

AECC input to the post Euro 6 study

MVEG meeting

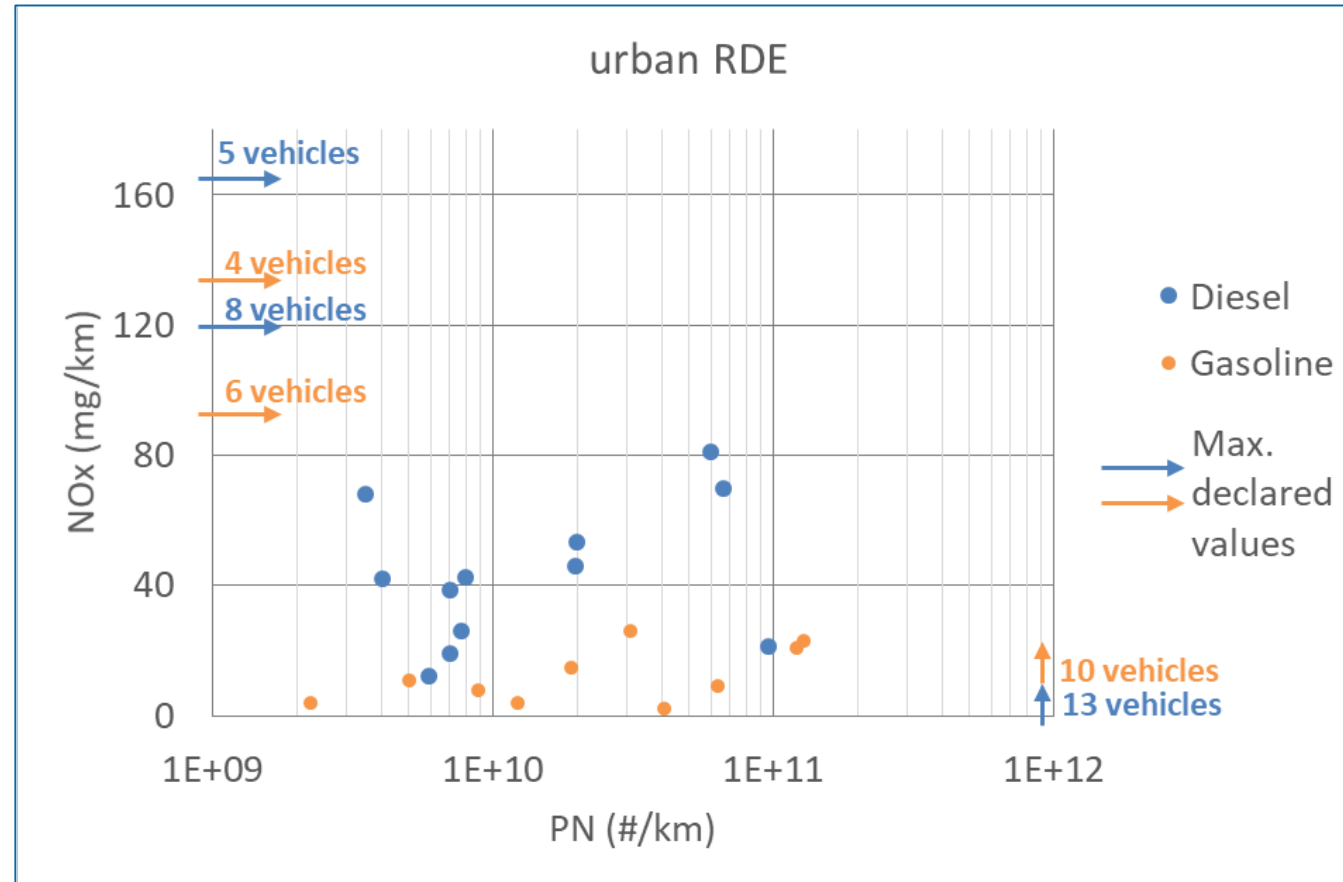
Brussels • 6 March 2018

Agenda

- Current emissions performance and evolution in emissions control technologies
- Timing considerations
- Topic considerations

