

Net-Zero Government Initiative (NZGI) Finland



Introduction _____ Change may seem inconceivable, but only until we act ___4 Facts about Finland ______5 Key emission targets ______5 Finland and Clean Energy ______6 Electricity supply in 2022 Case: Coalition of Finance Ministers for Climate Action _____7 Structure of the Finnish Administration ______8 Emissions of the State Administration______8 Properties and premises ______10 The Central Government Premises ______10 Towards carbon-neutral premises by 2035 ______10 With these concrete measures, we will achieve our goal ______11 Interim targets ______12 Case: Shared use of facilities as a response to increased remote work_______13

Procurement	15
Making Public Procurements Functional, Impactful, and Sustainable	15
The National Public Procurement Strategy: Eight common goals and 25 objectives	16
Advancing Finland's carbon neutrality target through procurement	17
Case: Centralized Public Procurement Platform (Hilma)_	18
Case: Zero- and low-emission vehicles in public procurement processes	19
Other policy areas	_ 22
The Defence Forces' Energy and Climate Programme 2022-2025	22
Examples of Key Target Areas of The Defence Forces' Energy and Climate Programme	23
Motiva – a Sustainable Development Company	24
Energy Efficiency Agreements	24

Finland is committed to mitigating climate change and adapting to its impacts as set out in the Paris Agreement of 2015. The new national Climate Act lays down more stringent emission targets with the aim of Finland being carbon neutral in 2035.

Change may seem inconceivable, but only until we act

Mitigating the climate crisis and halting biodiversity loss are some of the greatest challenges facing humankind. These crises need to be looked at side by side, as they increasingly require common solutions.

Finland is committed to mitigating climate change and adapting to its impacts as set out in the Paris Agreement of 2015. The new national Climate Act lays down more stringent emission targets with the aim of Finland being carbon neutral in 2035, whereas the goal of the EU Biodiversity Strategy is to halt biodiversity loss and to put biodiversity on a path to recovery by 2030. Together with the other Member States, Finland is committed to the key objectives of the Strategy for achieving the goals.

A system-level change throughout society and an overhaul of economic structures are preconditions for the green transition. The pace of renewal must be accelerated, and a course must be set towards attaining the climate and environmental objectives. The preconditions for simultaneously overcoming the challenges of climate change and biodiversity loss include structural change in the use of natural resources, policy

instruments, use of market economy mechanisms and significant investments. The ways in which commodities are produced and consumed must also change. Circular economy will play a key role in achieving climate objectives and preventing biodiversity loss.

In practice, however, we are still far from an environmentally sustainable economy, in Finland as well as elsewhere.

The new operating environment has increased the need for a green transition and phasing out of the fossil economy. Russia's military attack on Ukraine has necessitated significant changes in energy policy to secure energy supply and reduce dependence on Russia for energy and materials. The solutions for the acute need to break away from fossil energy imports and for climate change are partly the same and partly different. The climate objectives for 2030, 2035 and 2050 and the need to resolve the ecological crisis also remain relevant in the new geopolitical situation. The long-term objectives must be clear, and it is important to persist with them.



Facts about Finland

Finland is a Nordic welfare state with a population of 5,6 million people

The population density averages
18 inhabitants per km², ranging from
two inhabitants per km² in Lapland in
northern Finland to 187 inhabitants
per km² in the south of the country in
the Helsinki-Uusimaa region.

