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

![Energy demand chart]

- Road freight way more energy intensive than rail and shipping

![Energy intensity chart]

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

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

India

- 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

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India: road transport energy demand

Source: IEA energy balances and IEA Mobility Model Database
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 **IEA E4 programme** (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
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 FIA Foundation, UNEP, University of California, Davis Institute for Transportation Studies, International Transport Forum, IEA, ICCT, International Energy Agency
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?

Looking forward for a fruitful exchange!
Thank you
Heavy-duty vehicle fuel efficiency workshop
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Heavy duty vehicles are the second largest contributor to energy and GHG emission mitigation in transport.