Emissions performance of latest diesel and gasoline vehicles

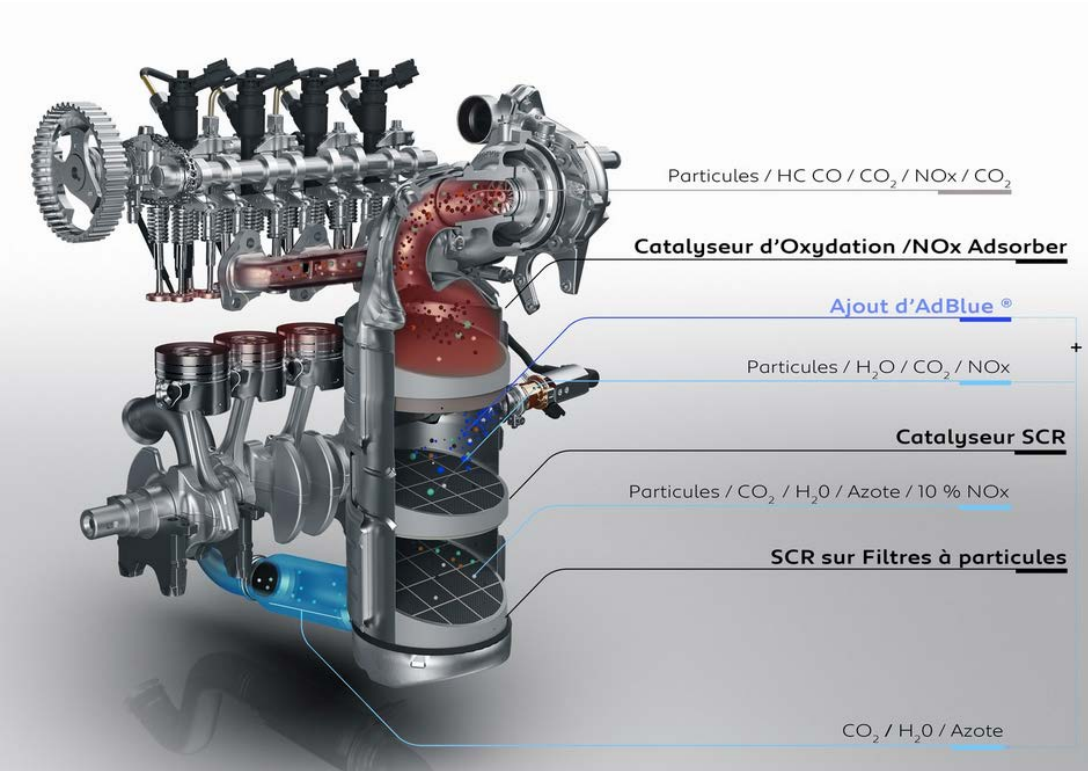
Declared emissions from latest vehicles well within standards



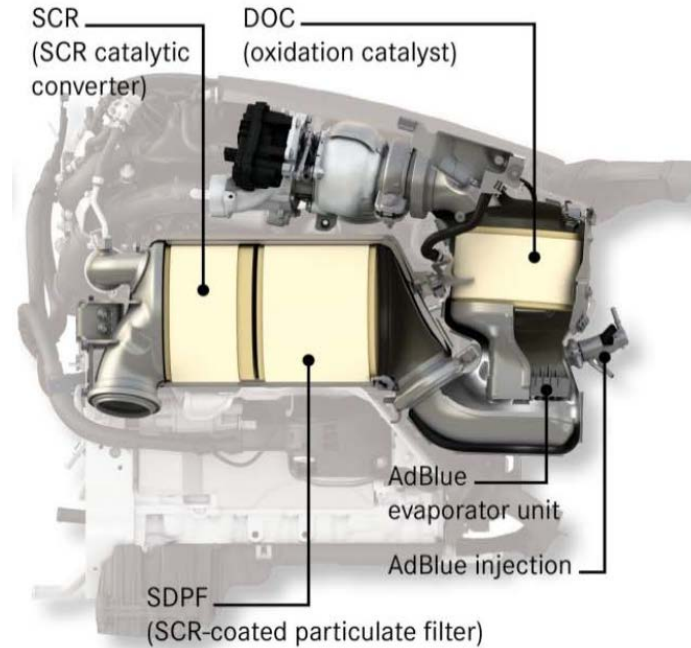
Source: PEMS results and maximum declared values from ACEA RDE database consulted on 13 February 2018 (no information about ageing status of emissions control technologies)

