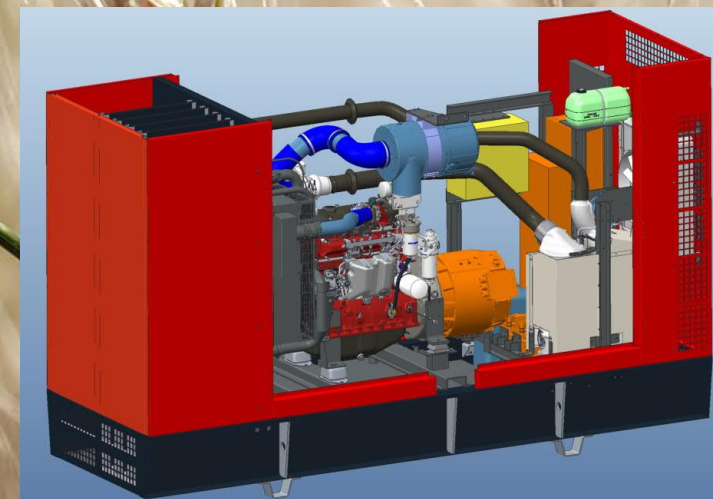




Uudet tutkimusinfrastruktuurit AGCO Power Oy

Pekka Nousiainen
Tutkimuspäällikkö, R&AE

SENECC Energiaekosysteemi seminaari
Tampere, 7.5.2019



A COMPANY WITH A CLEAR VISION



VISION

High-tech solutions
for farmers
feeding the world

MISSION

Profitable growth through
superior customer service,
innovation, quality
and commitment

confidential

GLOBAL PRESENCE



-  Global Corporate Headquarters
-  Regional Corporate Headquarters
-  Manufacturing/Assembly
-  Manufacturing/Assembly (Joint Venture)
-  Parts Distribution
-  Future Farm and Global Learning Centre

confidential

LEADING BRANDS

VALTRA



MASSEY FERGUSON®

FENDT

Challenger



Broad Agricultural Machinery Offering



Technology and Aftermarket Solutions



Other Off-road machines and gensets



AGCO POWER

75 years history in industry



© 2018 - AGCO CONFIDENTIAL



GLOBAL FOOTPRINT

AGCO POWER SITES



confidential
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LINNAVUORI FACTORY

