

The Role of Biogas and Natural Gas in the Climate Policy of Finnish Transport Sector

Mikael Nyberg



The National Energy and Climate Strategy (November 2016) and the Medium-term Climate Change Plan to 2030 (August 2017)

Goal

- According to the EU's Effort Sharing Decision, Finland should achieve a 39 % cut in its emissions in the effort sharing sector by 2030 compared to 2005. This target is a binding one.
- **The transport sector is preparing to cut its emissions by up to 50 % by 2030.**

Measures in the transport sector

1. Improving the energy efficiency of the transport system
2. Improving the energy efficiency of vehicles
3. Replacing oil-based fossil fuels with renewable fuels

Finland's National Policy Framework for alternative transport fuels* (February 2017)

Goal

- Finland's national target for road transport in 2050 or even in 2045 is near-zero emissions.
- Target for vehicles using alternative fuels is that **all new vehicles sold in Finland are compatible with alternative fuels already in 2030.**
- Vehicles that can be powered by either electricity, hydrogen, natural gas/biogas and/or liquid biofuels, *also in high concentrations*, will be included in the target.

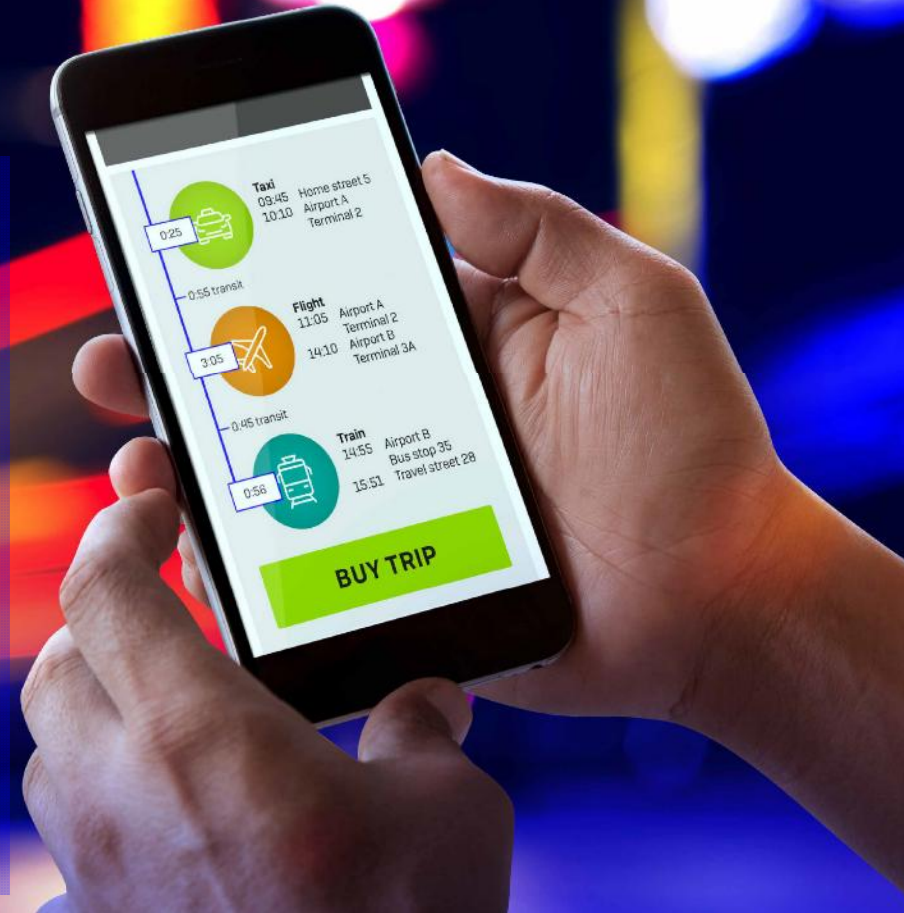
Measures

- The Act on the Promotion of the Use of Biofuels for Transport the use of existing economic instruments (e.g. car motor vehicle and fuel tax, energy grants)
- A procurement subsidy for new technologies
- Modifying the taxation of company car benefits
- Making use of public procurement
- Developing guidance by information
- Exerting influence at the international and EU level as well as research and development.

