

EU Car CO2 regulation, enforcement and innovation credits.

欧盟乘用车二氧化碳法规，法规执行以及创新奖励



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Vehicles

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Why EU action? 为什么欧盟会采取措施？



- Treaty of Rome (established 1957) empowers EU to deliver transport measures under a common transport policy
- 罗马条约（1957成立）赋予欧盟对交通运输方式可采用一个共同的政策来治理。
- European automotive manufacturers have a leading position in the global market and account for 25% of global car production.
- 欧洲的汽车制造商在全球市场具有领先地位，产量占全球汽车产量的25%。



What is the EU transport ambition? 欧盟交通运输有什么宏伟目标?

- European Commission Roadmap indicates that EU transport should reduce its CO₂ emissions by around 60% of its 1990 level by 2050.
- 欧盟委员会路线图指示，相比1990的水平，2050年欧盟交通应该减少CO₂排放大约60%。
- In UK 'The Climate Change Act 2008' commits UK to reduce emissions by 80% of its 1990 levels by 2050.
- 在英国，‘气候变化法案2008’致力英国相比1990的水平，到2050年减少大约80%的排放。



Climate Change Act 2008

CHAPTER 27 CONTENTS

PART 1

CARBON TARGETS AND REDUCTIONS

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What role for cars? 乘用车的影响?

- Road transport contributes about 20% of total EU CO2 emissions, but cars alone are 15%.
- 公路交通运输占欧盟二氧化碳排放的20%，但是仅乘用车就占有15%。
- Legal framework can reduce CO2 emissions from cars in a cost-efficient and proportionate way, which reduces fuel costs for motorists and provides opportunities for innovation and new technology.
- 法律体系可以才用性价比高且相称的方法来减少二氧化碳排放，从而减少驾驶者的燃油成本，为创新以及新技术提供机会。



