

# Using indicators to inform and monitor an emission based car tax

Martin Howley, SEAI

Emer Dennehy, SEAI

Fionn Rogan, ERI – UCC

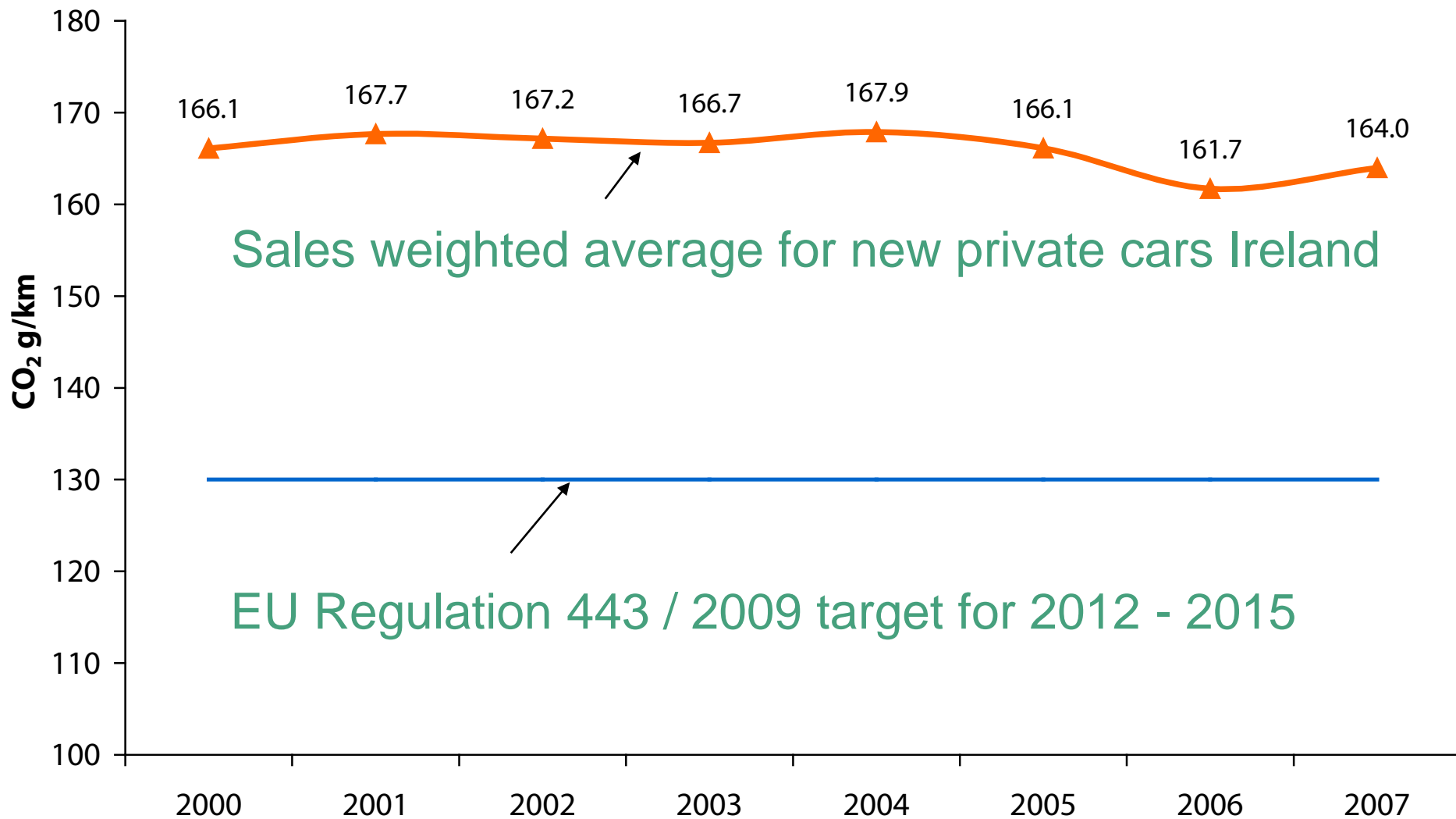
Dr Brian Ó Gallachóir, ERI – UCC

- Situation prior to vehicle taxation change
- Consultation process
- SEAI's response to consultation and proposal
- New taxation system
- Measuring the response

Are indicators effective in informing policy and subsequent monitoring the effect?

