FAURECIA NORTH AMERICA

OMB meeting on HD Low NOx/GHG

February 10, 2022

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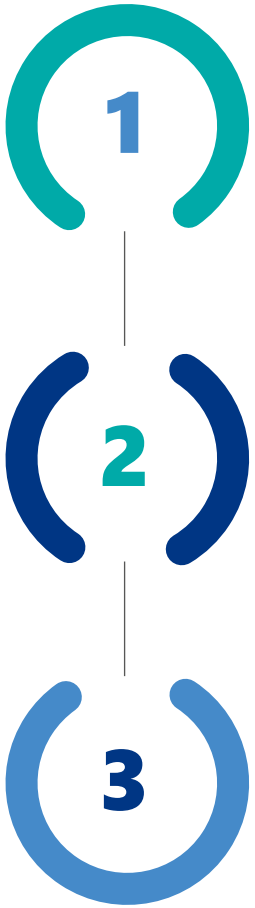
Agenda



1 **Faurecia Overview**

2 **Faurecia Sustainability**

3 **Cost/Benefits on HD Low NOx/GHG**

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1

Faurecia Overview

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A top ten global automotive technology supplier

Sales*
€14.7bn

Plants
266

1 in 3
vehicles **in the world**
equipped by Faurecia

Employees
114,000
of **103 nationalities**
in **35 countries**

R&D centers
39

4 Business Groups
- *Clean Mobility*
- *Seating*
- *Interiors*
- *Clarion Electronics*

A trusted partner
for all **automakers, commercial vehicles** and **industry**

Convictions & Values
for **sustainable development**

*All figures at Dec. 31.2020

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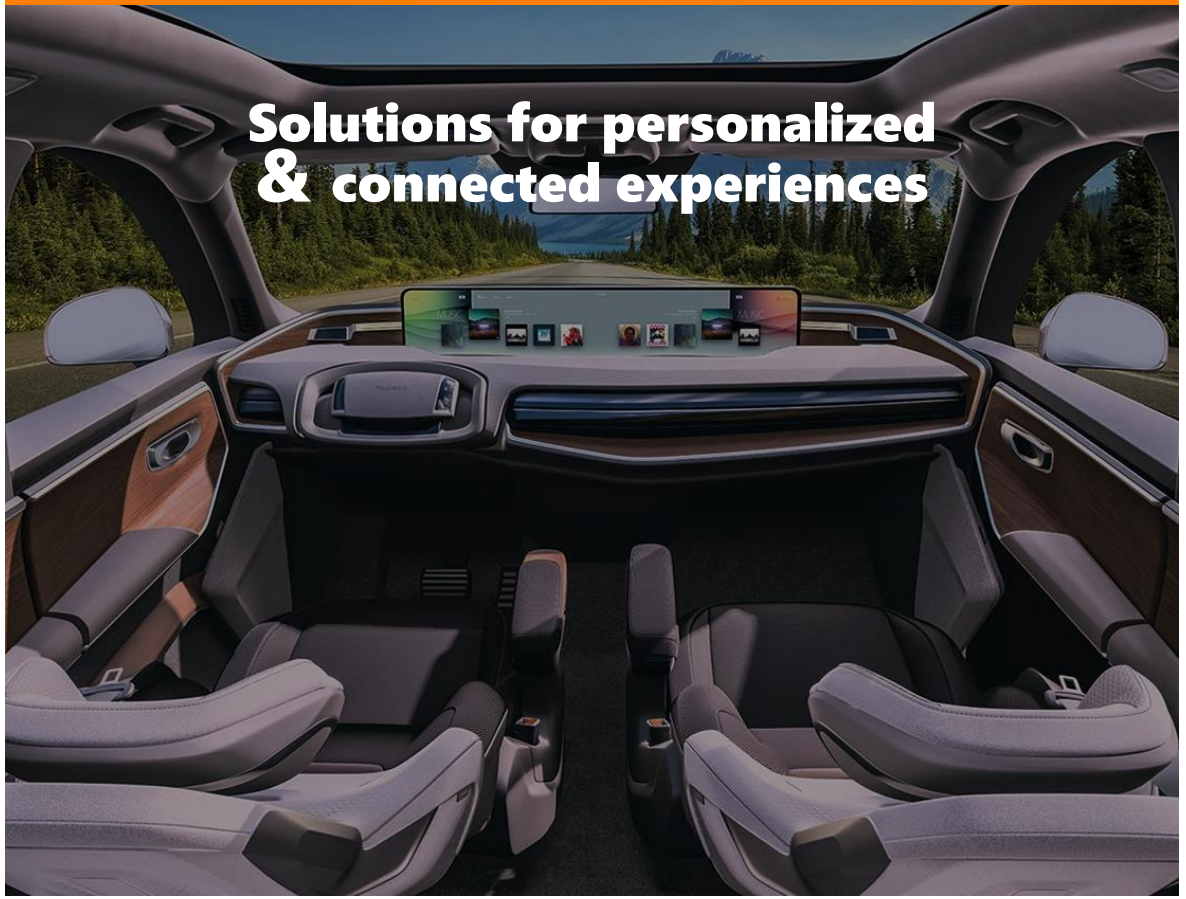
A transformation strategy focused on two fast-growing areas

