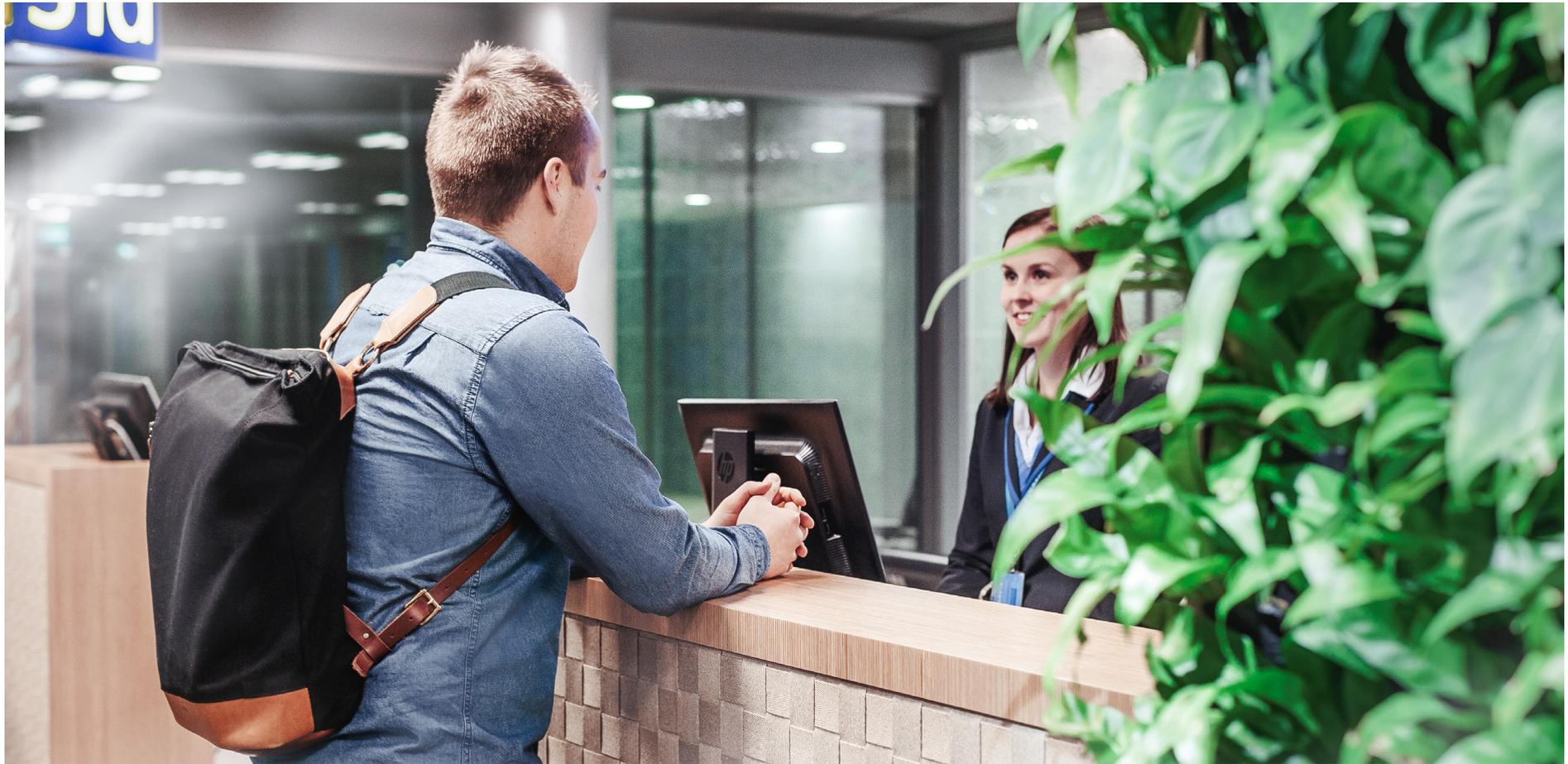


Responsibility Report 2018



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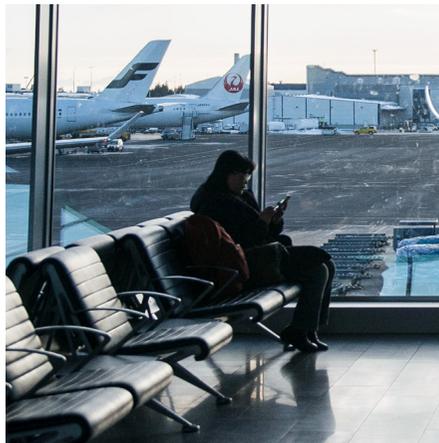
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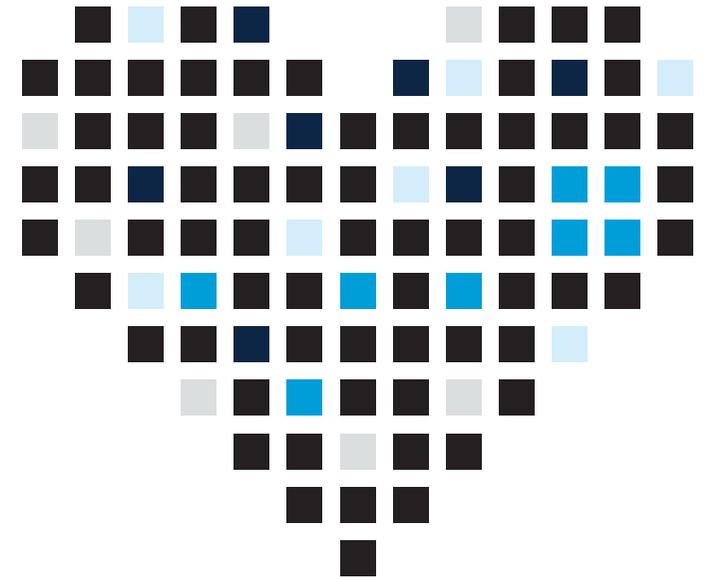
Finavia in brief

Finavia is an airport company that aims to make travelling smooth and uncomplicated. Our nationwide airport network enables good flight connections to all parts of the world. Our customers include passengers as well as the airlines operating at our airports.

Helsinki Airport is the leading transfer airport in Northern Europe for air travel between Europe and Asia. Having an internationally competitive airport is important for Finland as a whole. Transfer traffic ensures that the Finnish people have good flight connections.

We strengthen Finland's competitiveness and internationalisation and promote mobility by ensuring smooth, safe and cost-efficient aviation services in cooperation with the companies and organisations operating at the airports. At the core of our corporate responsibility work lie sustainable development, connectivity and safety, which is the basis for all our operations.

“At the core of our corporate responsibility lie sustainable development, connectivity and safety, which is the basis for all our operations.”



KEY EVENTS IN 2018

CO₂ emissions reduced by

10,700

tonnes.

So far, the development programmes in Helsinki and Lapland's airports have created

7,000

person-years of work.

Our employee satisfaction keeps improving.

The People Power index reached a record high

AA+

making Finavia one of the most inspiring workplaces in 2019.

Job satisfaction index

69.5

(67.5)

Excellent level

BREEAM

environmental certificate

awarded to the South Pier, a new expansion of Helsinki Airport.

New ethical guidelines for suppliers of goods and services

are a compilation of the principles and practices of Finavia's sustainable operations.

Responsibility themes

In terms of our responsibility, we focus on issues that are essential to Finavia's stakeholders and business operations from the social, financial and environmental points of view. The most significant responsibility themes also steer our corporate responsibility reporting.

We updated Finavia's key responsibility themes in late 2018 on the basis of the materiality analysis carried out in 2015 and the stakeholder survey conducted in 2017.

We updated our key responsibility themes following the steps of the GRI 101 Foundation standard. First, we identified material aspects by updating previous definitions with current insight and the results of the stakeholder survey, and then prioritised them in a materiality matrix in accordance with the recommendations of the GRI standards. In particular, we assessed Finavia's social, financial and environmental impact regarding each material aspect. We validated the material aspects within the Executive Group.

The most significant changes include the increased focus on the connectivity of Finland and its different regions and the division of the material aspects into three groups: 1) proactively developed aspects that produce the most added value for stakeholders and society; 2) aspects that

improve the efficiency of operations and that we develop, monitor and report; and 3) maintained aspects that safeguard operational continuity.

We report key figures for 2018 in accordance with our recent materiality analysis based on the GRI standard. In 2019, we will specify our action plans related to aspects that produce the most added value for stakeholders and society. In other words, we will focus on accessibility, safety, customer experience and responsible growth.

Connectivity

We promote the mobility of people, services and goods by enabling opportunities for air traffic and securing good flight connections inside and outside Finland.



Safety

Safety is the basis of all our operations. Together with our partners operating at our airports, we see to the safety of air traffic, travel and related data systems. Starting from 1 January 2019, the Finnish Transport and Communications Agency Traficom (the Finnish Transport Safety Agency Trafi until 31 December 2018) is the authority that supervises aviation safety.

Customer experience

An excellent customer experience and service attitude makes flying smooth and uncomplicated. Our services make travelling easier, offer experiences and memorable moments and are both safe and efficient.

Responsible growth

Responsible operations and the sustainable development of airports are at the core of Finavia's business. This means that we bear responsibility for the impact of our operations on people, the environment and society – carefully and conscientiously, seeing to every detail. Our goal is that our environmental impacts do not increase as our operations develop.

Wellbeing of employees

We find it important that our work community is happy and that Finavia is an attractive employer. Satisfied employees ensure excellent customer experiences, safe travel and productive cooperation with our customers

and partners. None of these would be possible if it were not for professional employees who enjoy their work and have opportunities for continuous development.

Open cooperation in value chains

Our key stakeholders include airlines, passengers, our employees, hundreds of companies operating at our airports, the authorities, decision-makers and people living in the proximity of our airports. We develop our operations and industry in open interaction with our stakeholders.

Ability to reform

To keep up with the international competition between airports, Finavia and its airports must be able to reform constantly. We reform our practices and use technologies to respond to the growing demands of our stakeholders for smooth travel and services. We cooperate with our partners to meet this end.

Global environmental impact

We reduce the environmental impact caused by our operations by taking care of the energy efficiency of our airports by, for example, using renewable energy. Together with airlines we also contribute to the environmental efficiency of air traffic, for example, by reducing the taxiing of aircraft. Additionally, we participate in the international development of our industry.

Local environmental impact

Together with airlines and air traffic control company ANS Finland we develop solutions for air traffic noise. We are also constantly developing ways to reduce the environmental impact of anti-icing and de-icing chemicals used at airports. We cooperate with local

residents, businesses located in areas adjacent to airports, municipalities, environmental authorities and air traffic operators. Airport operations are subject to strict environmental permits and compliance with them is supervised by regional ELY Centres (Centres for Economic Development, Transport and the Environment).

Compliance with standards

We follow laws and good corporate governance in all our operations. We communicate about our operations, management systems and remuneration practices openly. We observe the Corporate Governance Code of Finnish listed companies to the extent that is appropriate, given the state ownership and the nature of our operations.

Impact on regulations

We proactively see to the impact of national and international laws and regulations on Finavia's operations. We actively maintain a dialogue with the industry, our neighbours and the authorities. Airport operations are governed, for example, by international aviation rules and EU laws and regulations.

