



**RENAULT**

A carmaker's view on CO2 reduction  
Luc Bastard -13 September 2006

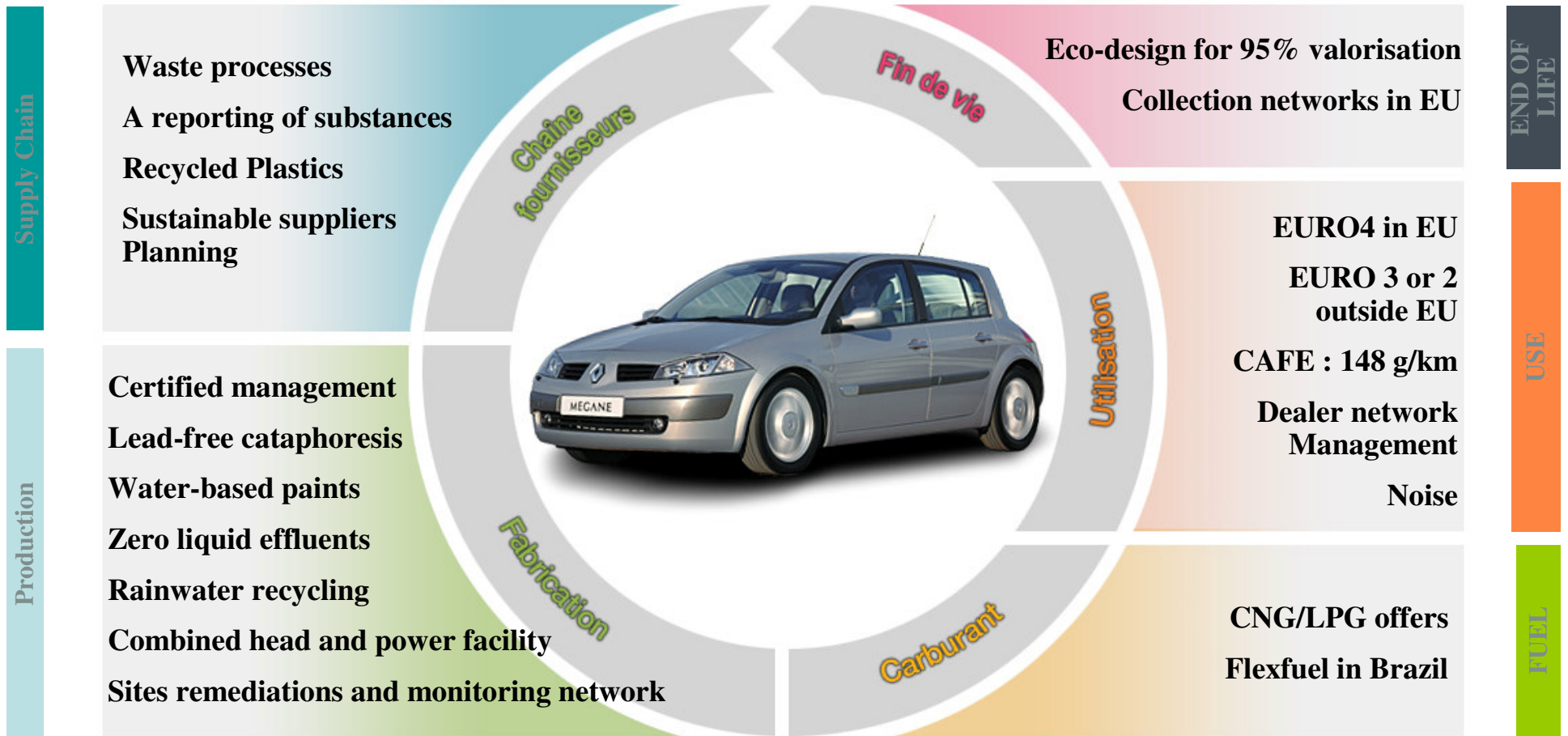


1. Renault Environmental Policy
2. Renault's approach to CO2 reduction
3. Assessment of current EU car CO2 policy
4. What recommendation for  
future EU car CO2 policy?



