs):
 - ✓ 10% GHG reduction target for the period 2020 – 2030
 - ✓ 13 strategies; Promote energy efficient and environmentally sustainable vehicle technologies is one strategy
 - ✓ Development on fuel economy standards is of the one actions.

Acknowledgment

- ✓ UNEP, GIZ, Clean Air Asia
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- ✓ Clean Air Sri Lanka
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Thank You