Can a strong (fiscal) price signal change purchase behaviour?

# Specific CO<sub>2</sub> emission of new cars



## Taxation prior to 1<sup>st</sup> July 2008

Engine Capacity (c.c)	VRT(% of OMSP)	AMT (€)
< 1,200	22.5	286
1,201 to 1,400		357
1,401 to 1,500	25%	471
1,501 to 1,700		582
1,701 to 1,900		784
1,901 to 2,100	30%	1,566
> 2,100		

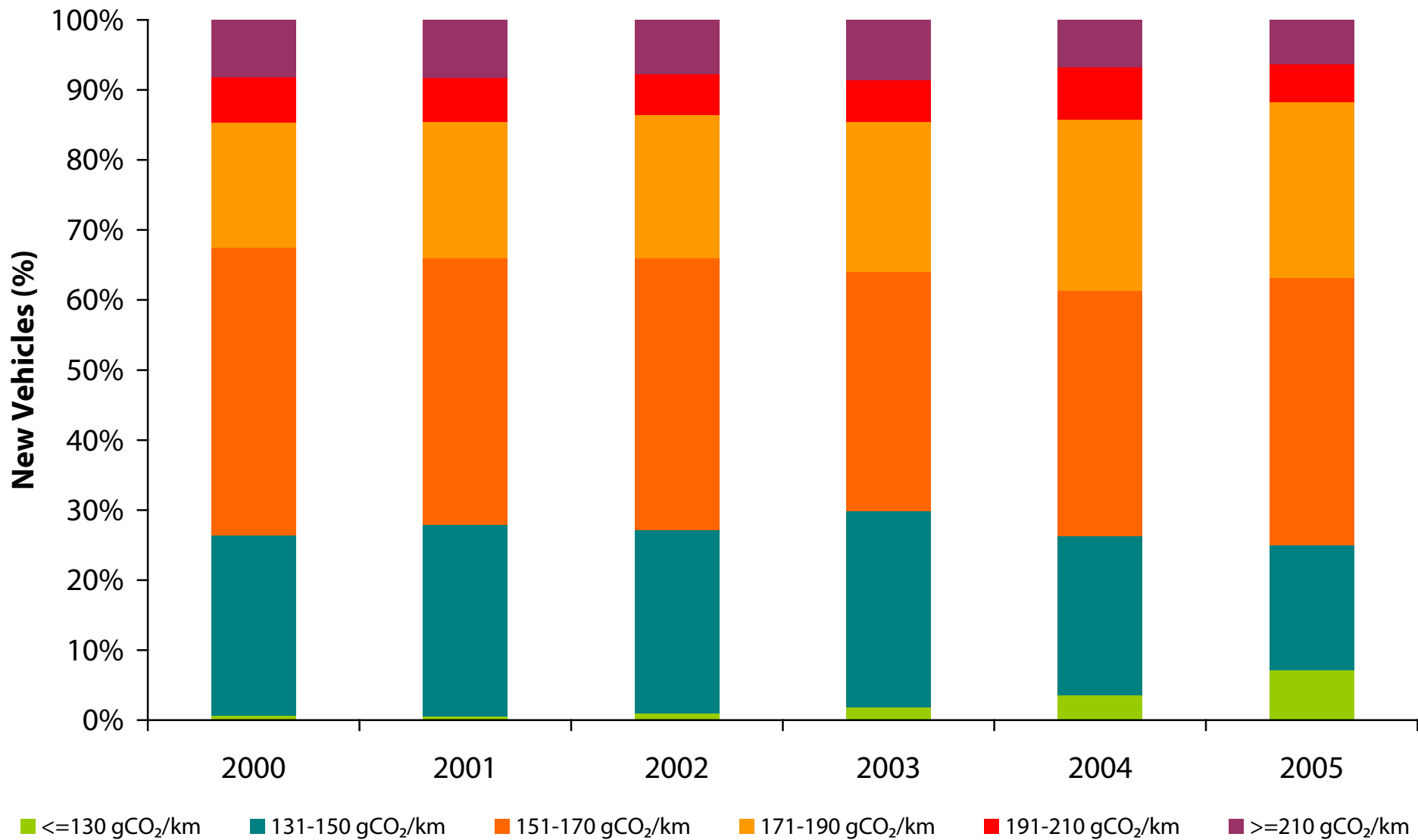
1.9L diesel car with market value €30,000