ENGINE ASSEMBLY
2013



NEW FACTORY
2019 – 2021



GEAR WHEEL
PRODUCTION



ENGINE ASSEMBLY
AND MACHINING



OFFICES & MACHINING



RESEARCH &
DEVELOPMENT



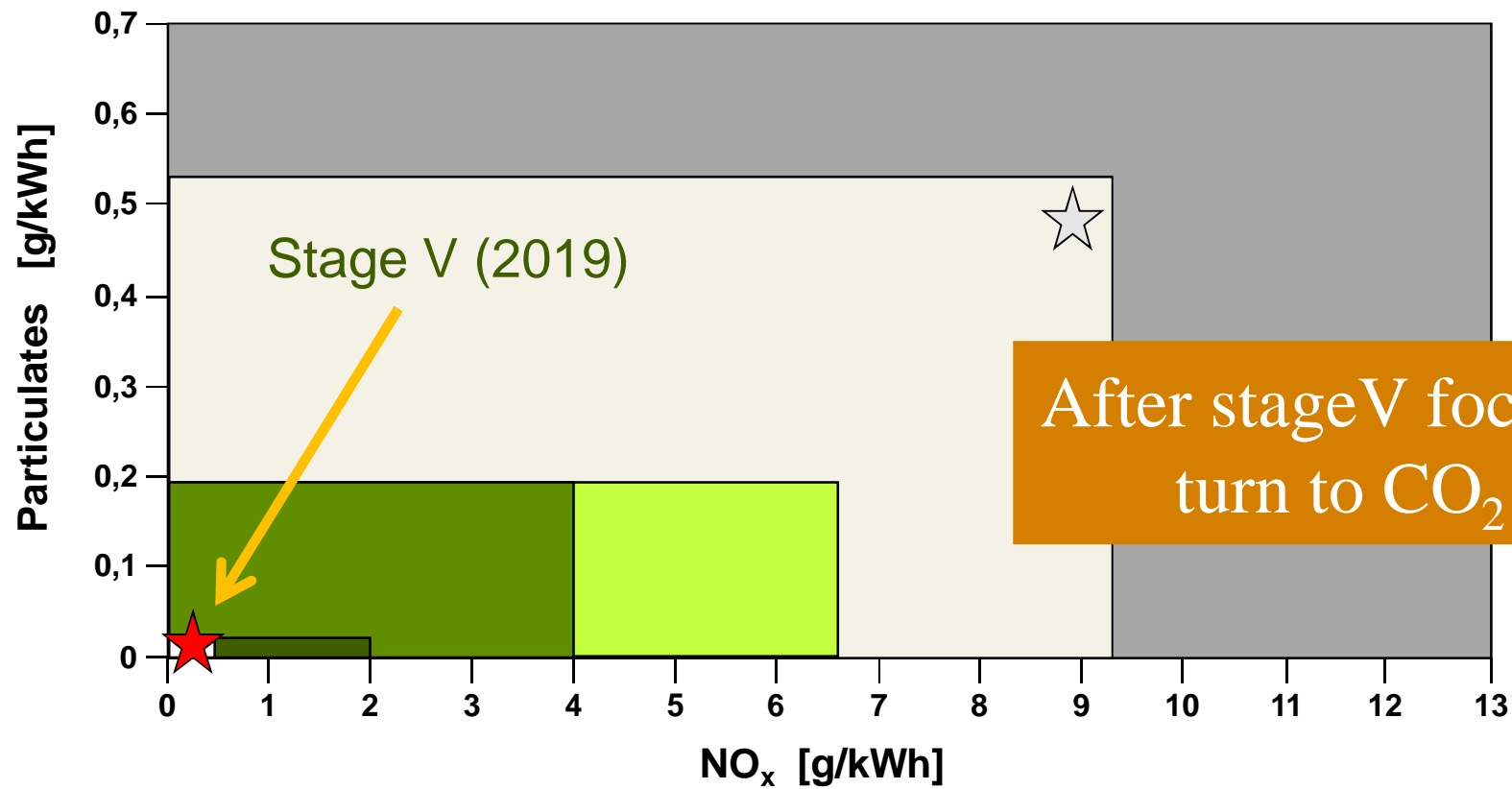
StreamLINE^e

Linnavuori

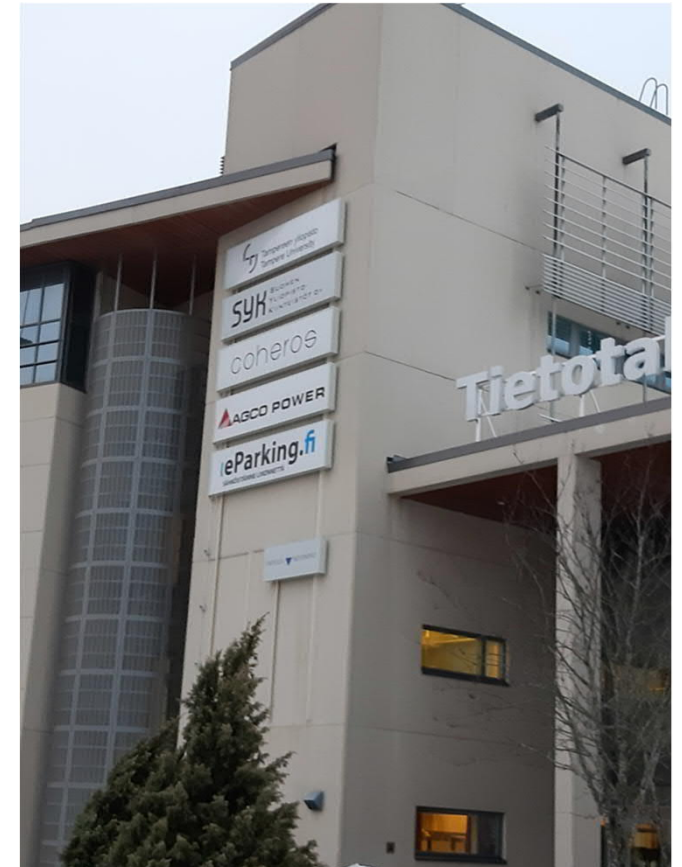


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AGCO POWER EXHAUST EMISSIONS LEGISLATION



Research & Advanced Engineering office @ Tietotalo



AGCO Power research field for the future

ELECTRICITY



- Mild Hybrids (48V)
- Full Hybrids (700V+)

HYDROGEN



- Fuel Cells

BIOMETHANE



- SI gas engine
- Dual Fuel engine

SYNFUEL



- 10 – 100 % blend in all diesels

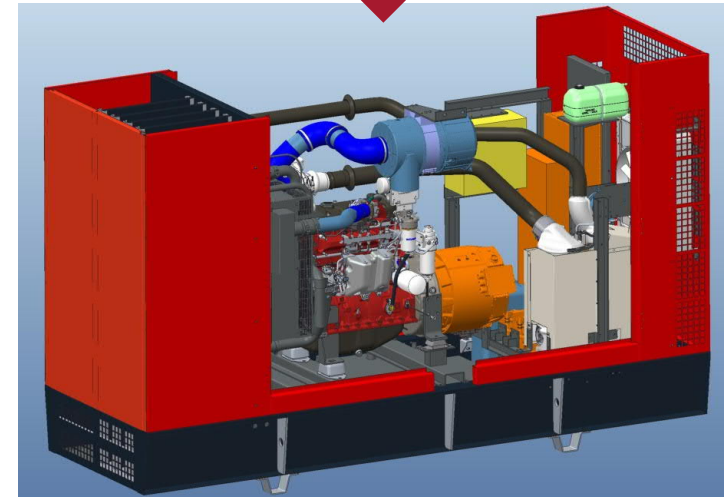
700V+ Research unit @ Sähkötalo grid

Scope:


