

Enova's support to charging infrastructure in Norway

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Overview

- Short introduction to Enova
- Enovas strategy for charging stations for electrical vehicles
- The support program for charging stations
- Points for discussion



Five areas of engagement:

Buildings



Industry



Transport



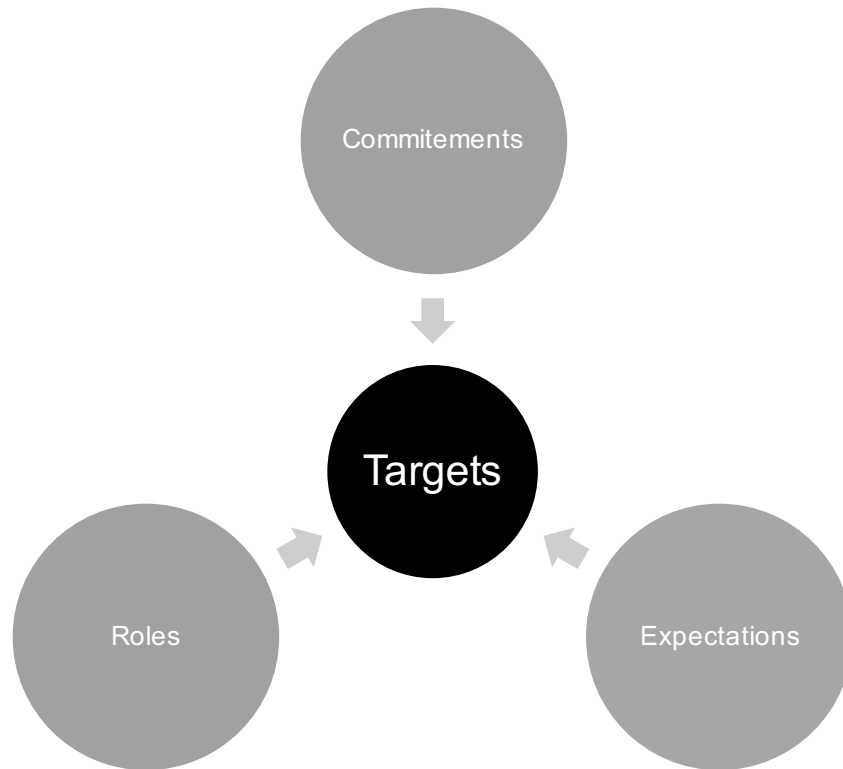
Renewable heating



New technology



Main targets for the 2011 – 2016 agreement period

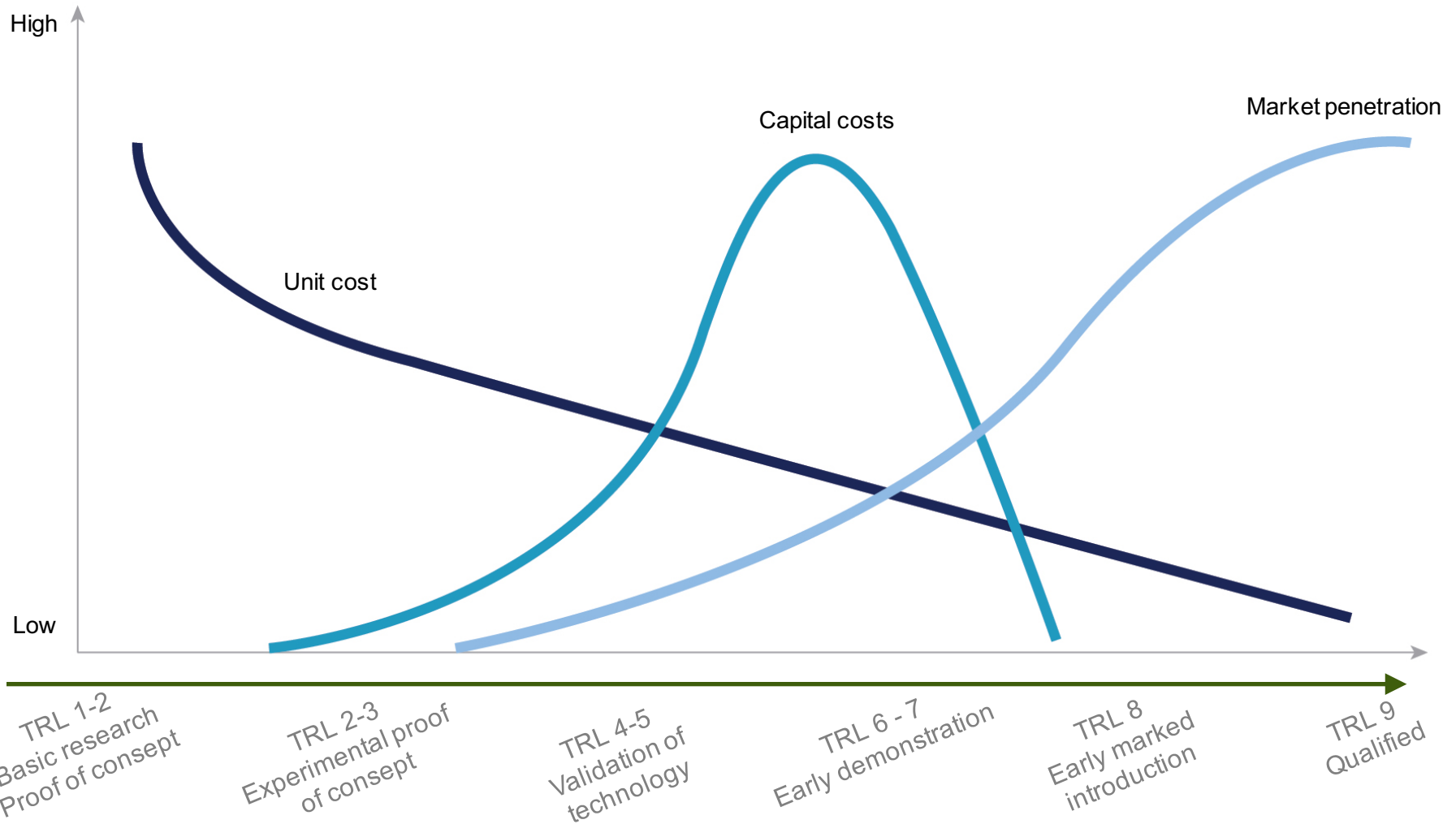


Incentivise projects contributing towards 7 TWh reduced energy use and increased use of renewable energy

Take a position within developing energy- and climate technologies

Contribute towards changing the market for energy- and climate solutions

Decreasing costs and increasing market penetration



New or modified support programs



Energy management



Energy measures in transport



Energy measures in ships



New energy and climate technologies in transportation



Infrastructure for alternative fuels (charging and shore electricity)



Production of biofuels

Battery electric transport:

Context:

- Strong policy measures are in place to stimulate increased purchase and use of zero emission vehicles in Norway, but important barriers still exist.

Our objective:

- Addressing typical early market barriers: High cost, low capacity utilization, limited scale, immature business models, lock in effects...
- To contribute towards sustainable market developments for vehicles and infrastructure by stimulating market capacities and sustainable business models, but without disturbing the market more than necessary.

Important measures are in place...

- Zero VAT for electric vehicles: NOK 1 000 million
- Zero VAT for the supply and import of batteries: NOK 35 million
- Exemption from registration tax: NOK 2 000 million
- Reduced annual vehicle tax: NOK 100 million
- Free parking at public parking places: NOK 100 million
