

**IEA-ECMT Workshop,**

8 February 2005

# **Managing Oil Demand in transport**

**Key messages from SMP 2030**

*Luc Bastard, Renault*

Horizon 2030

## **Sustainable Mobility**

***By « sustainable mobility » the project means « the ability to meet the needs of society to move freely, gain access, communicate, trade and establish relationships without sacrificing other essential human or ecological values today or in the future. »***

Horizon 2030

**Sustainable Mobility**

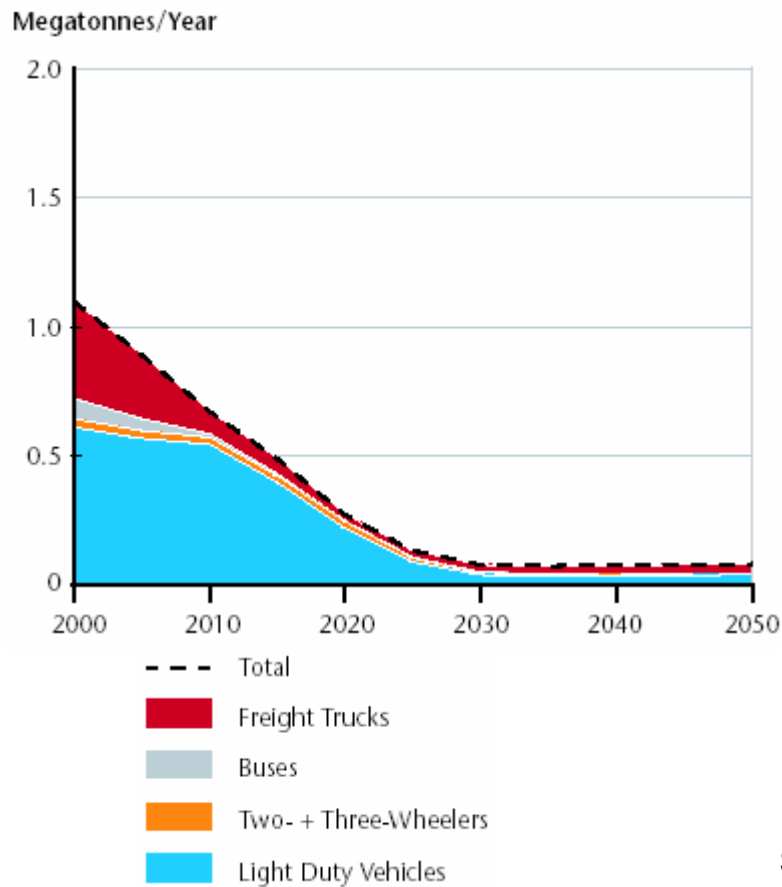
When factoring in all the indicators, it appears that today's system of mobility is not sustainable.

Nor is it likely to become so if present trends continue.

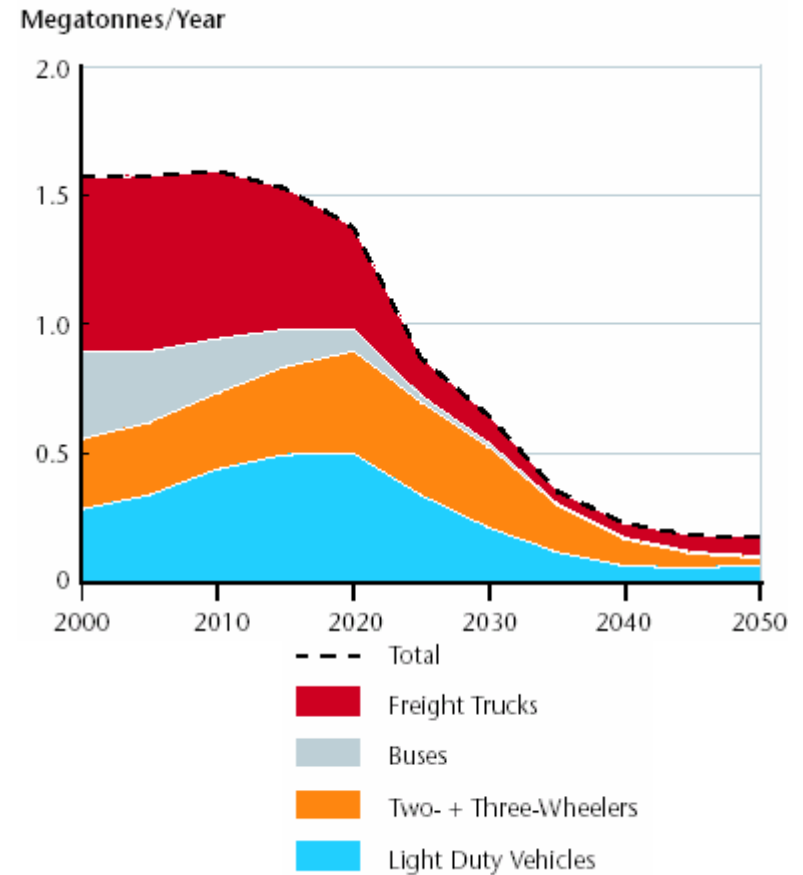
*Mobility 2030, p. 58*

Regulated pollutants  
**Long term emissions of PM-10 depending on road transport mode**