Material aspects of sustainability

Essential operational priorities	Contents	Management practices	Information released for publication that is essential for Finavia's operations
Connectivity	We promote the mobility of people, goods and services by ensuring the operating prerequisites for air traffic. By doing this, we provide a solid basis for extensive domestic and international flight connections.	Operational objectives Financial targets Finavia's management system	GRI 202 Market presence GRI 203 Indirect economic impacts
Safety and security	Safety and security are at the core of all our operations. In cooperation with our partners operating at our airports, we ensure the safety of air traffic and air travel and the security of the information systems supporting them. Finnish Transport Safety Agency Traficom is the authority supervising flight safety in Finland.	<u>Managing corporate responsibility</u> Risk management policy Corporate safety Safety management system Risk assessments Occupational safety and health management system	GRI 416 Customer health and safety GRI 403 Occupational health and safety
Customer experience	An excellent customer experience and service attitude make flying smooth and easy. Our services make travel easier, offer memorable experiences, and are safe and efficient.	Finavia strategy and key programmes Customer satisfaction survey	GRI 416 Customer health and safety GRI 203 Indirect economic impacts
Responsible growth	Responsible operations and sustainable development of airports are at the core of Finavia's business. This means that we accept responsibility for the impact of our operations on people, the environment and society – carefully, conscientiously and with attention to the details. Our aim is to ensure that as we develop our operations, there is no increase in their environmental impacts.	<u>Managing corporate responsibility</u> Finavia's strategy Environmental manual and environmental policy	GRI 201 Economic performance GRI 203 Indirect economic impacts

Managing corporate responsibility

In its responsibility work, Finavia is guided by its values, operating principles, policies and guidelines, which must be observed by all Finavia staff members and persons working in the company administration. On the practical level, every Finavia employee must act in a responsible manner and promote responsibility.

The decisions ensuring the responsibility of Finavia's operations are jointly made by the CEO and the Executive Group. Finavia's Board of Directors actively monitors the management of corporate responsibility issues and regularly discusses matters pertaining to the company's finances, safety, environmental matters and social responsibility. All policies observed in the company are approved by the Finavia Board of Directors. Financial profitability, customer satisfaction and safety are the corporate responsibility indicators set out in the Group's scorecard.

Practical aspects of environmental responsibility are coordinated by Finavia's environmental unit and Sustainable Development Director in cooperation with business areas and airports, which function as profit centres in the business areas.

Finavia's environmental management system (ISO 14001) was certified in 2018. Finavia's environmental policy serves as a basis for the setting of environmental objectives and targets for the company. These objectives and targets are approved by the CEO. The company also identifies the functions and services that generate the most significant environmental impacts that it can influence. The environmental objectives and

targets are divided into long-term (5-10 years) development programmes and year-long action programmes. Finavia measures environmental impacts and monitors the effectiveness of the action taken on a regular basis.

The Financial Unit and CFO are in charge of economic responsibility issues at a practical level. Consideration and promotion of social responsibility is allocated to a number of different parties at Finavia. The Group's HR matters are the responsibility of the HR Director and the HR Unit. Guidance in social responsibility issues is also provided by Finavia's personnel strategy and the detailed action plan based on it, as well as Finavia's ethical principles. Coordination of the management and development of safety and security matters is the responsibility of the Group's Risk Management Unit in accordance with the risk management policy.

Finavia is engaged in active dialogue with its stakeholders. Stakeholder engagement is coordinated by our Communications Unit, and the feedback that we receive is an important consideration in our responsibility work. In accordance with the company's communications policy, our aim is to ensure that our operations are predictable and transparent and that we communicate on our operations in an open manner.

Finavia requires its suppliers to abide by applicable laws, regulations and good trading practices, as well as sustainable development principles and responsibility. Finavia's procurement responsibilities and procedures are specified in the procurement policy. The procurement resources and methods are developed in a target-oriented manner so that the different aspects of social responsibility and their applicability to supply agreements can be ensured. The procedures prescribed in legislation governing procurement guide Finavia's competitive tendering processes. The Code of Conduct for suppliers of goods and services published in 2018 improves the transparency of the competitive tendering phase. In cases below the EU threshold value, Finavia requires fulfilment of the contractor's obligations. One of the objectives here is to combat the black economy. The Act on Procurements and Concession Contracts of Entities Operating in the Water and Energy Supply, Transport and Postal Services Sector (1398/2016) is observed in procurement.

Finavia is committed to good governance in all its operations. Effective internal control and risk management help to ensure high operational performance and constitute an essential element of the good corporate governance observed by the Group. Finavia's ethical principles, operating manual and documents such as procurement principles help to ensure that the company complies with the standards binding on it. Administrative transparency is ensured by complying with the Finnish Corporate Governance Code for Listed Companies to the extent that it is practicable in a company owned by the State of Finland.

Finavia monitors the results of its corporate responsibility work and reports on them in its corporate responsibility report by using the GRI indicators. Corporate responsibility reporting is coordinated by the Communications Unit.

Stakeholder cooperation

Our stakeholders include a broad range of different actors, from influential decision-makers in Finnish society to flight passengers. Maintaining a continuous dialogue with our stakeholders is important to us.

We serve more than 50 major airline customers every day and in 2018, the number of passengers using our airports was already close to 25 million. We engage in particularly close dialogue with the companies operating at the airports, the authorities, decision-makers and neighbours around our airports.

We cooperate with our stakeholders on a continuous basis: we meet with them, listen to them, discuss with them and jointly draw up plans to improve airport operations. We focus particularly on our main stakeholders, i.e. the communities and operators who have the biggest impact on Finavia's business, and whom our operations most impact.

Each of the main stakeholders has a designated person at Finavia, who coordinates the cooperation and makes the stakeholder's message more widely known at Finavia.

Key Finavia stakeholders



Memberships in aviation associations

Finavia contributes to the development of the airport and air traffic sector in several organisations and working groups, and we are represented in various Finnish and international travel development forums. For example, Finavia is a member of the European Region of the Airports Council International (ACI Europe) and takes part in its working groups. Finland is also a member of the International Civil Aviation Organization (ICAO), which manages the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA), a global air traffic emissions arrangement scheduled to take effect in 2021.

Finavia is a founding member of the Nordic Initiative for Sustainable Aviation cooperation network (NISA), the goal of which is to supply biofuels to the aviation industry.

As a member of the World Travel & Tourism Council, the Nordic Travel Retail Group and the Nordic Council of Shopping Centres, Finavia is also a partner in the international development of tourism and work to develop the commercial potential of airports. Finavia is a member of PALTA, the Association of Service Sector Employers.

Charity and sponsorship policy

Every year, Finavia donates money to charities that it considers to be socially important. In its sponsorship work, Finavia also supports causes that help to promote its business operations.

In 2018, we spent a total of EUR 94,000 (41,700) on charity and sponsorships. The aim of the sponsorships was to specifically increase the attractiveness of Lapland as a travel destination. In 2018, Finavia donated a total of EUR 13,600 (6,500) to charity.

In 2018, Finavia supported the work of Plan International to improve the education, health, safety and hygiene of girls living in developing countries. We also donated to the Good Christmas Cheer campaign organised by the Finnish Red Cross.

Finavia has cooperated with the children's rights organisation Plan International Finland since 2009. By the end of 2018, Finavia and Plan International Finland had collected about EUR 300,000 for children in developing countries in a joint fundraising effort at airports. For example, the deposits of the returnable bottles collected at security checks are donated to Plan. Passengers can also make contributions by donating money into collection boxes. A total of EUR 58,400 was raised through bottle deposits and with the collection box effort.

Finavia is an official partner of the Finnish Olympic Committee. Helsinki Airport served as a busy hub for athletes and tourists on their way to the Winter Olympics in Pyeongchang, South Korea in February 2018. The cooperation will continue over the coming years as Asian cities will once again host the Olympic Games (Tokyo in 2020 and Beijing in 2022).

Cooperation with suppliers and partners

Finavia is a major buyer of goods and services, both locally and nationally. Our purchases in 2018 totalled about EUR 499 million. Investments now account for a larger proportion of the purchases than in the past, a result of the development programmes at Helsinki Airport and at the airports in Lapland.

Finavia buys most of the goods, services, and investment goods it uses in Finland. We had a total of 3,917 suppliers of goods and services in 2018. A total of 293 of them were involved in contract projects. In 2019, Finavia focuses on the transparency of its supply chain by producing a detailed list of its key suppliers and supplier countries in accordance with the responsibility area of its Procurement Department.

Responsibility is the guiding principle in Finavia's cooperation with its suppliers and partners. The ethical guidelines for goods and services suppliers published at the end of 2018 is a compilation of the principles and practices of correct and responsible action that are important to Finavia and that we also expect our partners to observe.

The minimum requirements for sustainable development and social responsibility in our partners' operations are laid out in the guidelines. The document encourages Finavia's suppliers to minimise environmental loading and continuously improve the efficiency of environment-related operations. The guidelines are an essential part of the cooperation between Finavia and its suppliers, and from 1 January 2019, the document is incorporated into all agreements between Finavia and its partners. We aim for open and efficient cooperation, which is beneficial to both parties.

Responsible purchasing

Purchases and supply chain management are essential to responsibility at Finavia. Finavia is constantly working to expand the scope of responsible purchases and to apply more specific responsibility criteria to its sourcing. With the aim of developing the sector of responsible purchases, Finavia has prepared an action plan up to 2020 covering all areas of responsibility: economic responsibility, environmental responsibility and social responsibility. The Code of Conduct for suppliers of goods and services published in 2018 is an important element of Finavia's

responsibility objectives. The Code of Conduct conveys a strong message to foreign operators about how strongly we consider environmental and social responsibility in all our activities.

In 2019, Finavia will map the products, services and suppliers most important to corporate responsibility. Finavia's procurement strategies have designated persons with primary responsibility for procurement and development of activities within the category. Other expenses, such as air traffic monitoring charges and contracting, constitute independent categories.

Procurement categories



Our different stakeholders have different priorities. The following table lists a few highlights and examples of cooperation from 2018.

Stakeholder	Issues brought up by the stakeholders	Examples of Finavia's actions in 2018	Forms of cooperation
Airline customers	<ul style="list-style-type: none"> Digital services and developing the customer experience Efficient and punctual airport services and competitive pricing The role of regulation as a cost factor Continuous development of operations and Finavia's initiative Extensive and open cooperation and communication Improving awareness of Helsinki and Finland to create demand for routes 	<ul style="list-style-type: none"> Keeping air traffic charges at reasonable levels through efficient operations Helsinki Airport is the sixth least expensive main airport in Europe Cooperation with major airlines in noise control (CEM cooperation) Increasing the level of automation in passenger and baggage processes Successful development of flights to Lapland, in cooperation with regional tourist operators and Visit Finland Marketing Finland to target groups together with different regions 	<ul style="list-style-type: none"> Regular customer-specific meetings, continuous dialogue and cooperation Quarterly briefing and consultancy meetings regarding the Helsinki Airport development programme Preparation and joint assessment of route development analyses International visibility of Finavia's airports Development of routes and joint marketing efforts with airlines Carrying out campaigns to enhance the visibility of Helsinki Airport in target markets Customer surveys
Passengers	<ul style="list-style-type: none"> Flight safety Appropriate airport network and diverse domestic and international connections Smooth service at airports, high standard of customer service Diverse shopping and service options 	<ul style="list-style-type: none"> Day-to-day work to ensure flight safety Enhancing operational efficiency in cooperation with other airport operators Ensuring the smoothness of travel during the construction taking place as part of the development programmes Improving experiences at the airports and providing more shopping opportunities Smoother passenger processes by means of automation Continuous development of websites and mobile applications Joint service and cultural training for airport operators Multilingual signs at Helsinki Airport Targeted services for Chinese passengers 	<ul style="list-style-type: none"> Personal service situations Customer feedback channels and customer satisfaction surveys Website, newsletters, press releases, social media and mobile application Events Cooperation with other service providers at airports to create a uniform customer experience
Personnel	<ul style="list-style-type: none"> Wellbeing at work Supportive and fair remuneration Continuous and close cooperation and participation Continuous development of competence Operational efficiency issues Good management and supervisory work Ethical operating methods 	<ul style="list-style-type: none"> Wellbeing projects Personnel survey Training for supervisors, peer support and coaching Involvement of the personnel in the definition of values as part of the strategy work and practical implementation of the strategy Customer service training for the personnel Information screens for shift work and administrative units Collective agreement working group to develop the pay system Clearer goal-setting, performance management and assessment Development of a performance-based bonus scheme 	<ul style="list-style-type: none"> Personal development reviews Intranet and information screens Staff briefings Training sessions Expanded occupational healthcare Cooperation with shop stewards and monthly meetings with personnel organisations Presentations at shop steward days of personnel organisations
Public authorities	<ul style="list-style-type: none"> Compliance with regulations and Finavia's own guidelines Helpful and active approach in official matters Changing threat assessments by security authorities Quick response to environmental damage and queries by local residents Up-to-date environmental reporting 	<ul style="list-style-type: none"> Reviewing airport safety and security plans and testing them in cooperation with the authorities Compliance with regulations and Finavia's own instructions and principles Influencing the development of regulation of the industry Implementation and application of the aviation regulations of the European Aviation Safety Agency (EASA) Well-organised material in applications for environmental permits and replies regarding appeal Reporting to the authorities on environmental issues raised by local residents Developing the environmental reporting process Cyber security cooperation with different authorities Discussions and planning concerning the Kylmäoja fisheries associations 	<ul style="list-style-type: none"> Continuous dialogue, meetings, working groups with authorities Preparation and joint reaction to changes in the operating environment (e.g. with Finnish Customs, the police and the Finnish Border Guard) Joint overview and communication Transparent and reliable reporting Participation in the work of the airspace control advisory group Ensuring cyber security at Helsinki Airport, which has been determined as an area significant to society, in cooperation with the authorities (Traficom)
Financiers and owners	<ul style="list-style-type: none"> Efficiency and profitability Financially sustainable business Transparency of operations and reporting Responsibility Ability to pay dividend 	<ul style="list-style-type: none"> Maintaining steady growth and good financial performance Strong balance sheet Sustainable investment plans Business operations compliant with Finavia's operating principles and guidelines 	<ul style="list-style-type: none"> Meetings and communication Financial reporting Contact to state ownership steering General Meeting of Shareholders