Sustainable Mobility and Cockpit of the Future

Sustainable Mobility

Cockpit of the Future



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Four Business Groups to drive profitable growth

Clean Mobility

- Ultra-low emissions solutions
- Commercial vehicles and industry
- Zero-emission hydrogen solutions

Employees	Sites	R&D centers
22,260	84	10

Seating

- Advanced seat structure systems
- Complete seats
- Cover and foam solutions

Employees	Sites	R&D centers
42,515	77	13

Interiors*

- Instrument panels
- Door panels
- Center consoles
- Sustainable & smart materials
- Interior modules

Employees	Sites	R&D centers
40,465	97	5

Clarion Electronics

- Cockpit electronics
- Display technologies
- Advanced Driver Assistance Systems

Employees	Sites	R&D centers
5,800	8	5

**including SAS Interiors Modules.*

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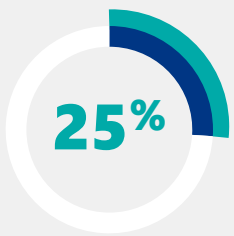
Faurecia North America Overview

Employees
20,000

Sites
50

2020 Sales
$4.4B

Global sales



Top 10 largest suppliers in North America

2020 VALUE ADDED SALES

- **Seating** - $1.2B (29%)
- **Interiors** - $1.3B (31%)
- **Clarion Electronics** - $147M (4%)
- **Clean Mobility** - $1.3B (31%)

Headquarters: Auburn Hills, MI

**All figures at Dec. 31.2020*

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Faurecia Clean Mobility

World Leader in Emissions Reduction

Employees
22,260

Sites
84

R&D centers
10

Group sales

Innovative solutions to drive mobility & industry toward zero emissions

- Ultra-low emissions solutions
- Commercial vehicles and industry
- Zero-emission hydrogen solutions