Key emission targets

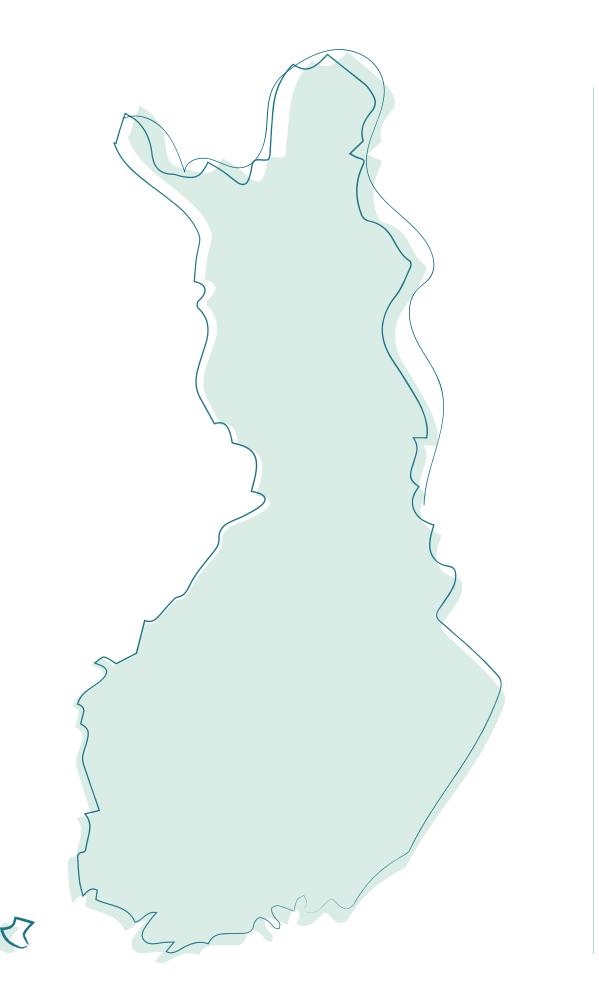
The EU legislation and Finland's Climate Act define Finland's climate objectives.

The obligations of the European Union to Finland are the reduction of emissions in the effort sharing sector by 50% in 2030 in relation to the 2005 level and the minimum net removal level of 17.8 Mt for land use (LULUCF) sector for 2030. The accounted GHG removals from the sector are set to be at a level equivalent to at least the accounted emissions from the sector in the period from 2021 to 2025.

Finland's national Climate Act sets the target of reducing emissions by 60% by 2030 compared to 2005 levels, which means total emissions may not exceed 28.5 Mt CO₂ eq in 2030.

The Act also lays down the aim for Finland to be carbon neutral in 2035 and carbon negative soon after that.

At the moment, it seems that the national 2030 target will be achieved. However, carbon neutrality by 2035 will require additional measures.



Finland and Clean Energy

Limiting global warming to below 1.5 degrees Celsius by the end of the century will require a significant level of carbon negativity. In addition to reducing emissions, an extensive amount of carbon will have to be removed from the atmosphere towards the end of this century. Investments that reduce emissions are increasing at an accelerating rate globally.

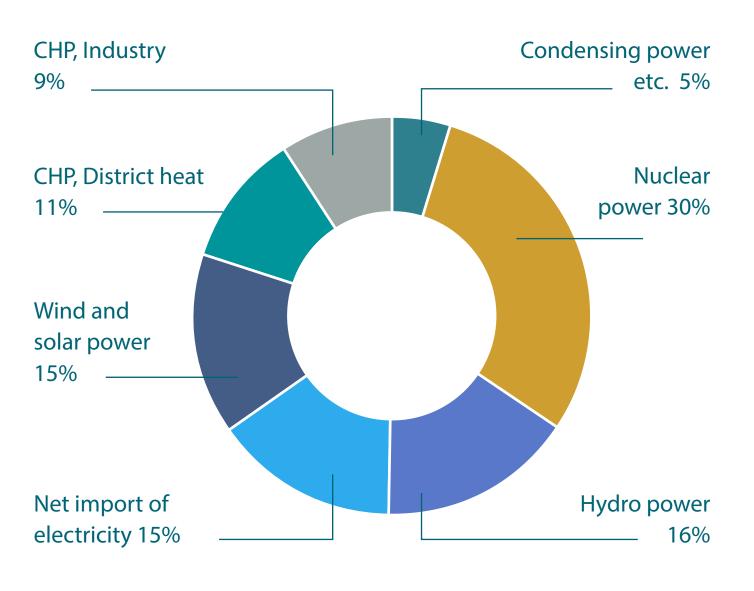
In this industrial revolution, we are competing to attract investments to Finland. Projects that reduce emissions are crucially affected by the availability and price of clean electricity, well-functioning infrastructure, the availability of competence in the field, the reliability of public administration and smooth permitting processes.

