

A fair transition towards a carbon neutral Finland –

Roadmap for achieving the carbon neutrality target

3 February 2020

Climate change is the greatest threat to humankind, and combating it requires leadership. Prime Minister Sanna Marin's Government is committed to pursuing measures that will make Finland carbon neutral by 2035 and carbon negative soon after that.

This climate target is achievable and measures can be taken that will improve people's wellbeing, increase employment and enhance economic vitality. Climate leadership and the innovations this brings will create new jobs in Finland, boost the economy and exports, and improve the opportunities to increase our positive carbon handprint. Major new investments are needed in Finland to improve competitiveness, to enable greater export income from high technology based exports, and to reduce emissions.

According to the Finnish Climate Change Panel, there is a significant gap between Finland's current actions and the target. Specifically, these actions account for only about 16 megatonnes (Mt) of the emission reductions of 35 Mt that will be needed. This means there is a gap of about 19 Mt between the target and actions. This estimate takes account of both actions decided earlier and measures included in the Energy and Climate Strategy and the Medium-Term Climate Change Policy Plan (KAISU). The Finnish Climate Change Panel estimates the size of the carbon sink to be 21.4 Mt. Different stakeholders have also outlined different kinds of paths towards carbon neutrality.*

Businesses, municipalities and ordinary citizens are constantly performing climate actions of their own, and advances in technology are making low-emission solutions ever more attractive and competitive. It is essential that we support these independent actions taken by businesses, municipalities and citizens.

The achievement of carbon neutrality means that the emissions and sinks must be of the same size in 2035. With its climate work the Government aims to reduce emissions by 17–24.6 Mt, on top of the emission reductions of 16 Mt that are already being implemented. The aim is to increase Finland's net carbon sink. However, there are uncertainties related to estimating and forecasting carbon sinks. The Government is aiming for additional sequestration of at least 3 Mt in the land use sector compared to the present measures. The trend in the sinks can be influenced through sink-strengthening measures set out in the Government Programme. The Government considers that priority should be given to reducing emissions.

To bridge the gap, the Government has already launched several sets of measures to find new ways to reduce emissions and boost the actions that are already being taken. These are to be ready in the period between the 2020 government spending limits discussion and summer 2021, and together they will lay the groundwork for a path that achieves the necessary emission reductions for the carbon neutrality target.

The programme work is coordinated by the Ministerial Working Group on Climate and Energy Policy. The Government will receive information on the plans and legislative reforms by the mid-term policy review, and will then consider whether the set of measures can meet the carbon neutrality target. If necessary, the Government may decide on further measures in order that the emission reduction path can meet the target.

The Government will present its proposal for a new Climate Change Act in early 2021. The role of the Climate Change Act as a guiding instrument will be strengthened. Emission reduction targets for 2030 and 2040 will be added to the Act, in line with the path to carbon neutrality. The land use sector and a target concerning the strengthening of carbon sinks will also be included in the Act.

** Similarly, in the Ministry of Economic Affairs and Employment's PITKO follow-up study on the long-term trend in total emissions, the need for reductions in the continuous growth scenario was estimated at about 34 Mt (both sink and emissions 23 Mt) or in the savings scenario at 43Mt (both sink and emissions 12 Mt).*

Main items in the Government's climate work

The estimates for the reductions by 2035 set as the target are based on the methodologies used in the studies by the Finnish Climate Change Panel and ministries and they will be further specified during the programme work.

| Comprehensive reform of energy taxation | |
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| Timetable | See separate Appendix (Towards a carbon neutral circular economy through comprehensive reform of energy taxation) |
| Objective | A comprehensive reform of the energy taxation system, moving to the EU minimum in industrial electricity tax |
| Estimate of the reductions to be achieved (minimum) | 3–4 Mt |

| Carbon neutrality plans for specific sectors | |
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| Timetable | Mostly completed in summer 2020 |
| Objective | Paths towards carbon neutrality in key industrial sectors |
| Estimate of the reductions to be achieved (minimum) | 6–8 Mt (electrification of industry and low-carbon technologies) |



| Roadmap for fossil-free transport and sustainable transport taxes & payments reform | |
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| Timetable | Roadmap completed in autumn 2020, followed by decisions based on the roadmap Legislative proposals on the taxation of employee benefits concerning fully electric and other low-emission vehicles in autumn 2020 |
| Objective | Facilitating reform of vehicle propulsion technologies and gradual achievement of a zero-emissions vehicle fleet. The aim is to halve emissions from transport by 2030 and achieve carbon-free transport by 2045. |
| Estimate of the reductions to be achieved (minimum) | 2–2.6 Mt (halving emissions from transport by 2030) + about 2 Mt (preliminary estimate of additional emission reduction by 2035, if target is carbon-free transport by 2045) |

| Medium-Term Climate Change Policy Plan (KAISU) | |
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| Timetable | Completed June 2021 |
| Objective | Study of emission reductions in the effort sharing sector and decisions on policy outlines |
| Estimate of the reductions to be achieved (minimum) | 1–2 Mt (individual heating of homes according to the action programme on oil heating) + 1–2 Mt (rest of the effort sharing sector), plus the above-mentioned emission reductions in transport |

