

Carbon-free transport 2045

Action programme

Final report by the Transport Climate Policy working group 12 December 2018

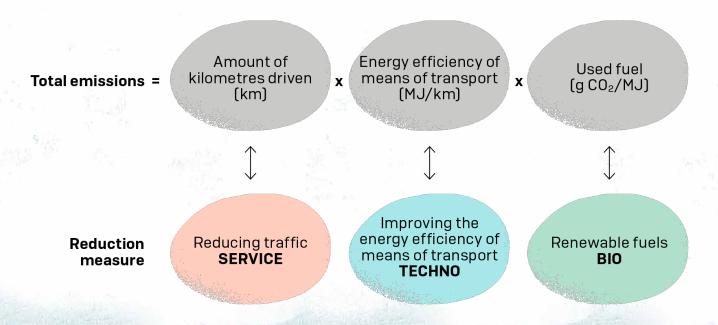
Transport Climate Policy working group 12 April to 12 December 2018

The working group identified and assessed ways to eliminate domestic transport-related greenhouse gas (GHG) emissions by 2045.

The interim report presented three distinct scenarios, or transition paths, illustrating how different factors affect emission volumes.

The final report presents a practicable proposal for an action plan on eliminating domestic transport-related emissions. The report combines the most efficient and cost-effective measures of the three paths described in the interim report for achieving carbon-free transport by 2045.

The volume of transport-related greenhouse gas emissions can be reduced with three approaches



Objectives set for the amount of kilometres driven

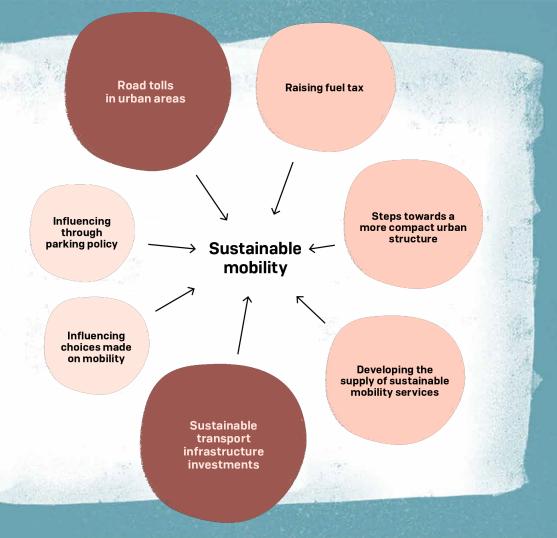
The growth in number of kilometres driven in passenger cars will level off and take a slight downward turn in 2025.

The combined number of kilometres travelled by rail, bus, cycling and walking will double by 2045.

The amount of kilometres driven with vans and buses will see only a slight growth by 2045.

For domestic water and railway transport, the aim is to retain the number of kilometres close to the current level or possibly increase this slightly if a share of goods transport will be shifted to waterways and railways.

Measures aiming at sustainable mobility



Raising fuel tax **Measures** aiming at effective **Promoting** Compensations railway for companies goods transport and water transports **Effective** goods transport Kilometrebased road Improving the tolls for heavy efficiency of transport logistics Developing the transport subsidy

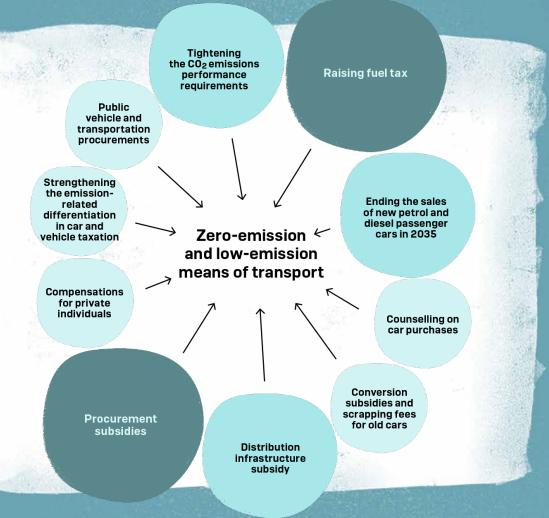
Objectives set for means of transport

The renewal rate of vehicles will accelerate considerably, and the share of zero-emission and low-emission vehicles of the total vehicle fleet will grow from today's few per cent to a hundred per cent.

The aim is around 670,000 electric cars and around 130,000 gas cars in 2030 and around 2 million electric cars and 250,000 gas cars in 2045.

