

# NET ZERO CARBON FINAVIA ROADMAP

Finavia's commitment to Net Zero carbon emissions defines the destination of Finnish airports' decarbonisation journey



**FINAVIA**  
FOR SMOOTH TRAVELLING

## Finavia in brief

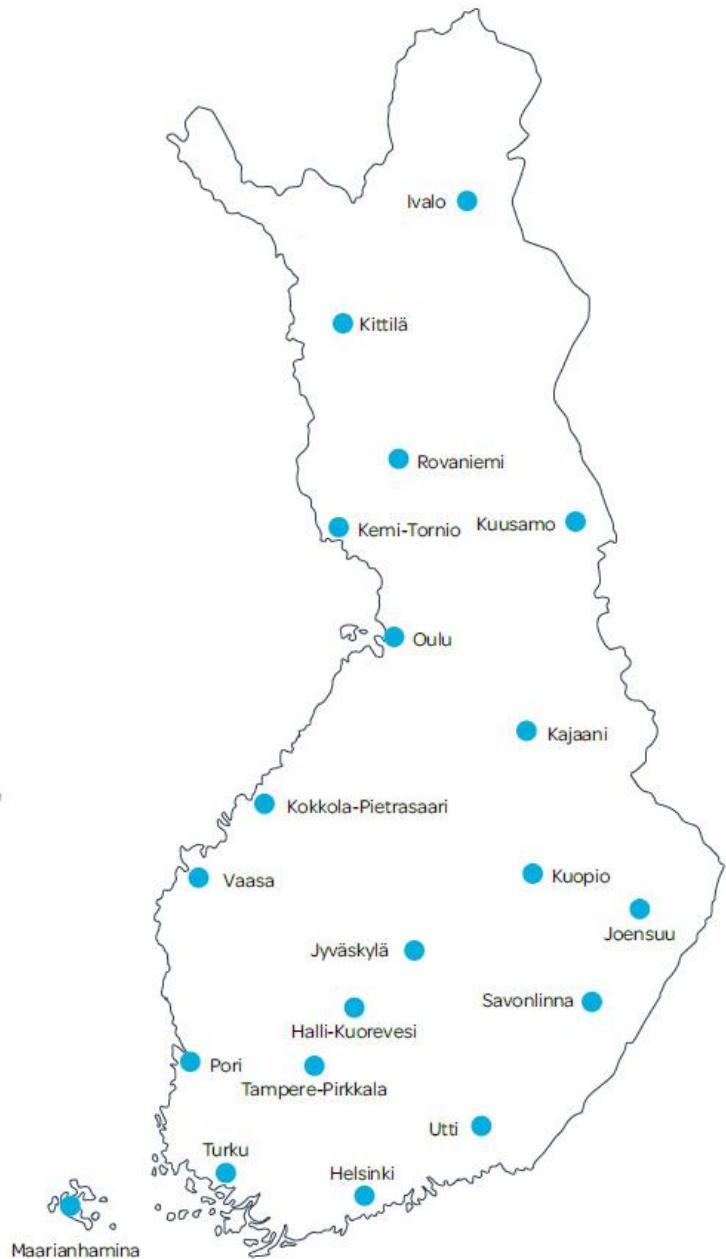
Functional flight connections are crucial for Finland's vitality and competitiveness. Air traffic is needed, for example, for imports and exports of goods, establishing international networks, and the management of cross-border value chains. Connectivity is vital for the growth and development of tourism in Finland. Flight connections also serve companies that operate internationally.

Finavia is an airport company whose goal is to make travel smooth and stress-free. We enable good flight connections from Finland to the rest of the world through our nationwide network of airports. Our main airport, **Helsinki Airport**, is a leading European hub for long-haul and connecting flights

We run a network of 20 airports in Finland. The northernmost airports have the brand name **Lapland Airports**

We develop and maintain airports and manage large-scale operations ranging from demanding construction projects to complex logistics, passenger flows and data. We work together with our customers and partners to promote the mobility of Finnish people and Finland's international competitiveness.

We bear our responsibility for the impact of our activities on people, the environment and society at large. Safety, security, sustainable development and connectivity are at the core of our responsibility.



*In 2025 Finavia runs a network of 20 airports in Finland*

## Finavia's climate programme

In 2008 Finavia composed its Climate and Energy Program and started evaluating its carbon footprint. In 2011 Finavia joined the Airport Carbon Accreditation (ACA) scheme of Airports Council International Europe (ACI/E). In 2022 Helsinki Airport was accredited on the Level 4+ (Transition). Four of Lapland Airports were accredited on the Level 5 (NetZeroCarbon) in 2024. Helsinki-Vantaa will apply for Level 5 in 2025.