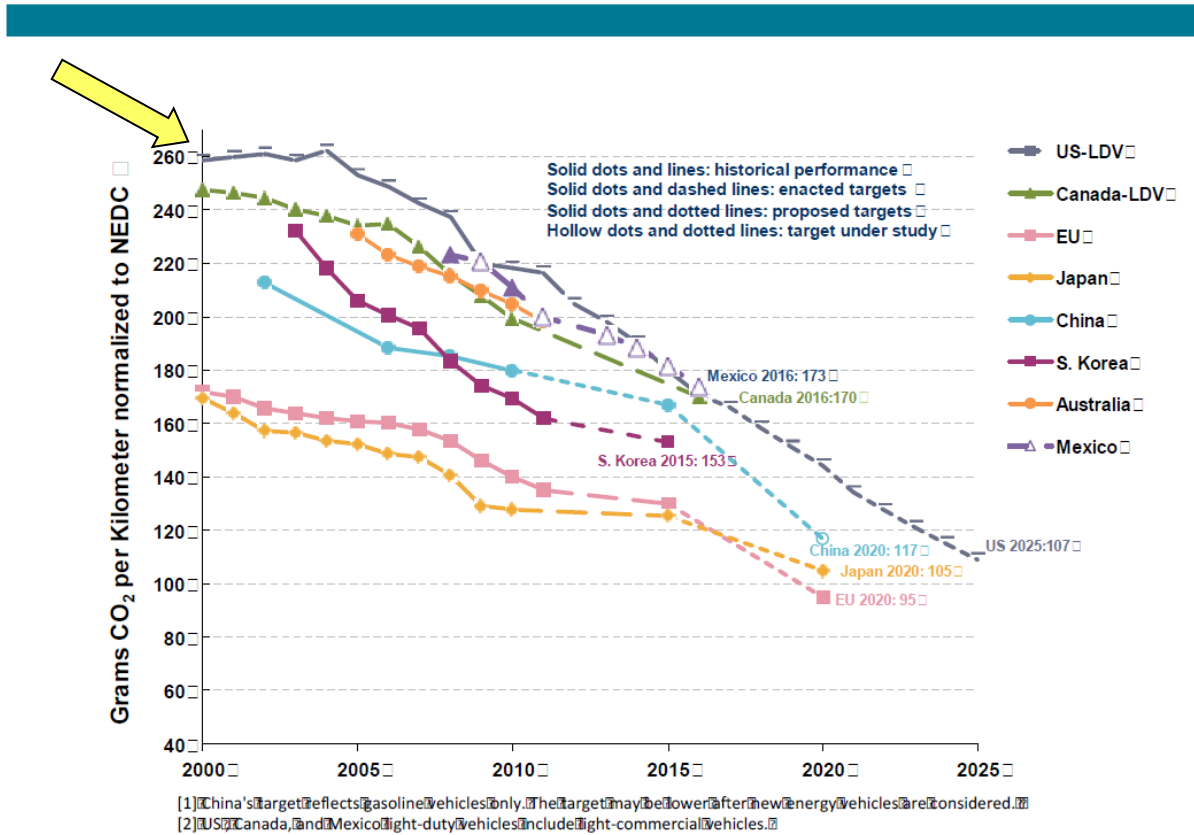
EU Regulation 443/2009

欧盟443/2009标准

- Following a failed voluntary agreement between Government and industry, negotiations on regulation began in 2007 and 443/2009 followed.
- 自政府和行业之间的自愿协议失败之后，对规章的谈判始于2007年，后来制定了443/2009标准。
- EU fleet average must be 130 g/km CO₂ by 2015.
- 到2015年，欧盟车队平均二氧化碳排放为130 g/km。
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- EU fleet average must be 95 g/km CO₂ by 2021.
- 到2021年，欧盟车队平均二氧化碳排放为95 g/km。
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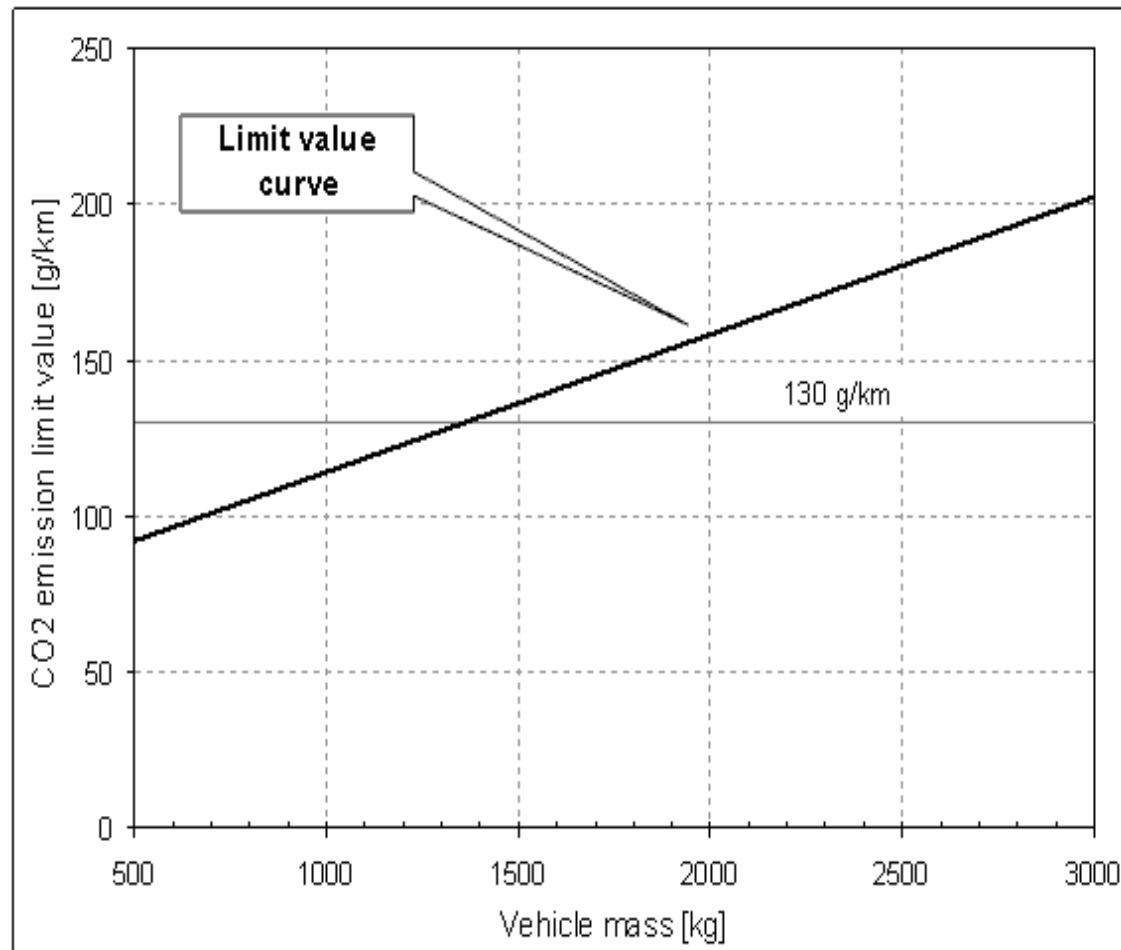


