



Brussels - 10 November 2017



AN OLD STORY

ECMT, 1991, Resolution N° 91/5 on the power and speed of vehicles

- *“The continuous increase in the power of vehicles (cars and heavy goods vehicles) is undesirable and unacceptable for safety, environmental and energy conservation reasons.”*
- *“Manufacturers are not able to resist competitive demands and market pressures in this area and, therefore, **support from Government is needed.**”*

OECD, 2004, Can cars come clean? Strategies for Low-Emissions Vehicles

“Lower power-to-weight ratios would have immediate benefits for both local pollutant emissions and global CO₂ emissions and also contribute to improved road safety.”

MASS, POWER & ENERGY

Average characteristics of new cars sold in some European Member States in 2015

	Mass (kg)	Front surface (m ²)	Power (kW)	Top speed (km/h)	CO ₂ emissions (g/km)
Germany	1,460	2.775	106	199	127
Belgium	1,406	2.769	89	188	117
France	1,316	2.741	83	184	111
Greece	1,233	2.614	71	176	106

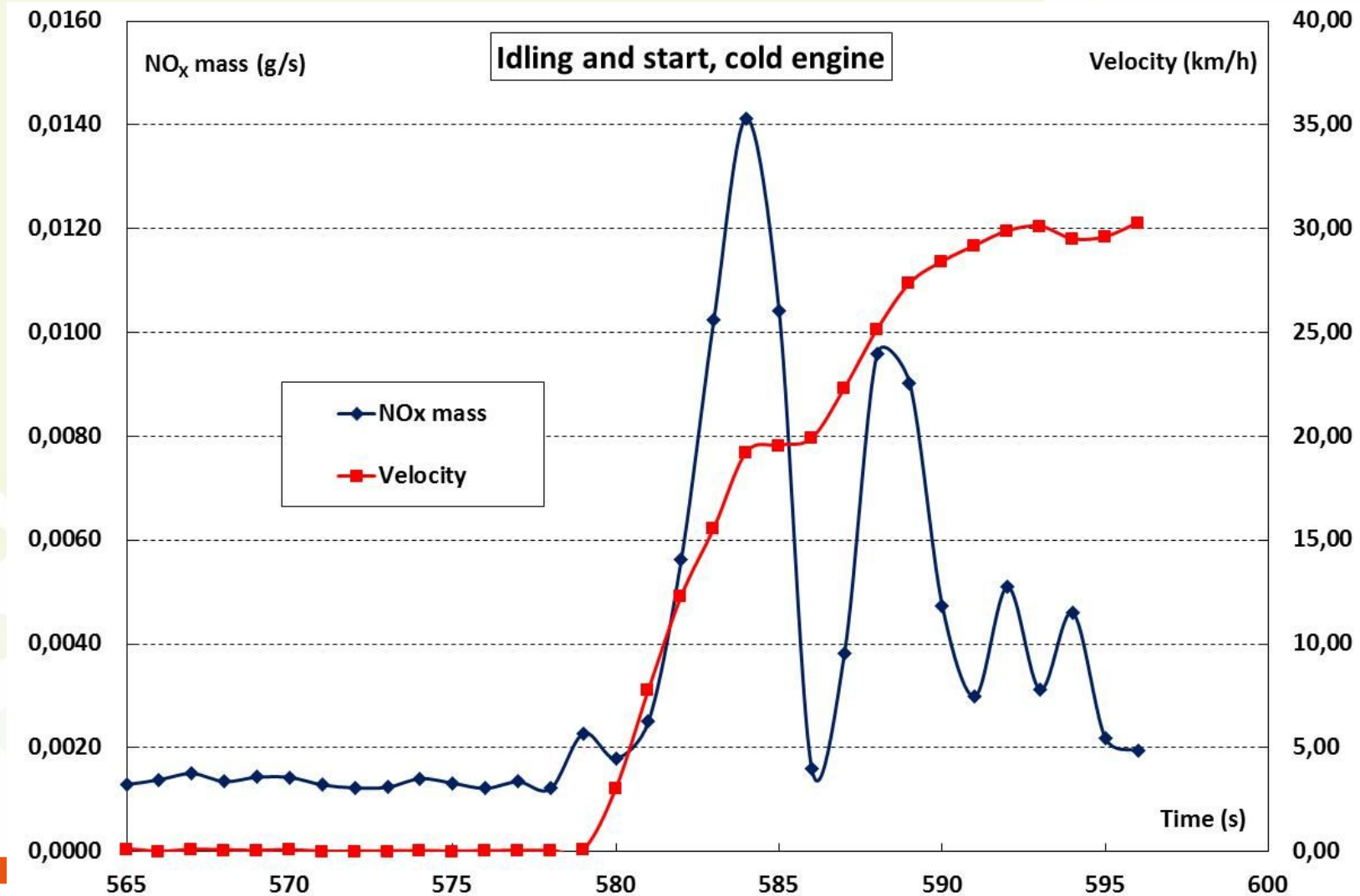
MASS, POWER & ENERGY

Characteristics and fuel consumption of petrol VW Golf VII

Version	1	2	Increase 1->2
Power (kW)	62	221	+ 256 %
Mass (kg)	1,130	1,401	+ 24 %
Top speed (km/h)	179	250	+ 38 %
NEDC Urban (l/100 km)	6.1	9.4	+ 54 %
NEDC average (l/100 km)	4.9	7.1	+ 45 %

POWER & POLLUTION

RDE test, vehicle *****



MASS, POWER & SAFETY

The segmentation groups used for the third party liability insurances are intimately correlated to the maximum kinetic energy (so to the power) of the vehicles

- AXA states that *“the statistics establish that the more powerful a car, the higher the frequency and the seriousness of the accidents.”*
- Partner clearly makes the link between the vehicle and the behavior: *“the characteristics of the vehicle (make, type, power, sporty character, body, ...) make it possible to predict the behavior of the driver and the potential dangerousness of the vehicle; both influencing the seriousness of the crashes.”*

MASS, POWER & SAFETY

HORSWILL M. S., COSTER M. E. 2002. The effect of vehicle characteristics on drivers' risk-taking behaviour. Ergonomics, 45:2, p. 85-104

