



SINGAPORE 2019

26th ITS World Congress
21-25 October



Smart Mobility, Empowering Cities

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2019

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Electric Road System, Feedback of the past trials and expected benefits and deployments

Transforming Freight Movements through ITS – Part I (SIS25)

Rein Jüriado

Swedish Transport Administration

Electric Road System, ERS

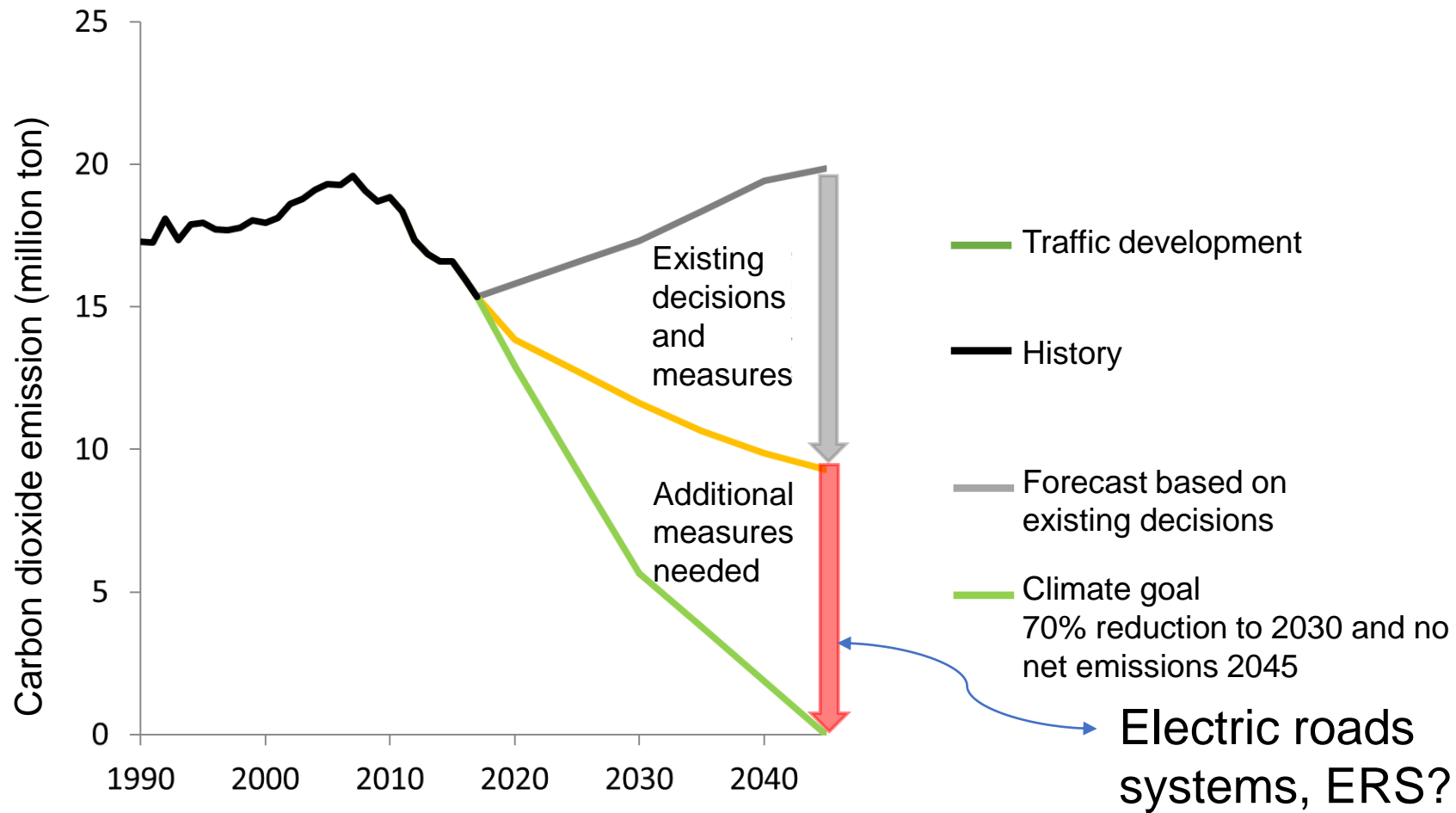
“Road supplemented with an electrical installation intended for the transmission of electrical energy to vehicles during travel”

Also known as

- Dynamic transfer
- In motion charging



Why Electric Road Systems?

