

The Swedish Transport administration

Electrification of road transports

EV100 Seminar 2022

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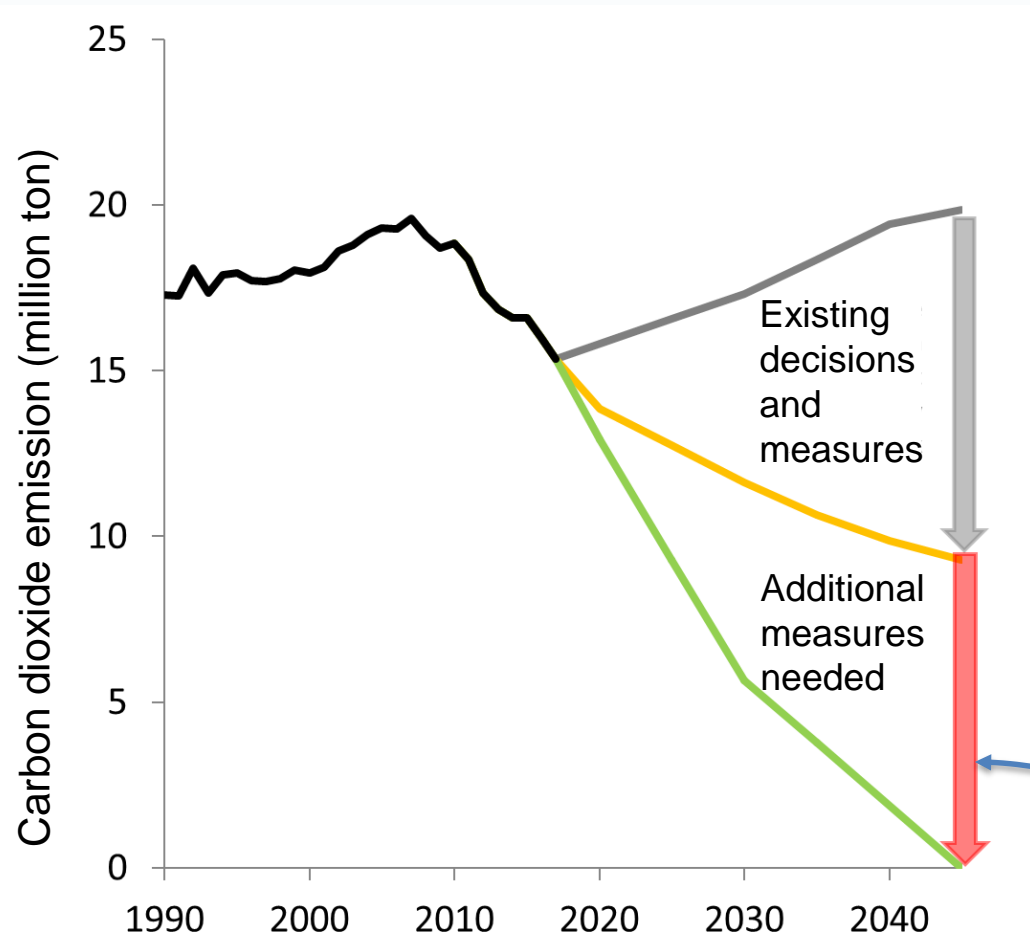
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Why Electrification?

- 25% off the CO₂-emissions from the road transportsystem comes from freight transports
- Add also emissions from construction and maintenance vehicles
- We therefore need to free the transport sector from the use of fossile fuels
- Electrification is a solution for tomorrows fossile-free transportsystem





- Traffic development
- History
- Forecast based on existing decisions
- Climate goal
70% reduction to 2030 and no net emissions 2045

Reduction of
greenhouse
gases

Roadtransports will continue to dominate!

Probably need of different solutions:

- Increased efficiency in the transportsystem
- Biofuels
- Static charging – Battery Electric Vehicles
- Dynamic charging - Electric roads
- Hydrogen/Fuelcells
- Battery swapping



Demonstrating technologies on public roads is important!

Create knowledge
and acceptance!

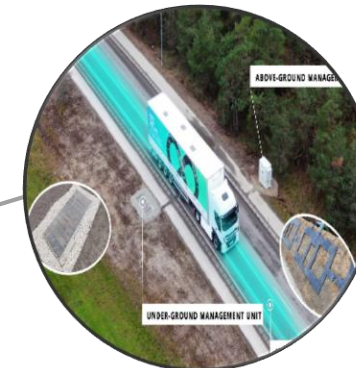
Battery Swapping?

Siemens
Sandviken
2016-2020



Evias
Arlanda/Stockholm
2017-2021

EVolutionroad
Lund
2020-2024



Smartroad Gotland
Visby
2020-2024

Summary

- Lack of infrastructure for stationary charging is an obstacle for electrification of heavy transports and that infrastructure should be deployed now
- ERS is a solution for electrification of long distance transports.
- Hydrogen for transport cluster around industries that produce H₂ or more?
- Battery swapping?
- During the upcoming years get more knowledge to remove uncertainties how road transports can be electrified including standardisations and regulations



Thank you for your attention!



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