**OECD  
 PM – 10 emissions**



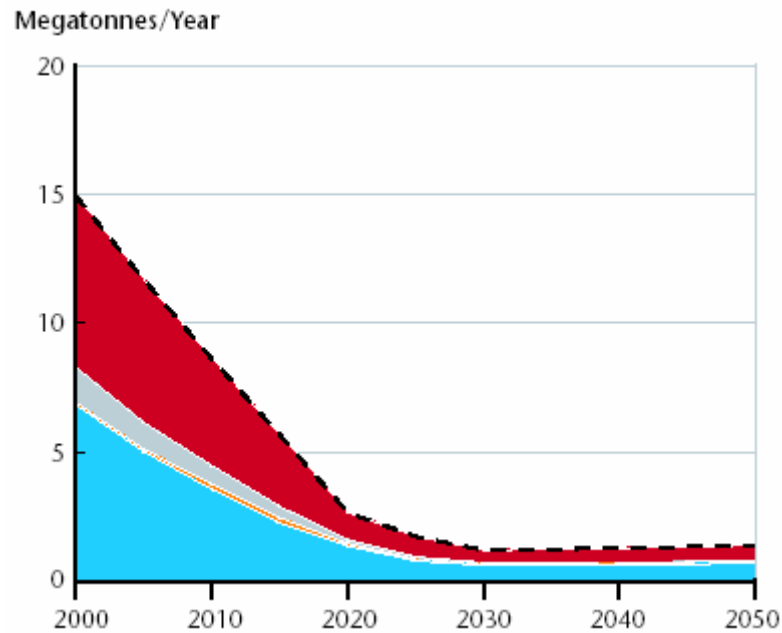
**Non OECD  
 PM – 10 emissions**



Source: WBCSD

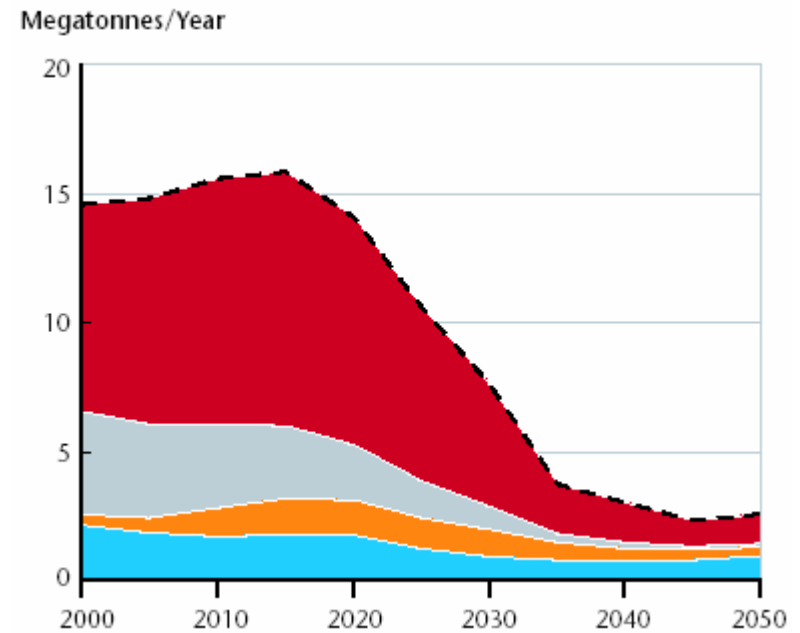
Regulated pollutants  
**Long term emissions of NOx depending on road transport mode**