What position in the global race? 欧盟在全球竞赛中的位置



443/2009 - How does it work?

443/2009— 如何工作?



443/2009 - Penalty payments

443/2009—罚款支付

- Non-compliance penalty for manufacturers should they miss their specific reduction targets.
- 如果制造商不能达到具体的减排目标则会有违规处罚。
- From 2012, €5 for first g/km, €15 for second g/km, €25 for third g/km and €95 for each subsequent g/km.
- 从2012年起，第一个g/km罚€5，第二个g/km罚€15，第三个g/km罚€25，接下来每个g/km罚€95。
- From 2019, cost will be €95 per g/km.
- 从2019年起，每个g/km罚款€95。



443/2009 - Eco-innovations

443/2009—生态创新



- Credit awarded (to a max of 7g/km) for 'innovative' technologies that can't be demonstrated under the current type approval test (NEDC).
- 对在当前的型式核准测试（NEDC工况）下不能表征出来的创新技术给予奖励（最多为7g/km）。
- Five innovative technologies currently approved, seven more under consideration. Assessments made on independently verified test data.
- 当前已经批准了5个创新技术，还有7个还在考虑中。采用了独立的评估来验证测试数据。



443/2009 - Super-credits

443/2009—超级奖励

- Incentive for manufacturers to produce vehicles with emissions below 50g/km.
- 对生产排放低于50g/km车辆的制造商给予激励。
- Each 'super-credit' vehicle is worth 2 vehicles in 2020, 1.67 vehicles in 2021, 1.33 vehicles in 2022 and then 1 from 2023. Cap of 7.5 g/km per manufacturer over the three years.
- 2020年，每辆‘超级奖励’的车按两辆车来算，2021年按1.67辆来算，2022年按1.33辆来算，从2023年开始，按一辆车算。7.5g/km是每个制造商在三年里可能授予的最大奖励。