VRT = €7,500 AMT = €582

- Adjusting existing engine size bands and VRT rates
- Retain existing engine size bands and VRT rates but apply a (say 5 percentage points) discount for cars below average specific CO<sub>2</sub> emissions (within each engine size band) and a levy for cars above average specific CO<sub>2</sub> emissions (within each engine size band)
- Retain existing engine size bands and VRT rates but apply a (say 5 percentage points) discount for cars below a set specific CO<sub>2</sub> emissions range and a levy for cars above a set specific CO<sub>2</sub> emissions range, the same range applying to all emissions bands.
- Introduce five engine size bands and VRT rates system as in Option 1 and then apply a (say 5 percentage points) discount and levy, for cars with specific CO<sub>2</sub> emissions below and above a set specific CO<sub>2</sub> emissions range, the same range applying to all engine size bands.

- Suggested that price signal needed to be clear and focused on emissions
- Transparent
- Challenged the retention of engine size bands as a starting point in the taxation design
- Demonstrated that data existed to support an emissions only based approach
- Possible to monitor the effects of the change going forward

# Share by emissions band 2000 - 2005



## Taxation post 1<sup>st</sup> July 2008

Emissions Band	Specific CO <sub>2</sub> Emissions (g/km)	VRT(%OMSP)	AMT (€)
A	≤ 120	14%	104
B	120 – 140	16%	156
C	140 – 155	20%	302
D	155 – 170	24%	447
E	170 – 190	28%	630
F	190 – 225	32%	1,050
G	> 225	36%	2,100

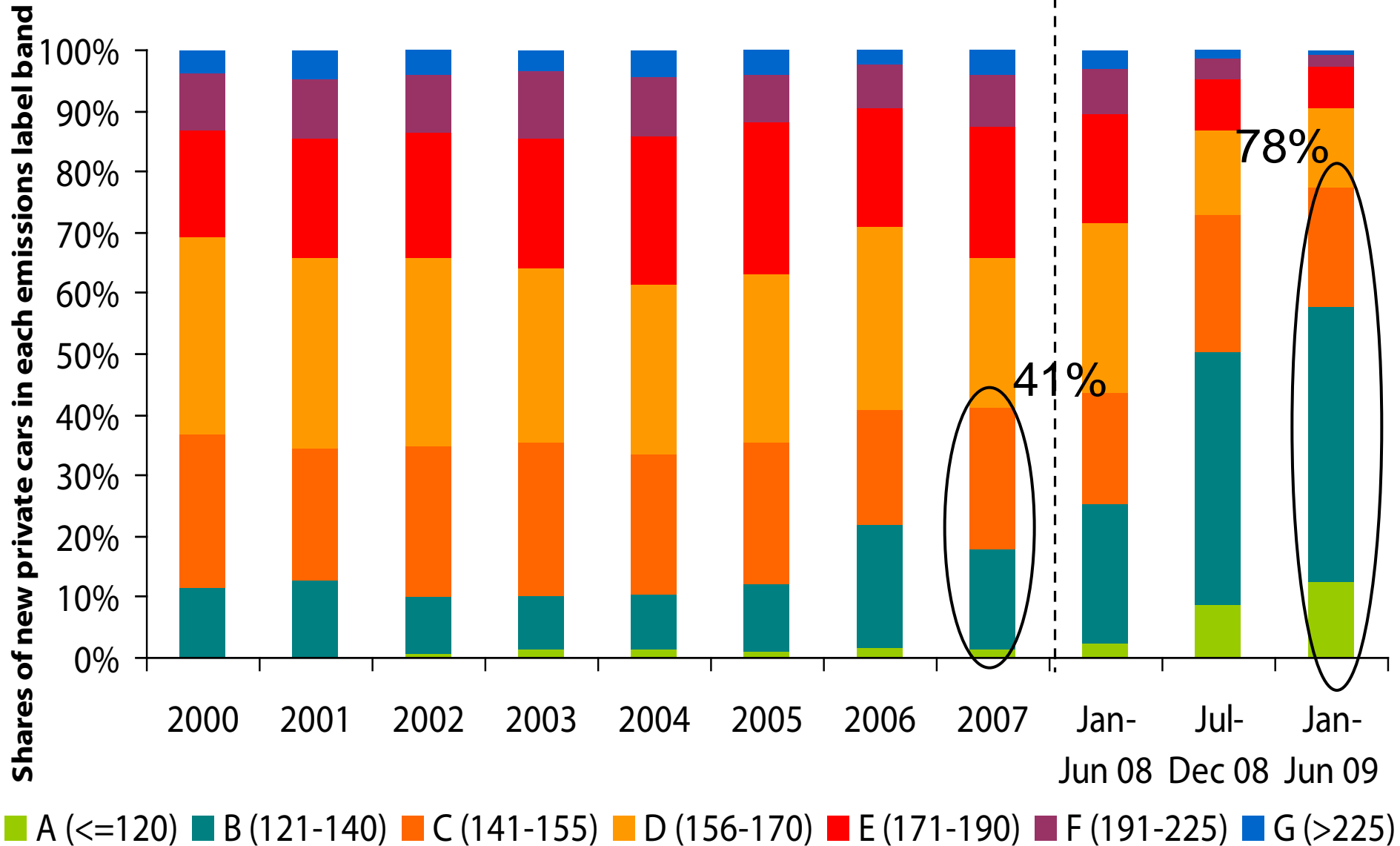
1.9L diesel car (**Band B**) with market value €30,000