**OECD  
 NOx emissions**



- Total
- Freight Trucks
- Buses
- Two- + Three-Wheelers
- Light Duty Vehicles

**Non OECD  
 NOx emissions**

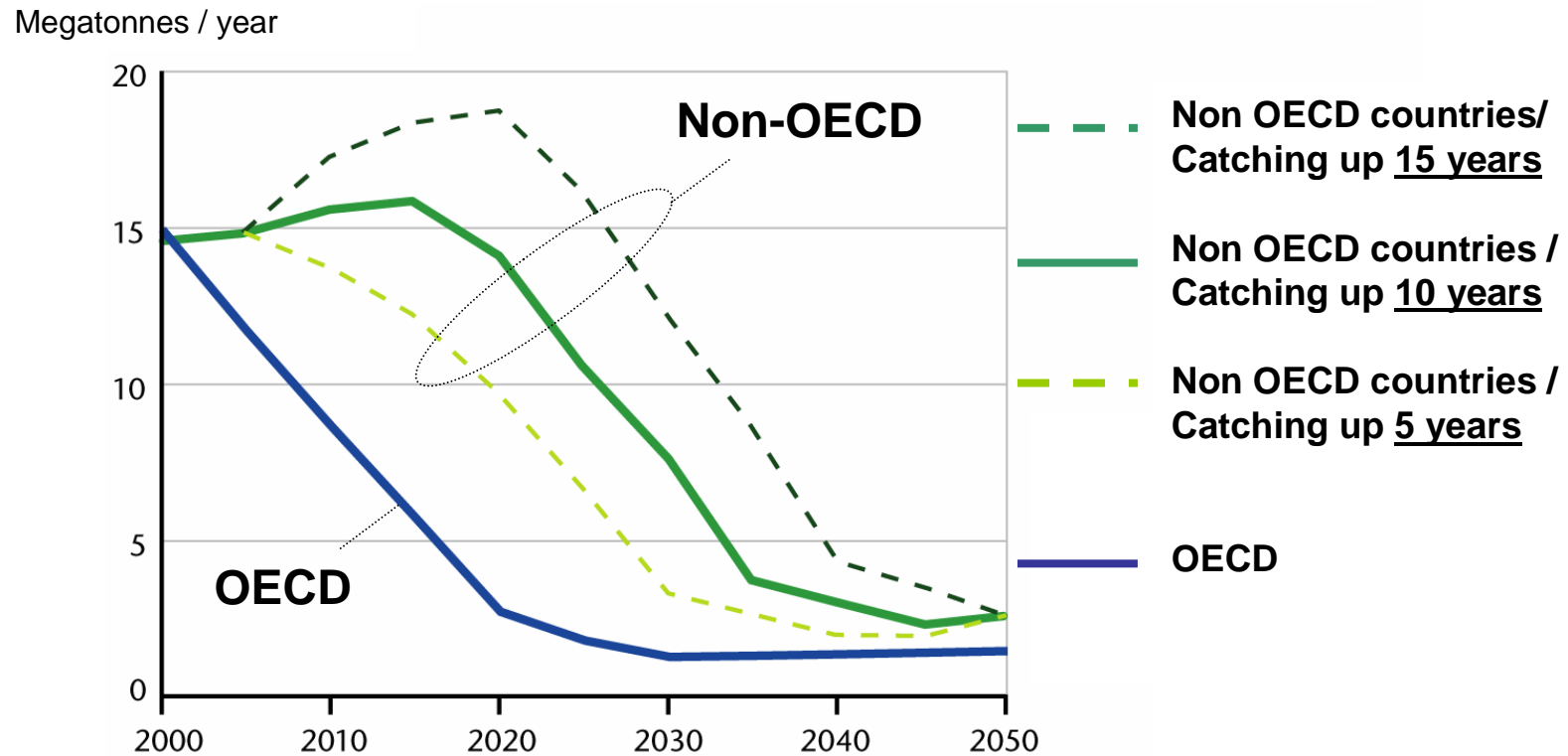


- Total
- Freight Trucks
- Buses
- Two- + Three-Wheelers
- Light Duty Vehicles

Source: WBCSD

Regulated pollutants  
Impact of closing the technological gap  
NOx example for road transports

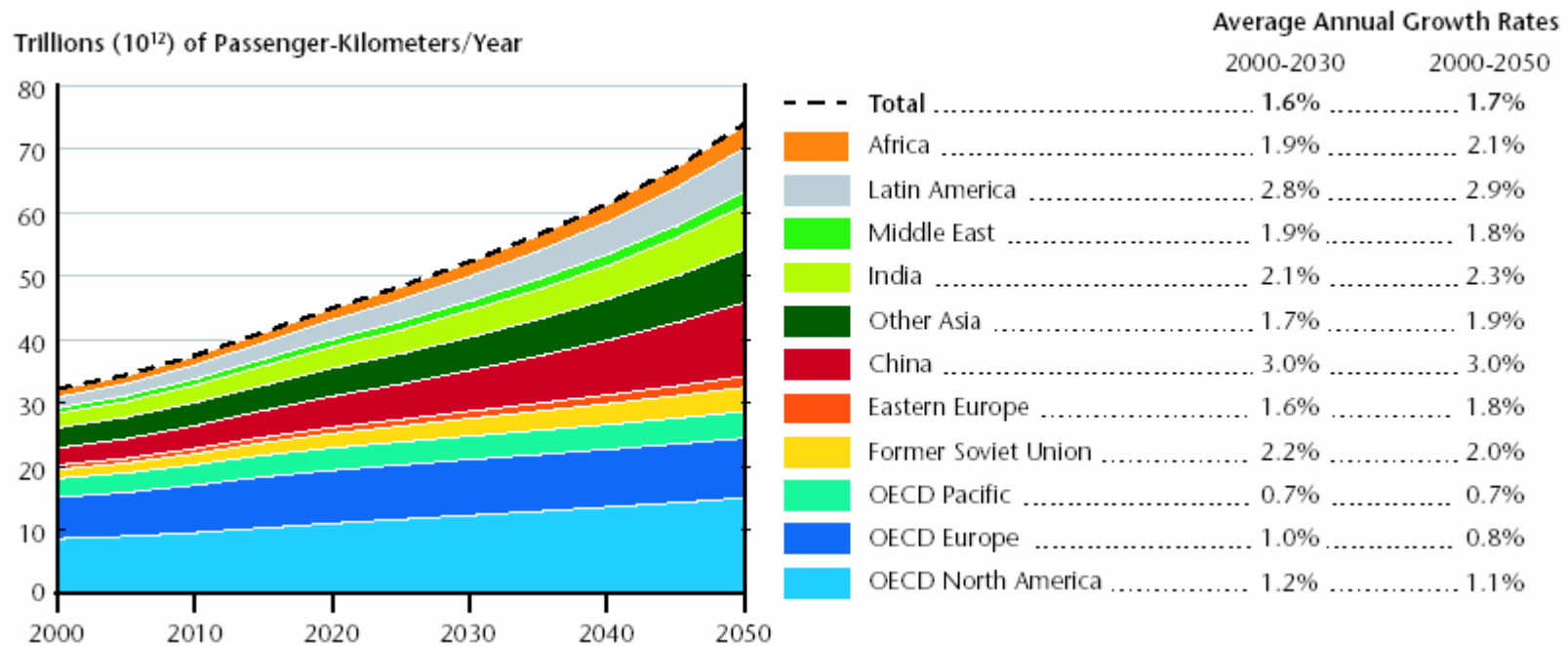
**NOx emissions**  
**Scenarios of catching up non OECD versus OECD**