The rest of the network follows same principles of carbon management outside the formal ACA procedure. The steps laid out in our climate programme enabled us to achieve carbon neutrality in our own operations at all our airports already in 2019.

CO<sub>2</sub> emissions caused by Finavia's own operations have been reduced and the residual emission have been offset. We use carbon-free power and generate electricity ourselves using solar panels. At all our airports, we have replaced diesel fuel with renewable diesel produced from waste and residual materials. We have also expanded the use of renewable motor-oil and renewable fuel oil to cover non-registered machinery and emergency electricity production. Half of our airports are heated using Finnish wood-based biofuel and we source renewable thermal energy from district heating networks. Finavia has also invested in energy efficiency improvements.

We offset our remaining emissions by funding ACA-compliant projects that reduce CO<sub>2</sub> emissions in developing countries.

In 2019 we signed the ACI/E commitment to net zero carbon emissions by 2050. In 2021 we signed an even more ambitious ACI/E target aiming at 2030. However, Finavia is proceeding faster and aim to achieve Net Zero emissions by 2025. Net zero emissions mean that our airports' own CO<sub>2</sub> emissions will be so small that we can capture them from the atmosphere.



*In 2024 four of Lapland Airports (Ivalo, Kittilä, Rovaniemi and Kuusamo) were accredited on ACA Level 5 (Net Zero Carbon) which is currently the highest level of achievement in the scheme. Helsinki-Vantaa will apply in 2025*

## Finavia commits to Net Zero Carbon emissions

Finavia’s operations at its 20 airports are already carbon neutral. Net Zero Carbon emissions are much more challenging to achieve. Our emission shall gradually decrease so much that the residual emissions can be removed from the atmosphere.

In a nutshell, “Net Zero carbon emissions” is the state our global civilisation needs to reach by 2050 at the latest, to avoid the most acute repercussions of Climate Change. According to scientific evidence by the Intergovernmental Panel on Climate Change (IPCC) the global warming of 1.5°C should not be exceeded. This is also the target of the Paris agreement under the UN Framework Conference on Climate Change (UNFCCC).

Net Zero in the definition proposed by IPCC is explained as the state “when anthropogenic CO<sub>2</sub> emissions are balanced globally by anthropogenic CO<sub>2</sub> removals over a specified period.” In other words, to reach Net Zero, we must either eliminate emissions entirely or remove an equivalent amount from the atmosphere.

Finavia commits to reach Net Zero target by further reducing the absolute emissions from company’s own activities to the furthest extent possible and address any remaining emissions through investment in carbon removal and storage.

Ideally this would mean that the commitment requires Finavia to reduce the emissions down to zero.

Finavia will build its carbon management and reduction on the experience gained within the Airport Carbon Accreditation programme. We are committed to reaching Net Zero emissions from our own operations by 2025. Our daughter companies will establish their own commitments later.

In addition, we acknowledge the importance of addressing emissions across the entire value chain and commit to achieving Net Zero in these areas by 2050, in line with scientific recommendations and global climate goals.

This commitment reflects not only our internal ambition but also aligns with broader national and international policy frameworks. It supports Finland’s national climate targets, including the goal of becoming carbon neutral by 2035, as well as the Net Zero pathways set by key stakeholders in the aviation sector.

We will continue to strengthen our carbon management and emissions reduction strategies, while expanding our focus to include collaboration across the value chain and engagement with relevant partners and stakeholders.

*Definitions of Carbon Neutrality and Net Zero emission as elaborated in ACI Europe’s Guidance document “Developing an Airport Net Zero Carbon Roadmap”.*

What does Net Zero Carbon emissions mean?

- Globally, Net Zero Carbon emissions will be achieved when all CO<sub>2</sub> emissions released by humans are counterbalanced by removing CO<sub>2</sub> from the atmosphere through negative emissions technologies (i.e. nature-based or technology solutions).
- At an airport, achieving Net Zero Carbon will involve two main elements. Firstly, the airport reduces carbon emissions from its own operations (Scope 1 and Scope 2 emissions) as a minimum to as close to zero as possible. Secondly, any remaining emissions that are difficult to avoid are neutralised through carbon removal.