Finland will double its production of clean electricity. The share of renewable energy in energy production will be increased, and action will be taken towards phasing out the use of fossil fuels in heat and electricity production by the 2030s at the latest.

In 2022 fossil-free electricity production reached a new record level, being 75 per cent of electricity consumption.

Electricity supply in 2022

Source: Official Statistics of Finland (OSF): Energy supply and consumption [online publication]. Reference period: 2022. ISSN=1799-7976. Helsinki: Statistics Finland [Referenced: 19.4.2023]. Read more on the Statistics Finland webpage: https://stat.fi/en/publication/cl8lmyfdcqgc70dukvv6dsrdd





Case: Coalition of Finance Ministers for Climate Action

The coalition aims to bring the contribution and economic policy instruments of finance ministries to the fight against climate change: taxation, budgeting, financing and public procurement.

The coalition is committed to the so-called Helsinki Principles, which guide member countries to align practices and policies with the objectives of the Paris Agreement, share experiences and expertise, work to promote effective and efficient solutions in carbon pricing, take into account climate change in economic policy, facilitate the channelling of private finance to climate actions and participate actively in the planning and implementation of nationally determined emission reduction targets.

The Coalition of Finance Ministers for Climate Action was launched in Washington in April 2019 on Finland's initiative. The coalition now has 84 member countries, covering about 66 per cent of the world's gross domestic product and about 40 per cent of the world's greenhouse gas emissions.

The coalition has been joined by, among others, the United States, Japan and South Korea.

The coalition has adopted rules aimed at making the coalition's structure permanent and a significant party in solving climate issues. The coalition has also strengthened its activities with a secretariat, which operates as part of the World Bank in cooperation with the International Monetary Fund.

The coalition has published several reports and tools that support member countries in implementing climate actions. For example, the "Better Recovery, Better World: Resetting Climate Action in the Aftermath of the COVID-19 Pandemic" report provides recommendations on how economic recovery measures can be directed towards low-emission and sustainable development.

Read more on the Coalition of Finance ministers webpage: financeministersforclimate.org

Structure of the Finnish Administration

The Finnish state administration handles legislation, national defence, foreign affairs, major infrastructure, and sets standards in sectors like health and education. 12 ministries, 70 agencies, 80,000 personnel.

Wellbeing services counties provide social welfare and health care services and rescue services in their area. 23 counties, 200,000 personnel.

Municipalities, based on local selfgovernment, manage local services like water, education, local infrastructure, cultural activities, and urban planning. 309 municipalities, 300,000 personnel.

Emissions of the State Administration

The estimated share of the state administration, namely the ministries and their subordinate agencies and institutions, of Finland's total carbon dioxide equivalent emissions is 5%.

The estimate is based on the state's accounting data and emission factors calculated using the Finnish Environment Institute's ENVIMAT method. In these, an average emission amount (kg CO_2 e) has been estimated for each euro spent on a certain product category.

The estimate covers the operating expenses and investments of the state budget economy, leaving state transfer expenditures such as grants and transfers made through the state to municipalities, other public entities, the business sector, households, and non-profit organizations outside the scope of the review.

In this estimation, national defence and transport sectors cause over two thirds of state administration's emissions.

Electricity used by the Central Government is 100% fossil free. Electricity is procured centrally using a Framework Agreement provided by Hansel. Hansel is a non-profit limited liability company, whose purpose is to generate savings for public administration through efficient procurement operations.





<u>Introduction</u>

The Central Government Premises

The Finnish Central Government has a personnel of 80,000.

Built real estate assets owned by the state are worth about EUR 4.2 billion and consist of approximately 9,000 buildings, about 600 of them protected buildings. The facilities used by the state total six million square metres; about one fifth of this area consists of offices, and the remainder of other premises such as courtrooms, museums, police departments, laboratories and storage facilities. The defence administration occupies the largest number of facilities, with the Finnish Defence Forces taking up almost half the total square footage. Read more on the use of the state premises and the related costs on the Ministry of Finance webpage: Exploreadministration.fi

The management and development of the state premises is centralized to unincorporated state enterprises, Senate Properties and Defence Properties Finland

In 2022, the total emissions of Central Government premises were 182,000 tons of CO₂-eqvivalent.

