



- 120 g delivered in 2012 through an "integrated approach".
  - a) 130 g on the vehicle side;
  - b) 10 g through additional measures

Efficiency requirements for air-conditioning systems

Tyre pressure monitoring systems

Low rolling resistance tyres

Gear shift indicators

Mandatory fuel efficiency targets for light-commercial vehicles Increased use of biofuels

Legislation to reach the targets

European Commission:



# Revised CO<sub>2</sub> and cars strategy

- Review in 2010 to assess potential for progress beyond 120g/2012
- Long-term vision
  - OR&D further promoted, with a view to analysing the possibility of more ambitious objectives beyond 120 g CO<sub>2</sub>/km at a later stage
  - O Support research efforts towards reaching the ERTRAC research target of a new car fleet average of 95 g/km.



## Criteria in preparing the legislation

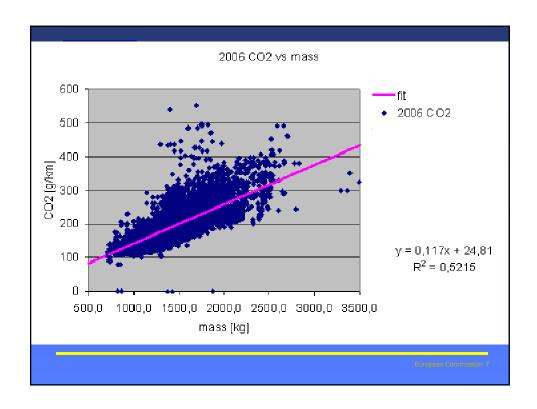
- Legislation to be designed:
  - To ensure <u>competitively neutral</u>, <u>socially</u> <u>equitable</u> and <u>sustainable</u> reduction targets
  - Equitable to the <u>diversity</u> of European car manufacturers
  - Avoid any unjustified distortion of competition
  - Compatible with the <u>achievement of Kyoto</u>

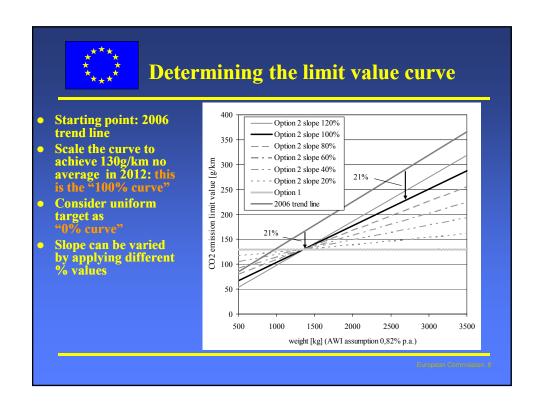
European Commission:



# **Key elements of the proposal on CO<sub>2</sub>** and cars

- Adopted by the Commission on 19 December 2007
- Ensures that the average CO<sub>2</sub> emissions from new passenger cars (as measured through type-approval) will be limited to 130g/km from 2012
- Additional measures to deliver the other elements of the integrated approach







## Choice of the slope of the curve

- Environmental: ensure delivery of 130 g/km target
  - Slope needs to remain <u>well below</u> 80% in order to avoid perverse incentive to increase mass: 65% considered to be environmental maximum
- Competitive neutrality between firms and affordability
  - O Lower slope better for smaller cars
  - Customers in lower market segment have less purchasing power and have less money available for the purchase of a vehicle (higher initial investment!): higher price sensitivity in lower market segment
  - O Lower market segment subject to stronger competition
- Manufacturers of larger cars want 80%, manufacturers of smaller cars want 20%-30%
- Chosen slope: 60%

European Commission:



## Scope

- The Regulation would apply to vehicles which meet the following conditions:
  - Fall within category M1 as defined in Directive 2007/46/EC
  - Have a reference mass not more than 2610kg (or are the subject of an extension of type approval in accordance with Regulation 715/2007) and
  - Are registered in the Community for the first time and have not previously been registered outside the Community for more than 3 months
- The Regulation would not apply to special purpose vehicles.



## **Manufacturer's Obligation**

- The Regulation would set targets for specific emissions of CO<sub>2</sub> from new passenger cars as a function of their mass
- Each manufacturer would be obliged to ensure that the average emissions from its new passenger cars do not exceed the average of the targets for those cars.

European Commission: 11



## Flexibility: pooling

- Manufacturers can form a pool will be treated as if they are one manufacturer for this Regulation.
- Agreement can be for up to 5 calendar years
- Must nominate one manufacturer as the pool manager
- Agreement must respect competition rules



# **Derogation for small independent manufacturers**

- Specialist derogation available to manufacturers which are:
  - responsible for less than 10,000 new passenger cars per year
  - o not connected to another manufacturer
- Specific emissions target would be set for the manufacturer consistent with its reduction potential, including technological potential to reduce its specific emissions
- Applications must be made to the Commission for a maximum of 5 years

European Commission: 11



## **Monitoring and Reporting**

- Member States collect data on new cars registered and report it to the Commission
- Commission calculates whether each manufacturer has met its target.