Light-duty diesel emissions control technology evolution

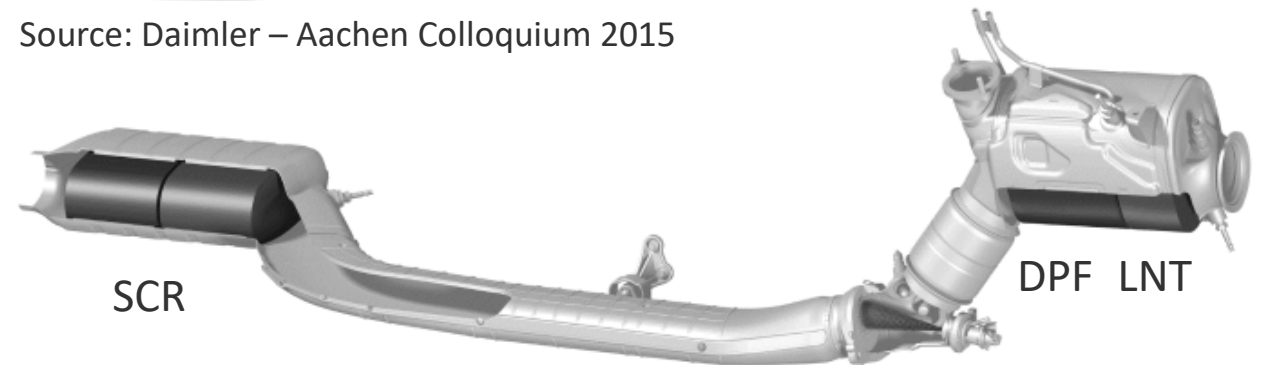
Towards combination of technologies in a compact design