- Exemption for road tolls: NOK 200 million
- Free boarding on national road ferries: NOK 5 million
- Authorization to drive in bus lanes: (not estimated)
- Free use of public charging stations: NOK 140 million
- Favorable income tax calculation for employees using corporate electric vehicles: NOK 140 million.

cost of measures (estimations per year): <http://www.eftasurv.int/media/press-releases/College-Decision---electric-cars-.pdf>

Enovas strategy for charging stations:

"Enova will prioritize": Important parts of the charging market to increase purchase and use of electrical vehicles, but not areas where it is possible to establish charging infrastructure commercially:

- Important transport corridors between, but not within cities
- Basic infrastructure, ie accessibility to chargers on all main roads, but not to serve capacity requirements in peak periods
- Charging stations as defined by the Alternative fuels directive (Chademo, Combo and AC)

Calls subsequently from September 2015 and during 2016 to cover 7500 km of National transport corridors. Chargers shall be in operation no later than 2017 (depending on market response).

The funding scheme

- Competitive bidding with fixed application dates
- Up to 100 % of investment cost can be supported
- Requirement after investment: At least two charging facilities per 50 km should have all three standards
- Maximum 1 km from the main road
- At least 50kW DC/22 kW AC simultaneously
- Third party access required
- NOBIL, acceptable payment methods
- Competition on need for support



Choices made

- Between cities, no program to increase capacity within cities
 - Road *stretches*, not single points are supported
 - Distance requirements
 - Standards and capacities
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- How can sustainable market developments be stimulated and negative effects of state intervention be avoided?



Vibrant change for new generations



Thanks for your attention!