#1 worldwide

**All figures at Dec. 31.2020*

Faurecia Clean Mobility

Focusing on leadership in 3 product lines

Ultra-Low Emissions for Passenger Vehicles

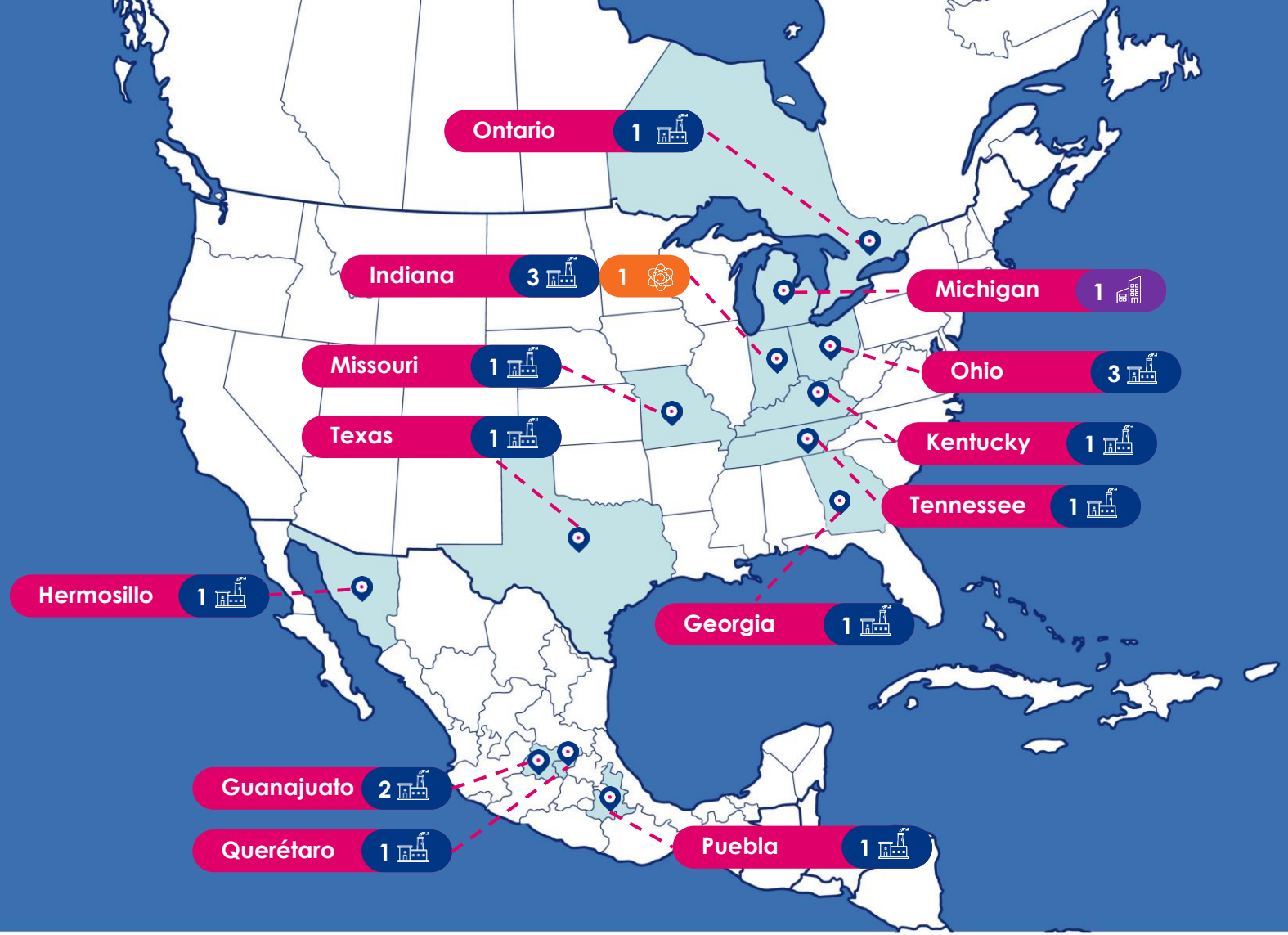
- **Consolidate #1**
  - CO2 reduction
  - Emissions reduction
  - Packaging optimization & Noise reduction

Ultra-Low Emissions for Commercial Vehicles and Industrial

- **Reach #1**
  - Large engine emission reduction
  - Ultra low NOx

Zero Emissions Hydrogen Solutions

- **Become a leader** in:
  - Hydrogen storage systems and distribution services
  - Fuel cell stack systems and services through Symbio, a JV with Michelin



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Faurecia Clean Mobility FCM NAO

Industrial Sites

Research Design & Development Center

Shared Services Center

13 in United States

5 in Mexico

1 in Canada

20 TOTAL SITES

2

Faurecia Sustainability

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Our approach towards CO_2 neutrality

We embarked on 1 journey…

CO_2 neutral

… with 2 key milestones…

- **By 2025** CO_2 neutral in operations
- **By 2030** CO_2 neutral for controlled emissions[1]

… across 3 streams

- Operations
- Eco-design
- Compensation (in value chain)

With a focus on high reputational credibility

TCFD CDP SCIENCE BASED TARGETS

1. excluding use phase emissions

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Inspired to care
our sustainability journey

Care for the planet

Environmental footprint in operations

We aim for CO_2 neutrality in operations by 2025 (scopes 1 & 2) and a better use of natural resources.