Source: Peugeot – 308 press release 2017



Source: Daimler – Aachen Colloquium 2015

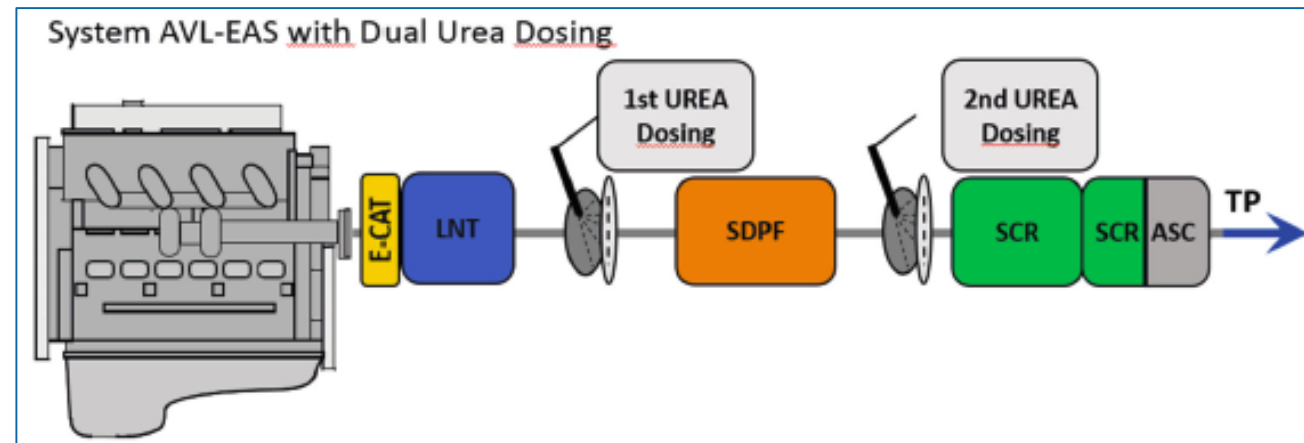


Source: BMW – Aachen Colloquium 2015

Light-duty diesel emissions control technology evolution

Potential for future improvements to cover a wide range of driving conditions

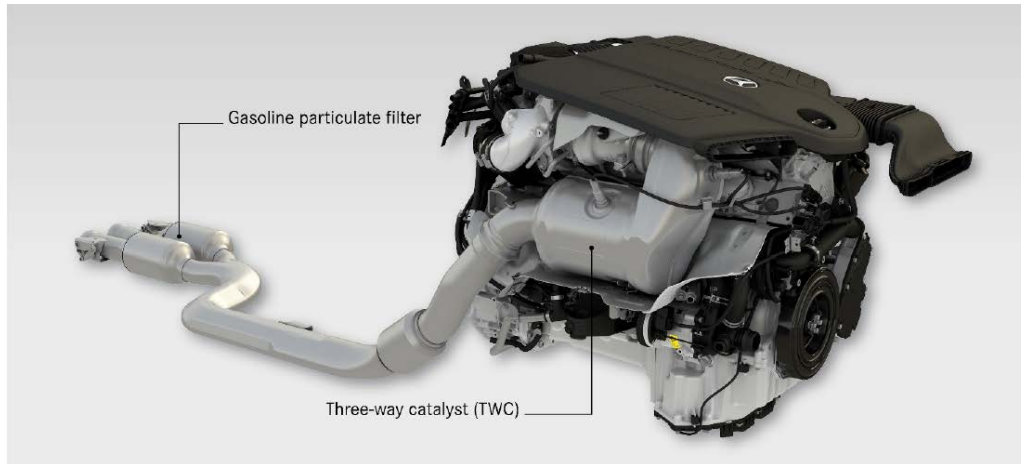
- SCR in different locations to cover urban and motorway driving
- Dual urea injection to provide more flexible dosing
- Optimising thermal management for urban driving



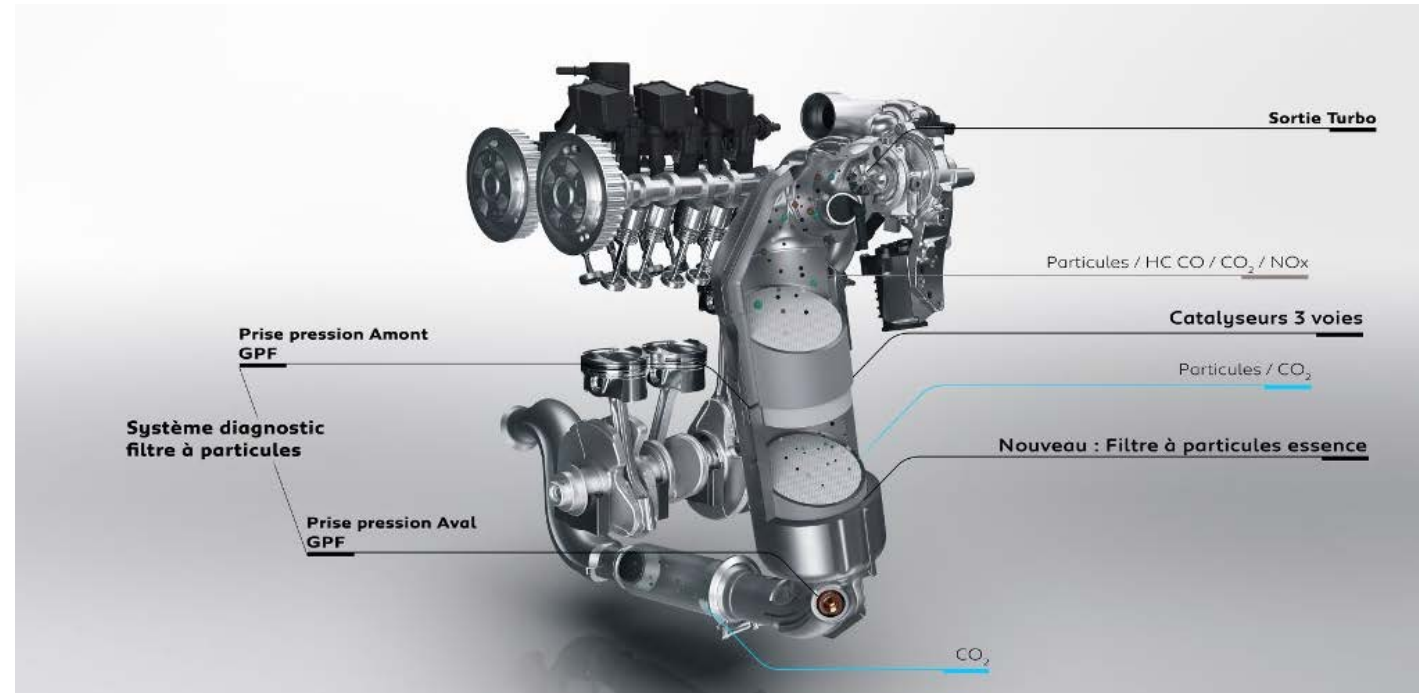
Source: AVL – Highly Efficient Exhaust Gas Aftertreatment for Future Diesel Applications – 10th International Exhaust Gas and Particulate Emissions Forum February 2018

