Electric Infrastructure for Goods Transport

- Concept analysis

Why ELinGO?

- *Norwegian road freight transport expected to increase with 95% towards 2050*
- *All means of transport need to become climate friendly*
- *Batteries for long road freight – expensive, spacious and heavy*

ELinGO - electric roads

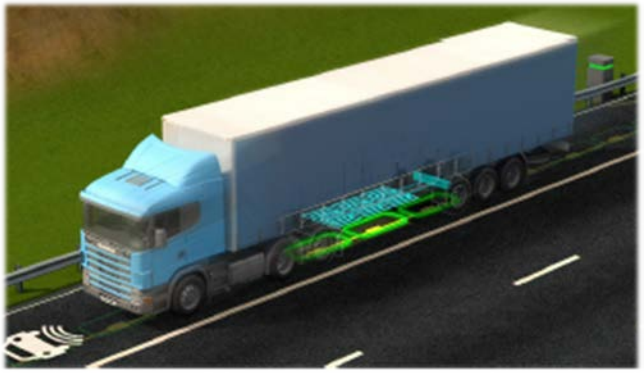
- Technology
- Climate efficiency
- Economy
- Road map for large scale realisation

  = foundation for a demonstration

Foto: SVV/Knut Opeide

Technology

Inductive charging



Utah - USA

Test track

Rail charging

Arlanda - Sverige

2 km – from airport to logistics centre

Pantograph charging

Los Angeles - USA

3 km in harbour area

Tyskland

5+5+7 km of Autobahn

(planned)

Sandviken - Sverige

2 km of European road 16

Climate effect balance

≈10 years to get into plus

(preliminary estimate)

Economy – building

- 340 mill. per kilometer
- 340 mrd. in total

10 – 15 million NOK per kilometer for catenary lines

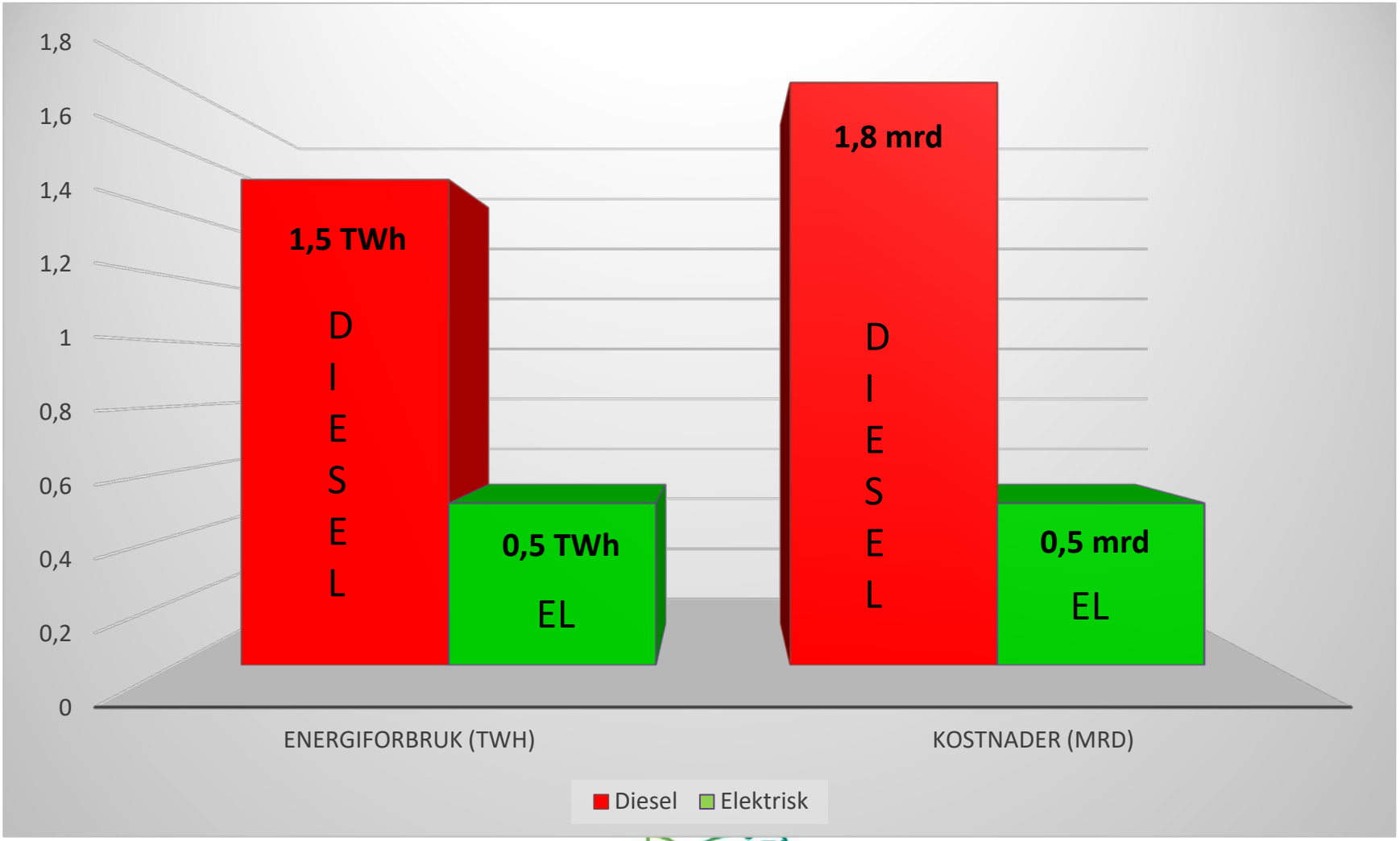
X

1000 kilometres

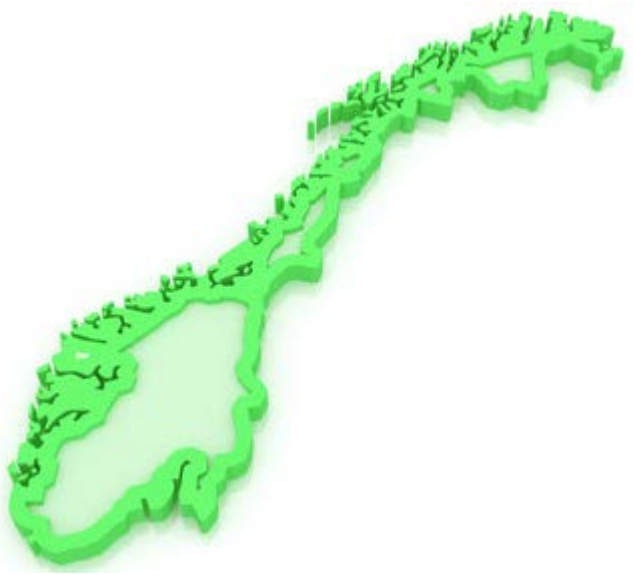
= 10 – 15 bill.NOK

(preliminary estimate)

Economy – «fuel» heavy vehicles E39



Electrifying 5% of Norwegian Roads cuts almost half of emissions from heavy freight



Taljegård et al.(2017): Electric road systems in Norway and Sweden

More information

- *Conference in Oslo 12.juni 2018*

www.elingo.no

Thank you for your attention

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