Circular economy for products

We want to reach 40% of recycled content in new products by 2025 and reduce their CO_2 footprint by 20%.

Investments for sustainable technologies

We are committed to help the automotive industry move towards zero emissions and plan to invest €1.1bn by 2025 in sustainable technologies, including hydrogen solutions.

We are continuously rethinking our way of developing, procuring, manufacturing, distributing and disposing of products.

- **Advancing CO2 neutrality journey by partnering with industry experts to transition to low and zero carbon energy across our sites**
- **Created a sustainable materials division to develop and manufacture environmentally friendly products across business groups**
- **Partnered with a Swedish steel maker to provide Faurecia with fossil-free produced steels for seat structures**
- **Continued investment and solutions to accelerate zero-emissions mobility, avoiding CO2 emissions, and reducing polluting emissions from all types of vehicles**


Faurecia invests in uMist Technologies Ltd. to reinforce its leadership for commercial vehicles


Faurecia to create cross-Business Group division for sustainable materials


Faurecia commits to net zero science based ta

Faurecia selects Engie to become a long-term partner on its CO2 Neutrality roadmap

Faurecia joins the "We Mean Business" coalit achieve carbon neutrality


Faurecia selects Schneider Electric as its exclusive advisor for offsite renewable electricity purchasing


Faurecia joins Entreprises pour l'Environnement (EpE) French association marking its commitment for the environment


elects KPMG as its advisor for onsite renewable production


Faurecia will develop ultra-low CO2 seat structures partnership with SSAB as its fossil-free steel supplie


ia supports Stellantis for hydrogen powered light ercial vehicles


Faurecia inaugurates its global center of expertise dedicated to hydrogen storage systems

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3

Cost/Benefit on HD Low NOx/GHG

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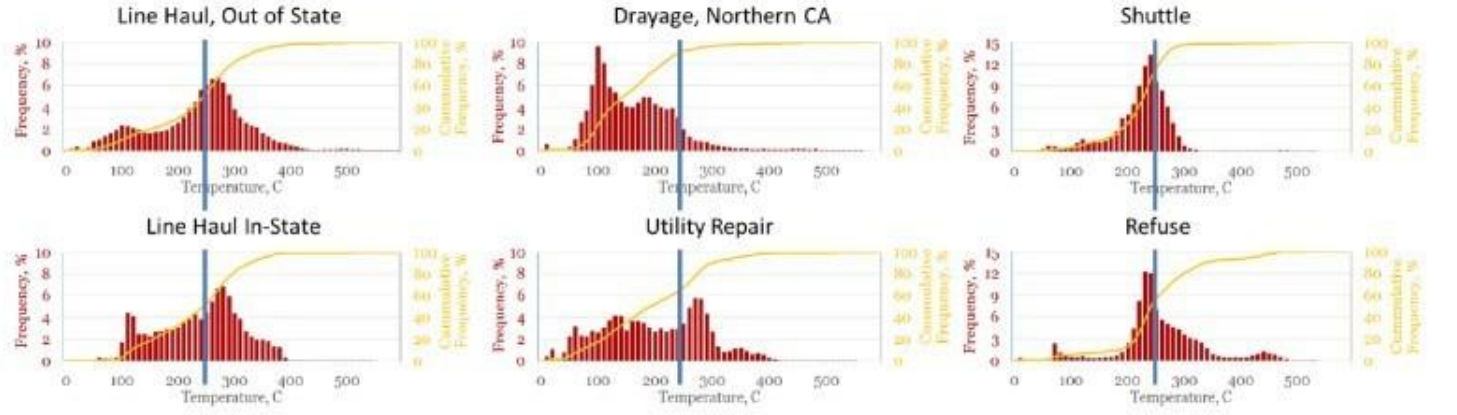
Cold Operation as next focus point

65% of remaining HDV NOx emissions in sub 50mph driving

ARB Vehicle Fleet Exhaust Temperature Data Logging of SCR Equipped Engines



Yoon et al. (2017, TRB presentation #P17-20763);
Final Report https://www.arb.ca.gov/research/apr/past/13-301.pdf

Low temperature SCR operation is relevant for basically all applications.
Focus on low temperature NOx abatement is critical for EATS development.