| National Energy and Climate Strategy | |
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| Timetable | Completed June 2021 |
| Objective | Emission reductions in the emissions trading sector (industry and energy) and enabling emission-free energy production as a replacement. The strategy measures are also covered in the work on the roadmap for industry and in the reform of energy taxation. |
| Estimate of the reductions to be achieved (minimum) | 2–4 Mt and necessary emission reductions to achieve carbon neutrality by 2035 |

| Climate Programme for the Land Use Sector | |
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| Timetable | Completed December 2021 (some of the measures started in 2020) |
| Objective | Emissions from the land use sector are reduced and Finland's carbon sinks strengthened in the short and long term. The aim is to increase Finland's net carbon sink. |
| Estimate of the reductions to be achieved (minimum) | Measures to strengthen the 3 Mt net carbon sink |

| Set of measures concerning fair transition | |
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| Timetable | Ongoing work, review in summer 2021 |
| Objective | The Ministerial Working Group on Climate and Energy Policy will lead the work to monitor the social, regional and employment effects of the climate work and to prepare a set of measures for a fair transition. |

The transition to a carbon neutral society will be implemented in a way that is fair and just, both socially and regionally. The key issue is to modify the structures of society in a direction where low-carbon solutions are attractive and profitable for businesses and people. A fair transition requires entrepreneurship, competitiveness and a determination to make the most of the entire country's potential.

To ensure a fair transition, the Government will monitor the social, regional and employment effects of its programme work. During the structural change, support will be provided for employment and a sustainable transition in regions and sectors whose viability is challenged. Implementation of compensatory measures will be ensured while taking account of impacts on low-income earners, and resources will be provided for continuous learning, employment services and on-the-job learning to enhance security in the face of change. Opportunities offered by e.g. the Just Transition Fund of the EU will be utilised for funding.

The Government will appoint two working groups to ensure a fair and just transition and acceptability of the climate measures:

- A round table on climate policy to be started in March 2020. The round table will discuss the preparation of the Government's measures, including broad consultations with other experts and stakeholders. Among the chairs there will be representatives of young people and businesses.
- A broad-based working group on peat to begin its work in March 2020. The task of the group is to study how the use of peat could be reoriented in a controlled manner towards innovative, more highly processed products instead of burning, as the use of peat for energy should be cut by at least half by 2030, and how the change in the use of peat will take place in a regionally and socially just manner.

Climate policy of the EU

Measures to reduce emissions in Finland must be supported by an ambitious, long-term EU climate policy. The Government is strongly committed to promoting this policy. Finland supports the Commission's work on the European Green Deal and its objectives to shape the EU into a fair and just society built on wellbeing. Finland will be active in getting the most out of the Commission's Green Deal.

To reach the EU's long-term carbon neutrality target (2050) it is also important to review the short-term objectives. The EU should aim for emissions reductions of at least 55% by 2030. Finland considers it important that new emission reductions should primarily concern the emissions trading sector. Emissions trading must be reformed so that that the price of carbon rises.

The Government will be working to influence the legislative reforms relating to the Green Deal. Better use will be made of EU funding for climate measures by improving the coordination of the different ministries and other parties that seek funding. Support for a fair

and just transition is available from the EU's new Just Transition Fund, and Finland will make full use of this.

Finland will be an active chair of the Coalition of Finance Ministers for Climate Action to ensure that effective climate policy is made on a global scale. The aim is that the price of carbon dioxide emissions will rise globally and public and private financing will be strongly targeted to support renewable energy, emission reductions, halting forest loss, afforestation and climate change adaptation. Progress in this will be reported at the UN Climate Conference at the end of 2020.

To bridge the gap between the climate objective and the measures decided so far, the Government has decided on the following systemic reforms:

Towards a carbon neutral circular economy through comprehensive reform of energy taxation
Promoting climate innovations through a climate fund

In addition, the Government will immediately launch a set of other measures:

- A study will be conducted on incorporating synthetic fuels into the blending obligation
- The biogas programme will be implemented on the basis of the working group's proposals.
- A study will be made as quickly as possible concerning measures to dismantle barriers to investments in terrestrial and marine wind farms, including restrictions due to the radar system, and to release investments worth billions.
- Necessary legislative amendments will be implemented to make it possible for housing companies to utilise solar energy for household electricity and measures will be taken to promote the use of solar energy and other renewable energy production in public buildings and commercial properties.
- The carbon footprint of the investments in the State Pension Fund will be studied and the fund will be obliged to present a plan on measures to reduce the carbon risk of its investments.
- In the development, use and maintenance of the state's building stock, the focus will be on low-carbon operations and energy efficiency. Promoting the use of wood for building will also be emphasized.
- Use of wood for building will be promoted in the context of the MAL agreements concerning land use, transport and housing.
- The Academy of Finland and Business Finland will look at the range of research and development work that has been carried out on climate change, carbon neutrality and biodiversity. This will serve as the basis for identifying

strong centres of expertise and particular gaps that may exist in regard to carbon neutrality and the necessary measures will be taken.

- Concrete objectives and measures will be included both in the Government report to Parliament on education policy and the RDI roadmap for raising the level of research and competence relating to climate change, continuous learning, science education, and research, development and innovation activities.
- An Act on Afforestation will be prepared that will enter into force on 1 January 2021.
- To increase forest growth, ash fertilisation will be included on a temporary basis in the scheme for financing sustainable forestry (KEMERA) as a measure that is eligible for support.