# Renault Environmental Policy

*All aspects of the Company and the Products are involved*

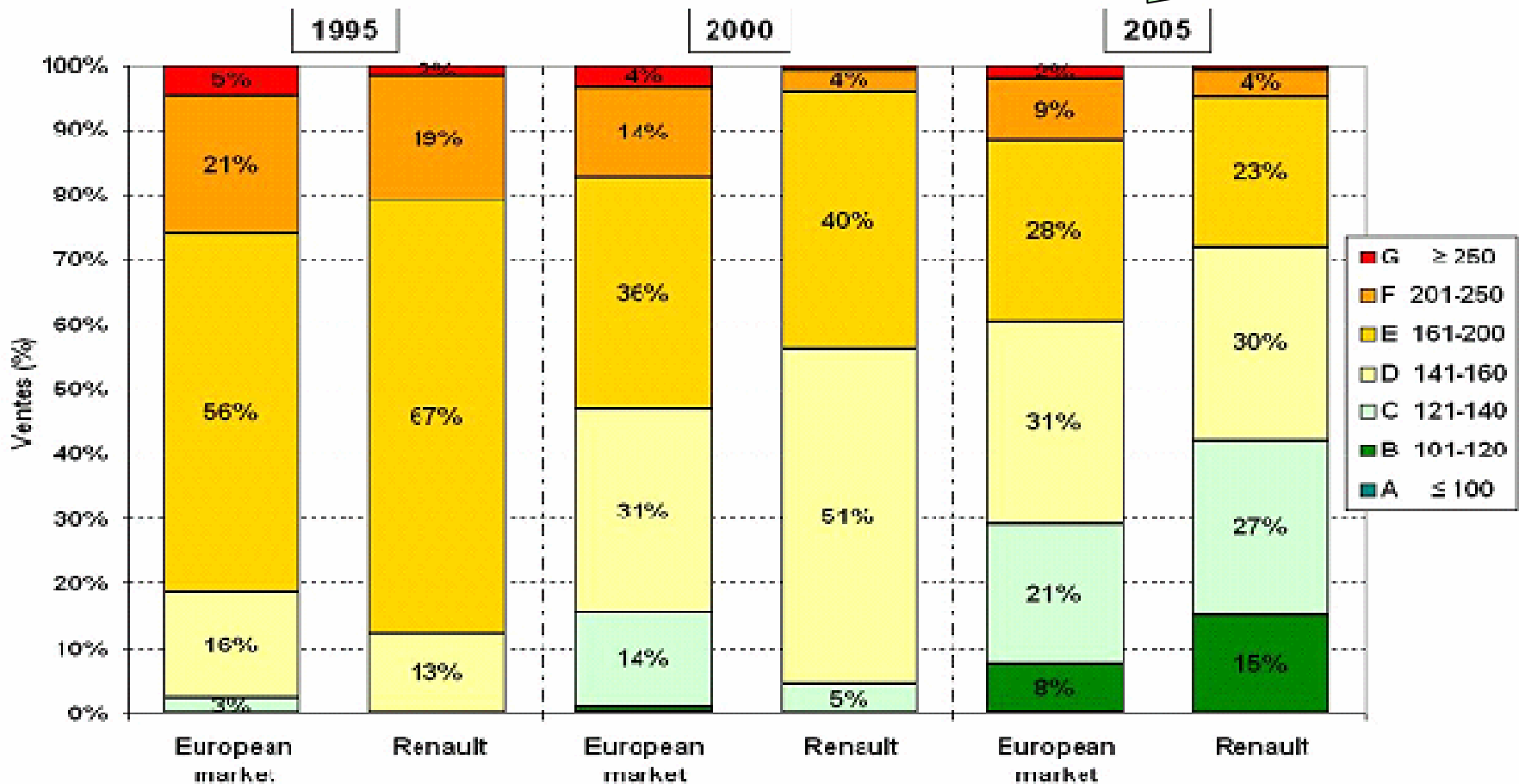




# Renault's approach to CO2 reduction

- Renault is a leading company in CO2 performance
- 2 reasons: sales mix & strict management of CO2 factors

Evolution of the % by class of CO2 in French labelling





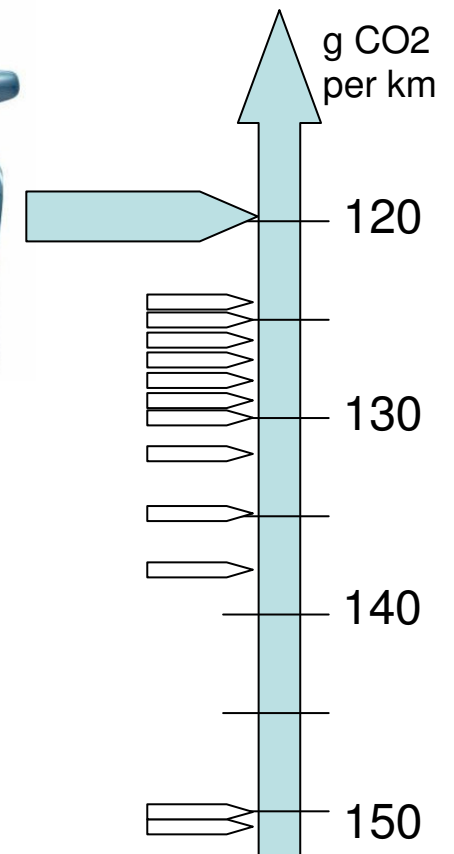
# Renault's approach to CO2 reduction

## Example of Renault's way on CO2: Mégane 1.5 dCi

- Segment leading CO2 performance of 120 g/km, achieved by:
  - *Modern diesel engine*
  - *Adapted gearbox*
  - *Good aerodynamics*
  - *Reasonable weight*
  - *Low rolling resistance tyres*
  - *Electric powersteering*
- While achieving top safety (5 stars EuroNCAP) & commercial success (over 130.000 sales in 2005)