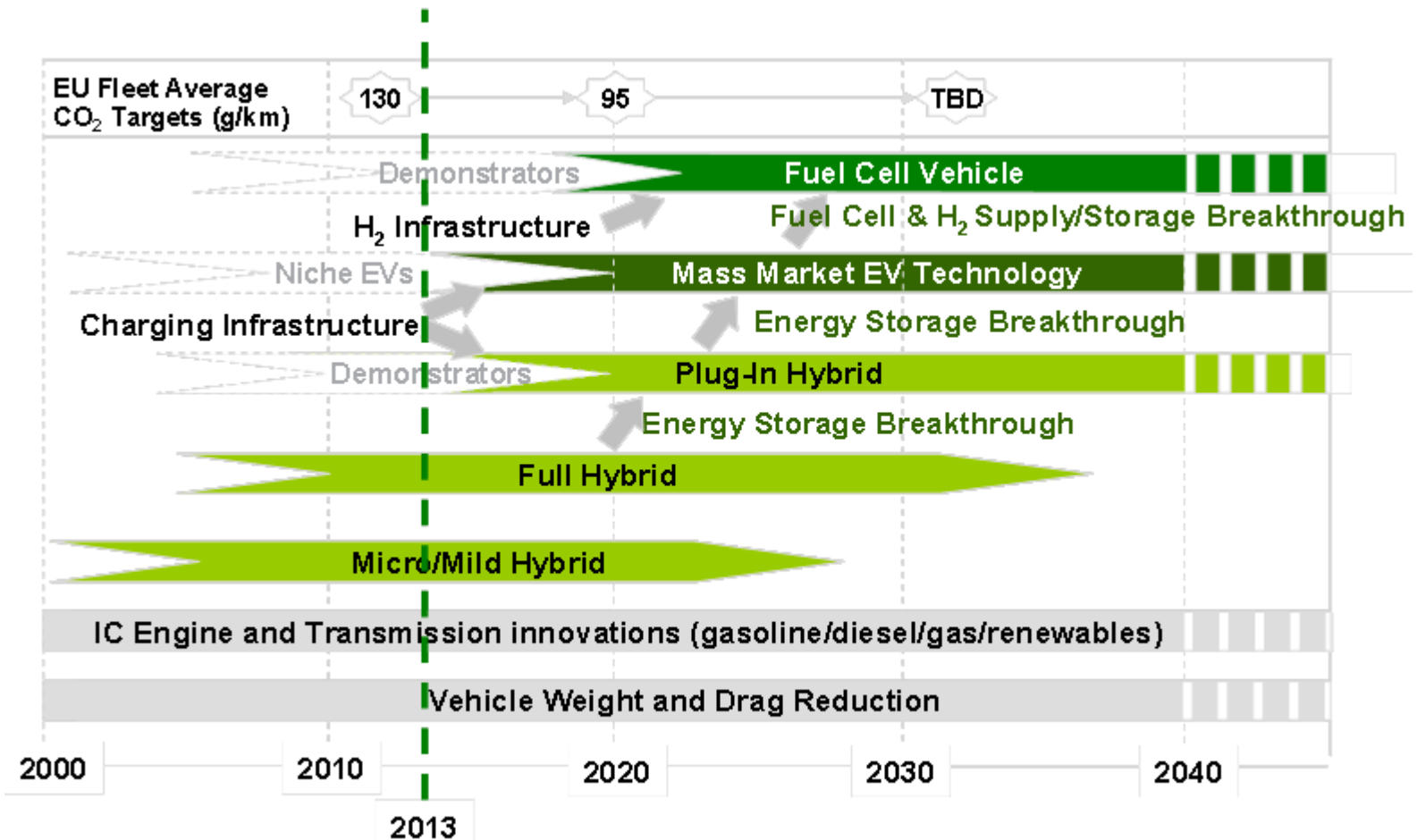


443/2009 - Smart regulation

443/2009—智能法规

No. of vehicles sold per manufacturer per year 每个制造商车辆年销售数	Type of derogation 减损形式
<1000 vehicles 小于1000辆	Excluded from scope of the legislation 不在法案的范畴中
<10,000 vehicles 小于10,000辆	Can propose their own emissions reduction target which is subject to approval by the European Commission. The Commission decides on the basis of a set of agreed criteria which include the manufacturer's emissions reduction potential. 可以向欧洲委员会提出自己的减排目标，但是需要得到批准才行。委员会会用一套商定的准则来仲裁，这些准则中包括制造商的减排潜力。
<300,000 vehicles 小于300,000辆	Can apply for a fixed target of a 25% reduction in their emissions from their 2007 average for the period 2012 to 2019, and a 45% reduction from the 2007 level as of 2020. 从2012年到2019年，可以申请固定的25%减排目标值，这是相对于2007年平均值来说。到2020年，可以申请相对于2007年减少45%的目标值。

Use of technology in cars 乘用车采用的技术



443/2009 - Recent negotiations

443/2009—最近的协商

- The review of the 2020 targets for cars and vans has recently been completed.
- 对乘用车和小客车2020年目标值的审阅已经完成。
- Commissioner Hedegaard ‘Ende gut, alles gut’
- 专员Hedegaard‘好，一切都好’
- Agreement keeps us well on track to deliver against our near and long-term ambitions.
- 协议让我们保持在预期的轨道上从而实现我们的近期和远期宏伟目标。



443/2009 - Future ...