# Greenhouse gazes

## Long term evolution in transport sectors

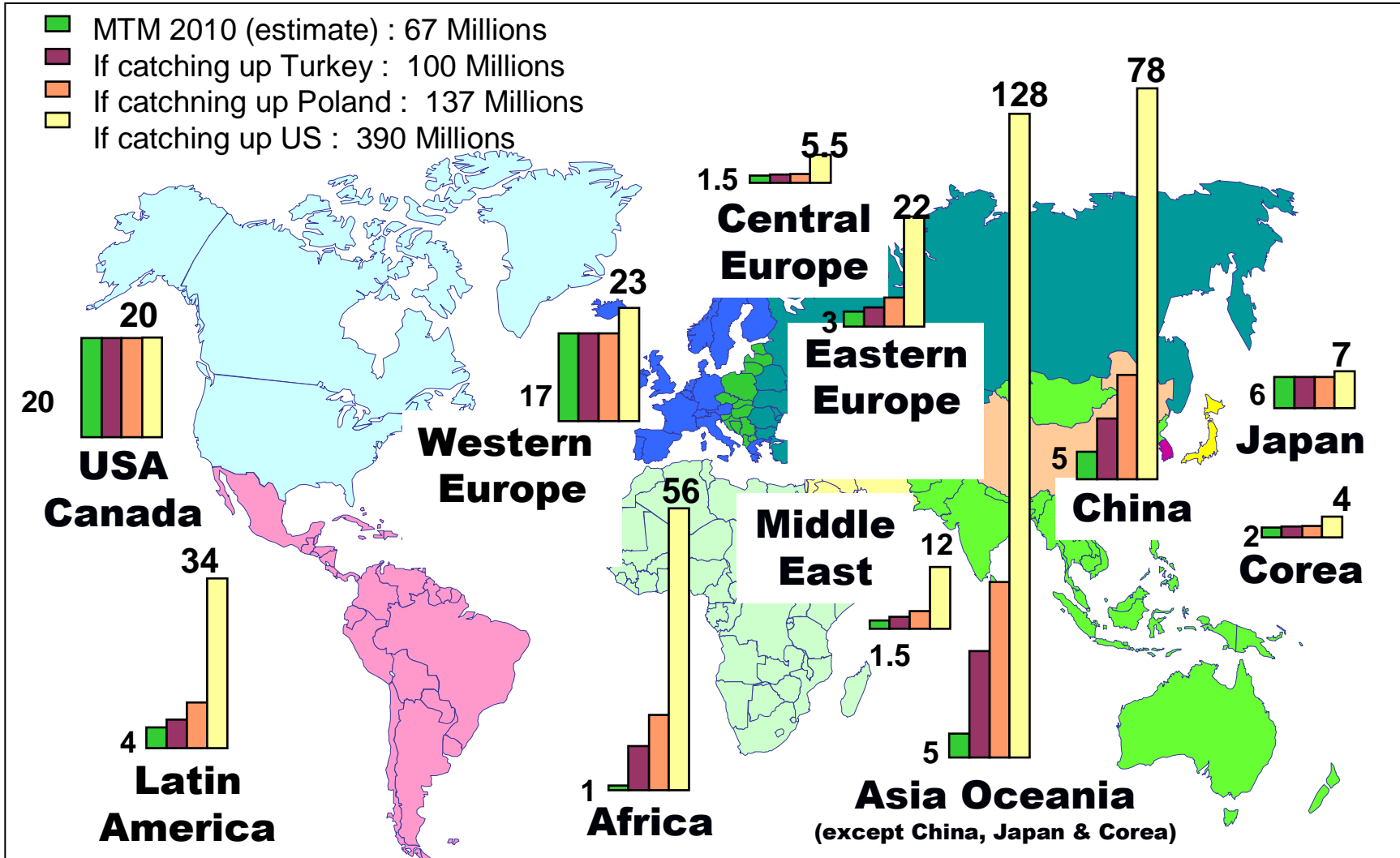
### Transport demand evolution by region as an indicator of the base Case