Towards carbon-neutral premises by 2035

The Senate aims for carbon neutrality in state premises by 2035. Carbon neutrality is pursued in two phases: carbon-neutral property use and carbon-neutral construction and renovation. The goal is to operate according to the principles of the circular economy in all activities.

By purchasing carbon-neutral electricity and district heating, the CO₂ emissions resulting from the use of government properties is reduced by about 100,000 tons annually. The electricity purchased for government properties has been 100% sourced from renewable energy sources for several years. We have continued to make significant investments in the utilization of renewable energy, both in purchased energy and in own energy production as well as continuing to convert district heating contracts to renewable district heating products.

- The state will phase out fossil oil heating in its properties by the end of 2023
- There will be 2 million euro investments in solar power plants in state owned buildings and an annual solar electricity production of 8 GWh by the end of 2025

<u>Introduction</u>

However, 85% of the emissions are generated in the value chain: investment and maintenance projects, product and service procurement, energy consumption in properties rented from the market, and upstream energy. Main ways to decrease emissions from scope 3 are:

- CO₂-guidance and project management in investments. Energy use at construction sites remains a significant source of emissions.
- Upstream energy emissions will decrease through reduced energy consumption and the greening of the production chain.
- New lease agreements in properties rented from the market are carbon-neutral.
- Responsible procurement, influencing suppliers especially in maintenance and cleaning.
- There's still potential in reducing waste amounts for CO₂ emission reduction, e.g., mixed waste emissions.

With these concrete measures, we will achieve our goal

Property Maintenance:

- Continuous improvement of space efficiency.
- Improving energy efficiency by 1% per year.
- Abandoning oil heating and peat.
- Transitioning to emission-free district heating and cooling.
- Additional construction of solar power.
- Minimizing refrigerant emissions.

Construction and Repair:

- Shared activity-based offices suitable for hybrid work.
- Lifecycle thinking and adaptability in design.
- Minimizing wasted space.
- Low-carbon solutions in construction and emission-free construction sites.
- Sustainable demolition and maximizing the circular economy.

Interim targets

2024	2025	2026	2030	2035
 Emission reduction target 15% in renovations, 25% in new construction Total carbon footprint decreases (scope 1-3) Putting in action a biodiversity program 	 Carbon emissions from the use of premises -75% 10% of central government personnel work in shared premises (8,000 people) Emission reduction target 15% in renovations, 25% in new construction Total carbon footprint decreases (scope 1-3) 	 Total carbon footprint decreases (scope 1-3), setting specific interim targets for 2027-> Emission reduction target 15% in renovations, 25% in new construction 	 Total carbon dioxide emissions halved by 2030 Use of premises is carbon neutral Subleasing is carbon neutral 25% of central government personnel work in shared premises (20,000 people) 	Carbon neutral Finland Carbon neutral premises



Case: Shared use of facilities as a response to increased remote work

- Utilization of Government Office Spaces: Government agencies and institutions in Finland have approximately one million square meters of office space for about 50,000 state employees working in offices. Measurements indicate that on average, only 28% of the workforce is present in the office at any given time.
- Impact of the Pandemic on Work Habits: The COVID-19 pandemic has permanently altered our work, travel, and living habits. Hybrid working has become a standard practice for the state and the use of state office spaces has stabilized at a level lower than before the pandemic. The state is taking this into account in its future space solutions, with a shift towards shared spaces used by multiple agencies and institutions. These spaces need to support the new way of working, and from an energy, emissions, and cost perspective, it's essential to evaluate the overall use of spaces.
- Future of Office Spaces: State employees will continue to work in offices and remotely, as tasks permit. The growing network of shared spaces offers diverse working opportunities throughout Finland. The overall amount of office spaces will be reduced by as much as 40% by 2030.

The central government premises strategy aims to create workspaces that support effective performance, flexible work and enhanced cost-effectiveness. The need for social, ecological and economic sustainability is observed in the space solutions used.