Our different stakeholders have different priorities. The following table lists a few highlights and examples of cooperation from 2018.

Stakeholder	Issues brought up by the stakeholders	Examples of Finavia's actions in 2018	Forms of cooperation
State and municipalities	<ul style="list-style-type: none"> Provision of cost-efficient air traffic services Good connectivity of Finland and its different regions Promotion of business life and competitiveness by means of well-functioning air traffic Land use planning around airports to prevent new noise issues Seeking synergy benefits between airports and municipal functions Local employment effect 	<ul style="list-style-type: none"> Enhancement of operations as part of the air traffic service chain Competitive pricing Helsinki Airport development programme Employment effects of the Helsinki Airport development programme and the investments made at network airports Closer cooperation with the EU Well-organised material in applications for environmental permits and replies regarding appeal Cooperation with regional councils in the preparation of regional plans and the implementation of national land use goals Cooperation with the City of Vantaa in issues concerning land use, runoff water and noise control Submitting opinions on land use plans Discussions in the City of Espoo environmental committee and in the City of Vantaa master plan committee Cooperation with the City of Vantaa and the Helsinki-Uusimaa Regional Council in land use planning Cooperation with the City of Kerava in urban planning issues Presenting Finavia's operations to new municipal committees 	<ul style="list-style-type: none"> Continuous dialogue Meetings, working groups
Residents in the proximity of airports	<ul style="list-style-type: none"> Mitigation of aircraft noise and other environmental impacts Open line of communication, consultations and influencing work Local employment effect 	<ul style="list-style-type: none"> Reducing discharges into the water and soil (for example, centralised de-icing locations) Promoting the continuous descent approach of aircraft Employment effects of the Helsinki Airport development programme and the investment programme for network airports Participation in events in Vantaa and Espoo (e.g. Kivistö and Leppävaara) School cooperation in Vantaa with the city's basic education unit Discussion on noise control during the consultation round required under the Environmental Noise Directive 	<ul style="list-style-type: none"> Environmental feedback channel and answering enquiries Regular reporting also available to residents Internet, social media Local events Participatory planning model WebTrak flight tracking and noise measurement service
Companies operating at the airports, partners, subcontractors and suppliers	<ul style="list-style-type: none"> Business relations benefiting both parties Open interaction and good personal relationships Good project management and Finavia's ability to fulfil agreed obligations Creating a fair competitive situation for operators at the airports Good operational infrastructure and working conditions Equal treatment Finavia's responsibility and good reputation as a partner 	<ul style="list-style-type: none"> Expansion and internationalisation of the partner network Closer cooperation with suppliers Implementing the Helsinki Airport development programme through joint contracting Action plan for responsible purchases Assessing the environmental impacts of purchases Ethical guidelines for suppliers of goods and services Smart & Clean research cooperation with Aalto University 	<ul style="list-style-type: none"> Project-specific information sessions for potential tenderers Agreement negotiations Daily contacts, follow-up meetings and safety and security meetings Development projects Training sessions Charity and sponsorship
Media	<ul style="list-style-type: none"> Reliable, transparent, and up-to-date information Media access to management and corporate communications 	<ul style="list-style-type: none"> Active communication in different channels 	<ul style="list-style-type: none"> Bulletins and briefings Interviews Meetings providing background information Events and visits Media Desk service
Military and state aviation	<ul style="list-style-type: none"> Safety Level and smoothness of services (e.g. operating hours at the airports) Efficiency 	<ul style="list-style-type: none"> Cooperation and agreements related to drills by the Finnish Defence Forces Negotiations on more effective airspace control over the Gulf of Finland with the Finnish Air Force Tripartite cooperation between the Finnish Defence Forces, ANS Finland and Finavia 	<ul style="list-style-type: none"> Local dialogue and customer service at the airports Regular cooperation meetings Membership in the airspace control advisory group of the Ministry of Transport and Communications Working groups
General aviation	<ul style="list-style-type: none"> Support and services at the airports Listening and discussion Pricing policy of season tickets Safety Smooth access at airports 	<ul style="list-style-type: none"> The price of a season ticket for recreational aviation remained at the previous year's level Enabling air shows and other aviation events at network airports Uniform approach to airport access and development of access systems 	<ul style="list-style-type: none"> Local discussion Meetings of the cooperation body of Finavia and the Finnish Aeronautical Association Relationships with interest groups and aviation schools

Finavia as a part of society



Connectivity

In autumn 2018, we examined what aspects of corporate responsibility are the most important for Finavia. As a result, connectivity was defined as the most material sustainability theme. Well-functioning flight connections are vital not only for the opportunities of people living in Finland to travel quickly and easily to different parts of the world, but also for the international operations and competitiveness of Finnish companies.

Finland's geographic location at the northern edge of Europe presents challenges to mobility and travel. The Baltic Sea separates Finland from Continental Europe and therefore prevents rapid train and road connections to the South and West.

Excellent flight connections turn these challenges into advantages: Finland is a bridge between the East and the West, offering connections between the Far East and the metropolises in Central Europe. The connections enabled by Finavia, together with its airline partners, make Finland a central and easily accessible destination.

Well-functioning flight connections are a prerequisite for Finnish business life and competitiveness. By safeguarding these connections, we can produce significant value for our stakeholders and the entire

society. Air traffic is needed for the imports and exports of goods, for building international networks and for the management of transboundary value chains. Connectivity is also vital for the development of tourism in Finland.

Finland's flight connections do not only serve Finnish companies. When expanding to new markets, global companies examine how easily different market areas can be accessed and how supply chains can be organised. Investors also focus on these factors: good connections make potential investment objects more attractive.

People and goods must also be able to move quickly within national boundaries. Finavia is developing its airport network so that its services cater to the needs of different regions and their people, business life and tourism in the best possible way.

In its competitiveness report (2017–2018), the World Economic Forum (WEF) ranked Finland's airport network as the fifth best in the world and the best in the Nordic region.

According to the Airport Industry Connectivity Report 2018, Helsinki Airport is the best networked hub in the Nordic region and the 12th best hub in Europe, measured by the number of connections. In 2018, the index that indicates the number of connections went up by 16 per cent from the previous year. Of all large and medium-sized airports, only Munich Airport was able to reach stronger growth.

Services and customer experience

Finavia works in a target-oriented way to ensure smooth travel and a top-class customer experience. Enhancing the customer experience has been made into a key programme in the new Finavia strategy.

An exceptional customer experience helps airports to stand out in international competition. The excellence of airports is based on smooth and efficient operations on the one hand, and on comfort and experiences on the other. We conduct regular surveys to monitor the level of customer satisfaction at our airports. The information collected in the surveys is used to provide a better understanding of changing customer needs and to respond to these changes. Agility is the key word when corrective action is taken. The target levels for the customer experience indicators are approved each year.

Feeling relaxed, secure and refreshed, as well as the feeling of Finnishness are the customer experience pillars guiding the development of Finavia's services, facilities and personnel. In a uniform service culture, the entire airport community recognises the practical importance of these pillars and is committed to strengthening them. Commercial operators at Helsinki Airport received more training in different aspects of a uniform service culture during 2018.

Helsinki Airport's
customer satisfaction
in the international ASQ
survey was

4.17

(on a scale of 1-5)

Network airports'
average customer
satisfaction
rate was

4.26

(on a scale of 1-5)

Customer experience pillars guide the planning and development of airports

We are developing the services and facilities at our airports in accordance with the needs and expectations of different target groups. In 2018, we surveyed the needs and expectations of transfer passengers as their numbers at Helsinki Airport are steadily increasing.

We also worked to enhance the service experience of Chinese passengers at airports in Lapland because Lapland has become a popular destination for Chinese visitors. Finavia launched a development programme to make the passenger facilities and services at its airports in Lapland more attractive. The Kittilä Airport extension was opened at the end of 2018, and the upgrading work at Ivalo and Rovaniemi Airports will be completed by Christmas 2019.

The customer experience pillars are an integral part of the planning and implementation of Finavia's investment programmes. For example, at Helsinki and Kittilä Airports, Finnishness is reflected in the use of Finnish design and materials.

New technologies help improve the customer experience

Finavia is at the forefront of using the opportunities provided by digitalisation. We are constantly seeking new ways to enhance processes and to offer fresh and attractive services based on new technologies. In 2018, our focus was on improvements in digital services and operational efficiency at airports. Intensive work in these areas will continue in 2019.

Development priorities during 2018 included a better situational overview and management procedures (especially in emergencies), and improved optimisation tools for day-to-day management. More than 2,000

employees at Helsinki Airport are already using the real-time situational overview produced by Finavia. An optimisation tool based on machine intelligence is now managing the coordination between aircraft parking and apron buses at Kittilä Airport.

For airlines, the development measures mean shorter turnaround times and more punctual operations. For passengers, the improvements materialise as smooth services, quick transfers and easier travel. Digitalisation and optimisation of processes also create a more positive personnel experience.

More intelligent services for passengers

Ensuring safety and smooth operations at airports is the top priority for Finavia at all times. For this reason, we thoroughly test the functioning of all technologies before they are put into use.

We carried out a variety of different technology pilots during 2018. We tested the targeting of information display content based on flight details, which allows us to provide information in different languages. We tested a chatbot in customer service and piloted the cleaning of sanitary facilities on the basis of real-time customer feedback.

Ensuring excellent customer experience during construction

The year 2018 was characterised by intensive planning as we were preparing for the expansion of Terminal 2 at Helsinki Airport, which started in January 2019. We will do our best to ensure that we can live up to our service promise 'For smooth travelling' during the construction work.

Ensuring an excellent customer experience requires good management at all levels of the airport community. During 2018, we worked in close cooperation with all companies and authorities operating at the airport.

"Feeling relaxed, secure and refreshed as well as the feeling of Finnishness are the customer experience pillars guiding the development of Finavia's services, facilities and personnel."