Light-duty gasoline emissions control technology evolution

Introduction of particulate filters on cars with direct injection



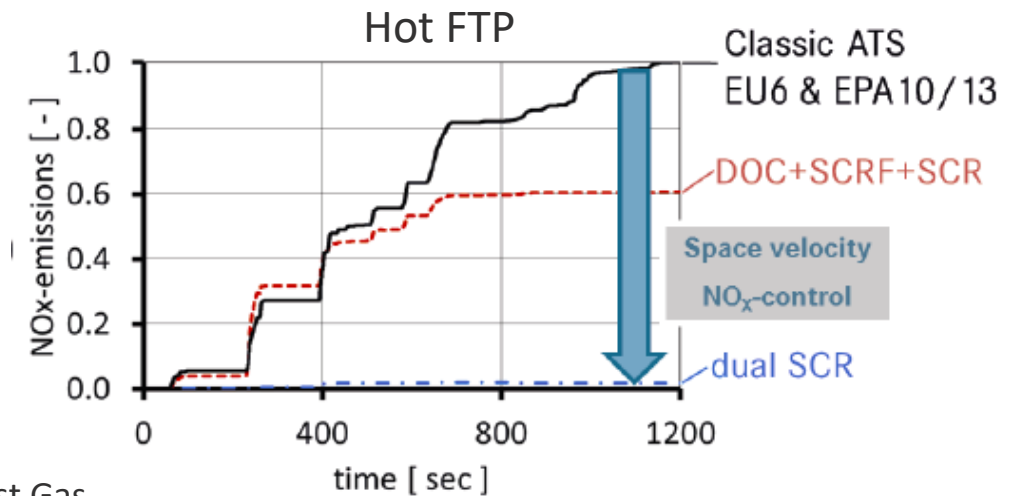
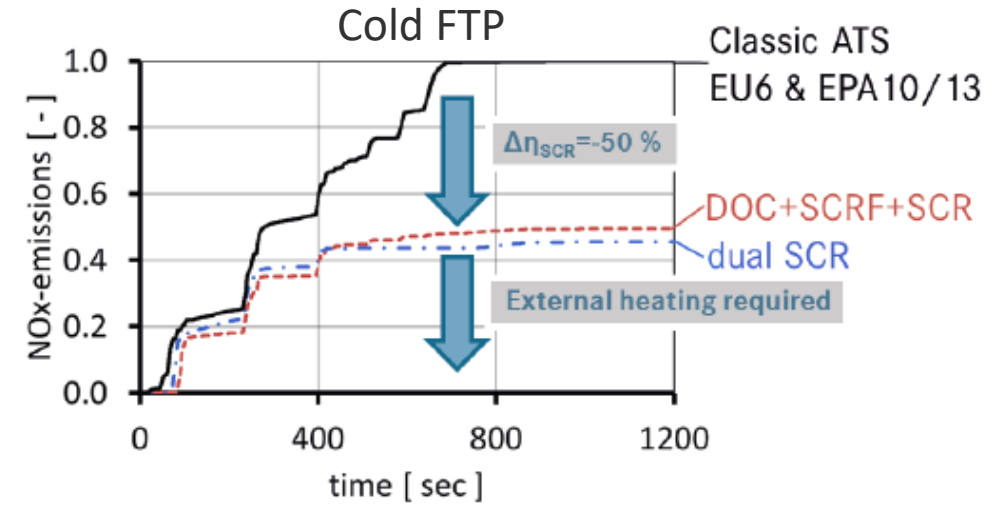
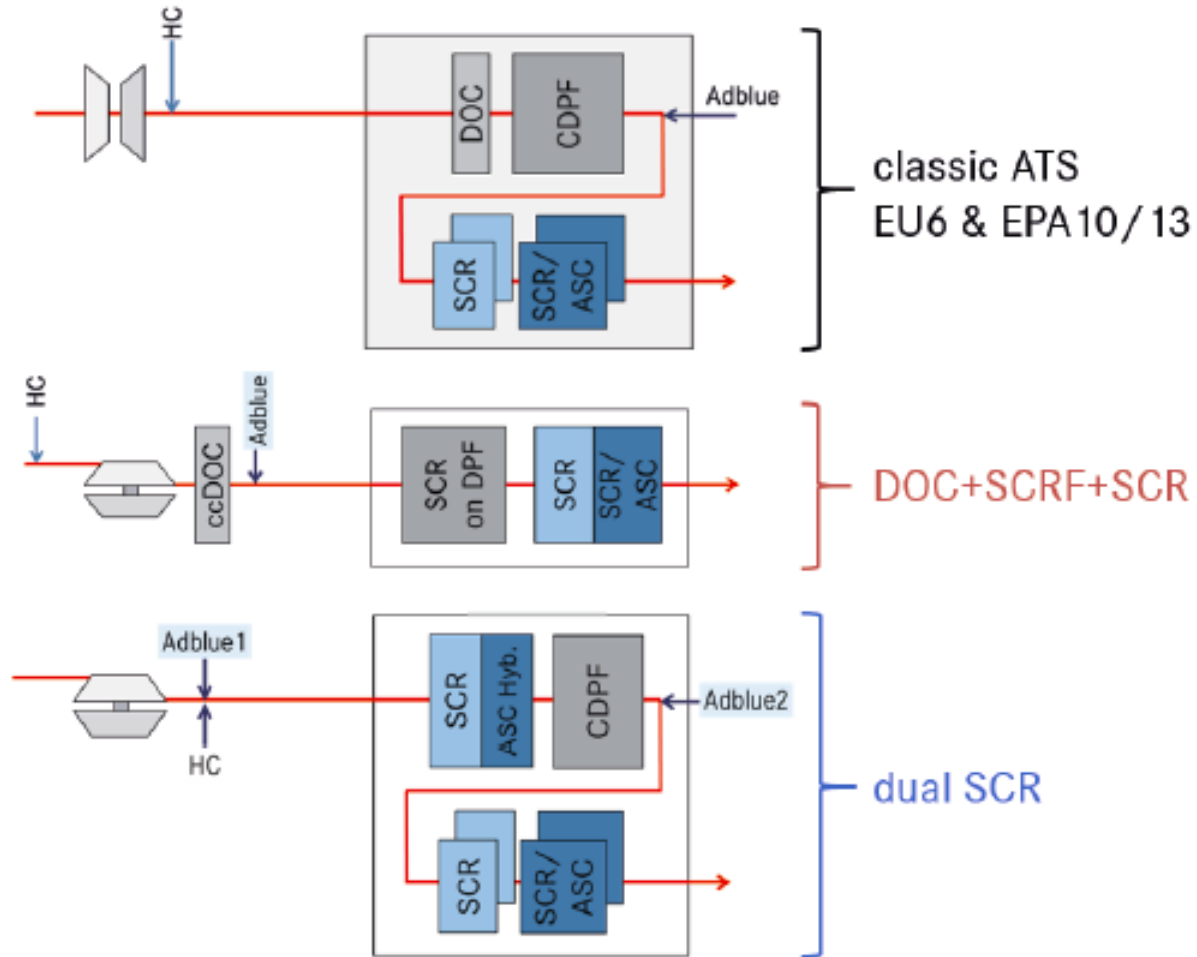
Source: Daimler – Vienna Motorensymposium 2017



Source: Peugeot – 308 press release 2017

Heavy-duty diesel emissions control technology evolution

Further development towards lower NOx



Source: Daimler – 10th International Exhaust Gas and Particulate Emissions Forum February 2018

EC is called upon to investigate a further emission stage

➤ European Parliament

➤ EMIS Recommendation No 73 (April 2017):

“... calls on the Commission to review the emissions limits ... and to come forward ... with proposals ... for new technology neutral Euro 7 emission limits ...”