Source: WBCSD

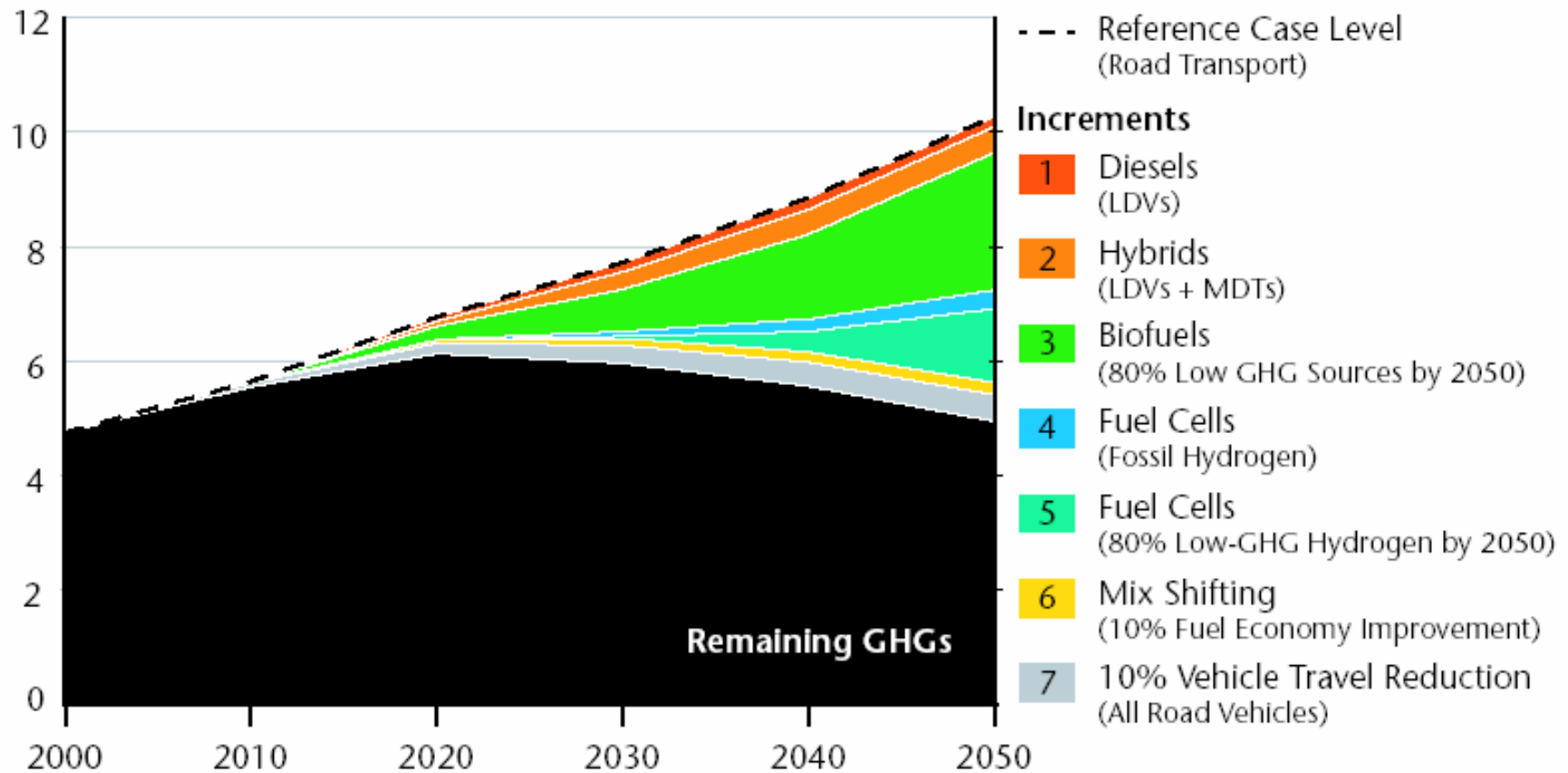
# Greenhouse gazes

## Simulation of regional PC markets accordint to current levels in Turkey, Poland or US



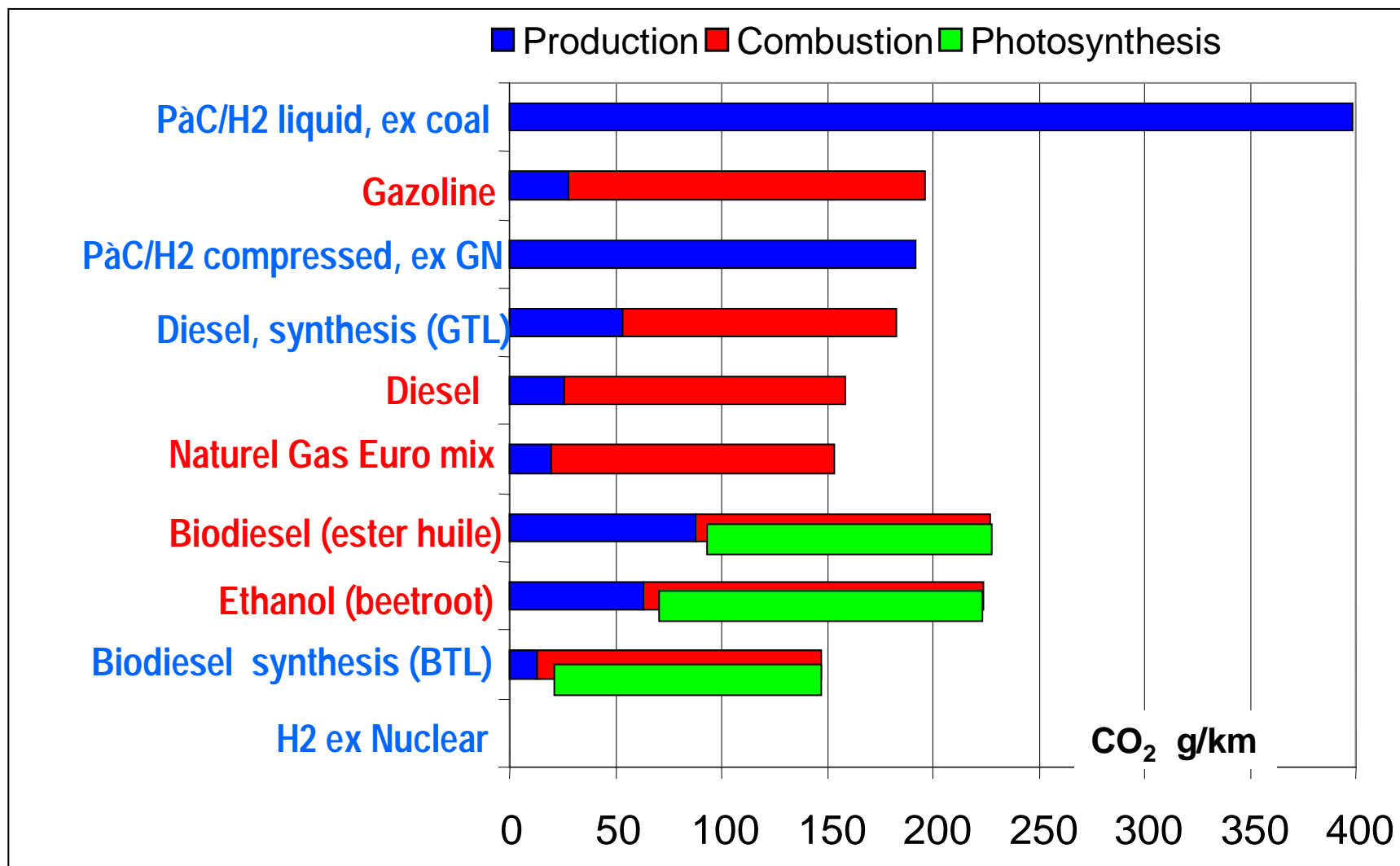
Greenhouse Gases  
**Potential for reducing GHGs of road transports**  
**Technology/biofuels/mobility**