OLD VRT = €7,500 AMT = €582

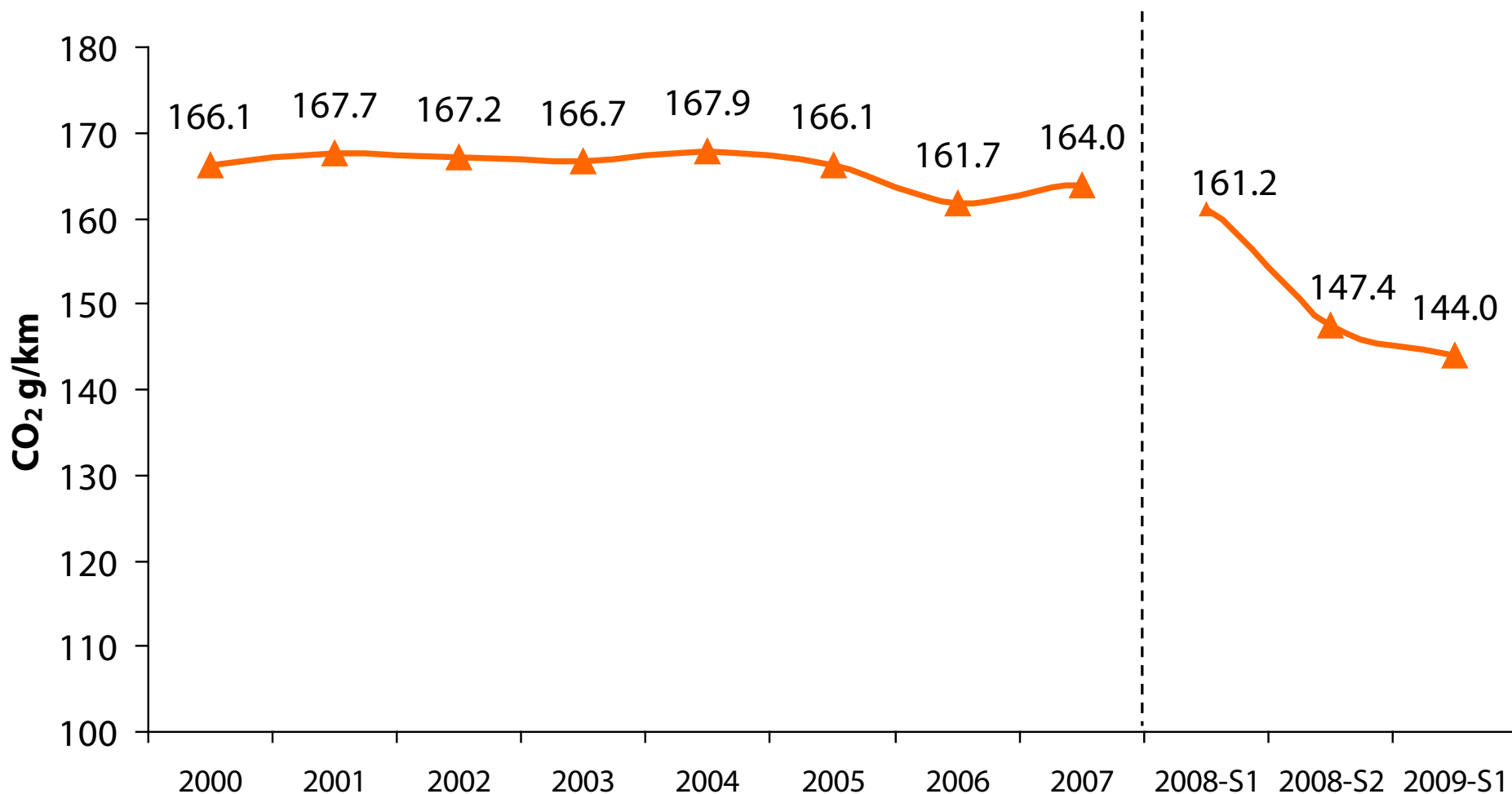
**VRT = €4,800 (36% Reduction) AMT = €156 (73% Reduction)**