➤ Resolution on a European Strategy for Low-Emission Mobility (December 2017):

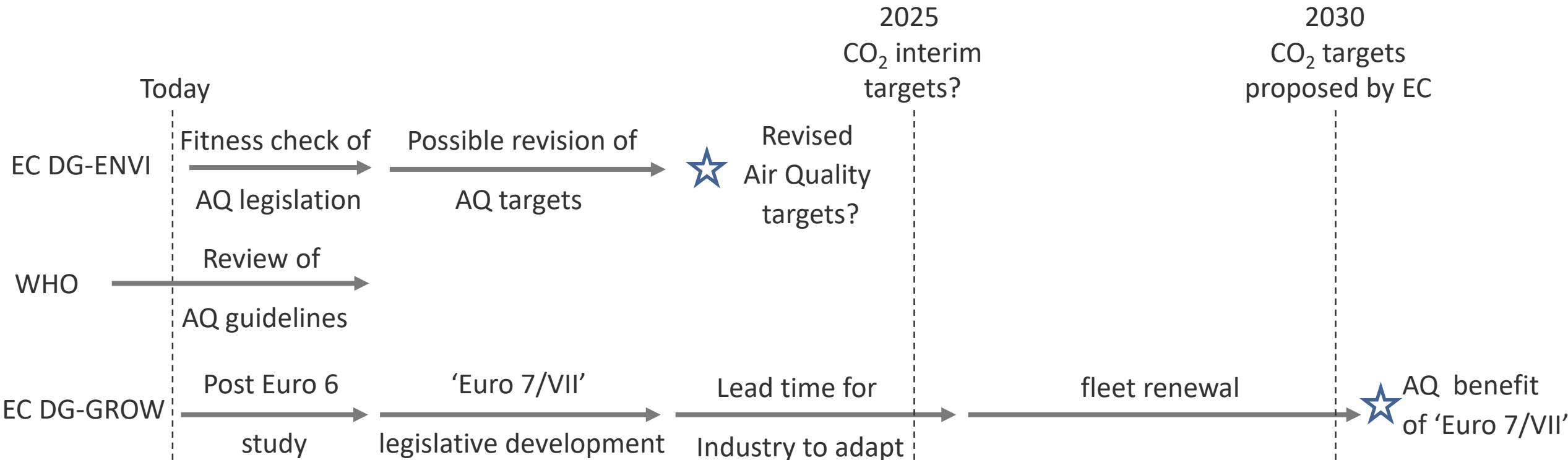
“...calls on the Commission, ... to review the emissions limits ... and to come forward with proposals ... for new technology-neutral Euro 7 emission limits applicable by 2025 ... ”

➤ French “Plan Climat” (July 2017) calls for a Euro 7 standard:

➤ *“... Le Gouvernement prendra l’initiative de proposer au niveau européen une norme Euro 7 ...”*

Investigation of a further emission stage to start now

- Be prepared for outcome of air quality (AQ) reviews
- Lead time for legislator to develop proper emission legislation
- Lead time for industry to further develop and implement emission control technologies
- Lead time to achieve air quality benefit of new emission legislation



'Euro 7/VII' is needed to rebuild trust in Internal Combustion Engine and emission legislation

- Euro 6 (a-b-c-dTemp-d) does not provide a clear definition of a clean vehicle for the public
 - Euro 7 provides an opportunity of a definition of a clean vehicle
- Ensure fuel- and technology-neutrality
 - Eliminate negative diesel image
- Further enhance regulation to ensure real-world compliance
 - Further reduce discrepancy between type-approval and real-world performance
 - Improve transparency of legislation

THANK YOU!

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