SAE INTERNATIONAL 5

US 2017 regulation

- Today's In Use tests do not measure emissions
  - Below 30% load
  - Below 250Deg C Exhaust Gas Temp

Significant operation time below 250°C drives consideration of regulation introduction for low load / low temp operation and need for technology solutions

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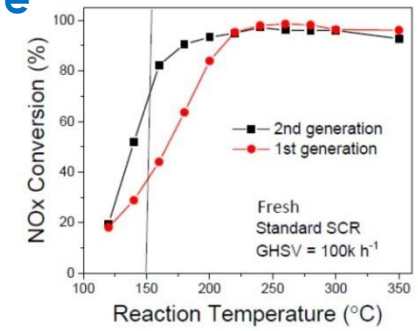
Next Generation EATS

Requirement summary, technology limitations and trends

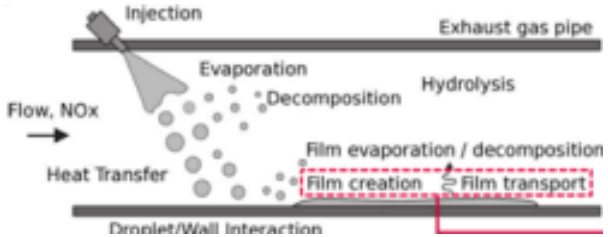
NOx reduction at all Temperature

- Improved efficiency < 200°C
- ~100% conversion at high load
- Durability / Robustness



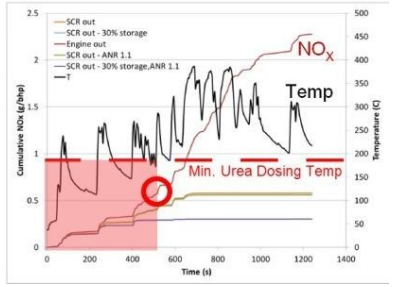
NH3 availability below 200°C

- Provide sufficient NH3 quantity
- Increased DEF conversion rate
- Limit / avoid deposit risks



Fast SCR Warm-up

- NOx reduction at cold start [Regulatory]
- NOx reduction in service [i.e. Urban delivery]



- **New SCR technologies from Coating companies**
- **SCR repositioning**
- **Dual DEF dosing systems**
- **Alternative NH3 source**
- **External Heating**
- **Engine Technologies (recalibration, CDA, EGR cooler bypass……)**

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Faurecia NOx Control Innovations

Building on a long history of CVI technology

DEF Mixers

DEF Mixers
- Gen3 Compact Mixer Technology
- Flex Mixer Technology

Electrically Heated Catalyst

Exhaust Gas Heater
- On demand additional heat
- 6-8kW

Heated Dosing System

Heated Dosing System
- Reduced deposit risk
- Ability to inject at lower Temp

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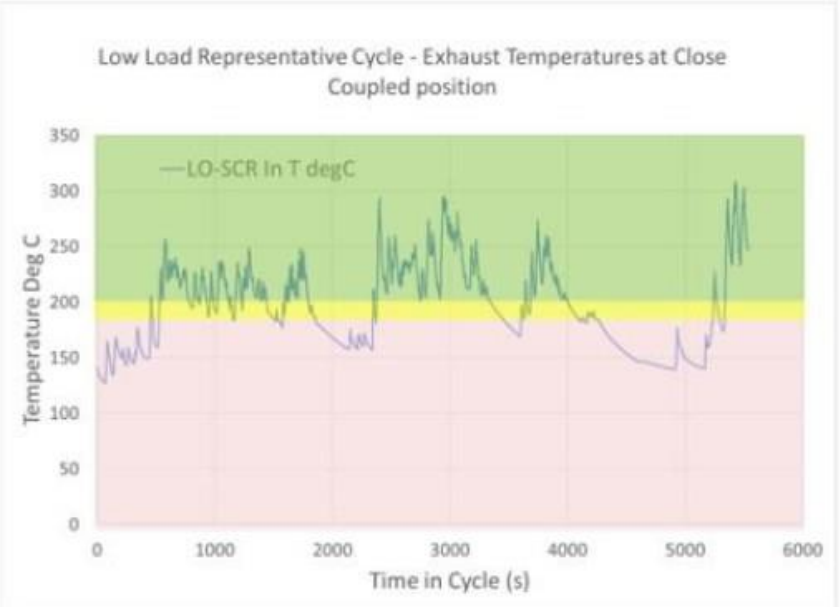
HDS: For safe Low temp dosing