- Test unit for a future hybrid platforms
- Engine - Permanent Magnet machine - Inverter
- StageV aftertreatment, Renewable fuel from Neste/UPM
- Finnish made package
- Connection to Sähkötalo grid

Possibilities:

- Simulate & Run of different hybrid system operation modes
- Practise of micro grid activities
- Research projects (Aerosol Physics, Power Electronics, etc.)
- Projects for students

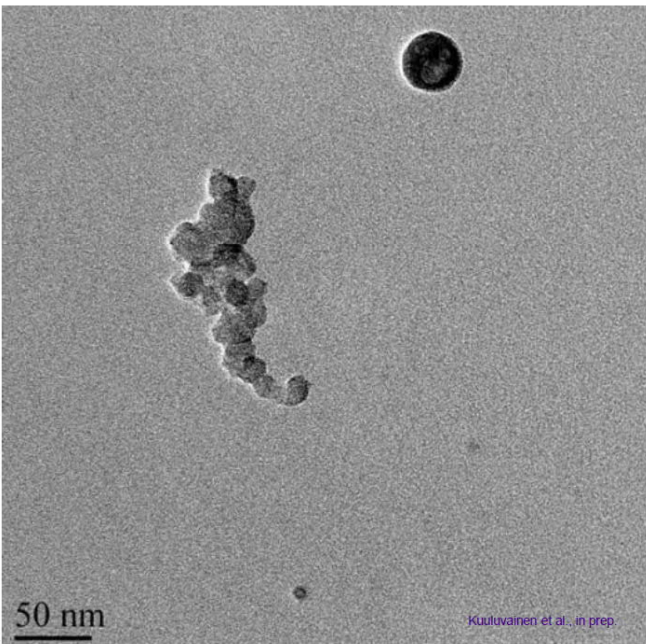


Case example : Aerosol Physics

 Tampere University

Case example : Aerosol Physics Laboratory - How to optimize engines so that the harmful effects of emissions on climate and air quality are minimized?

Primary particles from diesel engine exhaust

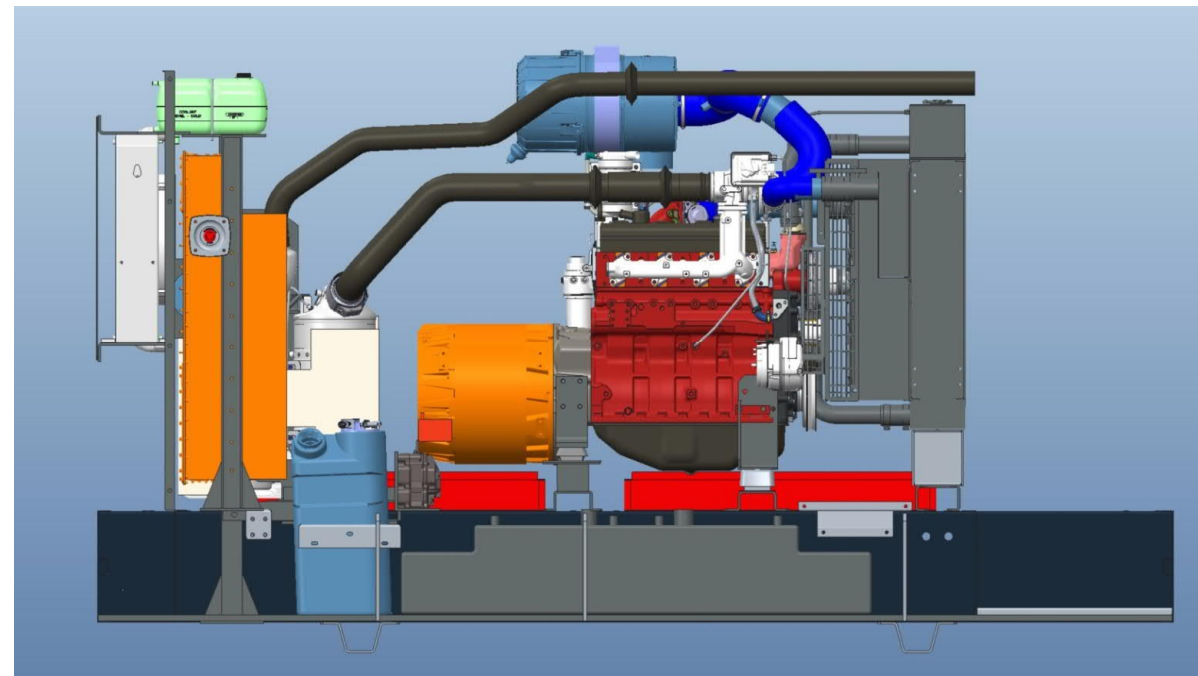


50 nm

Kuultavainen et al., in prep.

700V+ Research unit @ Sähkötalo grid

- 2929 x 1150 x 1960 (L x W x H)
- ~ 2000 kg weight
- Weather cover
- 4 cyl. engine power up to 150 kW
- AGCO power is responsible for maintenance



Thank You.

Questions are Welcome.

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