Overview of CO2 performance of diesel models in C-class segment:





# Renault's approach to CO2 reduction

## Renault Commitment 2009

**« Among the world's top three for CO2 emissions  
&  
Sell as of 2008 1 million vehicles  
below 140g CO2 / Km,  
of which a third below 120. »**





# Renault's approach to CO2 reduction

## Renault Commitment 2009

« *Offering a range compatible with biofuels* »

2009



ESSENCE

PETROL

50% Compatible avec 85% d'éthanol

*50% compatible with 85% of ethanol*



DIESEL

DIESEL

100% compatible avec 30% de diester

*100% compatible with 30% of diester*



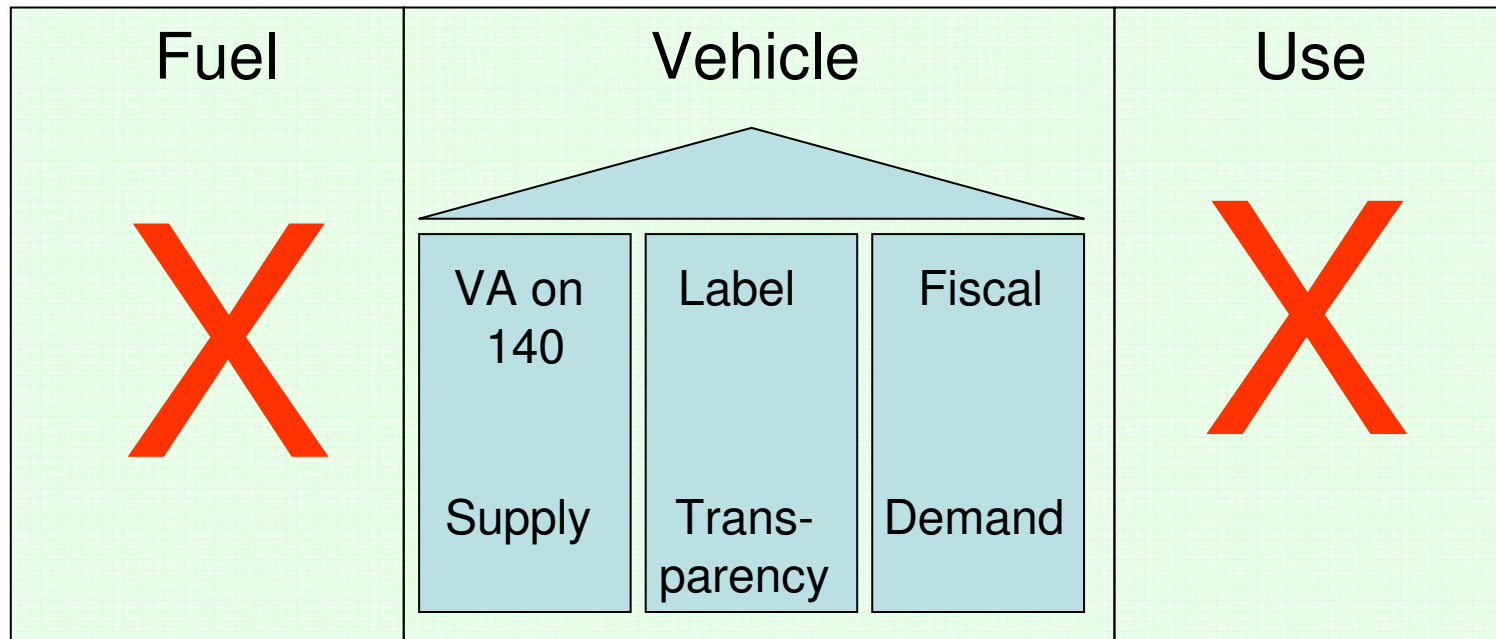
## Renault's approach to CO2 reduction

- Product constraints from customers
  - *Enhance continuously overall product features*
  - *Affordability remains a key subject*
  - *Limited additional value for CO2 efficiency*
- Permanent dilemma CO2 reduction / profitability
  - *High level of competition in the EU market keeps profitability low*
  - *Contradiction between good CO2 performance and profitability*
- A car manufacturer can reduce CO2 only if customers are ready to buy its products, and profitability generates sufficient financial resources