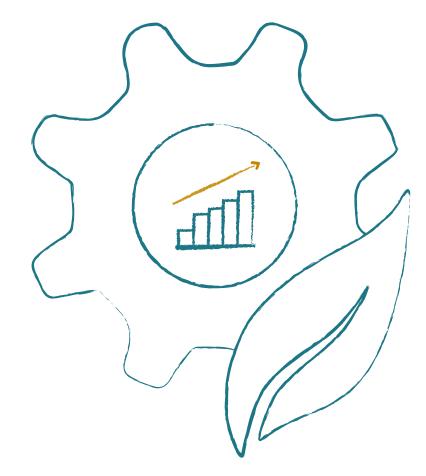
The increase in remote work and multilocation work will affect the use of and need for space. Shared use of facilities, in other words having employees from different agencies co-working in the same premises, is an objective set for the end of the decade. Facility sharing between public sector agencies will be increased, especially in customer services.

Read more on the Central Government

Premises Strategy PDF-document (2021)

The file opens in a new tab.





Making Public Procurements Functional, Impactful, and Sustainable

The volume of public procurement in Finland is significant, amounting to 47 billion euros annually. Public procurement is a powerful tool that can be used to improve the sustainability of public finances and promote societal objectives. To maximize the potential of procurement and promote its impact, systematic and strategy-based collaboration is needed with the central government, the municipal sector, the wellbeing services counties and private sector providers. The 'Effective Public Procurement Action Program' (ProcureFinland) has been set up to draft a national public procurement strategy, increase cooperation among public procurement actors, and develop the effectiveness of procurement.

The national public procurement strategy was drafted in extensive collaboration with procurement professionals and strategic management. The strategy consists of eight areas of development. The main focuses of development are strategic management and the promotion of procurement skills. Information management and impact assessment support strategic management.

The goal is also to support the vitality of the markets and the emergence of innovations. By developing these elements, procurement can achieve economic, social, and ecological sustainability.

Implementation of the national procurement strategy is well on it's way. ProcureFinland has put into effect 60 different measures including guides, digital tools and criteria. The collaboration within ProcureFinland is proven to be efficient and impactful. New targets and measures will be introduced for the next four years in early 2024.

The National Public Procurement Strategy: Eight common goals and 25 objectives

Strategic leadership

We will lead procurement as a strategic function and make the most of the potential to achieve our objectives.



Competence

We will ensure professional competence and continuously develop our skills.



Knowledge management and impact

Finland will be visionary in knowledge management and in developing the impact of public procurement.



Well-functioning procurement

We will achieve well-functioning and high-quality procurement in close cooperation with the market and end-users.



Innovation

We will use innovations to resolve challenges and have an agile mindset.



Economic sustainability

We will use public procurement to promote fiscal sustainability responsibly.



Social sustainability

We will use public procurement to enhance corporate social responsibility in cooperation with the public administration and the private and third sectors.



Ecological sustainability

Finland will be a forerunner of ecological public procurement.





Advancing Finland's carbon neutrality target through procurement

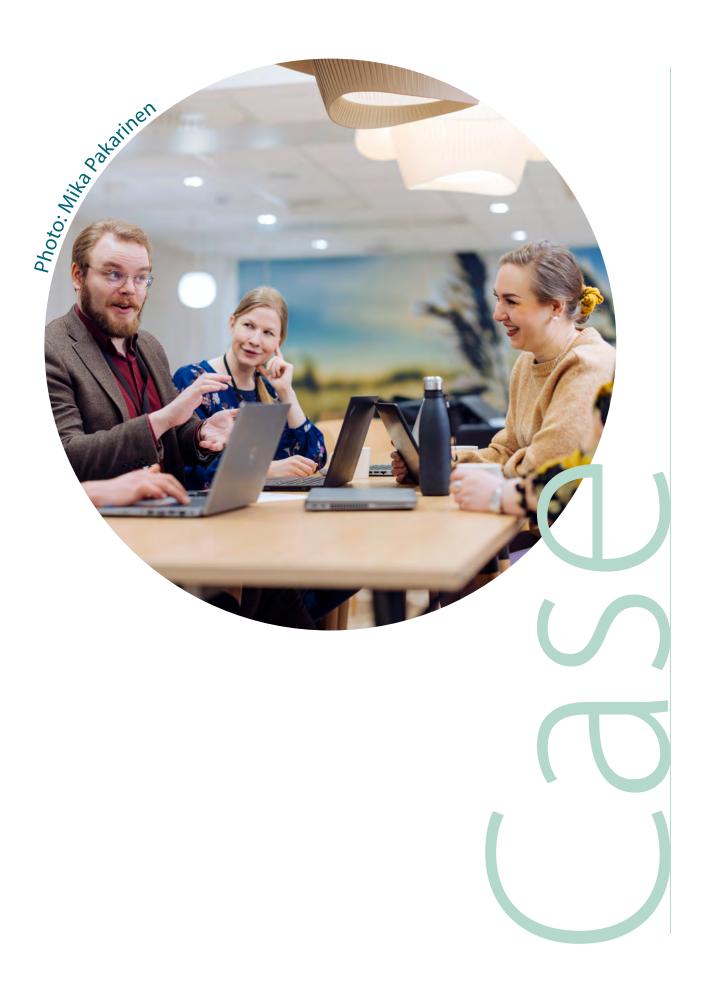
The government has set the goal of advancing Finland's carbon neutrality target for 2035 and the implementation of a circular economy through public procurement.