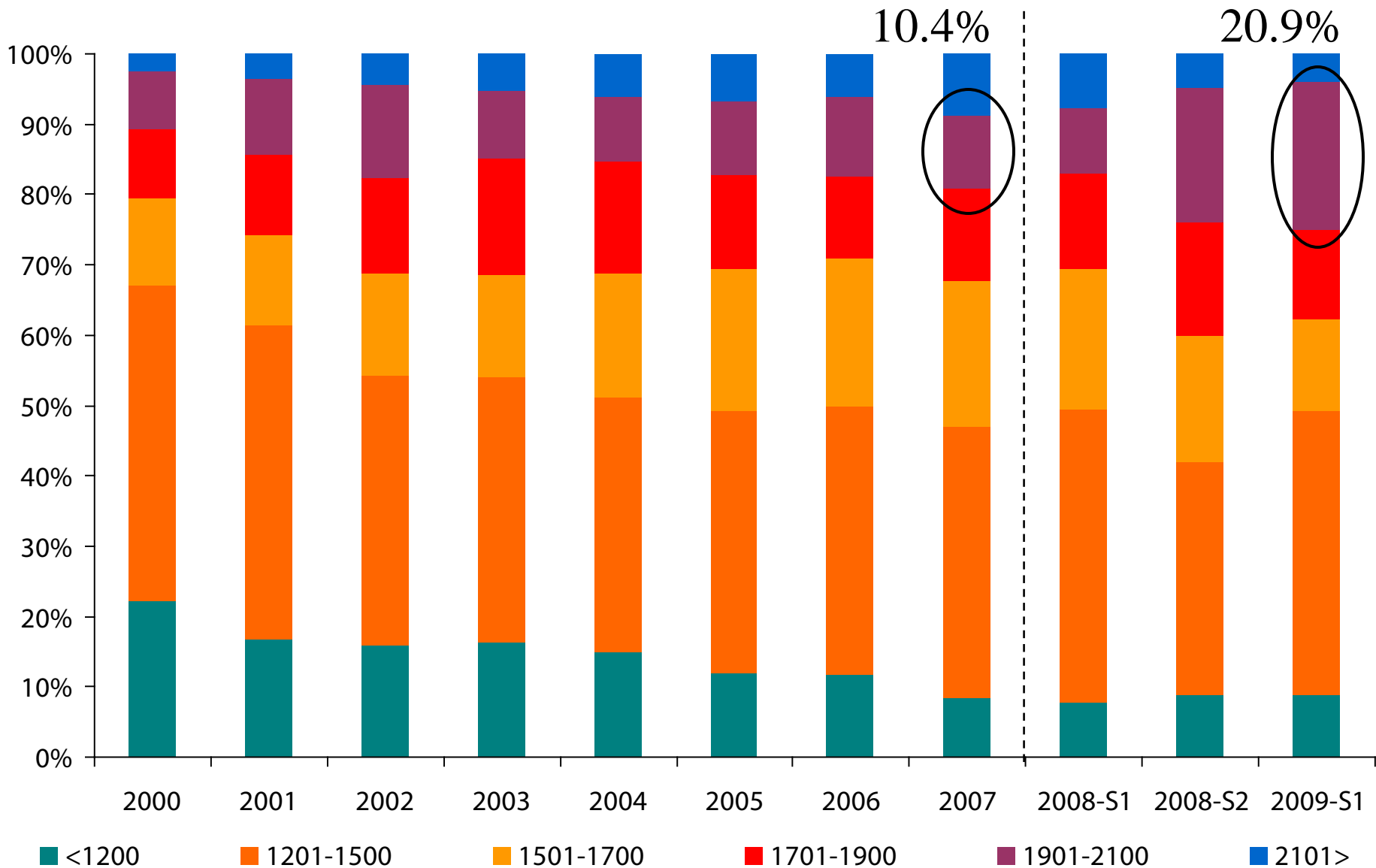
# Shares of new cars by emission band



