

Working paper No. **EFV-04-08** (GRPE Informal Group on EFV, 4th Meeting, 22/23 April 2009)

## IEA work on Improving Energy Efficiency in Transport

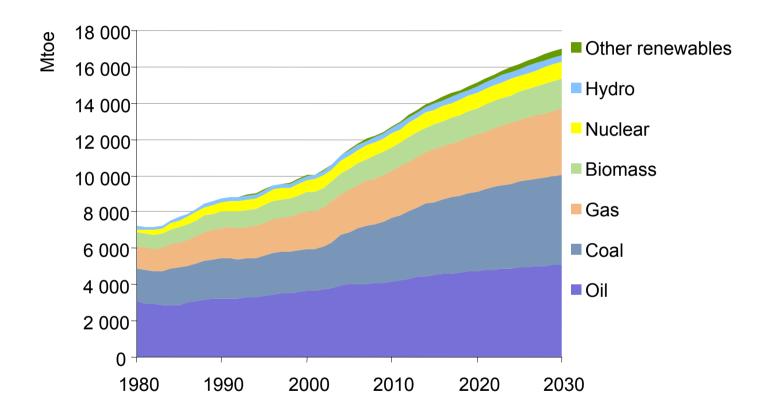
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4<sup>th</sup> informal group meeting Environmentally Friendly Vehicles (EFV), 22-23 April 2009

Slide 1



# World primary energy demand in the Reference Scenario

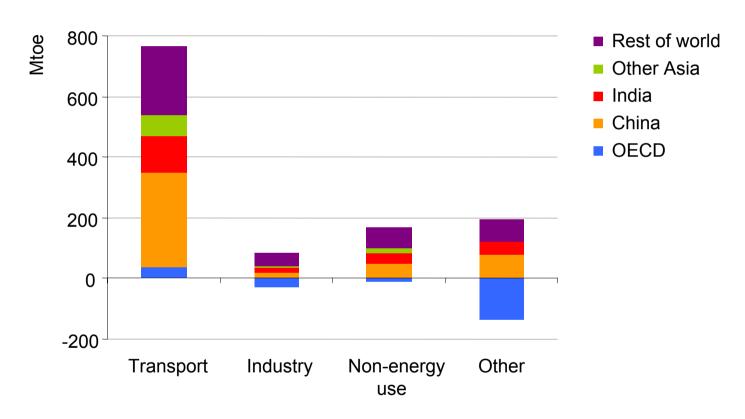


World energy demand expands by 45% between now and 2030 – an average rate of increase of 1.6% per year – with coal accounting for more than a third of the overall rise

Slide 2



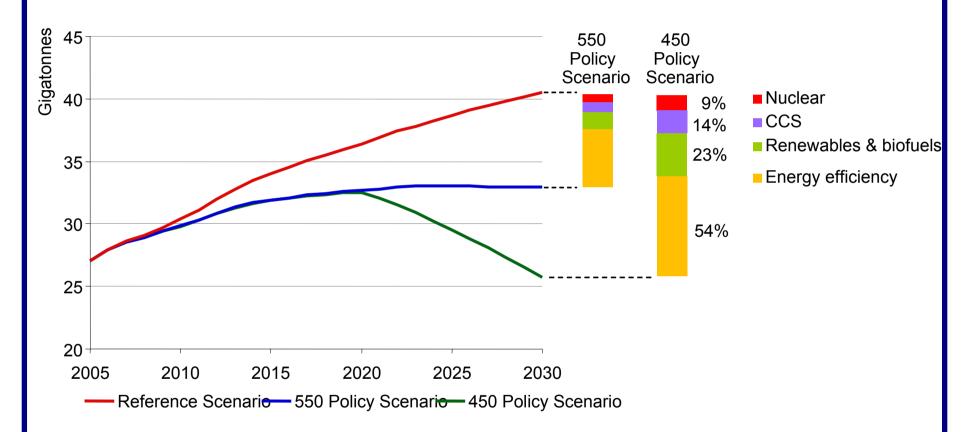
# WEO 2008 Reference Scenario: Incremental oil demand, 2006-2030



Around three-quarters of the projected increase in oil demand comes from transportation