# Assessment of current EU policy

## Current EU policy on CO2 from cars:



Today's assessment  
of results:



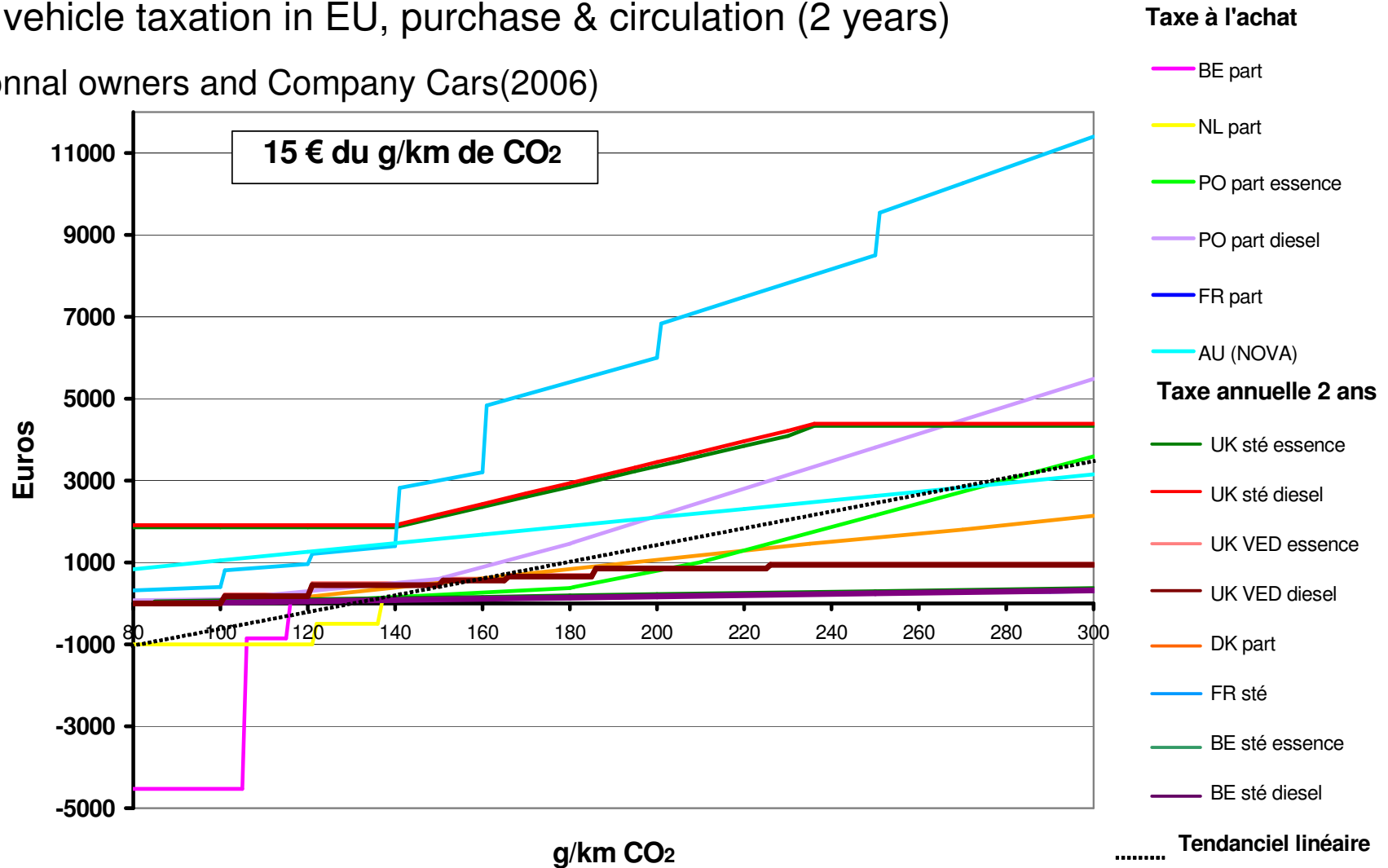
- Industry's efforts on supply side hampered by changes in customer demand and new regulations
- So far, limited effects of the two « pillars » aimed at orientating demand towards CO2 efficient cars



# Assessment of current EU policy

## CO2 vehicle taxation in EU, purchase & circulation (2 years)

Personal owners and Company Cars(2006)