Financial operating prerequisites

In order to successfully implement its strategy, Finavia must continue to maintain its financial ability to generate profit. Responsible and profitable growth provides a basis for the development of our airport operations also in the future.

For Finavia, responsible growth means that we can make decisions and investments that have a minimal impact on the environment. It also means that we are able to maintain our competitive position and develop our operations in a broad range of areas as well as invest. These factors combined will secure the continuity and development of our operations and at the same time ensure that we meet the expectations of airlines and passengers while maintaining a first-class safety culture.

Finavia's revenue comprises the air traffic charges paid by airlines, premises and lot rents paid by the companies operating at airports, rents for advertising spaces, and parking fees. Finavia's operations are not subsidised with tax revenue. We cover the losses arising from our airport network with the commercial income of Helsinki Airport.

Finavia is a major infrastructure investor

In 2018, our investments totalled EUR 239.5 million. Over the past five years (2014–2018), we have invested a total of EUR 860 million in our airports. The Helsinki Airport development programme, launched in 2014, totals more than one billion euros.

The breakdown of Finavia's spending in the period 2014–2018 is shown in the chart on the next page. Adequate cash flow financing provides a basis for long-term development of air traffic and infrastructure investments. In 2018, cash flow from operations amounted to EUR 99.3 million (105.7), which was used to cover financing needs in maintenance and development. The Helsinki Airport development programme was also partially funded with committed credit.

Stable financial position

Finavia's financial position is strong, which provides a solid basis for future development investments. At the end of 2018, the Group had cash and cash equivalents amounting to EUR 22.8 million (14.6).

At the end of the year, Finavia's interest-bearing loans totalled EUR 323.1 million (310.3). In addition to cash flow financing, Finavia also uses liabilities to fund its investments. Net debts totalled EUR 300.3 million (295.7). Finavia's funding needs are based on its long-term business plan, which contains estimates of future cash flows and sets out the company's operational and strategic investment needs.

Unused long-term credit facilities taken out to fund the Helsinki Airport expansion totalled EUR 180 million at the end of 2018. Finavia also has a EUR 250 million short-term commercial paper programme.

Most of the financing for Finavia's investments is in the form of project funding, which is well suited for extensive strategic infrastructure projects. This type of credit is also in line with Finavia's long-term earning logic in which investments in airports generate income on a very long-term basis and passenger numbers are expected to grow.

Finavia's equity ratio stood at 58.7% (58.4) at the end of 2018. The aim is to keep the equity ratio above 40%. Finavia has planned its investment programmes so that when the growth expectations are met, the company's solvency will remain at a good level in all situations.

Finavia pays dividends within the constraints of its distributable funds

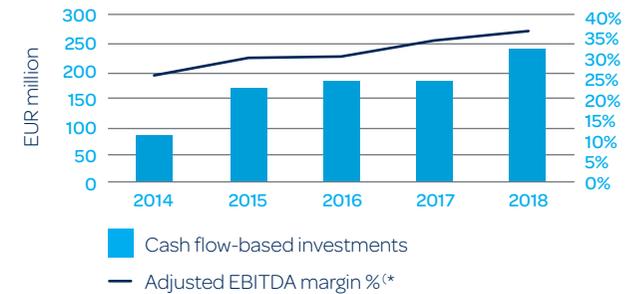
The aim of Finavia is to pay dividends to the State of Finland within the constraints of its financial results and distributable funds. The company does not have a dividend payments policy.

The profit for the 2018 financial year amounted to EUR 45.3 million (37.7). The Finavia Board of Directors has proposed that EUR 11.1 million be distributed as dividends for the financial year (8.3).

Balance sheet total and equity ratio, 2014–2018



Investments and adjusted EBITDA margin, 2014–2018



* Write-downs, impacts from new and cancelled environmental provisions, profit and bonus provisions, income from LAK and Aviatontti IV, consulting services related to mergers and acquisitions as well as legal expenses from settling disputes relating to the Helsinki Airport development programme are included in extraordinary items.

Efficiency and profitability

Finavia's operational efficiency has been at a good level for many years, and this was also the case in 2018. This is also reflected in the charges that Finavia collects from airlines, which are among the lowest in Europe.

Efficiency is one of the cornerstones of the sustainable and profitable growth of Finavia's business. Developing and maintaining airports is a highly capital-intensive business, and it is essential that investments are used in an effective way.

At a time when air traffic and passenger numbers are growing, enhancing operational efficiency is key to day-to-day operations at Finavia. This guarantees smooth travel and short aircraft turnaround times. Cost-effectiveness means that our unit costs per passenger and per landing are reduced. This boosts our competitiveness, as it allows us to keep our airport charges at reasonable levels.

Helsinki Airport's international competitiveness: air traffic charges 2018 – Airbus A32



RIX=Riga, TLL=Tallinn, VNO=Vilnius, HEL=Helsinki, DUB=Dublin, WAW=Warsaw, OSL=Oslo, KEF=Keflavik, CPH=Copenhagen, PRG=Prague, AMS=Amsterdam, BRU=Brussels, MAD=Madrid, LIS=Lisbon, BUD=Budapest, ATH= Athens, LED=Pulkovo, FCO=Fiumicino, VIE=Vienna, ARN=Arlanda, CDG=Charles De Gaulle, MUC=Munich, FRA=Frankfurt, LHR=Heathrow

Source: Airportcharges.com

Competitive pricing

In price comparisons between European main airports, Helsinki Airport's air traffic charges have been among the lowest for many years. In 2018, our air traffic charges were the sixth lowest among the 23 European main airports. We support the expansion of flight connections by providing airlines with low air traffic charges and discounts on new routes.

The aim of the European Commission is to harmonise the air traffic charges collected by airports so that the same charges would be applied for domestic and international flights. Finavia reduced differences between the passenger charges payable for domestic and international traffic in 2017 and 2018. Air traffic charges were increased by 1.5% in 2018.

At the start of 2019, Finavia raised air traffic charges by 2.1% from the 2018 levels. The price adjustments were made because the airport investment programmes have resulted in higher depreciation and capital costs.

In the long term, the prices charged by Finavia for its services have decreased. In real terms, air traffic charges decreased by eight per cent between 2004 and 2018, or by an average of 0.6% per year.

Performance of regional airports

After Helsinki Airport, the highest increases in passenger numbers in 2018 were again reached at the airports in northern Finland. Nearly 1.5 million passengers went through the airports in Lapland, with the passenger volumes 8.6% higher than in 2017. This increased the total number of passengers using Finavia's airport network.

However, in relation to the extent and service capacity of the regional airport network, passenger volumes at many of the airports remain low, and the airport network again posted negative results in 2018. Higher revenue and better cost control have, however, helped to improve

the results. The losses generated by the regional airport network are covered with the commercial income of Helsinki Airport.

The financial results of an airport mainly depend on passenger volumes, the structure of the air traffic, customer structure and opening hours - all factors that have a major impact on personnel costs. Airport operations are a highly capital-intensive business, which means that a significant proportion of Finavia's expenditure and the costs of its airport network are fixed and determined by regulations. Personnel expenses are also a major factor; they account for an average of 40% of the total costs.

Over the past few years, many of the regional airports have been able to improve their financial results as passenger numbers have grown and measures have been taken to boost operational efficiency. The airports in Lapland have posted the highest increases in passenger volumes, but small increases have also been recorded at main regional airports. At the same time, however, at small airports south of Oulu, passenger numbers are declining. The most significant improvements in financial results have been achieved at airports in Lapland and at main regional airports.

The structure of the financial results of a large airport in 2018 is shown in a graph on page 23. The airport's international traffic volume increased and it had several hundred thousand passengers, in total. Despite the growth, the loss amounted to EUR -1.1 million (-1.3). Finavia does not report the financial results of individual airports.

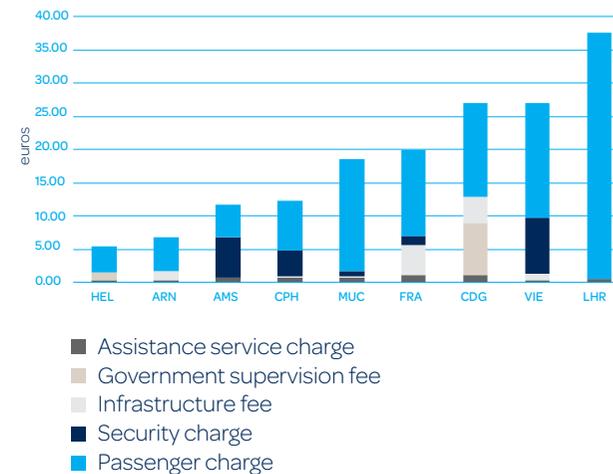
Uniform pricing at all airports

In Finland, a single service level-based charge is payable for identical services at all airports, irrespective of the profitability of individual airports. This is called the network principle.

According to EU legislation, each individual airport should be profitable, but in accordance with the network principle, loss-making airports can be supported using the commercial income of Helsinki Airport. Without the network principle and the subsidies from the income of Helsinki Airport, Finavia would have to substantially increase the price level of its network airports to make their operations economically viable.

Due to low traffic volumes, the potential for increasing commercial income at airports other than Helsinki Airport and the largest regional airports is limited. In the long term, the decrease in domestic air traffic is likely to continue at several airports. This is caused by urbanisation and the improved competitiveness of other modes of transport.

Transfer traffic charges on certain main airports, 2018



Please note that HEL does not charge for security for international passengers originating from EU, Norway, US, Iceland, and Switzerland.

An example of the structure of the financial result of a large airport, 2018



Financial added value for our stakeholders

The profitability of our business and development of our competitiveness are at the core of our financial responsibility. The most significant economic impact of Finavia's operations on Finnish society arises from our role as a facilitator for efficient air traffic. This in turn enhances the competitiveness of our society. Finavia is committed to developing its business operations in a manner that ensures the operating prerequisites of air traffic in Finland.

At the same time, we can only take care of our personnel and assets in a responsible manner and invest in the development of our airport network if our operations are on a financially sustainable basis. In addition, operating on a financially sustainable basis makes our airports more attractive to new airlines and passengers.

By ensuring our competitiveness, we also create jobs in all parts of Finland. The Helsinki Airport development programme, which is estimated to create 5,000 permanent jobs at the airport, is the most significant of the factors boosting our competitiveness.

The development programme has already generated 6,600 person-years during the construction stage. The total employment effect of the development programme is estimated at 15,800 person-years during the entire construction period. The investment programme at Lapland airports is estimated to generate 840 person-years during the construction.

