



OPERATIONAL REALITY

INSIGHTS FROM SCANIA'S ELECTRIFICATION PROJECTS

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Scania Pilot Partner



Scania's commitment

- Scania's purpose is to drive the shift towards a sustainable transport system, creating a world of mobility that is better for business, society and the environment.
- We reach our vehicle target with a mix
 - Lower fuel consumption
 - Sustainable fuels
 - Electrification

TOWARDS ZERO EMISSIONS

Target 2025

Scope

- 1** Direct emissions from owned or controlled sources
- 2** Indirect emissions from the generation of purchased energy, heat and steam

Target

50%

CO₂e reduction from own operations in 2025 (tonnes CO₂e compared to 2015)

Outcome 2025

-53.7%

Scope

3

Indirect emissions that occur in the value chain both upstream and downstream

Target

20%

Use-phase CO₂e/km reduction from vehicles produced 2025 compared to vehicles produced 2015

Outcome 2024

-11.1%

Target 2032

Scope

- 1** Direct emissions from owned or controlled sources
- 2** Indirect emissions from the generation of purchased energy, heat and steam

Target

50%

CO₂e reductions from own operations in 2032 compared to 2022

Scope

3

Indirect emissions that occur in the value chain both upstream and downstream

Target




45%

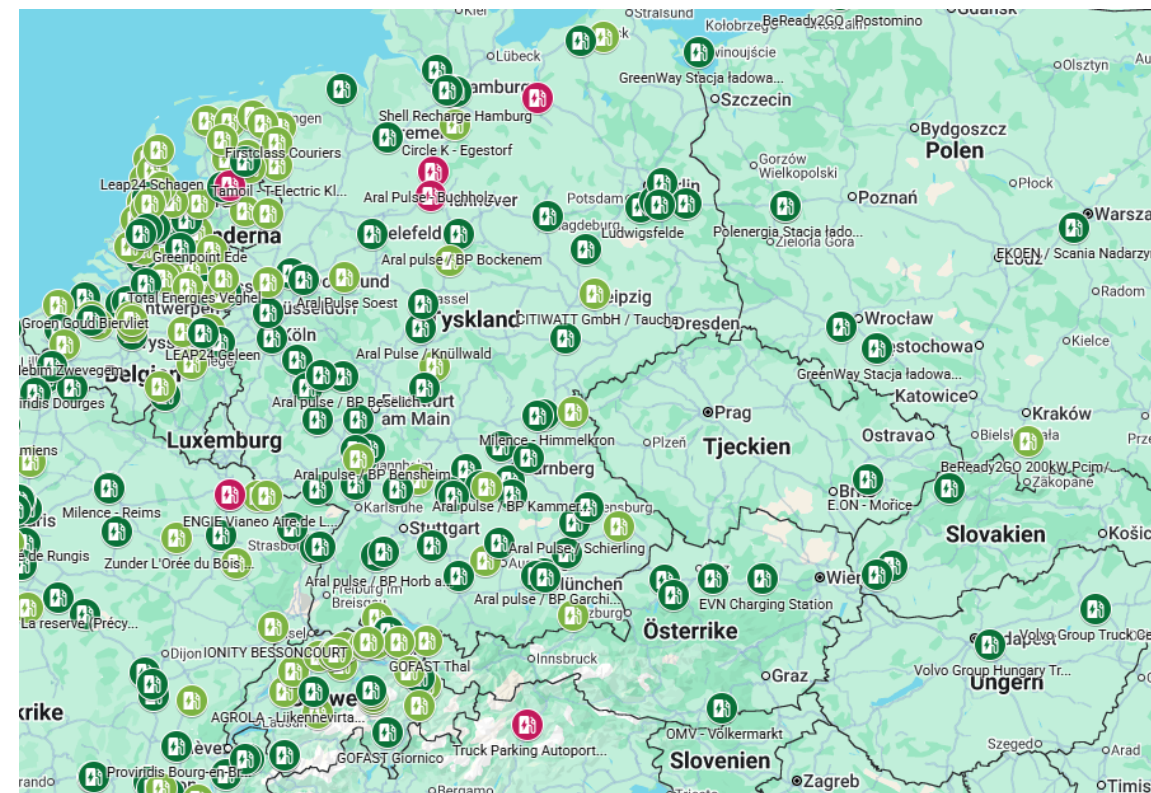
Use-phase CO₂e/km reduction from our vehicles produced 2032 compared to vehicles produced 2022



Infrastructure is developing fast

- MCS 750kW is introduced during 2026
- Most of western Europe now have chargers

-  Built for trucks - MCS
-  Built for trucks
-  Viable for trucks



<https://www.renault-trucks.com/en/trucks-charging-stations>



Vehicle performance increases rapidly

Battery capacity options

240, 320, 400*, 480 or 560* kWh usable capacity.