Gigatonnes CO<sub>2</sub>-Equivalent GHGs



## Greenhouse gazes

### Weel to wheel CO2 emissions of conventional and alternative technology

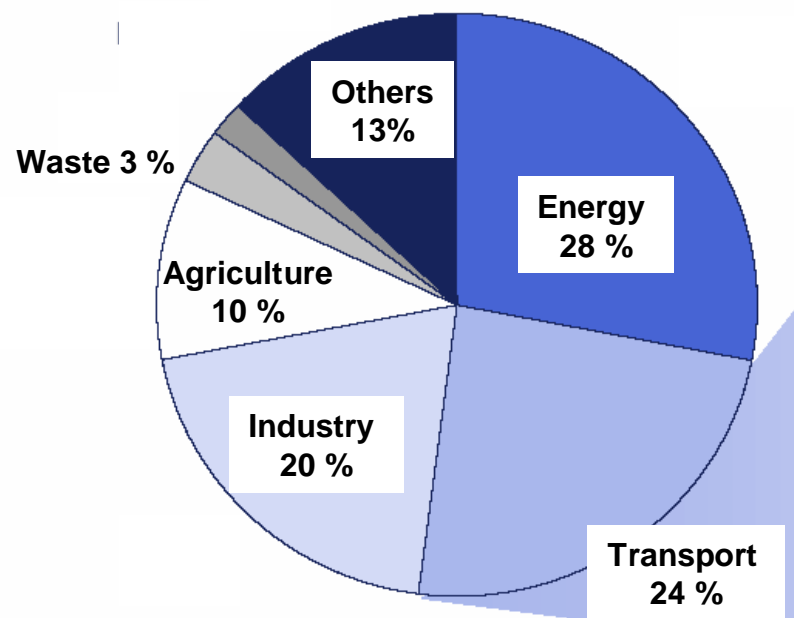


Source: Renault d'après IFP

# Greenhouse gazes

## Sectorial comparison of cost / efficiency (Europe, UE15)

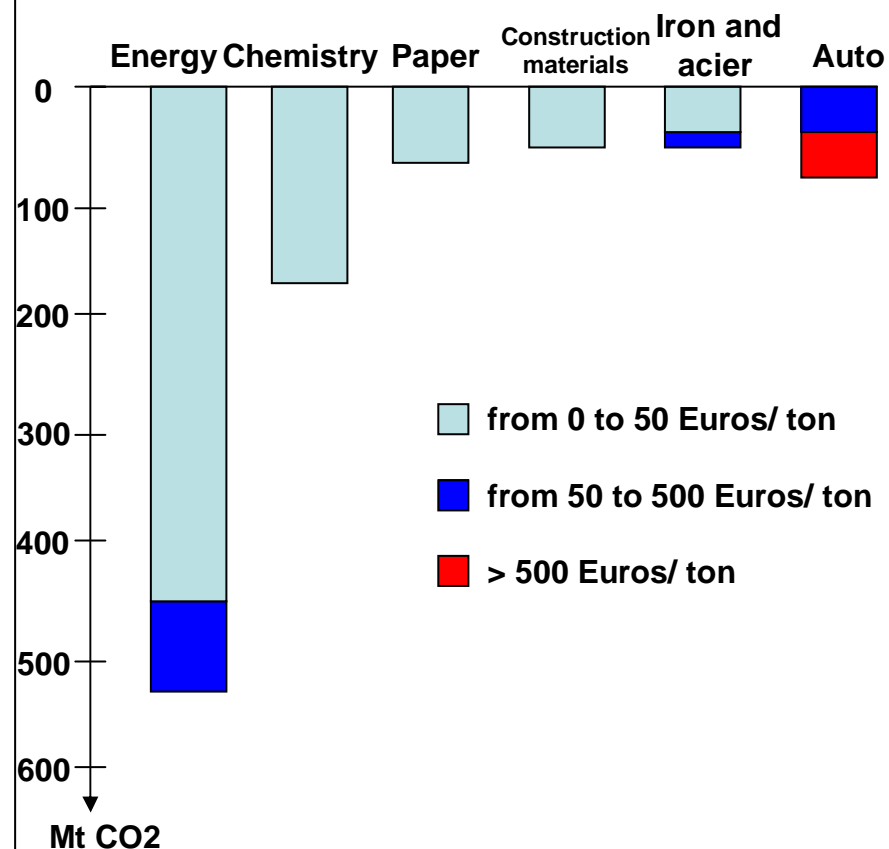
**Part of transports  
In CO2 emissions**



- 91.7% of the transports are linked to road (730 Mt)

- 60 % of the transports associated to road concern LC (450 Mt)