Very large disparity of CO<sub>2</sub> fiscal systems in EU MS



# Assessment of current EU policy

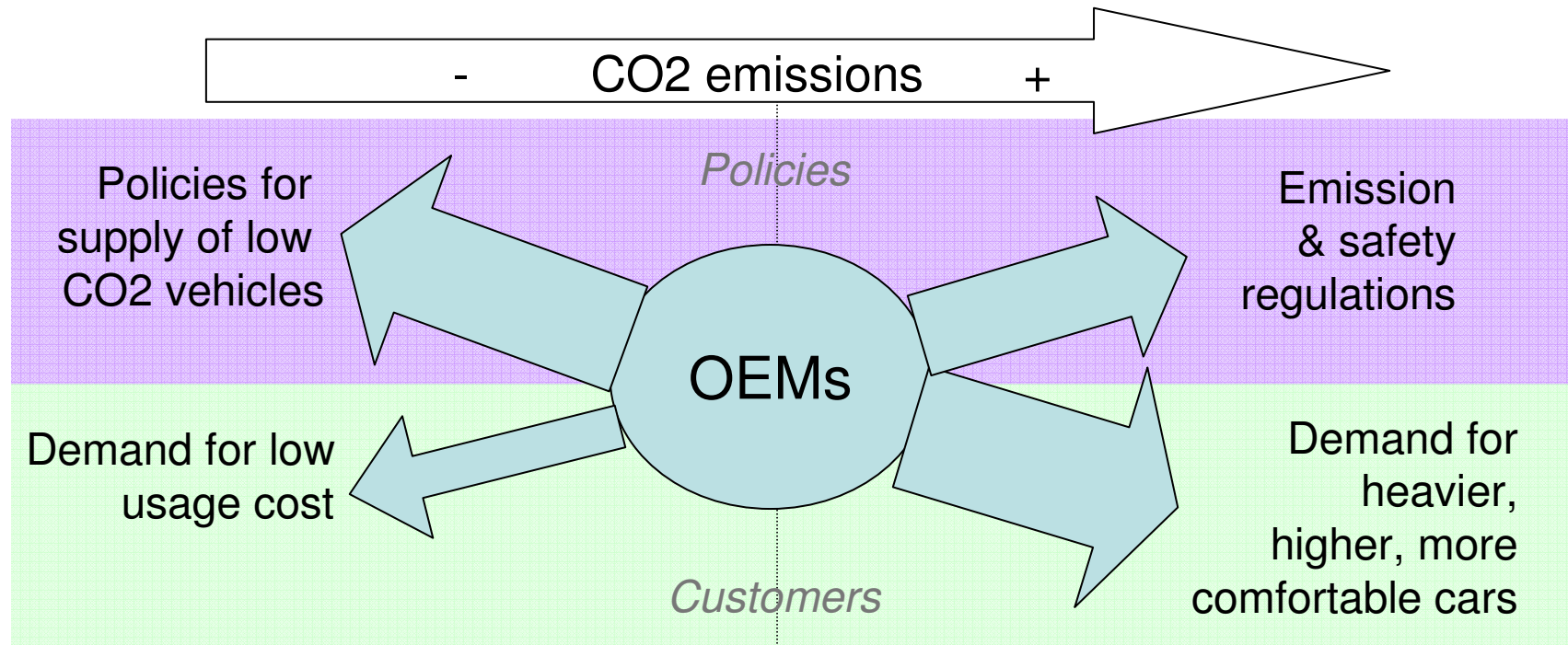
## Impacts on CO2 of Euro 5 and Euro 6 regulations

*Source: French government presentation at June 22 seminar*

	Additional cost on small cars	CO2 impact of emission technologies	Impact via market mix, EU	Total impact, EU market level	Total impact, french level
Euro 5	<b>1000 €</b> +8% at price level	Small cars +1,5g	+2 to 2,6 g	+2.7 to 3.2 g	+4.9 to 5.3 g
Euro 6	<b>700 €</b> +5 % at price level	All cars +4,5 g	+2,1 to 2,5 g	+3.1 to 3.5 g	+4.3 to 4.6 g
Total	<b>1 700 €</b> +13 % at price level	+4,5 to 6 g	+4 to 5 g	<b>Around +6 g</b>	<b>Up to +10 g</b>