For heavy fleet, the goals are around 7,000 electric and around 6,000 gas vehicles in 2030 and around 42,000 electric and 22,000 gas vehicles in 2045.

Measures
aiming at
zero-emission
and lowemission
vehicles



Objectives set for fuels

Biofuels will account for 30 % of all liquid fuels by 2030 and 100 % by 2045 as far as transport in Finland is concerned.

The absolute share of liquid biofuels in road transport will no longer increase after 2030 even though their relative share of the used (liquid) biofuel will grow.

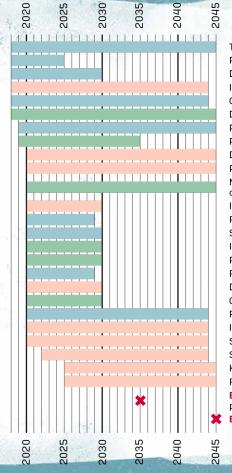
Considerably increasing the volume of domestically produced biogas in transport.

Promoting renewable fuels replacing petrol Distribution obligation **Measures National** plan on the sustainable aiming at production of renewable fuels renewable **Promoting** emission-free Renewable fuels air and water transport fuels Investment subsidies for manufacturing Tax exemption for biogas **Ending the sales** of fossil transport fuels in 2045

Timetable for the measures

The different support measures are presented as fixed-term measures. Other activities promoting the measures may continue after the support measures have ended.

- Zero-emission and low-emission means of transport
- Renewable fuels
- Sustainable mobility and efficient goods transport



Tightening the CO₂ emissions performance requirements
Procurement subsidies

Distribution infrastructure subsidy

Influencing choices made on mobility

Counselling on car purchases

Distribution obligation

Public vehicle and transportation procurements

Promoting renewable fuels replacing petrol

Developing transport subsidy

Promoting railway and water transports

National plan on the sustainable production of renewable fuels

Improving the efficiency of logistics

Reducing car tax

Scrapping fees and conversion subsidies for cars

Investment subsidies for manufacturing

Promoting emission-free air and water transport

Raising vehicle tax

Developing the supply of sustainable mobility services

Continuing the tax exemption of biogas

Raising fuel tax

Influencing through parking policy

Steps towards a more compact urban structure

Sustainable transport infrastructure investments

Kilometre-based road tolls for heavy transport

Road tolls in urban areas

Ending the sales of new petrol and diesel passenger cars

Ending the sales of fossil transport fuels

Regional perspective on reducing transport-related emissions

Not all solutions are suitable for everyone or every region. Nonetheless, a suitable solution for cutting transport-related emissions should be found for each person and every region.

Mobility services play a key role in and between urban areas. Walking and cycling are also important means of mobility in urban areas.

Privately owned cars continue to be the primary means of transport in many regions, particularly in sparsely populated areas. This makes it important to accelerate the renewal rate of the vehicle fleet. While the use of biofuels has its role in reducing passenger car emissions, heavy transport and air transport will require significant volumes of biofuel in the long term.

Criteria for selecting measures

Improving the energy efficiency of traffic and the transport system.

The measures are cost-effective, efficient and practicable as required by the objectives.

Individuals and operators are guided with a predictable and long-term approach to reduce, and eventually eliminate, greenhouse gas emissions. The "polluter pays" principle is primarily used.

The measures for cutting emissions are funded by raising taxation and payments for activities causing most emissions. The transition to emission-free technologies and sustainable means of mobility is supported. The total tax burden of transport will not increase.

What would implementing the action plan mean in practice

The use of fossil fuels in transport would become more and more expensive each year.

The transition to zero- and low-emission power sources would be facilitated by different subsidies and other incentives primarily funded through revenue from fuel and vehicle tax increases.

The subsidies and incentives in the transport sector may not suffice alone for compensating the negative impacts caused by the tax increases; instead, a more extensive reform is needed. Solutions such as the corporate tax could be revised in this context.

It is important to safeguard opportunities for working, using services and transport goods throughout the country as well as ensure a successful transition towards a low-emission and, eventually, emission-free transport.

Work by experts in an open interaction

Throughout its term, the working group has openly communicated about its work and aimed at extensive interactive discussion.

It has actively provided information about the progress of its work, e.g. on social media, #ilmo45.

A survey on the interim report was published and attracted over 10,000 responses.

The working group has organised three open discussion events and consulted experts.

Material is widely available in the Government's project portal https://valtioneuvosto.fi/hanke?tunnus=LVM028:00/2018

Transport Climate Policy working group













Teknologiateollisuus