**Potential of CO2 emissions reduction  
and associated costs**



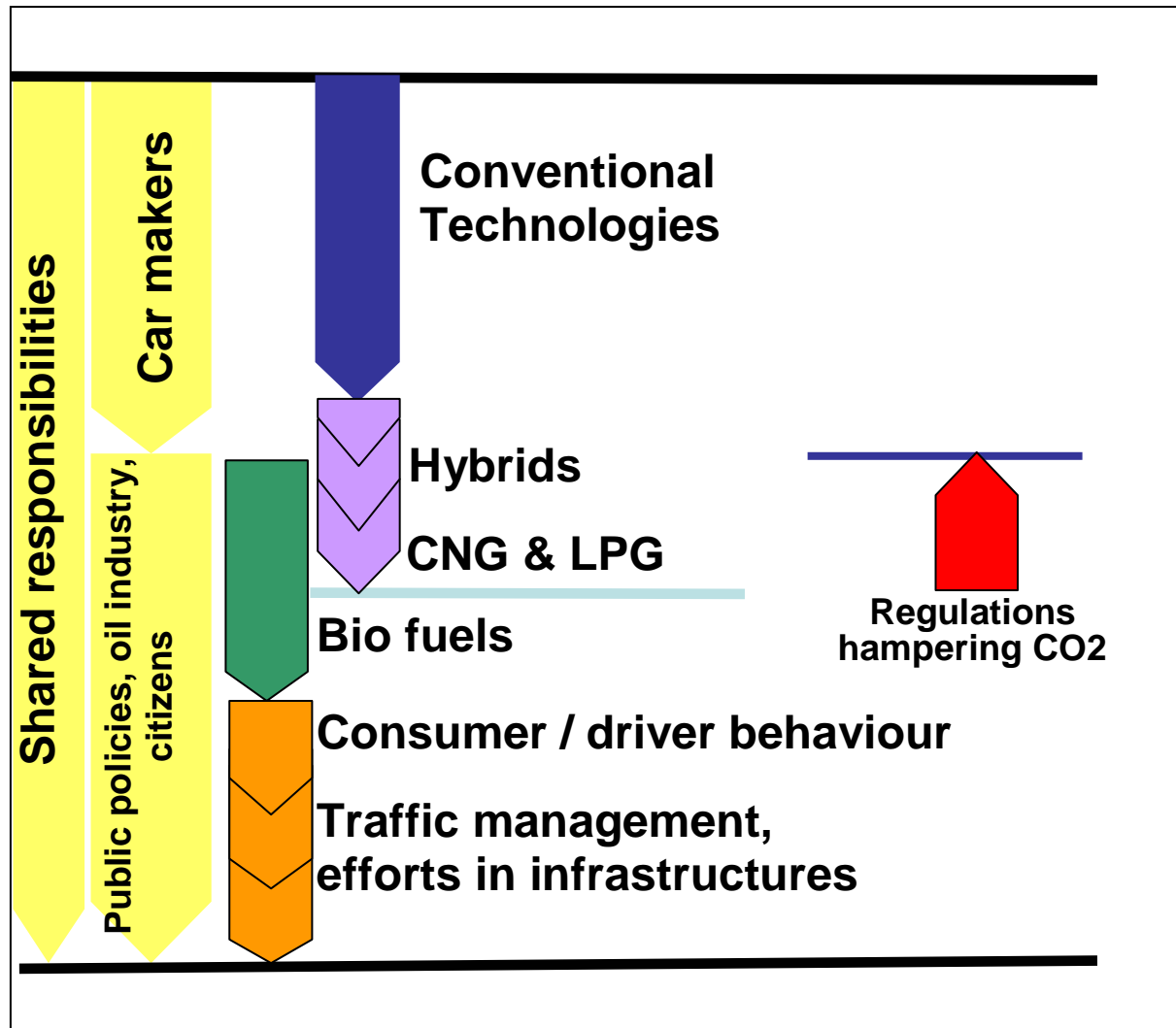
Greenhouse gases

**Need in the mid-term for an Integrated Approach involving all stakeholders**

- A mobilization coordinated among all stakeholders...

- .... Organized by public authorities

- Synergies of reduction beyond technologies