Mobility as a Service

Improving the energy efficiency of the transport system

- In the transport sector, the self-service market will be replaced by a service market. By promoting the “Mobility as a Service” model, the aim is to reduce the number of solo car journeys and to halt the increase in the transport performance of cars in urban areas regardless of a growing population.
- Implementing a legislative reform related to the transport market, the Transport Code.
- Coordinating transport and land-use as well as promoting the conditions for walking, cycling and public transport, especially in urban areas. The target is a 30 % increase in the number of journeys taken by walking and cycling by 2030. Also preparing for changing mobility habits through land use planning and parking norms.
- Promoting the automation of transport and different remote practices.
- Significantly improving the energy efficiency of transport by developing the operating methods.



Improving the energy efficiency of vehicles

- Influencing the drafting of EU legislation applicable to car manufactures so that the specific consumption and emissions of new cars and vans will be reduced by approximately 30 % from their 2020 levels by 2030.
- Participating in the preparation and introduction of the corresponding threshold values for heavy-duty vehicles in the EU.
- Speeding up the replacement rate of the vehicle fleet in Finland considerably.
 - In October 2017, the Government submitted to Parliament a proposal for an act on the scrapping incentive scheme (8 M€ in 2018). The act came into force in 1.1.2018. The scrapping incentive would amount to EUR 1,000 for a purchase of a new passenger car with carbon dioxide emissions not more than 110 grams per kilometre. The amount supporting an acquisition of an ethanol, gas, full-electric or plug-in hybrid car would be EUR 2,000. With these the emission limit of 110 grams would not apply.

Replacing oil-based fossil fuels with alternative fuels

- The physical share of biofuel energy content in all fuels sold for road transport will be increased to 30 per cent by 2030.
- The distribution station network for new fuels (including gas and hydrogen) and the network of recharging points needed for electric vehicles will *mainly* be built on market terms in Finland.
 - However, a sum of 4,5 million euros per year will be allocated to subsidise the construction of a charging and distribution network (**biogas stations included**) as well as the electrification of urban logistics equally in all regions in 2018-2021.

Replacing oil-based fossil fuels with alternative fuels -2

- The goal for Finland is to have a minimum of 250,000 electric vehicles in total (fully electric vehicles, hydrogen-powered vehicles and rechargeable hybrids) and **a minimum of 50,000 gas-fuelled vehicles in 2030.**
 - In October 2017, the Government submitted to Parliament a proposal for an act on support for acquiring electric cars and converting passenger cars to run on gas or ethanol (6 M€ per year in 2018-2021). The act came into force on 1.1.2018.
 - According to the law, support of EUR 2,000 would be provided for buying a full-electric car or leasing one for a long term.
 - The support for gas conversion would amount to EUR 1,000 and for ethanol conversion EUR 200.

Incentives for private persons' low-emissions car purchasing

The scrapping incentive scheme
1.1.–31.8.2018

1000 €

The scrapping incentive for a new car, CO₂ –emissions max 110g/km.

2000 €

The scrapping incentive for a new gas-, ethanol- or electric car

Support for full-electric cars
2018-2021

2000 €

Support for full-electric car or leasing one for a long term
The price of car max 50 000 €

Support for conversions
2018-2021

1000 €

the support for gas conversion

200 €

the support for ethanol conversion



Thank you

For more information

- [Government report on the National Energy and Climate Strategy for 2030](#)
- [Government Report on Medium-term Climate Change Plan for 2030 – Towards Climate-Smart Day-to-Day Living](#)
- [Alternative transport fuels infrastructure. Finland's national plan](#)