# Assessment of current EU policy



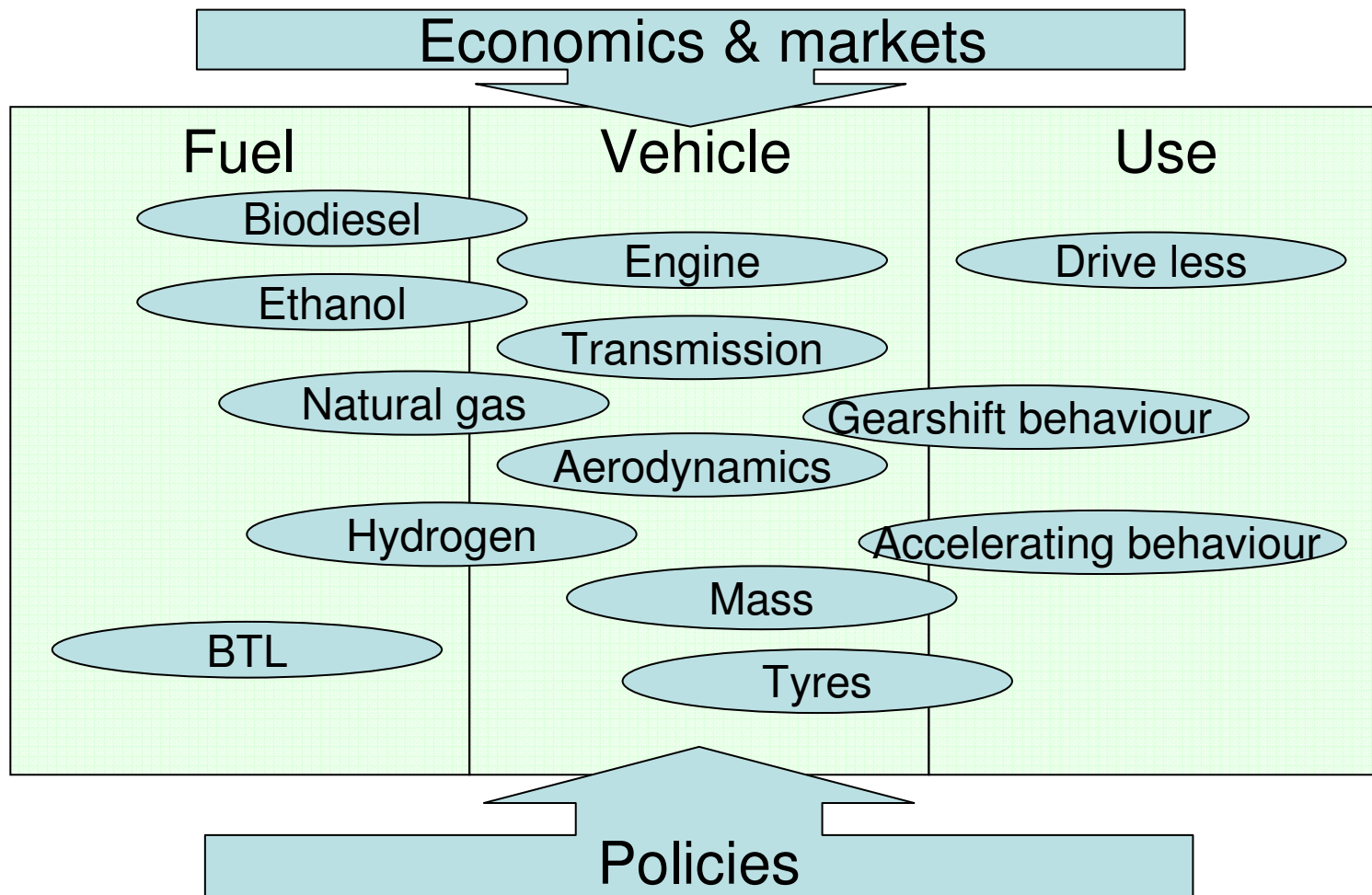
Numerous low CO2 versions were absolutely NOT succesful:  
Audi A 2 – GM Corsa Eco – Mercedes A 160 – Renault Twingo – VW Lupo 3 l ...  
Electric vehicles by Renault, PSA, Fiat, VW – CNG, LPG : lack of infrastructure

→ **Result of current policy : Virtual gap between supply and demand due to unbalanced measures on each side**