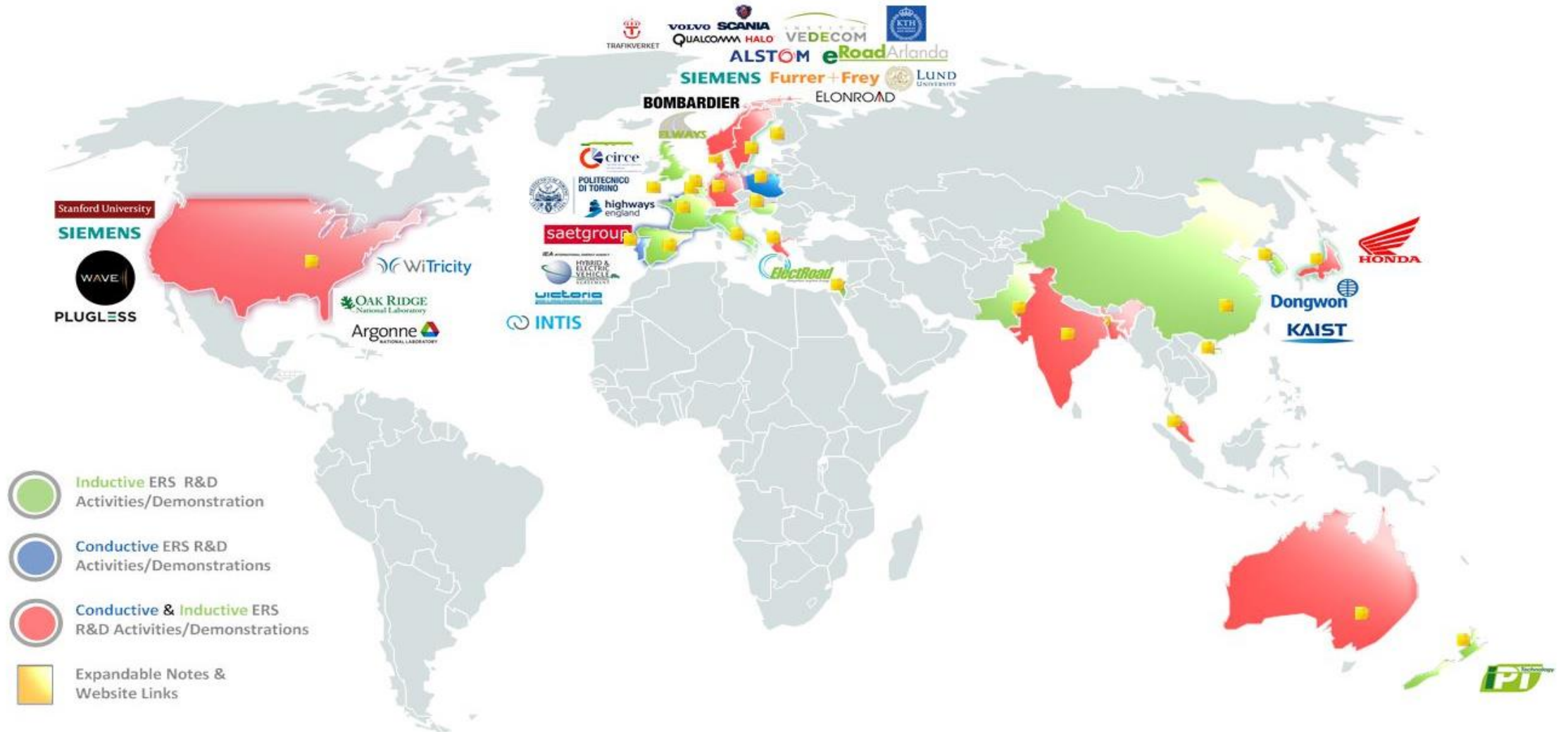


Reduction of greenhouse gases

Additional benefits

- Air Quality
- Energy Efficiency
- Enable new technology
- Energy diversity
- Energy Security