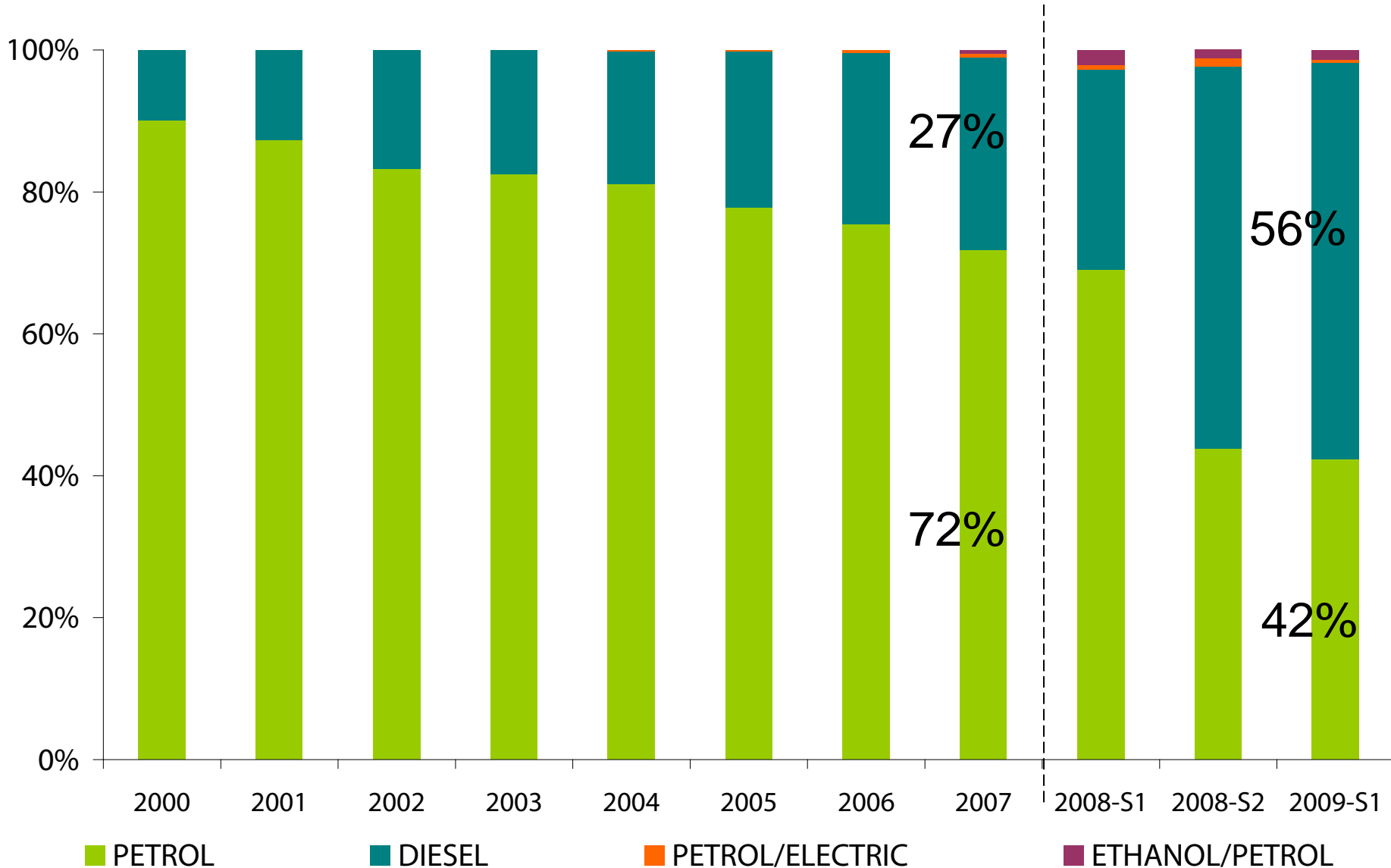
# Specific CO<sub>2</sub> emissions of new cars