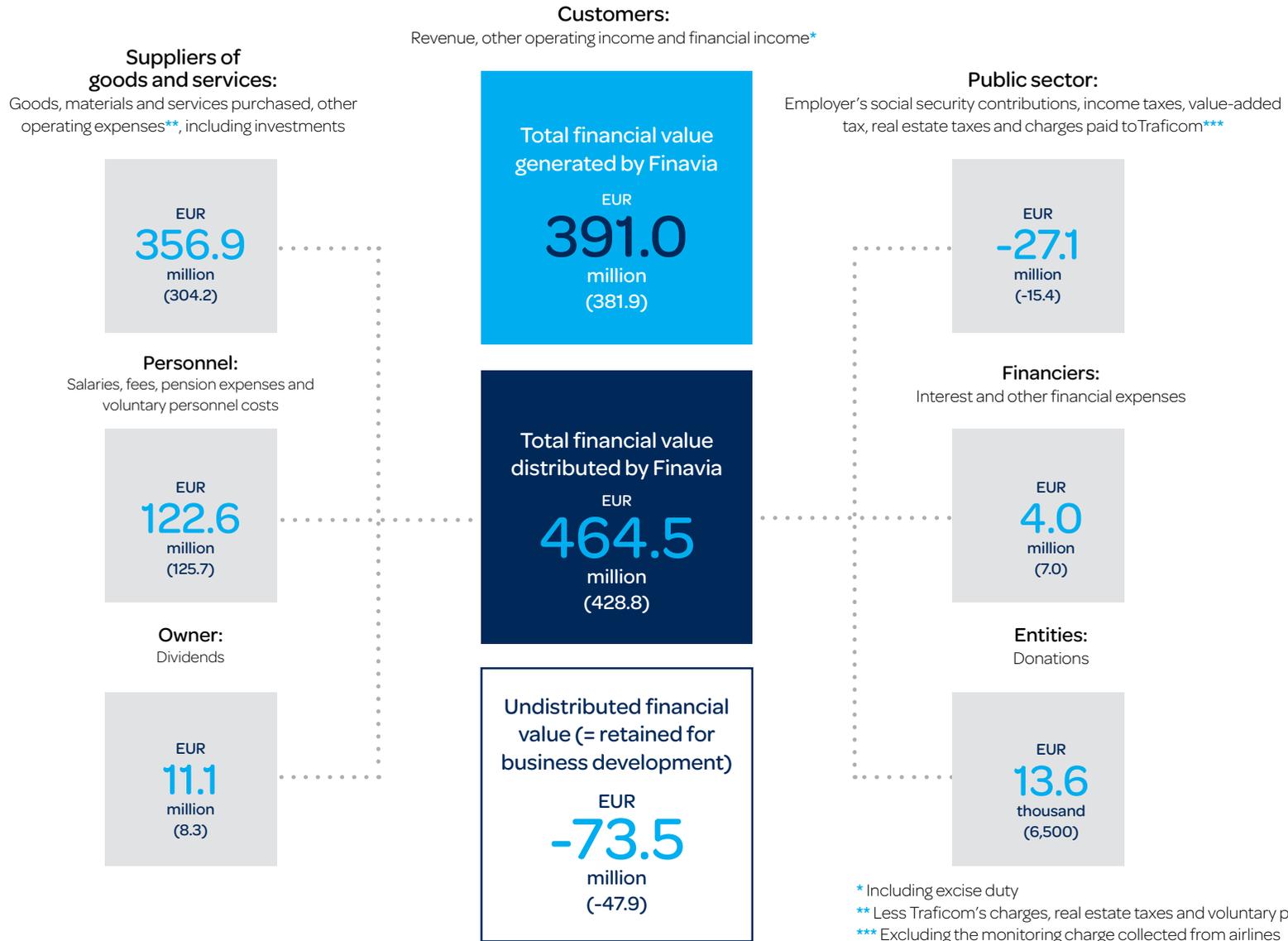
We created financial value amounting to EUR 391 million

Finavia creates financial value for a variety of stakeholders through its operations. In 2018, we generated financial

value amounting to EUR 391.0 million (381.9). The financial value distributed to our stakeholders totalled EUR 464.5 million, which was EUR 73.5 million more than the financial value generated by Finavia.

The expenses arising from purchased goods, materials and services amounted to EUR 356.9 million (304.2), reflecting the high level of investments at Finavia. Investments totalled EUR 239.5 million (181.8). Financial expenses amounted to EUR 4.0 million (7.0). Salaries, fees and other personnel costs totalled EUR 122.6 million (125.7).

Financial added value generated by Finavia for its stakeholders



Direct and indirect financial impacts

We generate significant impacts on society by offering employment and enabling business throughout Finland. The Helsinki Airport development programme, totalling more than one billion euros, will significantly enhance and diversify the effects of Finavia’s operations.

	Direct impacts	Indirect impacts
Finnish society	<p>Well-functioning air traffic is a key factor safeguarding Finland’s competitiveness. Finavia is responsible for ensuring the competitiveness of airports so that extensive flight connections can be maintained. In its 2018 competitiveness report, the World Economic Forum (WEF) again ranked Finland’s airport network as the fifth best in the world and the best in the Nordic region.</p> <p>The total employment effect of the Helsinki Airport development programme is estimated at 15,800 person-years during the construction period. In 2018, the employment effect was 2,200 person-years. In addition, an increase in the airport’s passenger volumes will generate about 5,000 permanent jobs. The employment effects of the investment programme at Lapland airports are 840 person-years during construction. In 2018, the employment effect was 400 person-years. Air traffic accounts for 3.2% of the Finnish GDP and provides employment to about 100,000 people in Finland, either directly or indirectly.</p>	
Customers	<ul style="list-style-type: none"> • The extensive flight connections made possible by Finavia keep Finnish society, people and goods moving. • Finavia provides its airline customers with cost-effective and punctual airport services. • With inexpensive seasonal aviation charges, Finavia makes recreational flying and business aviation possible. 	<ul style="list-style-type: none"> • Finavia is committed to developing its business in a sustainable manner that ensures the operating prerequisites for air traffic in Finland. • Finavia is constantly working to improve the efficiency of its operations, which supports competitive pricing. The charges collected from airlines are the sixth lowest among European main airports. • Finavia promotes aviation culture in Finland and supports Finnish general aviation with several hundred thousand euros every year by keeping the prices of general aviators’ season tickets at a low level. • In July 2019, Finavia will lower by 50% the prices for touch-and-go landings made during training flights at network airports and included in operation-specific charges.
Personnel	<ul style="list-style-type: none"> • At the end of 2018, Finavia Group had 2,852 employees (2,696). • Finavia provides jobs at all its airports in different parts of Finland. • Finavia invests in the competence of its personnel by providing different types of training, encourages employees at airports to learn multiple skills and supports the wellbeing of its personnel in various ways. • Finavia wants to provide young people with employment opportunities and recruits dozens of seasonal workers for its airports for the summer months. 	<ul style="list-style-type: none"> • The salaries and fees paid go to private consumption, while the taxes paid by the personnel contribute to the welfare of the society. • The Helsinki Airport development programme has substantial employment effects during its construction stage: about 15,800 person-years. • The employment effects of the development programme at the Lapland airports are approximately 840 person-years.
Suppliers of goods and services	<ul style="list-style-type: none"> • The services purchased by Finavia include real estate, repair, maintenance, security patrol, security check, construction, and contracting and expert services, such as planning and weather services. • The most important investments concern the development and maintenance of airports. The Helsinki Airport development programme totals more than one billion euros. We are also investing in our airport network: for example, an investment programme totalling EUR 55 million was launched at airports in Lapland in 2018. 	<ul style="list-style-type: none"> • Finavia seeks long-term cooperation with its partners. The operations are developed in close cooperation with our partners; this also supports suppliers’ business opportunities. • Finavia makes purchases in a centralised manner and at local level.
State of Finland	<ul style="list-style-type: none"> • Finavia pays income tax, real estate tax and value added tax. • Finavia collects air traffic monitoring charges on behalf of the Finnish Transport Safety Agency Traficom and forwards the charges to the agency. In 2018, the monitoring charges totalled EUR 13.3 million (12.1). • Finavia pays dividends to its owner, the State of Finland, within the constraints of its financial results and distributable funds. The Finavia Board of Directors has proposed that EUR 11.1 million (8.3) be distributed as dividends for the 2018 financial year. 	<ul style="list-style-type: none"> • Finavia contributes to the development and welfare of society by paying taxes and by providing jobs in Finland. • Finavia strives to operate in an economically sustainable manner by ensuring the efficiency of its own operations, using other European airports as a reference group. In this way, Finavia can contribute to the competitiveness of Finnish companies and the welfare of Finnish people.
Financiers	<ul style="list-style-type: none"> • Finavia seeks to finance its maintenance investments through cash flow financing. Expansion investments required for growth can be financed through long-term borrowing. • In 2016, the European Investment Bank granted Finavia a loan of EUR 230 million. In 2015, the Nordic Investment Bank granted Finavia a loan of EUR 150 million for the expansion of Helsinki Airport. 	<ul style="list-style-type: none"> • Finavia aims to retain its equity ratio at a level allowing it to obtain financing cost-effectively. On 31 December 2018, the equity ratio stood at 58.7% (58.4).

Finavia as a taxpayer

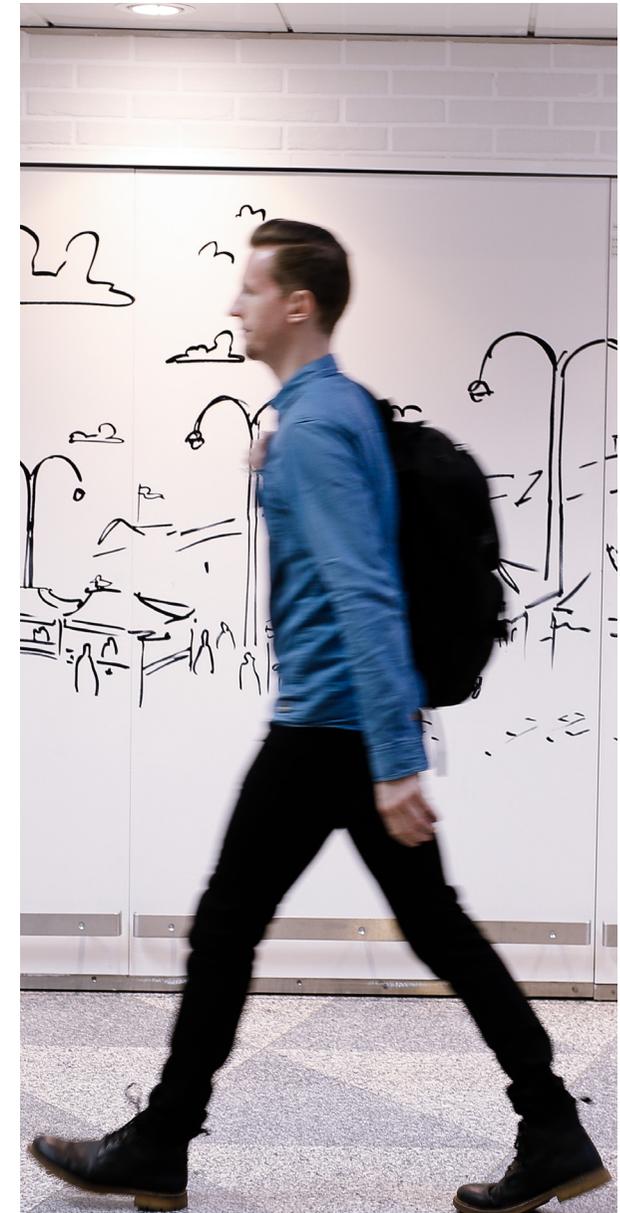
Every year, Finavia's business operations accumulate revenue for the tax authorities in the form of taxes and tax-like levies. In 2018, Finavia paid and accounted for a total of EUR 81.1 million (77) in taxes and tax-like levies.

Finavia only has business operations in Finland, and it pays taxes and tax-like levies for its result to Finland in accordance with the Finnish legislation. Finavia has not defined a separate tax strategy.

The company's CFO is responsible for tax-related matters at Finavia. If necessary, the CFO reports on them to the Audit Committee of the Board of Directors. Finavia actively cooperates with the tax authorities and requests preliminary rulings from them in matters subject to interpretation so that tax-related uncertainties can be minimised. Finavia complies with all deadlines set for payment and notification obligations.

Finavia ensures that it has adequate group-level expertise in taxation matters. If necessary, Finavia may purchase taxation-related expert services from outside the company. In 2018, Finavia also used tax advisory services supplied by external providers.

Finavia's tax-related reporting does not include any evaluations. The reporting is based on consolidated financial statements and accounting material.



Taxes and tax-like levies

Finavia Group's revenue amounted to EUR 377.3 million (373.6) and the profit before taxes to EUR 58.4 million (47.6). Finavia Group had 2,852 employees at the end of the 2018 financial year.