*(*400 and 560 kWh options will be available for order during the beginning of 2026)*

Maximum possible range (560 kWh) – up to:

560 km at 29 t GTW

515 km at 42 t GTW

360 km at 64 t GTW

Charging

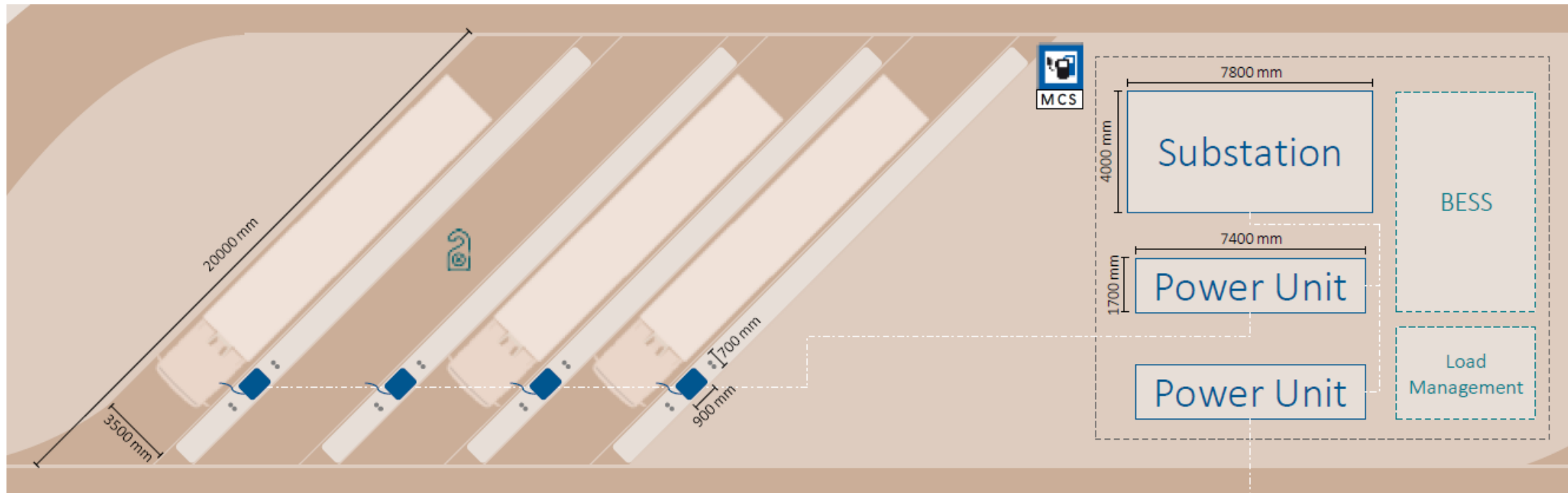
CCS2 375 kW/500 A DC, fully charged in 90 min at 375 kW (at 560 kWh usable capacity). MCS (Megawatt Charging System) at 750 kW will be available for vehicle orders in the beginning of 2026.