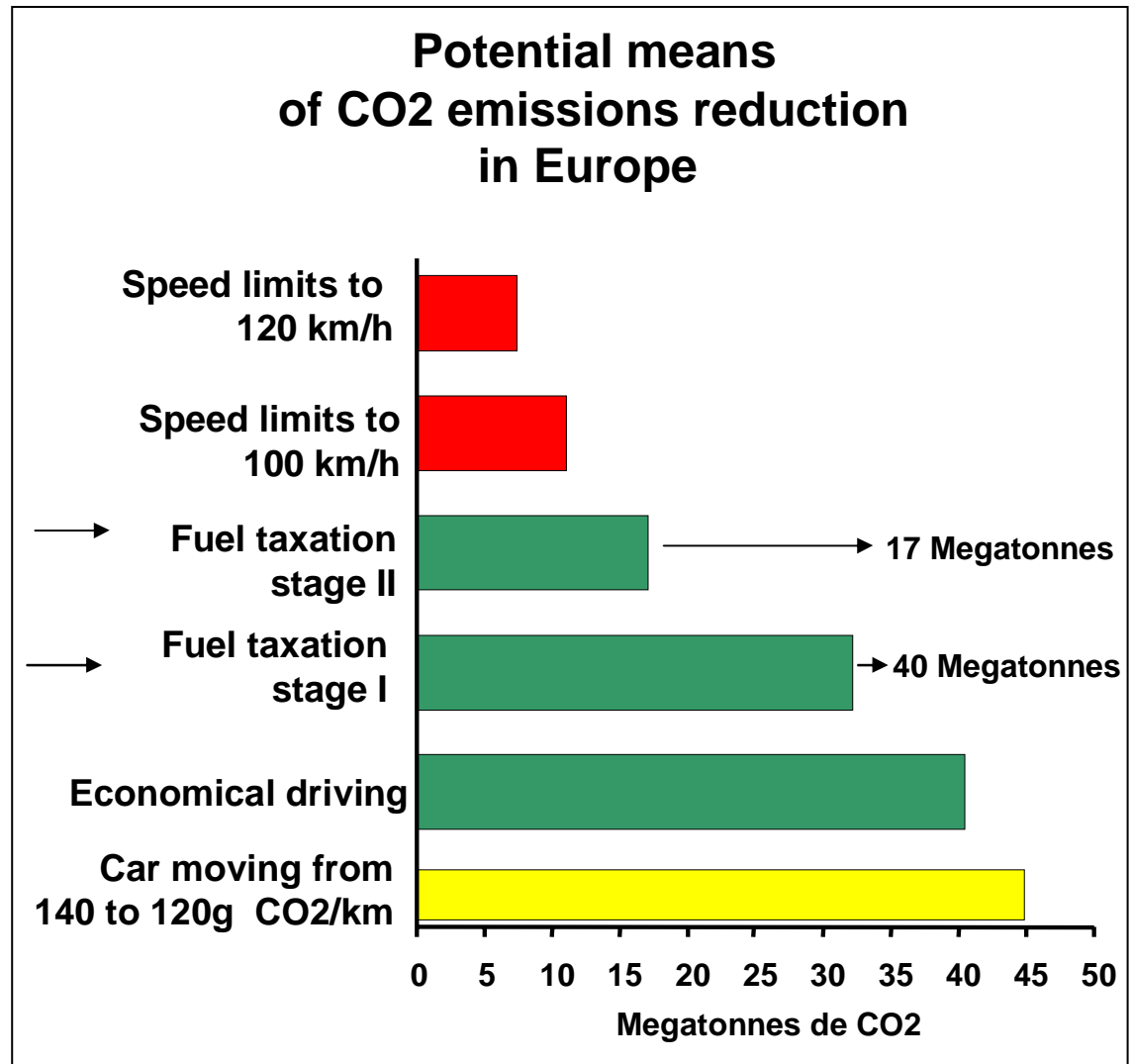
Greenhouse gazes  
**Need for public policies –i.e. fiscal**

• Global Insight simulation for ACEA (Europe, UE15)

⇒ Increase of fuel prices gas and diesel in two stages:

↳ Second increase of 0.1535 Euros /l

↳ First increase of 0.1535 Euros /l



Source :Global Insight