In 2018, Finavia paid a total of EUR 39.1 million (34.7) in taxes and tax-like levies. As in the previous year, the company paid all its taxes to Finland. Finavia does not pay or account for taxes to tax haven countries defined by the OECD and has not received support from these countries.

Finavia received a total of EUR 52,500 in public subsidies in 2018. The subsidies are reported in the company's financial statements for 2018.

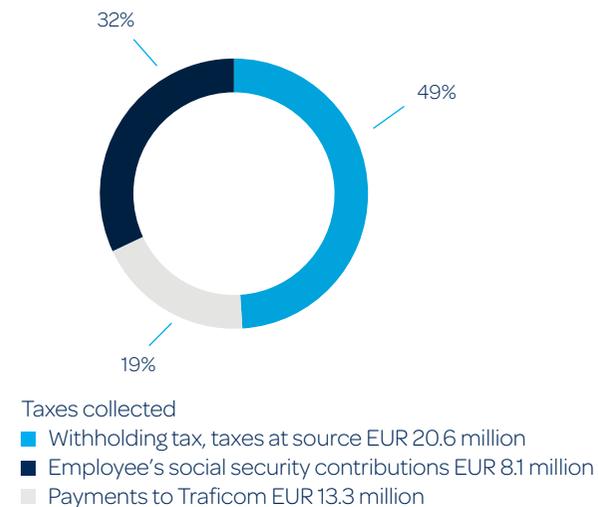
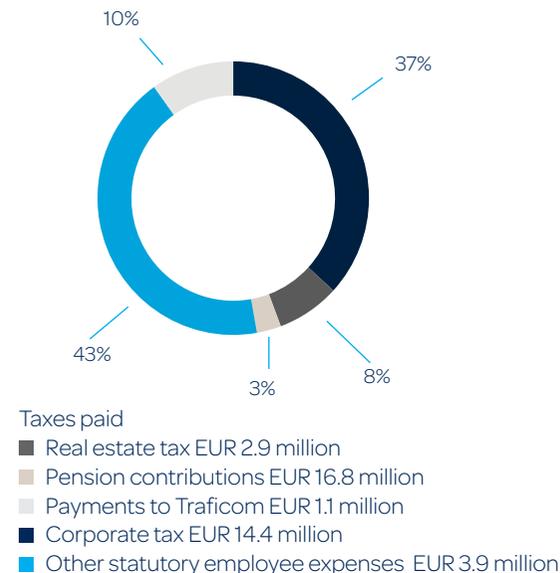
The corporate tax includes the taxes recorded in the financial result for the period and the taxes recorded for the previous period (does not include deferred taxes). The payments to Traficom include the air transport monitoring charges and other aviation-related charges.

Taxes and tax-like levies accounted for

Finavia collected and accounted for a total of EUR 42.0 million (42.3) in taxes and tax-like levies. The taxes and tax-like levies collected do not affect Finavia's result, as the company acts as an intermediary for the charges.

The air traffic monitoring charge is a statutory charge levied by Traficom, which Finavia collects and forwards to Traficom. The charge, which has been approved by Parliament and is collected from all airlines, is not related to the airport services provided by Finavia.

The taxes collected and accounted for 2018 and 2017 do not include value-added tax. In 2018, Finavia reclaimed more VAT than it collected and accounted for.



Finavia's safety work



Safety and risk management

All Finavia's operations are based on safety and security. It is something we work on actively and continuously. In 2018, risk management focused especially on the increasing number of passengers at Helsinki Airport and the development of cybersecurity and information security.

Finavia approaches safety and risk management in their broadest sense. The organisation has defined distinct roles, responsibilities and practices in order to ensure safety and security. The company assesses its risk management by means of sufficient self-monitoring.

At airports, safety means, for example, aviation safety, secure civil aviation, occupational safety, cybersecurity and information security. These areas combined make up overall safety – also known as corporate security. High-quality corporate security and preventive safety activities secure Finavia's operational continuity, safety and compliance with requirements, under all circumstances.

In accordance with its safety practices, Finavia is continuously monitoring and analysing its procedures and operations. The company makes its voice heard and aims to influence regulatory work in matters that help to build and improve safety and security.

Systematic development of safety in 2018

Finavia invests heavily in the development of safety and security. The company is constantly developing the security and safety of civil aviation and everyone working in airport areas. Finavia's airports are safe environments.

Requirements set for aviation security and safety systems are based on national and international regulations. Finavia complies with official guidelines and regulations in all its operations.

The European Aviation Safety Agency (EASA) granted a regulatory certificate for Finavia in December 2017. The purpose of the aviation regulations set by EASA is to ensure that all European airports follow the same level of aviation safety. According to the regulations, a large joint SAR (Search and Rescue) exercise with the authorities and key stakeholders is held at every Finavia airport every two years. Smaller exercises are held annually.

During 2018, Finavia extended its cooperation in terms of security with different authorities, such as the Police of

Finland, Finnish Customs and the Finnish Border Guard. As a result, the authorities now exchange information more actively and maintain a joint overview.

In 2018, costs arising from the maintenance of security and safety amounted to approximately EUR 45.9 million (44). Security checks in accordance with safety regulations and investments in security technology accounted for the majority of these costs. The entire airport network has fixed and effective standard procedures for maintaining safety in all situations. Finavia is systematically developing its safety management in order to identify the best national and international practices.

In 2018, Finavia invested in the development of security checks for transfer passengers at Helsinki Airport. The airport deployed a new type of technology when the Aukio plaza opened in early 2019. A high level of safety and its continuous development in order to ensure the safety and security of civil aviation follow national and international requirements and enable smooth and enjoyable travel without any congestion.

Risk management in the Helsinki Airport development programme

Traffic in airport areas is a carefully designed system where the safety of passengers and employees goes before everything else.

In the Helsinki Airport development programme, safety is considered from the point of view of risk management, both in the design of the infrastructure and during construction work. During the renovation of the apron, carried out simultaneously with the development programme, the aim is to ensure that the volume of worksite traffic is as low as possible during the busiest air traffic hours.

Corporate culture that promotes safety

Finavia's strong safety culture is a key element in preventing hazardous situations. It includes, among other things, risk prevention methods and active reporting of non-conformities.

The safety index is the key safety indicator at Finavia. In the index, each incident is scored on the basis of a risk assessment. The scores are totalled for each month. Ensuring the safety of civil aviation includes the security checks of passengers, baggage and personnel, as well as safety in the apron area.

A safety culture survey was conducted in 2018, covering all Finavia employees. Its goal was to prepare an overview of

the personnel's mindset and experiences related to safety. Based on the survey results, Finavia's safety culture and the personnel's understanding of safety are at an excellent level. In addition, a safety culture development plan for 2019 was prepared on the basis of the survey results.

Finavia's safety cooperation and the flow of safety-related information are supported by the company's Just Culture policy, with fairness and openness as its basic pillars. All Finavia employees can report any non-conformities they observe.

Aviation safety comprises close cooperation

Last year was the first full year when air navigation services operated in a separate company: Air Navigation Services Finland (ANS Finland). The joint task of Finavia and ANS Finland is to maintain an exceptional level of safety in all situations.

During the year, Finavia developed its cooperation with ANS Finland and shaped the shared operating model based on an open exchange of information. Other focus points in 2018 included the prevention of any non-conformities regarding vehicles on runways.

Cybersecurity in focus

Finavia has systematically and extensively developed information security. Potential cybersecurity threats

directed at airport operations include denial-of-service attacks and information leakage. On the basis of regulation, Helsinki Airport has been defined as an area significant for society, where special attention must be paid to cybersecurity.

In 2018, Finavia, together with Traficom, assessed the overall level of Finavia's information security. The goal is to ensure monitoring and response capabilities and to document any threats related to information security. In terms of cybersecurity, Finavia works with Traficom, the National Cyber Security Centre, the Ministry of Transport and Communications and the National Emergency Supply Agency.

EU General Data Protection Regulation entered into force

In May 2018, the EU General Data Protection regulation (GDPR) entered into force in all member states, following a two-year transition period. Finavia appointed a data protection officer in 2017 and continued its preparations in 2018 by training employees in charge of data protection and data registers as well as by preparing guidelines and practices for monitoring and responses. Finavia's internal audit unit audited the data protection organisation before the GDPR entered into force.

Safety management system

Finavia's safety organisation consists of Group, business and function units. This organisation structure ensures the flow of information and provides managers with the necessary information about matters that impact safety. Finavia's safety management is based on the strong commitment of the company's management. The company ensures that safety is considered in all decision-making processes.

The safety organisation systematically addresses the reaching of safety goals, as well as potential safety hazards and deficiencies. All observations are recorded in an action plan, the implementation of which is regularly monitored. Independent of business operations, the risk management unit prepares a report on safety-related information. This report is presented to Finavia's Executive Group and Board of Directors.

Finavia's safety management system is based on seven main principles.

1. Compliance with official standards

- The safety management system must comply with a significant number of national and international regulations. Traficom monitors that the system complies with these regulations.
- Traficom uses advance approval procedures and regular audits in its monitoring. In 2018, Traficom conducted 7 (8) audits regarding operations at regional airports.
- Finavia will send a response to Traficom for any non-conformities reported during the audits.

2. Commitment of the management

- Priority of safety: the attainment of appropriate safety is given priority in Finavia's operations over commercial, operational, environmental, and social aspects.
- Safety targets have been set for different functions, and their attainment is regularly monitored.
- Finavia's management is committed to the principles of the safety management system and to using the information it produces in decision-making processes.

3. A proactive approach to safety

- The impact of safety-critical changes, new systems and methods on safety is assessed beforehand.
- The objective is to identify and control any risks associated with the changes and to reduce them to an acceptable level through various actions and back-up procedures.
- In 2018, a total of 48 safety reviews and 19 advance safety inspections were carried out. The overall safety inspection procedure was changed at the beginning of 2018 to better correspond to the needs and operations of Finavia's current organisation.

4. Encouraging reporting of non-conformities and investigation without apportioning blame

- Any non-conformities reported by personnel are classified and analysed. An independent internal investigation is initiated for more significant non-conformities without apportioning blame.
- In 2018, a total of 1,670 (1,705) non-conformities were reported, of which 611 were reported by external parties.

5. Sufficient self-monitoring

- In addition to the self-monitoring of the operational units, independent internal audits are performed so that the safety impacts of activities are taken into account when deciding on the content, extent and focus areas of each audit.
- The observed deviations are analysed and investigated, and the required corrective actions are implemented systematically.
- In 2018, a total of 20 (9) internal audits were carried out at Finavia. These covered all Finavia airports.

6. Competent personnel

- The personnel have the appropriate qualifications based on training, professional competence and experience.
- A training record is maintained of the personnel where details of special training, experience and level inspections required for the position are recorded.
- Familiarisation with safety matters comprises part of the training programme of every employee.

7. Dissemination of useful information

- The information derived from investigations, audits, analyses of non-conformity reports, the efficiency of corrective actions, and international cooperation is extensively used in personnel training, in the development of instructions, and in internal communication.
- Safety information is distributed to the personnel through presentations, safety campaigns and regular safety summaries.
- Active feedback promotes the commitment of the personnel to joint safety work.



Finavia as an employer



At the end of 2018, Finavia Corporation had 1,240 employees (1,181). The Group had 2,852 employees (2,696). The increase in the number of employees was due to the expansion of Helsinki Airport as well as the increased number of seasonal workers at the airports in Northern Finland and Lapland.

Person-year describes the work input of one person as a full-time equivalent. All compensable hours of Finavia employees (excluding overtime) are divided by the computational hours of full-time employees per year, as laid out for the task in question.

In 2018, Finavia Corporation employees worked a total of 1,045 (1,107) person-years. The average number of employees in the Group, as calculated in person-years, totalled 2186 (2,042).

A person can work a maximum of one person-year per year. Absences without pay reduce the number of person-years.