Climate goals are promoted through various means, including green deals (voluntary agreements) between the State and the municipal sector, the use of a digital criteria bank and a Low Carbon Procurement Playbook that supports both management and procurers in their work. Read more on the Digital Criteria bank webpage: kriteeripankki.fi

Additionally, in the autumn of 2023, a research project was initiated to assess the environmental and ecological footprint of public procurement and those key procurement categories where public procurement can influence the climate and markets.

The sustainability of public procurements project will produce a knowledge base on the carbon and nature footprint of procurements by the end of the year. The study uses a methodology based on financial accounting as well as land use data and material flows to assess the impacts on biodiversity and climate due to purchases.

Following the research project, the Ministry of the Environment will initiate a co-creation project with other ministries, public procurers and markets to set national goals in these critical procurement categories.



Case: Centralized Public Procurement Platform (Hilma)

Hilma is a statutory public procurement service in which public sector buyers can put their procurements out to tender.

All contract notices exceeding national and EU thresholds are required to be published on Hilma.

Tenderers can leverage Hilma as a single service to identify appropriate business opportunities and to submit their bids.

Hilma aggregates and openly shares data through national digital platforms and APIs, including data on ecological and social sustainability, such as carbon-neutrality, biodiversity, and fair working conditions.

Read more on the Centralized Public Procurement Platform (Hilma) webpage: hankintailmoitukset.fi





Case: Zero- and low-emission vehicles in public procurement processes

The Act on Environmental and Energy Efficiency Requirements for Vehicle and Transport Service Procurements adopted in 2021 places obligations on municipalities, wellbeing services counties and the State to ensure a certain share of zero- and low-emission vehicles in public procurement processes.

The Act implements the EU Clean Vehicles Directive and applies, for example, to the procurement of vehicles and transport services by municipalities, the State or parishes in relation to school transport, waste collection, local bus transport and transport reimbursed by the Social Insurance Institution of Finland. It will also apply to procurement through concession contracts.

The aim is to have low-emission public transport by the end of the ongoing decade when a significant part of transport procured by municipalities and the State will be powered by electricity or gas. Due consideration is given to regional differences in, for example, the availability of charging infrastructure. In the south, municipalities will have stricter requirements than in the north. The stricter requirements will also apply to the 17 largest cities in Finland.

The minimum requirements for low and zero-emission procurement are divided into three categories of vehicles: passenger cars and light commercial vehicles, trucks, and buses. The obligations have been divided into two procurement periods: from 2 August 2021 to 2025 and from 2026 to 2030.

Traficom (Finnish Transport and Communications Agency) monitors compliance with the law:

Traficom ensures that procurement units purchase the prescribed proportion of clean vehicles.
Supervision is based on procurement notices and subsequent notifications made in the HILMA system. If a subsequent notification has not been made, Traficom can impose a penalty payment on the procurement unit.