# Recommendations for future EU policy

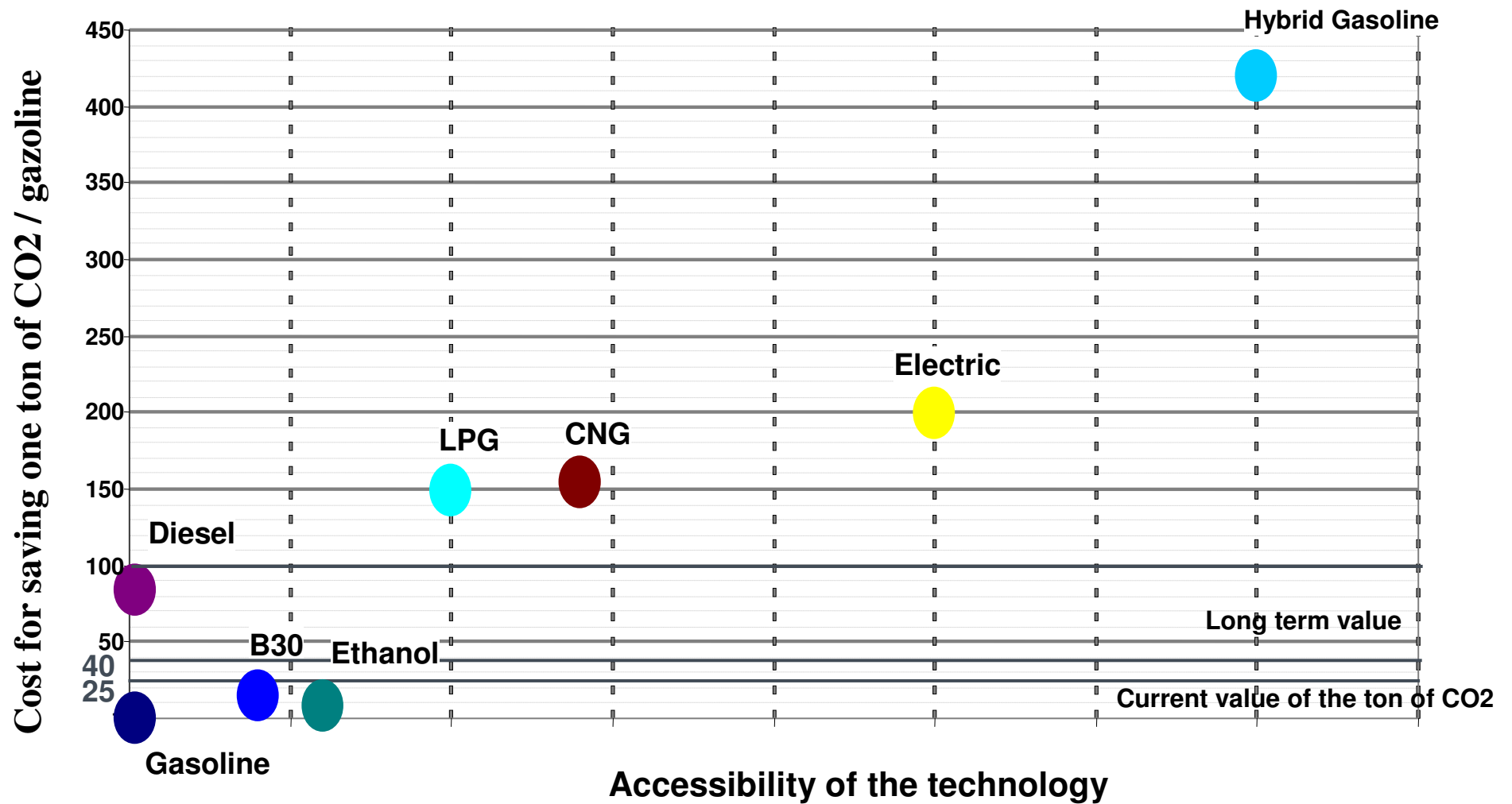
Policies should be designed to trigger the most cost-effective solutions in all the possible areas