Scaling – high volume scenario

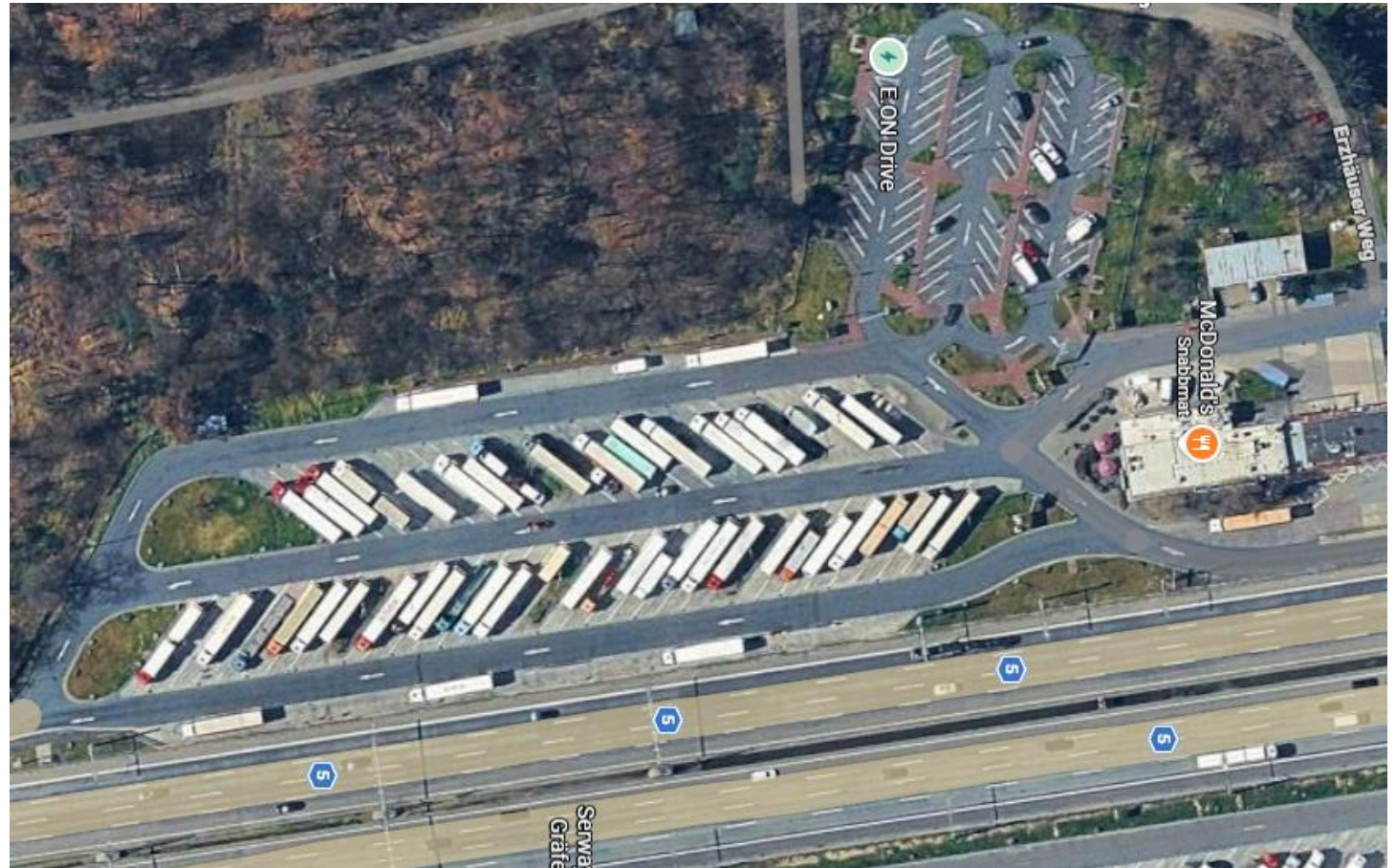
- Space for parking
 - Dispenser and substation requires space
 - German parking along Autobahn are overbooked with 30% each night
 - It is difficult to find extra space for chargers





Grid connection

- Typically, 50 vehicles are parked at a given time on a large parking spot along the German autobahn
- Each vehicle needs 750kW charging to enable full charging during the mandatory 45 minutes rest time
- Grid connection: 37MW
- Equal requirement at opposite direction
- A BESS solution might reduce the need but we still need at least 2x25MW
- A Swedish town of about 40.000 inhabitants have similar power requirement
- Today it is difficult to get even 2MW grid connection in Germany





Charge while you drive

- With an ERS system
 - Vehicle is supplied continuously for
 - Propulsion
 - Battery charging
 - You do not need a charger when you park
 - Battery is fully charged when you leave the road
 - Vehicle battery can be smaller
 - Only needed when driving to and from ERS road
 - Grid connection is spread out
 - Target: 2MW each 2km at full deployment
 - Supply is spread out over the day





Swedish pilot

- Operation during 2016-2019
- 2km ERS road one direction
- Two vehicles
- Daily drive
- 3500 visitors
- ERS vehicle
 - Generation 1





German demonstrator

- Operation during 2019-2024
- 3 ERS roads
 - 2x5km Lübeck
 - 5km + 12km Frankfurt
 - 2x3km Baden Württemberg
- 22 vehicles, Generation 2 and 3
- Daily drive, about 10 operators
- 3.5 million km driven





Conclusion

- The technology works
- Scania has the solutions
- No European country has decided to invest in infrastructure
 - Bottlenecks with grid and space still not very visible
- Scania continues to invest in sustainable technology. We are always customer driven and follow the development regarding ERS





SCANIA