



# Workshop on heavy-duty fuel efficiency regulations

#### Introduction

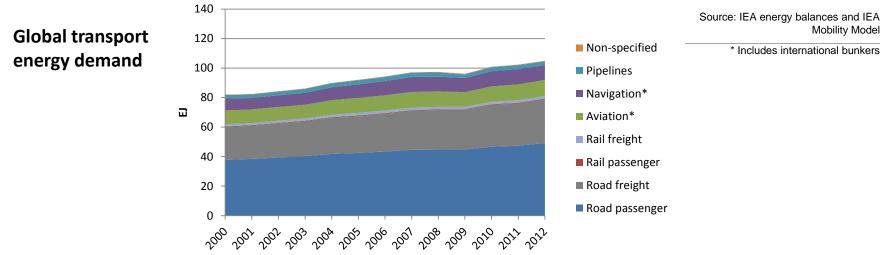
Pierpaolo Cazzola Energy Technology Policy Division International Energy Agency



#### Rationale Global action

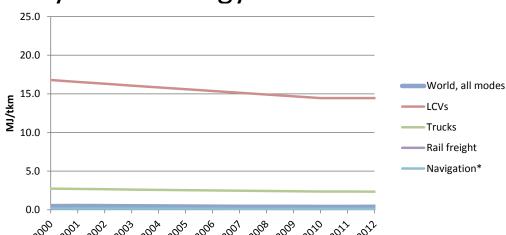


Road freight accounts for 28% of total transport energy use



Road freight way more energy intensive than rail and shipping





Sources: IEA energy balances, IEA Mobility Model, UNCTAD Review of Maritime Transport, UIC rail transport database

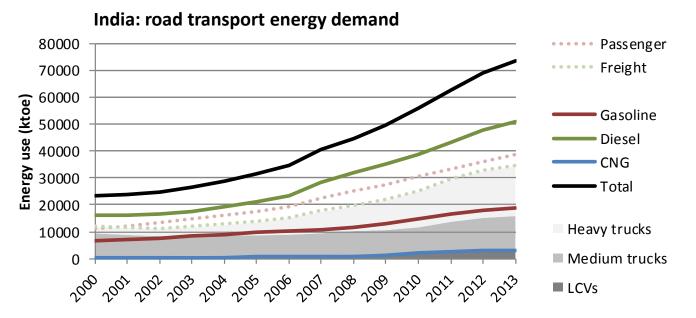
\* Navigation allocated only to freight transport, it includes international bunkers



#### Rationale India

Heavy-duty vehicle fuel efficiency workshop Delhi, India 29 April 2015

- Road freight represents
  - About half of the Indian road transport energy demand
  - More than 2/3 of the total diesel in transport in India
- Most of this is due to trucks
  - Shift toward larger reliance on heavy trucks in place





## Background Indian perspective



- India imports close to 80% of its crude demand today
- The Government of India gives high priority to conservation of petroleum products
  - Need to reduce ever increasing gap between demand of petroleum products and indigenous supply of oil
- The Indian government is now aiming to develop regulations for the fuel efficiency of heavy-duty vehicles (HDVs)
  - This follows the recent promulgation of fuel efficiency standards for light duty vehicles
  - Petroleum Conservation Research Association (PCRA) and Bureau of Energy Efficiency (BEE) given the mandate to formulate an action plan to develop fuel economy norms for HDVs



## Background IEA E4 programme



- Workshop promoted and supported by the <u>IEA E4 programme</u>
   (Energy Efficiency in Emerging Economies)
  - Support for energy efficiency scale-up in major emerging economies, aiming to generate economy-wide benefits
  - Builds on IEA's existing EE portfolio: data, indicators, modelling and policy recommendations
  - Target countries:
    - Work started in Mexico, South Africa, and India
    - China, Indonesia, Thailand and Ukraine: work at early stage of development
  - Target Regions: South East Asia and Latin America
    - Energy efficiency policy recommendations and indicators training
  - Work with global initiatives, build on previous efforts, avoid duplication



### Background IEA perspective in international context

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The HDV workshop supports the G20 energy efficiency action plan and is aligned with priorities identified in it



- Priority for new work: improving vehicle energy efficiency and emissions performance
- Action to be undertaken particularly on HDVs (also on LDVs)
- Objective is to develop recommendations for strengthened standards related to clean fuels, vehicle emissions and vehicle fuel efficiency in G20 countries
- Work aligned with the IEA involvement in the Global **Fuel Economy Initiative**



- Promotion of fuel economy improvements in road transport
- Partnership between FOUNDATION















### Purpose



- This workshop is part of the Indian stakeholder consultations to move this important Government initiative forward
- Workshop designed to build on experiences from international experts from Japan, North America, the EU and Korea
  - Sharing international experiences on HDV fuel efficiency regulatory process
  - Getting insights on future developments of HDV fuel efficiency standards globally and the implications for India
- Involving Indian regulators, technical services, original equipment manufacturers and component suppliers
- Identifying possible ways forward for the regulatory process
  - Opportunity for stakeholders to exchange views



#### Questions to be addressed



- What are the biggest challenges that may arise for the regulatory process? How can they be best addressed?
- What considerations affect the definition of the scope of the regulatory action?
- Are there factors that can influence decisions on testing and certification approaches?
- What should guide decisions on the stringency of targets/limits?
- How do all this play out in the case of India? Considerations/suggestions/recommendations on the best way forward?







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#### Thank you



## IEA Energy Technology Perspectives Global projections to 2050

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Delhi, India 29 April 2015

 Heavy duty vehicles are the second largest contributor to energy and GHG emission mitigation in transport