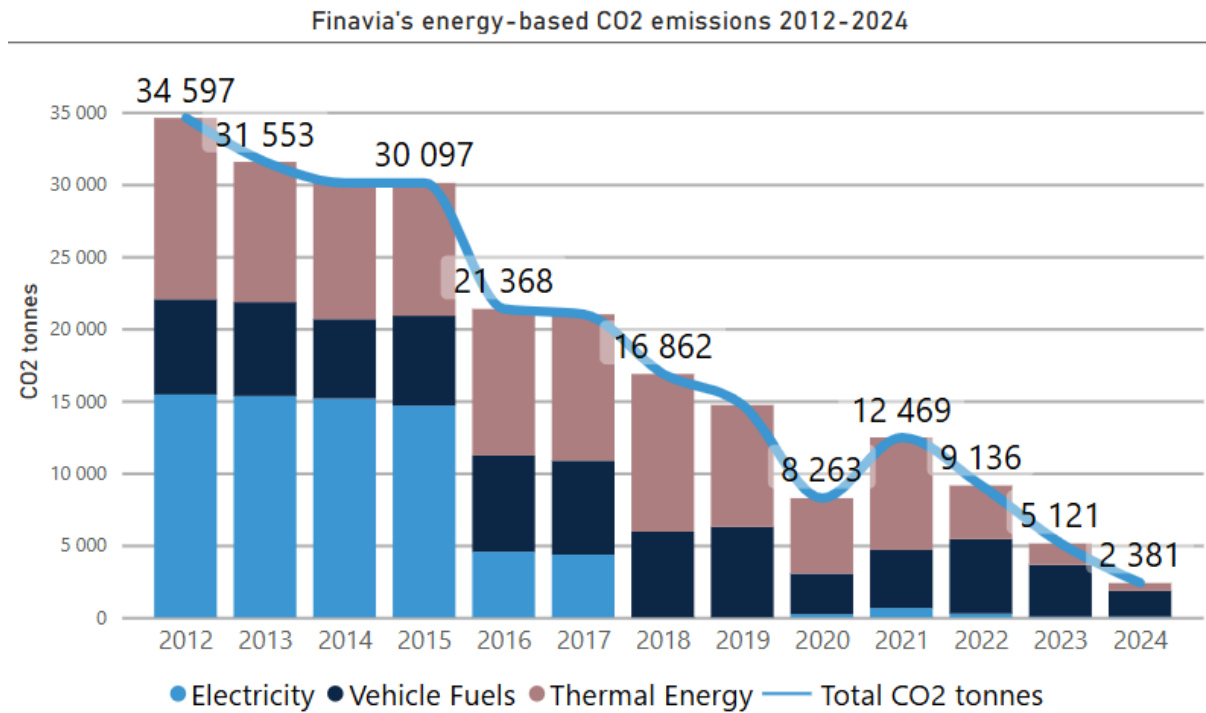
What is the difference between Carbon Neutrality as defined under Airport Carbon Accreditation and Net Zero Carbon?

- To achieve Carbon Neutrality, airports reduce carbon emissions and compensate for the remaining carbon emissions through the purchase of certified carbon offset credits - i.e. by investing in emissions reductions or removals elsewhere (in other sectors/organisations).
- To achieve Net Zero Carbon, airports reduce carbon emissions as close to zero as possible and any residual emissions can only be addressed by carbon removals. This does not allow for offsetting through carbon reductions in other sectors/organisations.

## Historic carbon emissions from Finavia's activities

Through the work initiated in the 1980s as efforts to improve energy saving and further reduction of carbon dioxide emissions as defined in the 2008 Energy and Climate Programme, Finavia has been able to cut CO<sub>2</sub>

emissions from 35000 tonnes in 2012 to 2400 tonnes in 2024.



Finavia's historic CO<sub>2</sub> emissions since 2012 from the main sources (electricity, thermal energy, vehicle fuels, emergency generators from 2020 onwards). The year 2020 was exceptional due to closure of many airports during the COVID19 pandemic.

## Gradual reduction of emissions towards Net Zero

Our emissions from heating and cooling, emergency electricity generation and from use of fuels in machinery and vehicles reached 2400 tonnes in 2024.

We will gradually intensify emission reduction measures, however the financial situation permitting, as the COVID19 pandemic and hostile activities in Eastern Europe have impacted Finavia's capacity to invest and to increase operative costs.

We will continue sourcing all electricity from renewable sources.

We will reduce the use of fuels by replacing our vehicles with electric ones.

We have gradually moved to use renewable diesel and renewable motor fuel oil in all our machinery and power generation. At the beginning of 2025, all of our airports use renewable fuels as a source of energy in vehicles, machinery and power generation.