## **Excess Emissions Premium**

- Manufacturers which fail to meet their targets will be subject to an excess emissions premium
- Calculation:

Excess emissions x no of vehicles registered x excess emissions premium

- Premium will be paid to the Commission
- Details of payment procedure to be set out in Comitology Regulations

European Commission: 15



## **Level of Premium**

- Staggered introduction of excess emissions premium over first four years:
  - **○2012: 20€ per (g/km)**
  - **○2013: 35€ per (g/km)**
  - **○2014:** 60€ per (g/km)
  - **○2015+: 95€ per (g/km)**



## **Review and report**

- In 2010 the Commission will:
  - review progress on the implementation of the integrated approach
  - Oconsider whether there has been a change in the mass of cars and if so amend the figure for autonomous mass increase in Annex I to be the average of any increase.
- In the longer term the Commission will consider how the type approval process should be amended to take into account technological developments

European Commission: 17



## Main advantages of the Regulation

#### **Good for the environment:**

- Effective contribution of the motor industry to the fight against climate change
- Reducing the average emissions of CO<sub>2</sub> from new passenger cars in the EU from around 160 grams per kilometre now to 130 grams per kilometre from 2012 will save more than 630 million tonnes of CO<sub>2</sub> by 2020 (savings will further accumulate beyond that date)

#### **Good for consumers:**

 Car owners will on average pay almost €2700 less for fuel over the car's life-time (based on average 2006-2007 fuel prices). Compared with an average price increase of €1100-1300 for a car, this gives a considerable net benefit for consumers (increasing with higher fuel prices).



## Main advantages of the Regulation

#### Good for the industry and for the economy in general:

- Incentive for more innovation in the EU and an opportunity for EU car manufacturers to become world leaders on fuel efficiency
- Creation of highly-skilled jobs in the EU (e.g. for engineers in research centres)
- Opportunity for the EU motor industry to gain first mover advantage and gain long-term competitive advantages
- Energy security: less oil imports necessary
- Industry profits generally not affected (assuming a low price sensitivity of demand, allowing for a high degree of pass-through of investment costs to consumers. Consumers likely to accept price increase as they will benefit from even higher fuel savings)

European Commission: 19



## **Cost impacts**

- Cost increase of car around €1200 (1100-1300)
- Regulation will result in savings of 30g/km (160->130)
- Average cost per gram/km = €40/g/km (1200/30)
- CO<sub>2</sub> savings over lifetime of car (200,000km) = 6 tonnes (200,000\*30g)
- Cost per tonne of  $CO_2 = £200 (1200/6)$ ?

BUT THIS IS ONLY HALF THE STORY- MUST TAKE INTO ACCOUNT FUEL SAVINGS



## **Cost impacts**

- 30g/km saving means a saving of 1.2l/100km
- Total fuel savings over lifetime of car = 2400 litres of petrol (2000x1.21)
- Consumer saves 2400 litres of petrol for initial cost of €1200 (that's 50 Cents per litre) -> that's like a fuel voucher!
- Average fuel cost saving of  $\Rightarrow$   $\in$  2700

THEREFORE FUEL SAVINGS OVER LIFETIME OUTWEIGH INITIAL COSTS – CONSUMER INFORMATION WILL ENSURE CONSUMERS SEE THIS AS A GOOD DEAL

European Commission: 2



## **Car Labelling**

- Existing labelling rules set out in Directive 1999/94/EC
- The purpose of the Directive is "to ensure that information relating to the fuel economy and CO<sub>2</sub> emissions of new passenger cars offered for sale or lease in the Community is made available to consumers in order to enable consumers to make an informed choice."



## Car Labelling - existing rules

- The Directive contains four different provisions:
  - A label must be displayed near each passenger car model at the point of sale
  - A guide on fuel economy and CO<sub>2</sub> emissions
  - A poster or display, showing the fuel consumption data and CO<sub>2</sub> emissions of all car models displayed at a point of sale
  - All <u>promotional literature</u> must contain fuel consumption and specific CO<sub>2</sub> emissions data for the models to which it refers. This means all <u>printed matter</u> including technical manuals, brochures, advertisements in newspapers, magazines and trade press and posters

European Commission: 23



## **Car Labelling - revision**

- The Directive is insufficiently effective
- The strategy announced:
  - extending the scope to light-commercial vehicles (N1)
  - harmonising the design of the label
  - o introducing energy efficiency classes
  - Attention will also be paid to the definition of the Light-duty Enhanced Environmentally-friendly Vehicle (LEEV) and to indicating annual running costs and where appropriate vehicle tax levels
- http://ec.europa.eu/environment/co2/co2 cars labelling revision.htm



## Car Labelling - advertising

- The Labelling Directive is about consumer information
- The Commission has no intention of regulating the style and content of advertising
- But the strategy recognises that "In addition to consumer information, the way in which cars are marketed may also need to be adapted, so as to focus less on the dynamic performances of vehicles".
- The strategy invites manufacturers to sign up to a voluntary code of good practice regarding car marketing and advertising aimed at the promotion of sustainable consumption patterns

European Commission: 25



## **Car Labelling - Further process**

• Public meeting on CO<sub>2</sub> from cars held in July 2007 - some input on labelling.

(presentations available at

http://ec.europa.eu/reducing\_co2\_emissions\_from\_cars/index\_en.htm)

- Stakeholder consultation meeting held June 2008.
- Impact assessment ongoing.
- <u>Legislative proposal</u> accompanied by impact assessment planned for adoption before end 2008.