For Low load / Low temperature operation

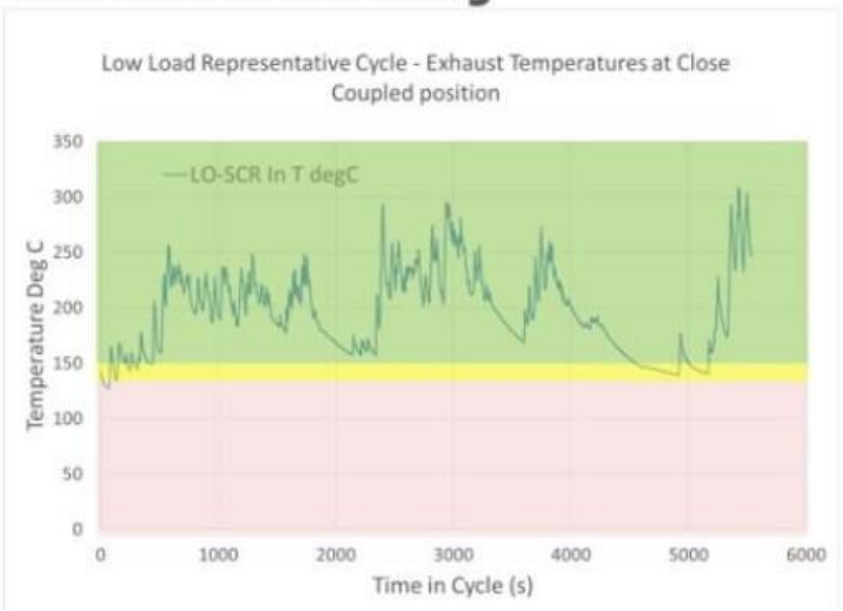
Basics:

- **Enabling DEF injection at Low Exhaust temperature**
  - Uses Flash boiling to improve DEF atomization and DEF temperature immediately
  - Allows for safe dosing in low load operation region
  - With suitable low-temp SCR substrate, allows NO_x conversion faster

Limit of Conventional Dosing



Limit of Heated Dosing



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Faurecia Clean Mobility Technology readiness

- Faurecia has invested $7m in the US in R & D for Diesel NOx Emission solutions as needed to be ready for 2027 stringent NOx reducing emission regulations and are continuing to invest more.
- Faurecia's heated dosing technology demonstrated as effective by South-west Research Institute
- Faurecia technologies ready for production in 2026
- Faurecia is also uniquely positioned to provide hydrogen fuel cell technology solutions as industry transitions to zero emissions solutions

Costs & Benefits

Incremental cost within aftertreatment system scope

- Piece part cost addition to meet 90% NOx reduction estimated to be an additional cost of 15-25% maximum over current aftertreatment cost, or approximately 0.5% of the cost of a new Class 8 Truck

Impact of Emissions reduction benefits

- Benefit of 90% NOx reduction is valued at between $5200 - $7500 according to the NERA report
- The report states “This suggests that a NOx-control technology to achieve the estimated HDOH NOx reductions would need to cost less than about $4,500 per truck to pass a robust benefit-cost test”

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Wrap up

- Faurecia is developing technologies for sustainable mobility, both in zero carbon powertrains and for traditional Diesel combustion engines
- We project that Diesel will be the core of on highway freight movement for many years.
- There are several alternative technology solutions to deliver very significant NOx reductions while the industry transitions to Zero Emissions solutions,

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