# Reductions in energy-related CO<sub>2</sub> emissions in the climate-policy scenarios



While technological progress is needed to achieve some emissions reductions, efficiency gains and deployment of existing low-carbon energy accounts for most of the savings

Slide 4



### **IEA Work on Vehicle Efficiency Policy (1)**

- 25 Energy Efficiency Policy Recommendations by IEA (2008)
  - IEA recommends action on:
    - Fuel-efficient tyres
    - Mandatory fuel efficiency standards for light-duty vehicles
    - Fuel economy of heavy-duty vehicles
    - Eco-driving
- Information papers:
  - Fuel-Efficient Road Vehicle Non-Engine Components -Potential Savings and Policy Recommendations (2007)
  - Review of International Policies for Vehicle Fuel Efficiency (2008).



### **IEA Work on Vehicle Efficiency Policy (2)**

- Workshops, within a wide range of advisory and promotional tasks designed to help countries to understand and implement the policy recommendations.
  - Three workshops on vehicle components:
    - Energy Efficient Tyres: Improving the On-Road
       Performance of Motor Vehicles, Paris, November, 2005.
    - Energy Efficiency Through Better Car Components, Paris, June, 2006.
    - Cooling Cars with Less Fuel, Paris, October, 2006.
  - ◆ An international workshop on <u>Fuel Efficiency Policies for Heavy-Duty Vehicles</u>, Paris, June 2007.
  - Workshop on Ecodriving, Paris, November 2007.



### **IEA Work on Vehicle Efficiency Policy (3)**

- Forthcoming publication on transport policies and technologies (to be published in mid 2009).
   Objective: Identify policies and measures to improve onroad fuel efficiency. The contents will cover:
  - All transport modes such as road, rail, marine and air
  - Various energy sources such as fossil fuels, biofuels, hydrogen and electricity
  - **♦** Technologies to improve energy efficiency
  - Policies to foster technology improvement and shift markets more energy efficient

On-road fuel efficiency

Tested fuel efficiency

Fuel efficiency of components

Driving behavior



### **Global Fuel Economy Initiative**

• IEA and its partners launched the "Global Fuel Economy Initiative" on 4 March, 2009 in Geneva.

#### **Partners:**

- OECD International Transport Forum
- UN Environment Program
- FIA Foundation
- This initiative features four key elements:
  - Data development and analysis of fuel economy potentials by country, region
  - Support for national and regional policy-making efforts
  - Cooperation with stakeholders (e.g. vehicle manufacturers)
  - Information campaigns around the world to educate consumers, stakeholders



#### **Conclusions**

- Without policy interventions, CO<sub>2</sub> emissions and energy use in many countries will increase significantly by 2050
- A number of effective policies and efficient technologies for CO<sub>2</sub> reduction are already in place
- It is important to share and implement these "Best Practices" worldwide
- EFV would help reduction of CO<sub>2</sub> emissions and energy use through promotion of fuel efficient vehicles



#### References

#### Papers:

- 25 Energy Efficiency Policy Recommendations by IEA http://www.iea.org/G8/2008/G8 EE recommendations.pdf
- Fuel-Efficient Road Vehicle Non-Engine Components
   http://www.iea.org/Textbase/publications/free new Desc.asp?PUBS ID=1977
- Review of International Policies for Vehicle Fuel Efficiency
   http://www.iea.org/Textbase/Publications/free new Desc.asp?PUBS ID=2049

#### Workshops:

- Energy Efficiency Through Better Car Components
   http://www.iea.org/Textbase/Papers/2008/cd\_energy\_efficiency\_policy/5-Transport/5-vehicle\_efficiency.pdf
- Cooling Cars with Less Fuel
   http://www.iea.org/textbase/work/workshopdetail.asp?WS\_ID=247
- Energy Efficient Tyres: Improving the On-Road Performance of Motor Vehicles
   http://www.iea.org/Textbase/work/workshopdetail.asp?WS\_ID=227
- An international workshop on Fuel Efficiency Policies for Heavy-Duty Vehicles
   http://www.iea.org/textbase/work/workshopdetail.asp?WS\_ID=306
- Workshop on Ecodriving
   http://www.internationaltransportforum.org/Proceedings/ecodriving/ecodriving07.html