Global interest

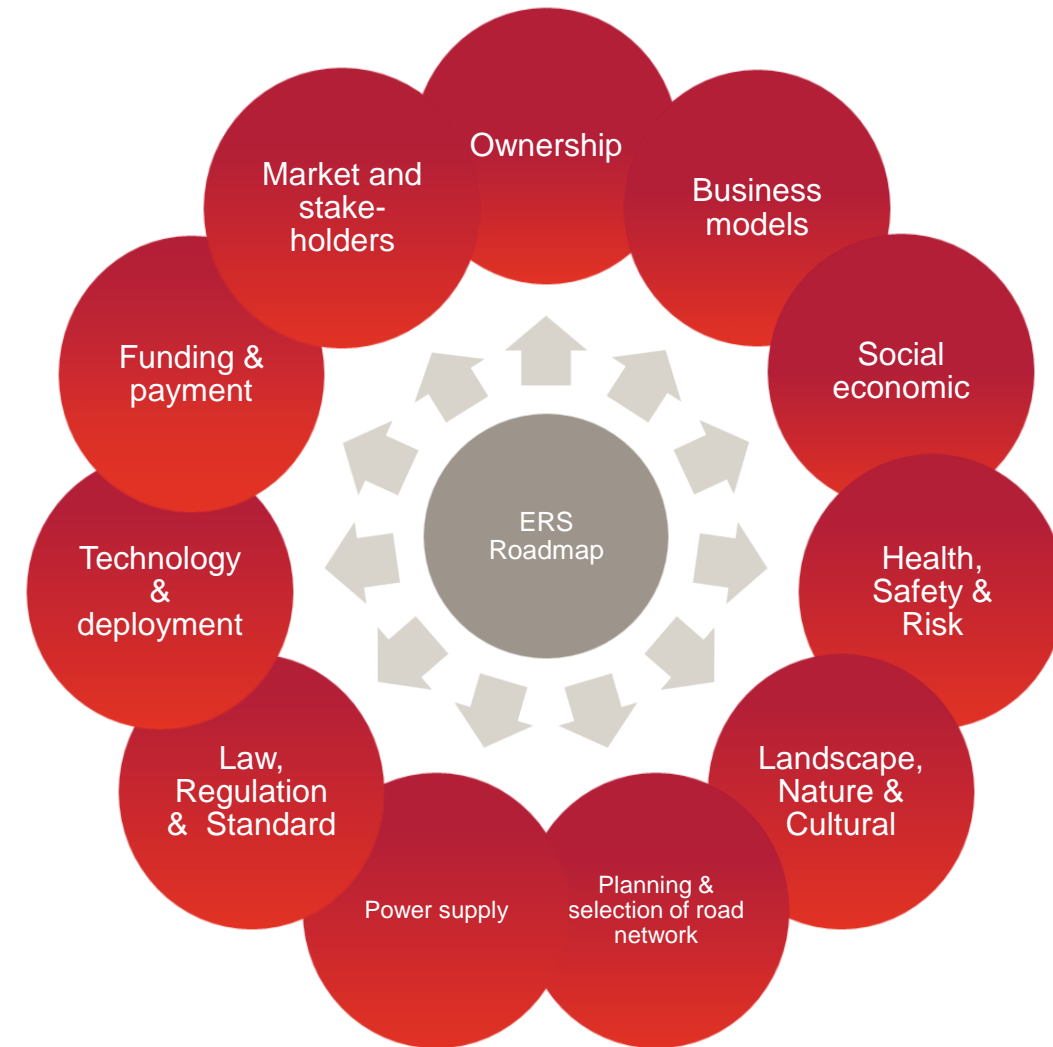
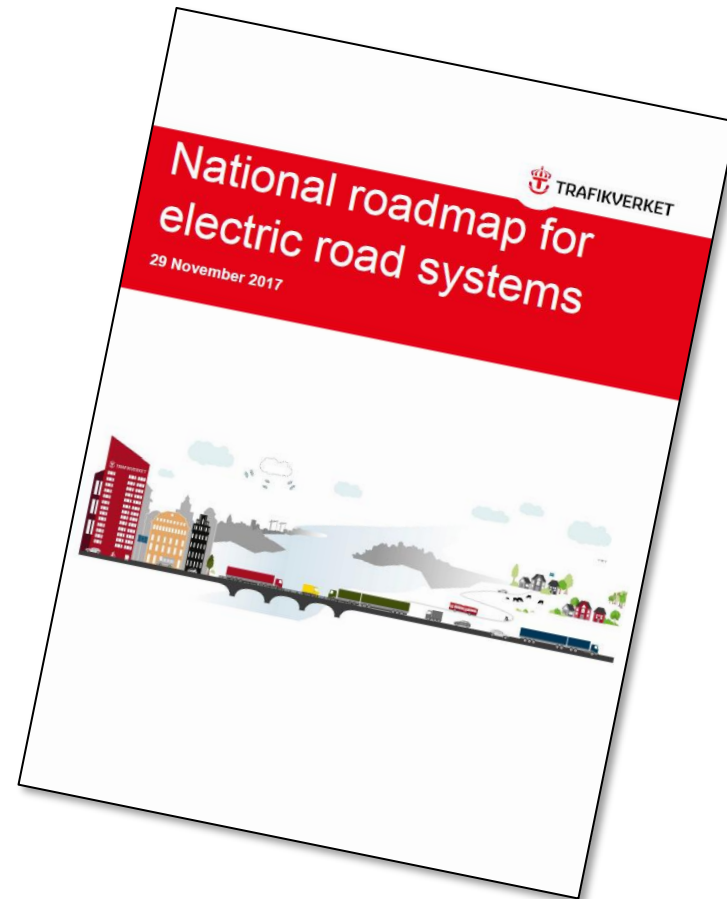