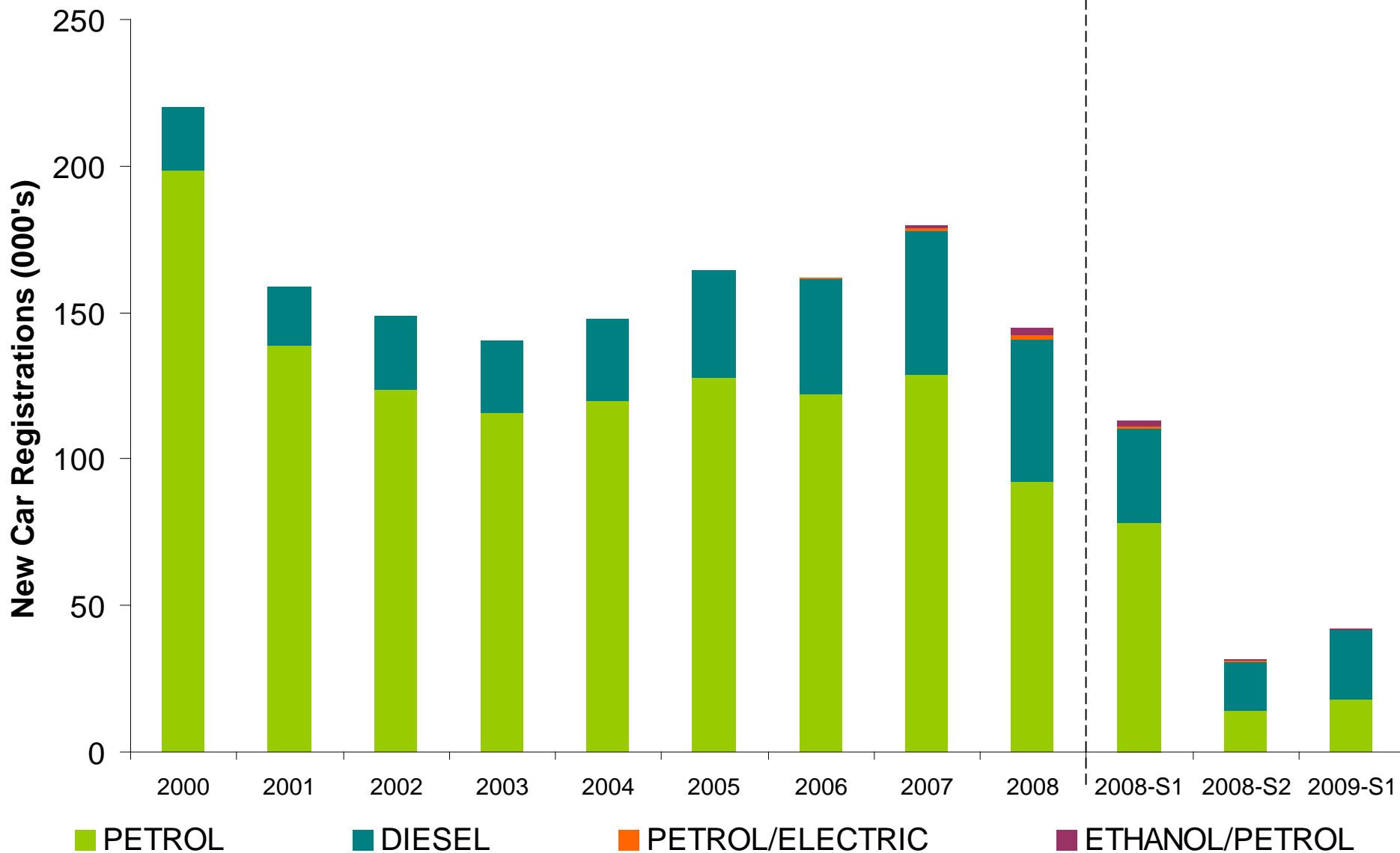
# Shares of new cars by engine size



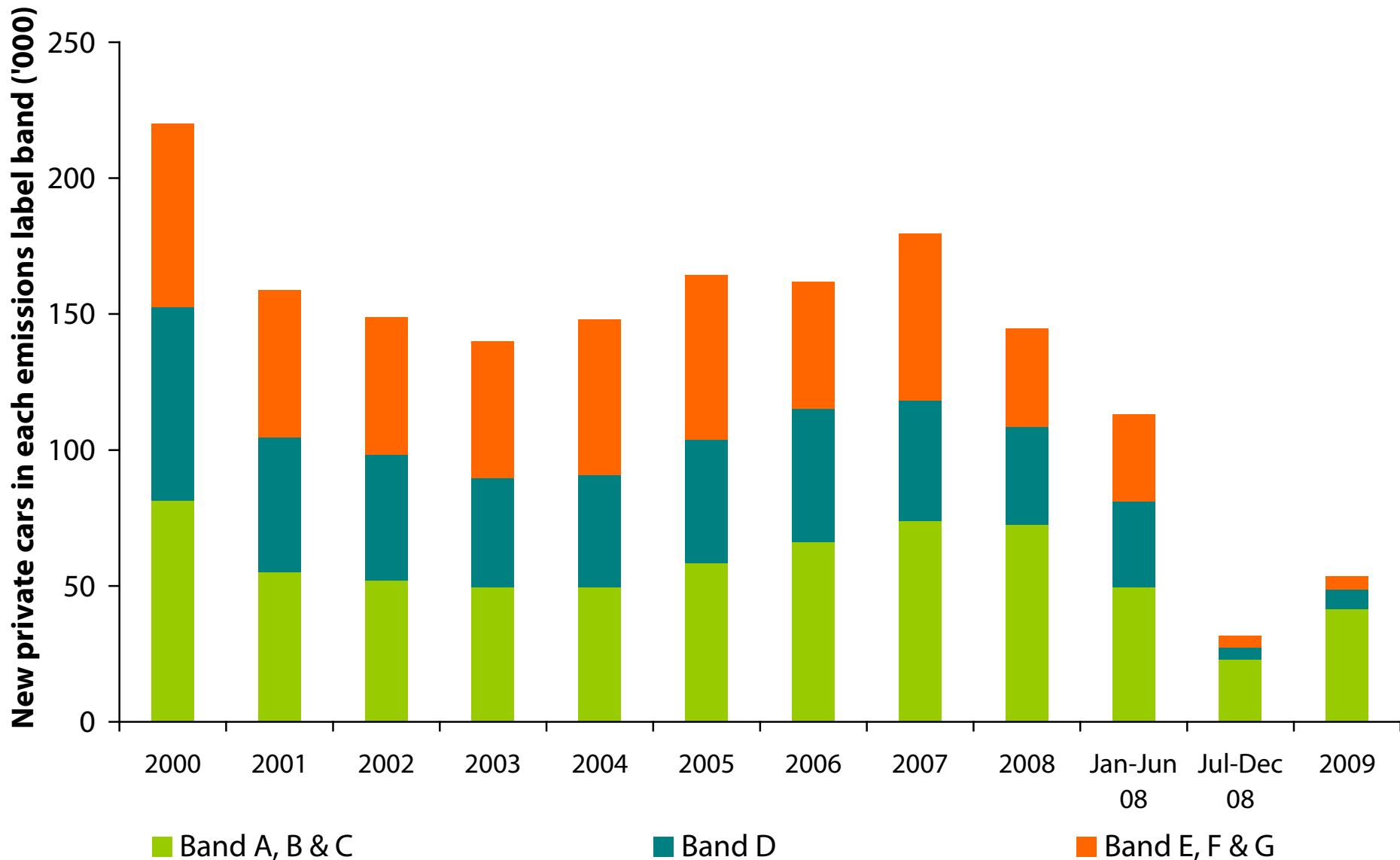
# Profile of new cars by fuel type



# Sales of new cars by fuel type



# Sales of new cars by emission band



- Strong price signal did deliver change
- Share of low emissions vehicles (<155 g/km) grew from 41% to 78%
- Share of diesel cars more than doubled (27% to 56%)
- Results tempered by recession effect
- Emissions saved from tax change estimated as 7.7 kt CO<sub>2</sub>.
- Target savings in the NEEAP of 54 kt CO<sub>2</sub> to be achieved by 2020.
- 14% of the target was delivered in the first year during a recession

# Using indicators to inform and monitor an emission based car tax

Thank you.



EUROPEAN REGIONAL  
DEVELOPMENT FUND



Ireland's EU Structural Funds  
Programmes 2007 - 2013

Co-funded by the Irish Government  
and the European Union

*The Sustainable Energy Authority of Ireland  
is financed by Ireland's EU Structural Funds  
Programme co-funded by the Irish Government  
and the European Union.*