- Passenger cars and light commercial vehicles increase in the share of electric cars: During each procurement period, 38.5 per cent of passenger and vans purchases must be environmentally friendly. During the first procurement period, also plug-in-hybrids will be considered environmentally friendly, while during the second procurement period, only vehicles with 0 CO₂g/km emissions, i.e. fully electric cars, will be considered environmentally friendly.
- Trucks environmentally friendly vehicles run with biofuel, electricity, gas or hydrogen: 9 per cent of truck purchases in the first procurement period and 15 per cent in the second procurement period must be environmentally friendly.
- Trucks powered by alternative fuel, i.e. biofuel, electricity, gas or hydrogen, are categorised as clean trucks.

• Buses - more fully electric buses: 41 per cent of new bus purchases in the first procurement period and 59 per cent in the second procurement period must be environmentally friendly (local transport). An environmentally friendly bus is defined as a vehicle running on alternative fuel such as electricity, hydrogen, gas or biofuel. During each procurement period, half of environmentally friendly buses must be fully electric buses.

Regulation does not apply to long-distance transport and to vehicles used in agriculture and forestry, or for example, emergency vehicles, military vehicles and construction site vehicles.



Defence Forces strive for significant emission reductions and prepare for energy transition without compromising the defence capability.

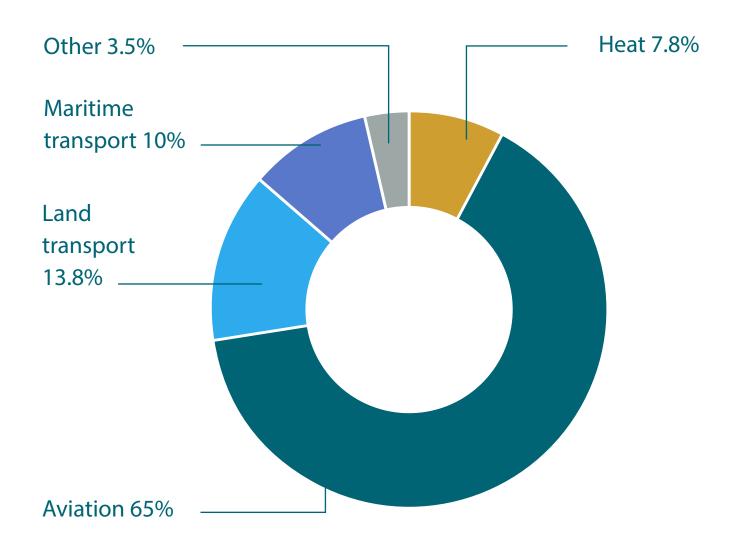
The Defence Forces' Energy and Climate Programme 2022-2025

The Defence Forces' third updated Energy and Climate Programme for 2022-2025 aims to significantly reduce greenhouse gas emissions and halve greenhouse gas emissions from civil and maritime transport from their 2020 levels by 2030. The condition for the reductions is that the national defence capability is not compromised.

The most important means now to achieve the desired emission reductions is renewable liquid fuel, because it will not be possible to solve the capability requirements of the Defence Forces by other energy solutions in the 2030s. Electric power is a possible power source in garrisons and official vehicles. In order to determine practical measures, the Defence Forces are preparing a roadmap for reducing emissions, and in this connection, the possibilities to reduce emissions from military aviation will also be examined. The introduction of renewable forms of energy will also support the defence capability, as society aims to phase out fossil fuels.

The programme describes the objectives of the Defence Forces' emission reductions, climate change adaptation and preparation for the energy transition, as well as the means and measures to achieve them.