Source: Piarc 2017

Governmental assignment “Electric roads”

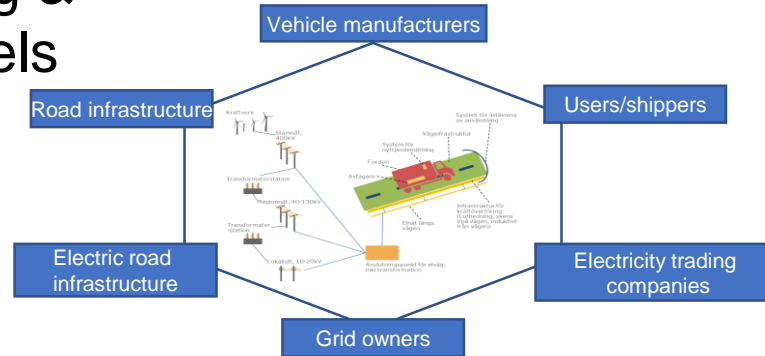
Three parts

- The basis for electric roads to be part of the state owned road network
 - Roadmap
 - Deployment
- Swedish-German cooperation on e-mobility



Roadmap in brief

1. Market, funding & Business models

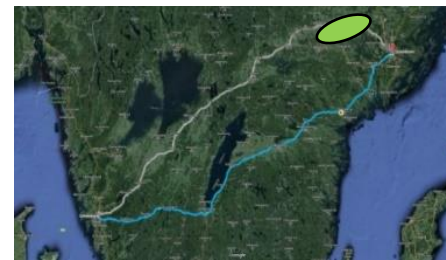


2. Promote ERS technologies



TRL 5-6
2018

3. Implement a major ERS pilot



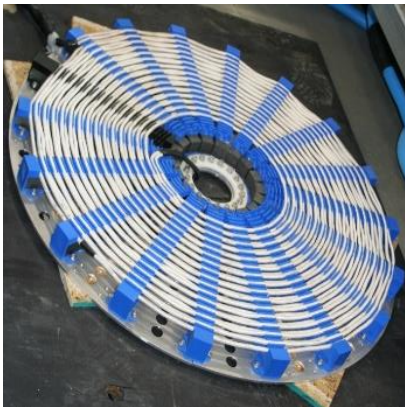
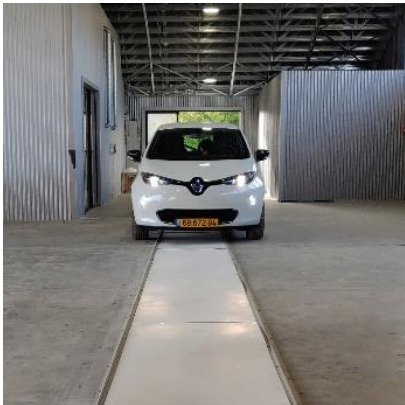
TRL 8
2021