# Recommendations for future EU policy

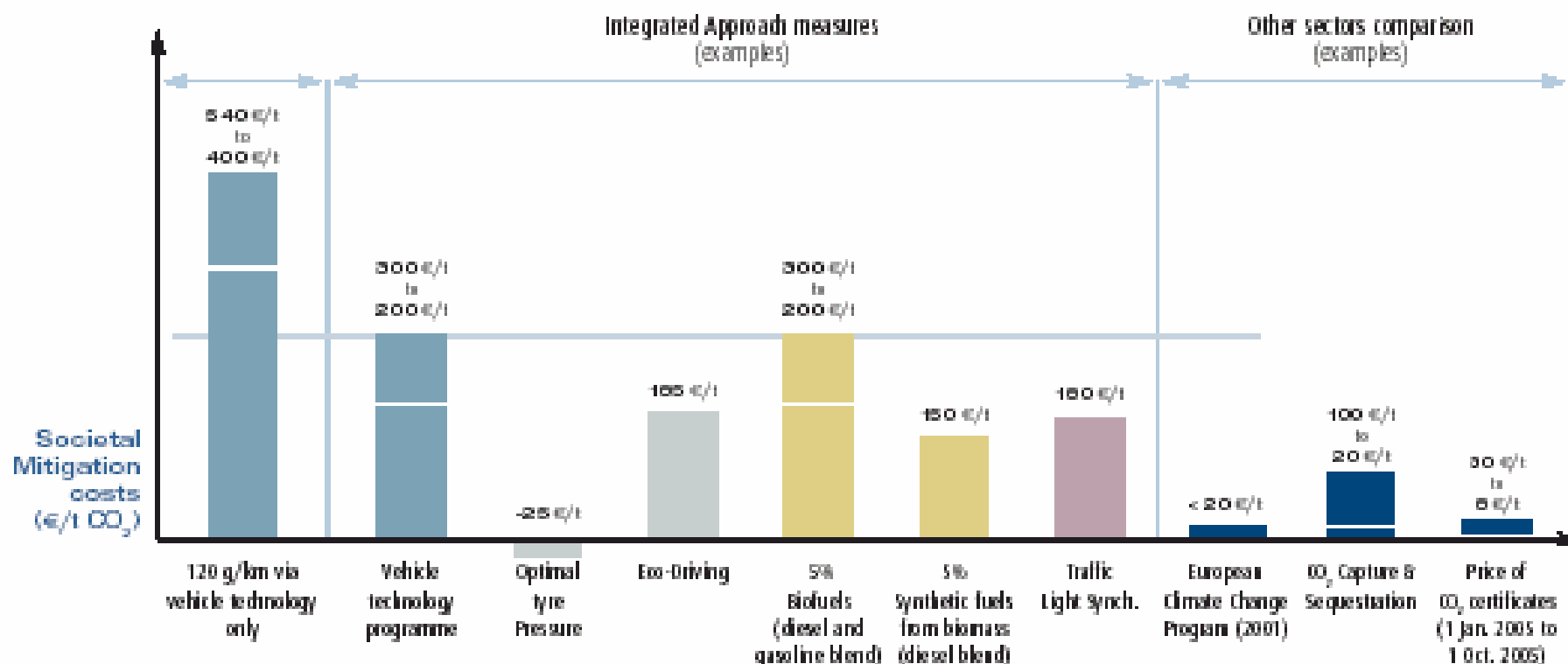
*Focus on true sustainable solutions*





# Recommendations for future EU policy

## *Focus on true sustainable solutions*



- ➔ Integrated Approach enables inclusion of activities to reduce passenger car related CO<sub>2</sub> emissions with lower societal mitigation costs.
- ➔ In other sectors much lower societal mitigation costs.



## 1. Integrated Approach requested

- *Prefer systematically most cost-effective measures in terms of CO<sub>2</sub> abatement cost*
  - Think performance, not technology
  - Consider ecodriving and taxation in ECCP 2
  - Overstep institutional limitations
- *Measures on fuel & vehicle use involve existing fleet*
  - new technologies require 20 years from launch to full presence in the rolling fleet



## Concerning vehicle measures

2. Whatever policy, highest flexibility and visibility needed !
  - *Flexibility leads to same or better performance at lower costs (no regret option)*
  - *Industry needs sufficient lead time and stability*
3. Measures should not discriminate certain technologies or vehicle types/sizes
  - *So far, policy measures do not compensate for economic and technical constraints especially of small cars*
  - *Measures should be performance based hence directly refer to g/km of CO<sub>2</sub>*



# Recommendations for future EU policy

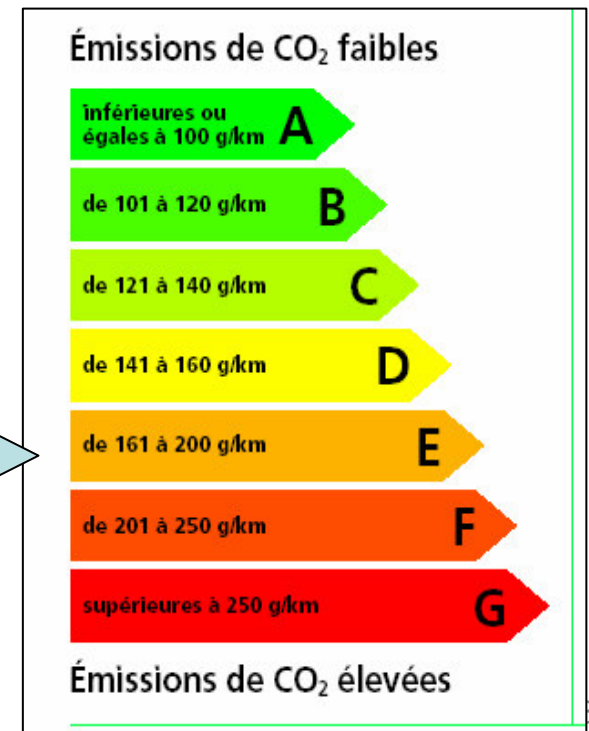
## Concerning vehicle measures (Continued)

### 4. Correct demand shift by fiscal measures

- *Linear, continuous, stable, revenue and technology neutral, eventually harmonised*
- *Regulation would further increase the gap between supply & customer demand and damage industry competitiveness*

### 5. EU CO2 label for cars

- *An harmonized EU label would better provide incentives*
- *Example of French absolute CO2 label*





- CO2 performance of new fleet relies on full development in the market of affordable technologies
- Today's business environment does not reward OEMs for developing and selling CO2 efficient vehicles
- Future EU policies should create this reward and continuously support demand for those vehicles through coordinated fiscal measures

*Thank you for your attention*