Person-years by function

Headquarters and Group Services	280
Helsinki Airport development programme	14
Helsinki Airport	355
Airport Network in total	396
Enontekiö Airport	1
Ivalo Airport	31
Kajaani Airport	18
Kemi-Tornio Airport	17
Kittilä Airport	23
Kuusamo Airport	13
Oulu Airport	33
Rovaniemi Airport	36
Airports in Northern Finland and Lapland in total	173
Kuopio Airport	35
Joensuu Airport	15
Savonlinna Airport	8
Airports in Eastern Finland in total	59
Turku Airport	29
Pori Airport	12
Vaasa Airport	28
Mariehamn Airport	12
Kokkola-Pietarsaari Airport	14
Airports in Western Finland in total	95
Tampere-Pirkkala Airport	33
Jyväskylä Airport	22
Halli Airport	6
Utti Airport	5
Airports in Central Finland in total	66
Total	1,045

Personnel by type of contract

In 2018, Finavia Corporation had 918 permanent employees (1,010) and 226 fixed-term employees (186). A total of 1,006 employees (1,066) worked full-time and 138 employees (130) on a part-time basis.

Finavia Group had 2,132 (1,957) permanent employees in 2018.

A total of 1,030 (1,066) Finavia employees, or 90.0% (89.1) of the personnel were covered by a collective bargaining agreement.

In 2018, agency workers at Finavia Corporation, as converted into person-years, totalled 1,164 (1,047). Security patrol and security check services accounted for most of the contracted services. Finavia also used agency workers in maintenance and IT service tasks.

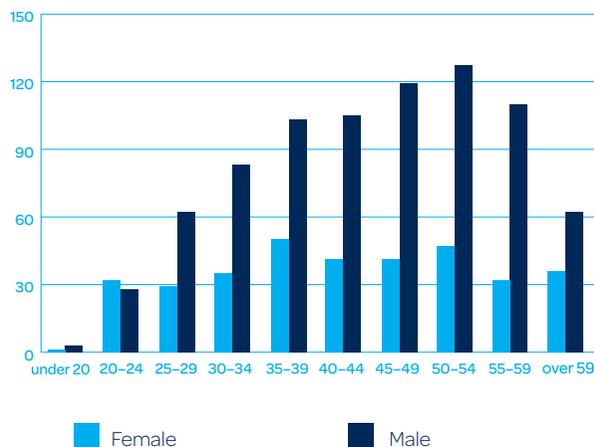
Distribution of personnel by age and gender

In 2018, the average age of Finavia Corporation's permanent employees was 44 (44). At the end of 2018, 70% (72) of the personnel of Finavia Corporation were men and 30% (28) were women.

Duration of contracts of employment

In 2018, a total of 21% (9) of all Finavia staff members had worked in Finavia for 1 to 4.9 years. The proportion of employees that had been employed for 5–9.9 years was 13% (16) and the proportion of those employed for 10–14.9 years 15% (14). A total of 34% (35) of the employees had been employed for more than 15 years.

Distribution of personnel by age and gender



	Full-time	Part-time	Permanent	Fixed-term
Female	265	79	254	89
Male	742	59	664	136

Personnel turnover

The indicator of personnel turnover is calculated by adding the numbers of incoming and departing employees and by comparing the sum with the average number of permanent employees during the year.

The total personnel turnover at Finavia Corporation in 2018 stood at 17% (15). Incoming employee turnover was 8% (6) and departure turnover 9% (9).

Personnel training

In 2018, each Finavia employee spent an average of 2.5 days (2.8) in training.

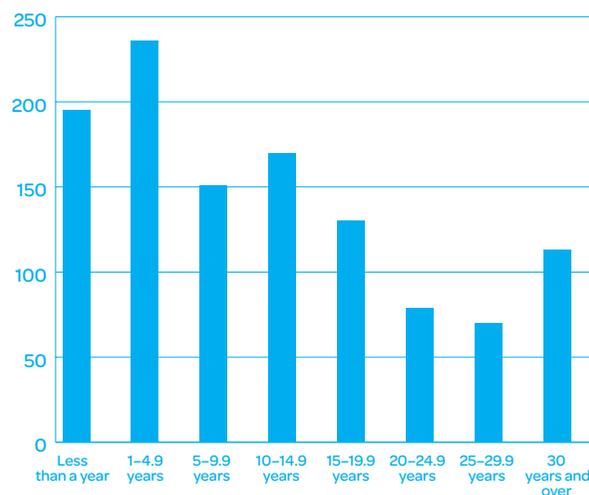
Finavia needs employees trained in accordance with regulatory requirements, and the required skill levels must also be ensured in the future. In 2018, Finavia examined how to provide the required training in a high-quality and efficient manner by using the latest technology. The work will continue in 2019.

Staff expenses

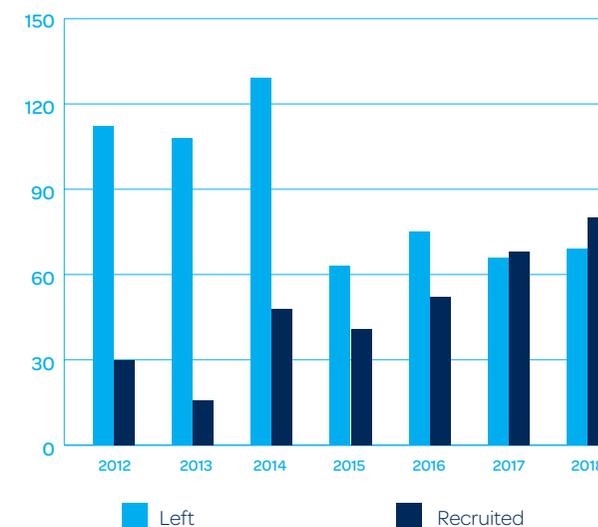
In 2018, Finavia's total staff expenses amounted to EUR 64,382,459 million (72,313,621).

Personnel turnover	Total turnover, %	Departure turnover, %	Incoming turnover, %
Group Services	17.2	8.8	8.4
Helsinki Airport	15.0	8.9	6.1
Helsinki Airport development programme	0.0	0.0	0.0
Airport Network	11.8	6.7	5.1
Total	13.3	7.5	5.8

Duration of contracts of employment



Number of permanent staff recruited and left



Equality and non-discrimination

Finavia works to ensure non-discriminatory treatment and fair pay for its employees. We promote equality by making it easier to combine work and family life, by helping ageing Finavia employees to cope with their work and by ensuring a more balanced gender distribution in our units.

Finavia endeavours to be a good place to work for people of all ages and genders. The personnel policy, ethical principles and the equality and non-discrimination plan guide the efforts on workplace equality at Finavia. The equality plan, which is updated every two years, sets out the objectives for promoting equality at Finavia. The document is prepared in cooperation with the personnel.

Continuous equality work is an essential part of the promotion of wellbeing at work at Finavia and the implementation of the company's values. We actively monitor our pay policy and gender distribution to ensure that they are on a fair and equal basis, and we strive to ensure non-discriminatory treatment of all our employees. We are also working to achieve a more balanced gender distribution in managerial tasks by promoting the careers of promising female staff members.

The pay gap between women and men narrower than average

We monitor the gap between the average pay of women and men by comparing the regular earnings of our full-time staff members.

In Finland, women's average earnings are 84% of the pay received by men. According to the 2018 pay survey, women's basic pay at Finavia is 2% higher than what their male colleagues earn. At Finavia, a woman's euro is EUR 1.02. In regular earnings, women's pay lags behind the earnings received by men because on average, women do less shift work, which means that they also receive fewer shift work bonuses.

Finavia has conducted surveys on the proportion of women in different working hour arrangements as well as the impact of shift work on overtime and, consequently,

on pay. The findings show that the proportion of men is higher in those working hour arrangements that involve a large amount of shift work and overtime. This partly explains why men have higher overall pay. Compared with 2017, there have been few changes in the amount of overtime and the proportion of women and men in different working hour arrangements.

Helping to combine work and family life

We want to ensure that our employees can combine their work and family life as flexibly as possible. Finavia offers flexitime and telework for employees in tasks where such arrangements are possible as well as flexible working hours for various situations. Parents of small children on partial child-care leave and ageing employees on part-time pension may work part-time, and this possibility is also open to other employees if their life situation requires it. In addition, Finavia provides its staff members with longer holidays than many other employers, which allows the employees to spend more time with their families.

Most of our employees do shift work, which poses challenges to combining work and family life. When developing our shift systems, we take into account the workload caused by shift work, and units can arrange shifts in accordance with employees' wishes. In some of the units, the emphasis is on the regularity of the shifts.

We encourage women and men to use family leaves equally. According to our 2018 equality survey, women's share of all family leave users had increased slightly and stood at 80.4%. In maternity, paternity and parental leaves, the proportion of women increased from the previous years to 62.9%.

In the annual personnel survey, Finavia staff members were asked to give the views on how their needs concerning the combination of work and leisure time are taken into account in the company. In their responses, women gave Finavia better marks than men. The average rating given by women was 2.97 (on a scale of 1-4), while the average for men was 2.92. The rating for Finavia as a whole was 2.94. Compared with the previous year's rating, the results improved.

We support our employees throughout their working careers

The average age of Finavia employees is 44 years. Most of the employees are in the age group 50–54 (15.3%), followed by those in the age group 45–49 (14.0%) and those in the age group 40–44 (12.7%).

In its age programme, Finavia has created models for supporting employees close to retirement in coping with their work. Senior discussions are conducted with each staff member about five years before retirement as part of the personal development review. At the same time, the 'best working years' group coaching provides ageing employees with personal tools for coping with their work.

In 2018, Finavia took part in the 'work does not discriminate' campaign organised by the Confederation of Finnish Industries, in which the aim is to promote equality and non-discrimination in companies, organisations and society at large.

Aiming for a more balanced gender distribution

We work to promote a more balanced gender distribution in individual units by taking into account the aspect of non-discrimination in the recruitment process. In order to ensure this, the recruitment process at Finavia always involves a recruitment professional whose task is to review the procedure from the perspective of non-discrimination.

Gender distribution at Finavia has remained more or less the same for many years. In 2018, a total of 70.4% of the staff members were men and 29.6% women. Compared with 2017, the proportion of women increased by 6.8%.

Many of the tasks at Finavia are physically demanding and technically oriented, and for this reason, most of the

applicants have traditionally been men. For example, women account for only 1.9% of maintenance workers, whereas 72.7% of all service personnel and 59.6% of specialists are women. The fact that most of the persons with technical training are men is one reason why there are so few women in technical tasks at Finavia.

We encourage women to actively apply for supervisory and managerial tasks. The proportion of women in supervisory tasks at Finavia increased in 2018. There are both women and men in the company's Executive Group.

Inappropriate behaviour is dealt with

Finavia has guidelines for the prevention of inappropriate treatment. In the guidelines, staff members are encouraged to report any inappropriate behaviour to their supervisors, the HR unit or the occupational safety delegate.

All situations reported by the employees are looked into and Finavia has pledged to investigate the incidents by hearing the views of both parties and to plan the necessary corrective action.

Experiences of our staff members concerning inappropriate treatment are also monitored in the annual personnel survey in which the employees are asked whether they have experienced harassment during the preceding year that has not been investigated despite requests. The measures required for dealing with potential problems are specified at the meetings in which the survey results are discussed.

Wellbeing at work and personnel satisfaction

Developing wellbeing at work and extending working careers are ongoing goals for Finavia. We monitor job satisfaction at Finavia by conducting personnel surveys and promote all aspects of wellbeing at work with occupational health care and our expert partners. In 2018, the focus was on helping our personnel to cope with their work and to recover from work-related stress.

Finavia monitors wellbeing at work among its employees by conducting a group-wide personnel survey each year. According to the results, wellbeing at work among Finavia staff members has improved from the 2017 level. The People Power wellbeing index stood at 69.5 (67.5), which is better than the average for Finnish companies as a whole.