We will gradually switch to renewable district heating power based on the Law on Certificates for Origin of Energy and the new registry of certificates for guarantees of origin of green heating power supervised by Energy Authority. Half of our airports are already heated with renewable wood-based fuel.

For the residual emissions, we continue acquiring carbon elimination (carbon capture and storage) credits from projects fulfilling the high-level criteria of the ACA guidance.

We started implementing these measures and intensifying them from 2023 onwards, gradually covering more airports. We first focused on four of the Lapland Airports in 2023, followed by Helsinki Airport in 2024. The rest of the network will follow in 2025.

At the mean time we are committed to improving energy efficiency and to reducing carbon emissions further from a variety of sources covered of the ACA scheme's Level 5 scope.

Lapland group of airports have achieved level 5 (NetZeroCarbon) accreditation in Airport Carbon Accreditation program with 2023 data and Helsinki airport has applied for the same level in 2025 with 2024 data.

In parallel with reducing our own operational emissions, we are also taking steps to reduce emissions across our value chain. Our long-term goal is to support the full decarbonisation of airport-related activities, not only within our direct control but also in collaboration with the broader aviation ecosystem

The Roadmap to Net Zero emissions in Finavia's own operations

Year	The ACA level reached	Finavia's emissions CO <sub>2</sub> , t (all airports)	Reduction measures
2022	ACA Level 4+ (Helsinki and Lapland Four)	9100	<p>A fraction of district heating power guaranteed as renewable at Helsinki Airport.</p> <p>Switch from fossil motor fuel oil to 100% renewable at some Lapland airport(s) for part of the year.</p>
2023	ACA Level 4+ (Helsinki) and Level 5 (Lapland Four)  <b>Lapland Airports Net Zero Carbon</b>	5100	<p><b>Additional measures</b></p> <p>A major fraction of district heating power guaranteed as renewable at Helsinki Airport.</p> <p>Switch from fossil motor fuel oil to 100% renewable at four Lapland airports.</p> <p>Removal of residual emission of the four Lapland Airports through purchase of carbon elimination credits.</p>
2024	ACA Level 5 (Helsinki and Lapland Four)  <b>Also Helsinki Airport Net Zero Carbon</b>	2400	<p><b>Additional measures</b></p> <p>All of district heating power guaranteed as renewable at Helsinki Airport</p> <p>Switch of fossil motor fuel oil to 100% renewable also at Helsinki airport</p> <p>Removal of residual emission of also Helsinki Airport through purchase of carbon elimination credits.</p>
2025	ACA Level 5 (Helsinki and Lapland Four)  <b>Net Zero Carbon emissions at all Finavia airports</b>	(200)  0	<p><b>Additional measures</b></p> <p>All of district heating power guaranteed as renewable at all airports</p> <p>Switch from fossil motor fuel oil to 100% renewable at all airports</p> <p><b>(The residual CO<sub>2</sub>-emissions before carbon capture and storage 200 t at all airports)</b></p> <p>Removal of residual emissions of all airports through acquiring of carbon elimination credits and thus reaching Net Zero Carbon emissions throughout the airport network.</p>

## **Finavia airports are forerunners in carbon reduction in air transport industry**

Finavia's airports are economic and societal hubs, with a vital role to play in Finland and further in the regions. We safeguard the connectivity of Finland, the northernmost country of the EU, and enable air transport services.

Airports have always been and are today a powerhouse of decarbonisation in the air transport industry. With a public commitment to reaching Net Zero carbon emissions from operations under its direct control by 2025, Finavia aims to lead by example and demonstrate that the aviation industry is moving decisively toward a Net Zero future.

Beyond our own operations, we are also working to reduce emissions across our value chain by engaging with stakeholders who contribute to the broader airport ecosystem.

May 2025

Vantaa, Finland



Kimmo Mäki

CEO

Finavia Corporation

## Commitment to Reduce Emissions

Lapland Group of Airports (Rovaniemi, Kittilä, Ivalo and Kuusamo) has achieved  $\geq 90\%$  absolute GHG reduction in Scope 1 and 2, from a 2012 base year with residual emissions addressed with offset removals.

Lapland Group of Airports commits to maintaining  $\geq 90\%$  GHG absolute reduction in Scope 1 and 2 and achieving Net Zero by 2050, or sooner, from a 2023 base year, aligned with the ISO Net Zero and/or sector Net Zero frameworks or commitments, where applicable, with interim targets/milestones outlined in a Net Zero roadmap. Where no Net Zero sector commitments/framework exist, the ISO target applies.



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CEO, Finavia Corporation



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