“Results indicate that the causal mechanism behind the relationship [between vehicle performance and drivers’ risk-taking behaviour] is bi-directional , such that while drivers who take more risks choose faster cars, vehicle performance also influences drivers’ risk-taking intentions.”

The phone booth experiment



CAR MARKET TRENDS



New cars sales in EU

	2001	2015	Evolution
Mass (kg)	1,268	1,372	+ 8.2 %
Power (kW)	74	84	+ 13.5 %
Top speed (km/h)	180	185	+ 2.8 %
Width x height (m ²)	2.52	2.69	+ 6.7 %

CAR MARKET TRENDS



New cars sales in BE

	2001	2015	Evolution
Small hatchbacks	111.276	16.443	- 85,2%
Medium family cars	66.034	32.336	- 51,0%
Big monospaces	23.803	30.092	+ 26,4%
Jeeplikes	13.490	112.389	+ 733,1%

FRONTRUNNERS

E-car 333

Weight: 550 kg (+ batteries: 80 kg for 150 km autonomy)

Power: 15 kW

Top speed: 130 km/h (possibility to limit at 90 km/h)



Renault 4L

Very welcome!

But not sufficient to reshape the car market!

Strict regulatory framework is needed (cfr ECMT 1991)

THE LISA CAR CHARTER

1. Coalition building

IEW and OVK-PEVR with the support of other environment and road victims Belgian NGOs + consumers + car sharing actor + EU umbrellas (FEVR and T&E)

2. The charter

- A LISA Car is a car whose weight, power, top speed and front side design are optimised to limit their dangerousness and CO₂ emissions while providing transport for one to nine persons on the road network at speeds of a few dozen kilometres per hour.
- By 2030, all (100%) of new cars sold in Europe should meet this definition, with the exception of vehicles intended for professional use that require specific characteristics.
- Only a strict regulatory framework is capable of guaranteeing that this objective will be achieved

2014 EU elections: 5 BE MEPs signed and help defining a strategy

TO CONCLUDE

- Downsizing reduces many of the problems induced by cars – and it is strictly independent from motorization
- Dr Claude GOT, expert in accidentology (FR), 2011

“It’s not arguable having limited the top speed of motorized two wheelers and heavy vehicles for safety reasons and not having adopted the same approach for light duty vehicles which cause the greatest number of fatalities [...] This is a huge failure of our civilization, a sign of barbarity and of indifference to a suffering that one refuses he could face himself but accepts it can affect other people.”