4. Long term plan for deployment of ERS



TRL 8-9
2022 and beyond

Different perspectives and needs of technology

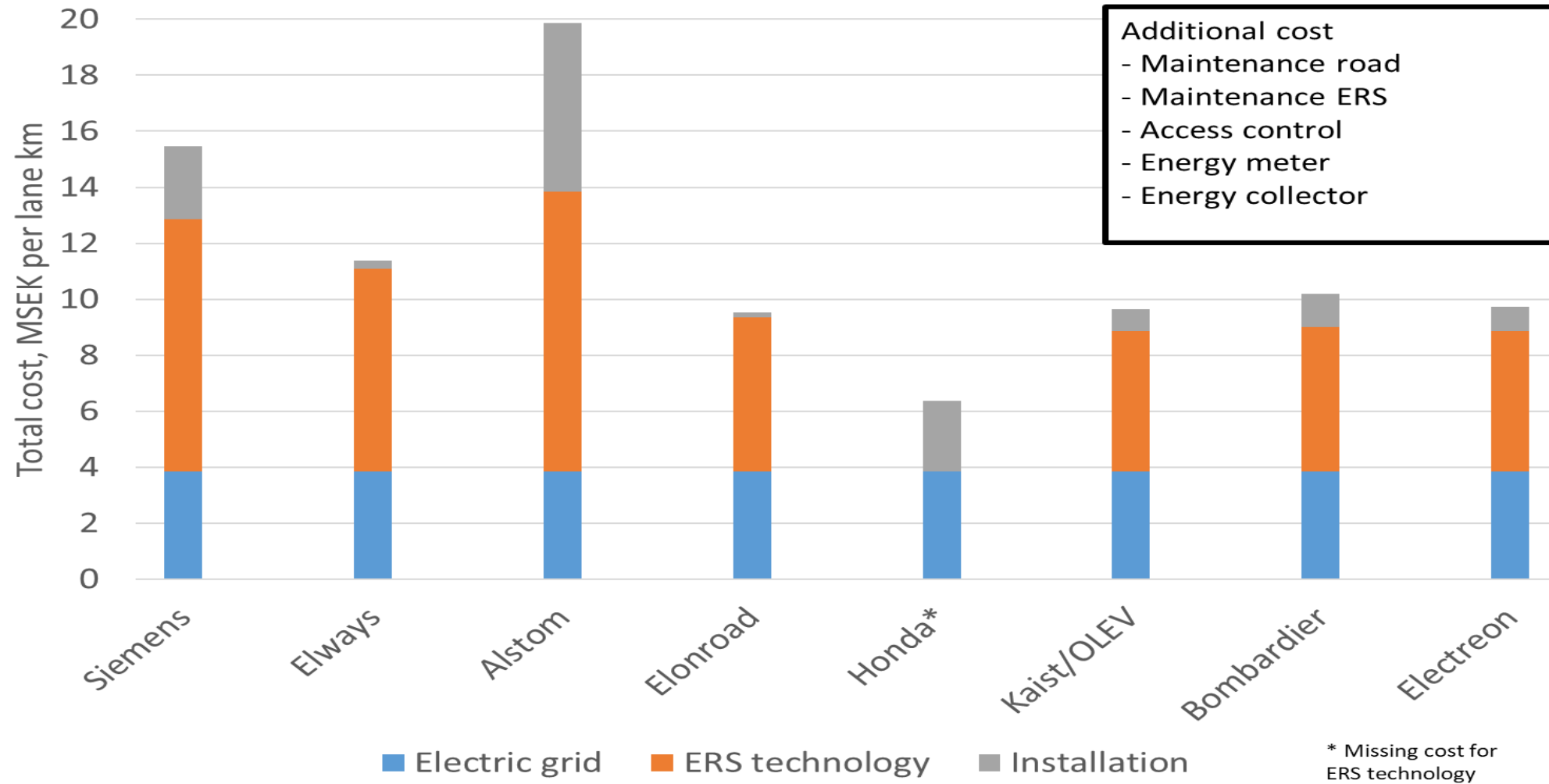


In road
Inductive

On/beside road
Conductive

Above road

ERS costs: 2019-08-21



Thanks & Welcome to The 4th ERS world Conference in Sweden 12-13th of May 2020!

Head of programme ERS; Jan.pettersson@trafikverket.se

National Roadmap for ERS;

https://www.trafikverket.se/contentassets/4c00abedf6794077a1e2a443cde60349/national_roadmap_for_electric_road_systems_20171129_eng.pdf

Electric road conference; electricroads.org



The background features a gradient from dark red at the top to light orange at the bottom. Three stylized trees are depicted, each with a thick, light-colored trunk and a canopy of thin, white, interconnected lines that resemble a network or a complex web. The trees are positioned on the left, center, and right sides of the frame.

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