Emission breakdown 2021



Examples of Key Target
Areas of The Defence
Forces' Energy and
Climate Programme



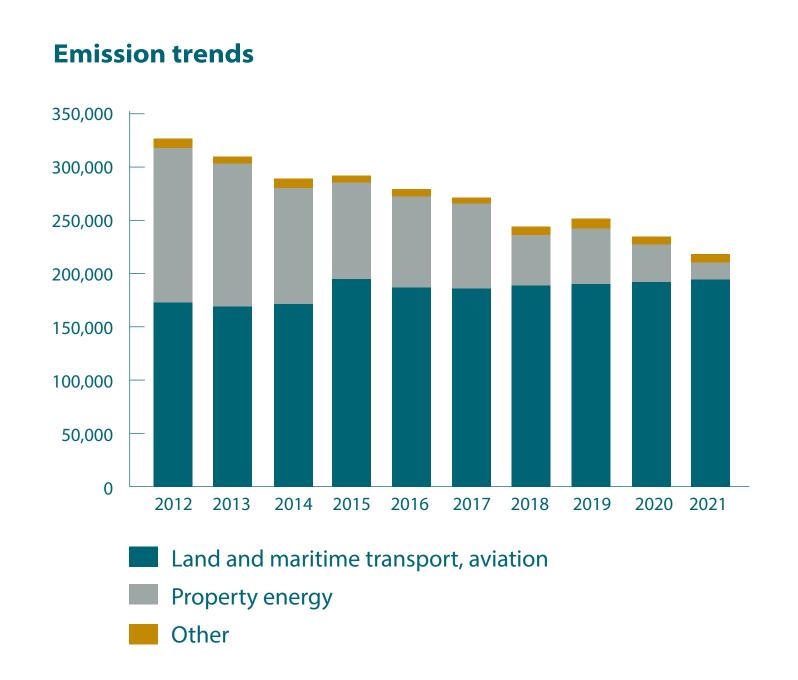
Reducing Traffic Emissions and Developing Procurement

Reduce traffic emissions by introducing renewable fuels and low-emission power sources.

- Roadmap for traffic emission reductions to halve land and maritime traffic emissions by 2030.
- Setting an emission reduction target for military aviation by the end of 2023 in collaboration with the manufacturer.
- Measures include: technological upgrades, increased use of simulators, and combining transports.

Develop the consideration of energy efficiency and climate impacts in projects and procurements, as well as in lifecycle management.

- Request information on carbon footprint and the usability of renewable fuel in procurements as part of the procurement process. The usability of renewable fuel is set as a requirement when it is possible in terms of the performance of the system being procured.
- Develop the assessment of the carbon footprint throughout the material's entire lifecycle.
- Increase circular economy methods. Implement the first pilot project for the utilization of discarded textiles.



Energy efficiency agreements cover about 60% of Finland's total energy consumption.

Over 750 companies with their more than 7,000 locations, as well as over 150 municipalities and municipal federations, are purposefully improving their energy consumption.

The number of companies and municipalities joining energy efficiency agreement grew by 12% in 2022.

Motiva supports those who have joined in the implementation of the agreement, communicates, and monitors the effects of the agreements.

Results 2017- 2022 in Finland PPT document.
The file opens on the slideshare.net webpage.

Motiva – a Sustainable Development Company

Motiva is a wholly state-owned company that offers expert services to accelerate sustainable development. It provides the public sector, businesses, municipalities and consumers with information, solutions and services that allow them to make resource-efficient, effective and sustainable choices.

- Specializes in promoting the energy transition and electrification, and development of circular economy models and markets.
- Recent projects include increasing the number of sustainable and innovative public procurements implementing green deal agreements, such as emissionfree construction sites, and providing centralized advice on sustainable and innovative procurements.
- Promotes and supports Energy efficiency agreements.

Read more on the Motiva web page: motiva.fi/en

Energy Efficiency Agreements

Energy efficiency agreements are pivotal to Finland's energy and climate strategy, aiming to enhance energy utilization and fulfill the EU's energy efficiency directive. The current agreement spans 2017-2025, with negotiations for the 2026-2035 period set to commence in early 2024.

Between 2017 and 2022, companies and municipalities involved in the Finnish energy efficiency agreements implemented nearly 25,000 energy efficiency measures. These actions have enhanced the annual energy consumption by approximately 12.5 terawatt-hours, equating to the energy use of 625,000 electrically heated homes. By the end of 2022, most sectors in the agreement had already met the energy efficiency target set for 2025.

Investments in energy efficiency over the past six years amounted to about 1.2 billion euros, with significant contributions from the industrial and energy sectors. The Ministry of Employment and the Economy supported these initiatives with around 120 million euros, benefiting projects that wouldn't have proceeded without this aid. These measures have led to a reduction of about 2.7 million tons in annual carbon dioxide emissions, comparable to the carbon footprint of 270,000 average Finns.