443/2009—将来…

- Ever tighter global emissions regulations are one of the main drivers for the transition to ULEVs.
- 更加严厉的全球排放标准是过渡到超低排放车辆的主要动力之一。
- Must preserve the balance between stretching targets and being overambitious.
- 必须保持目标伸展和目标过于宏伟的平衡。



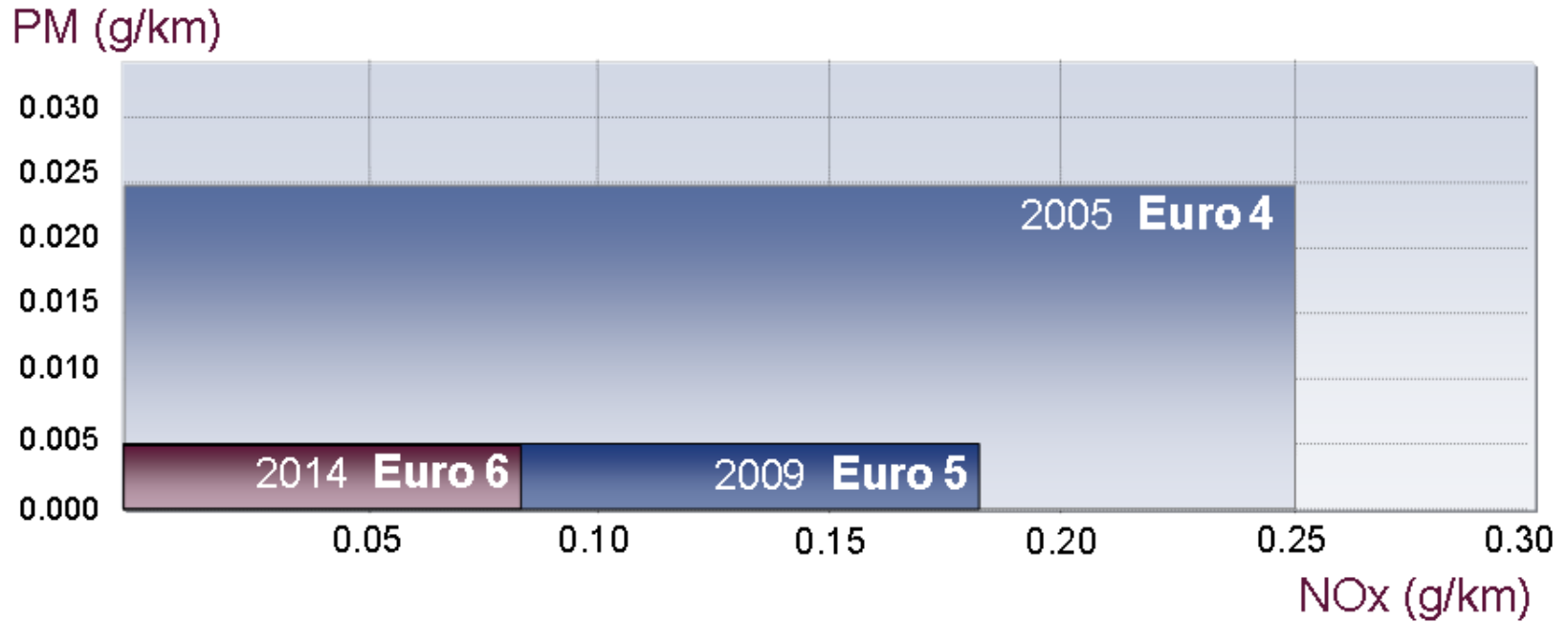
443/2009 - Key challenges for beyond 2020 ...

443/2009—2020后主要的挑战

- New test cycle ...
- 新测试工况...
- Eco-innovations ...
- 生态创新...
- Super-credits ...
- 超级奖励...
- Mass, footprint or different approach?
- 质量，脚印面积或是不同的方法？
- Rate of progress ...
- 进展速度...



Air quality 空气质量



Final thoughts ... 最后的要点

- It's not all regulation.
- 并不是所有的规章
- Preliminary 2013 data shows that the EU fleet will have met its 2015 target 2 years early. 30% reduction since 2000.
- 初步的2013年数据显示欧盟车队将提前两年达到2015年的标准，相对2000年减排30%
- Amazing progress against tough challenge, but helped by right incentives, supportive environment and time.
- 针对严峻的挑战且具有惊人的进展，归功于正确的激励体系，支持性的环境和时间。





THANK YOU

谢谢

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