Improving internal communications and providing staff members with more say in the company were the priorities in the development of wellbeing at work during 2018.

The coping and recovery of employees were supported by providing fitness and lifestyle coaching, while at the same time, Finavia introduced a new staff benefit programme and a care money scheme to support staff members' work capacity.



Supporting all aspects of wellbeing at work

Personnel and health surveys provide important information for supporting the work capacity of personnel and enhancing wellbeing at work. Close cooperation with occupational health care also helps us to place more focus on preventive action.

Helping personnel to cope with their work was the priority area in the development of wellbeing at work during 2018. We paid particular attention to the recovery of shift workers. For example, night shifts were introduced at Kittilä Airport in 2018 and we used First Beat measurements, conducted as part of work capacity training, to determine the effects of the new arrangements. The results prompted us to add supporting recovery during leisure time to the list of objectives in 2019.

We also continued fitness and lifestyle coaching aimed at maintaining work capacity. The first office workers' pilot group started work capacity training in July 2018, and the results will be seen in the autumn 2019 fitness tests. The aim of the training is to reduce sickness absences, develop self-management skills and enhance professional work capacity.

Better team spirit through open communications

Our task is to ensure that important and topical messages reach every Finavia staff member. In 2018, we focused especially on enhancing the communications directed at shift workers and office personnel and providing them with better access to information. This was done by installing information displays at every unit.

We also developed cooperation between workplace communities at Jyväskylä, Rovaniemi and Oulu Airports

through a variety of projects. Furthermore, we continued the Fiilismittari pilot project launched in autumn 2017. The Fiilismittari online service provides a new and quick way of measuring the work atmosphere in a unit.

Work capacity is actively monitored

Musculoskeletal diseases are still the main cause of sickness absences at Finavia even though there has been a substantial reduction in the absences arising from them.

We are closely cooperating with occupational health care, and the focus in the cooperation is increasingly shifting towards preventive action. We also provide our employees with opportunities for physical exercise during working hours if the work involves physical effort.

Support for dealing with more serious challenges concerning work capacity and stress is available in the 'suitable work' service jointly provided by Ilmarinen and Barona. In the service, a new career path is designed for the employee, and it may comprise different types of retraining and employment options.

The new care money scheme provides support for employees in situations requiring surgery. Finavia may, on the basis of specific work capacity criteria, contribute to the costs of an operation if the operation significantly enhances the employee's work capacity and shortens the sick leave.

There was a reduction in overall sickness absences compared with 2017. The sickness absence rate at Finavia was 3.28% (3.44).

The number of occupational accidents increased, while the serious accident frequency declined

The trend in Finavia's accident statistics in 2018 was

twofold compared with the previous year. Both the number of accidents and the overall accident frequency per hours worked increased. At the same time, however, there was a decline in the frequency of serious accidents (accidents causing a sick leave of more than three days).

There were a total of 52 (34) workplace accidents at Finavia during 2018. The occupational accident frequency (number of accidents resulting in a sick leave of more than three days) per million hours worked stood at 5.72.

"According to a personnel survey, the satisfaction rate of Finavia's employees reached a record high."

Personnel development

We are comprehensively developing the service, professional and management competence of our personnel. In 2018, our focus was on joint strategy work and the harmonisation of the service culture in the airport community as part of the process of fully integrating the customer experience pillars into our operations.

The updated Finavia strategy and its practical implementation were the key themes in personnel development during 2018. Preparations were also made at Finavia for the start of the expansion project of Terminal 2 at Helsinki Airport in 2019 by strengthening the customer experience pillars through discussions and training in the airport community.

In its personnel strategy, Finavia focused on measures activating the personnel and providing them with the opportunity to take part more extensively in the strategy work.





Strategy work in cooperation with the personnel

In addition to key personnel, promising young participants of the Talent Management programme were selected to participate in the preparation of the strategic key programmes and in the subcommittees. Finavia staff members from different organisational levels were selected to the projects so that an upward trend in the degree of commitment, personal development and motivation could be ensured.

The personnel have been involved in the process of determining Finavia's values from the start of the strategy work. The Executive Group and the Board of Directors approved the values, formulated on the basis of extensive discussions, in August 2018. Safety, customer orientation, responsibility and renewal were highlighted as the key values.

To ensure the practical implementation of the values and to make them part of the daily work at Finavia, the dialogue was continued by means of monthly digital discussions. Each of the values was openly discussed with the entire personnel. The aim of Finavia is to adhere to the values in all its operations on a uniform basis, and for this reason, the summaries of the discussions will be used in the preparation of the 2019 action plan.

Supervisors received support in the practical implementation of the strategy in training sessions where they learned to use the strategy as a basis for action plans in their own units.

Ensuring a cohesive customer experience through a uniform service culture

Providing passengers with an exceptionally positive

customer experience is one of the key projects in our strategy. The customer experience pillars provide the basis for a uniform service culture, and we are continuously developing the capacity of our personnel to provide Finavia's customers with the best possible service.

In 2018, we examined how to provide a more uniform customer service approach in electronic channels and in face-to-face situations. A sales-oriented approach is key to creating a customer experience. We therefore enhanced the capabilities of Finavia employees working in the customer interface by expanding the CX Academy training programme in which the focus is on customer experience. The programme will be further developed and expanded in 2019.

A consensus on what a highly positive customer experience at Finavia means for the airport community will be highlighted during the construction work at Helsinki Airport.

Job rotation and exchange programme were expanded

The company-internal job rotation scheme provides Finavia employees with opportunities for personal development and new tasks within the company. By familiarising themselves with the work of their colleagues, staff members can get an idea of how other Finavia units operate, learn new skills and share their expertise. A total of 46 staff members took part in the job rotation scheme during 2018. Persons in managerial positions also took part in operative work in different Finavia units at least once during the year.

International staff exchange is an important part

of personnel development and internationalisation training. Finland is attracting more and more Chinese visitors, and the understanding of the Chinese culture is highlighted as Finavia is determined to provide the best customer experience. The purpose of the staff exchange programme between Finavia and Beijing Airport is to familiarise Finavia employees with Chinese service culture and to apply the knowledge at all Finavia airports.

Peer support as part of the development of management practices

The work to enhance management and supervisory practices at Finavia continued with supervisory training and coaching projects during 2018.

The project involving the development of supervisory work and the management system continued at six regional airports in spring 2018. In the project, managers holding similar positions visited other airports to learn more about their practices. In the mentor airport project, which continued throughout the summer months, supervisors provided each other with training by sharing their experiences of supervisory and management work and practices that could be used in the development of airport operations.

Finavia also provides individual coaching for supervisors that need support in succeeding in the supervisory role. At change management workshops, supervisors learn how to put changes into practice.

Supporting self-development

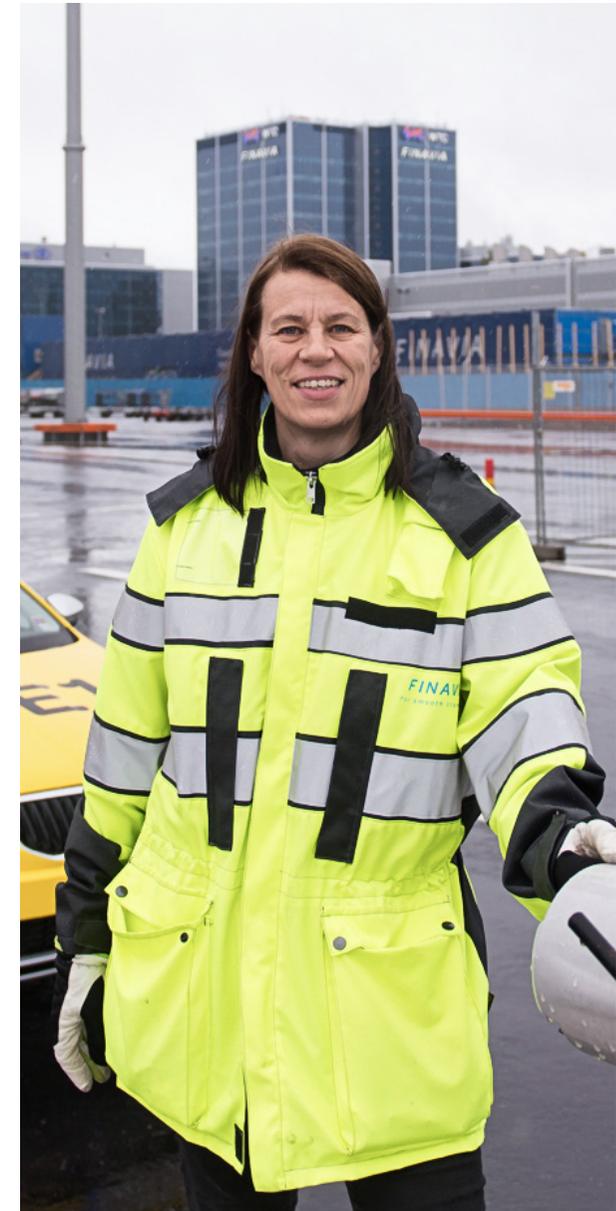
We encourage our personnel to take part in development groups across the boundaries of business areas. We also have schemes that make it easier for staff members to combine training with working life. Finavia employees are entitled to ten days off with full pay so that they can concentrate on their studies, sit exams and take part in contact instruction. The support is only provided for training that helps staff members to perform their tasks more effectively or that is otherwise in accordance with Finavia's aims.

Training new professionals in cooperation with educational institutions

Cooperation with educational institutions helps Finavia to plan its future workforce needs. The cooperation gives Finavia more visibility in regions, which also supports recruitment.

Finavia needs employees with training that is not directly provided by educational institutions. In 2018, we renewed the agreement with Vantaa Vocational College Varia and developed training tailored to the needs of shift supervisors. In autumn 2018, a group of supervisors started studying for a specialist vocational qualification.

The new cooperation agreement with Aalto University will serve as a framework for broad-based cooperation and provide the university's students with an opportunity to introduce new practices and fresh thinking to Finavia. In October 2018, Finavia took part in the Design Hackathon organised by the Aalto Entrepreneurship Society.



Environmental work



Finavia's environmental management system

Environmental work by Finavia

Finavia's environmental work is based on legislation, international regulations and the expectations of our stakeholders. The ownership policy of the Finnish Government, requiring due diligence and detailed reporting, is a major consideration in our environmental responsibility. In our work, we always take into account the requirements of air traffic safety and security.

Our annual actions are guided by the provisions contained in environmental permits and the targets set in accordance with our environmental system.

Finavia's certified environmental system

Finavia operates an ISO 14001 -compliant environmental management system that has guided the development of our environmental work since 2001. Certification of the system was first applied for in 2018, and it was granted in December. In line with its environmental system, Finavia has prepared environmental programmes for seven different areas. The annual environmental goals are chosen on the basis of these programmes.

Management of environmental responsibility

The Group's Technology and Environment Service and the director responsible for sustainable development coordinate Finavia's environmental work. Our aim is to constantly mitigate the environmental impact of our operations, as well as to develop stakeholder cooperation and communication related to environmental issues.

The main areas of responsibility of Finavia's Environmental Unit are:

- Sustainable development of operations
- Environmental permits and reporting to public authorities
- The investigations and operating plans required by environmental legislation and permits
- Supervising Finavia's interests in order to secure the operational prerequisites of airports

Finavia develops its environmental responsibility on the basis of permit regulations and continuous improvement according to its certified ISO 14001 -compliant environmental management system, taking the financial framework into account.

- Environmental management manual (ISO 14001)
- Environmental policy and goals
- Environmental programmes regarding seven subjects for 2016–2020
- Environmental goals for 2019
- Monitoring and reporting
- Environmental provisions made for the investments required by permits and other regulations

Examples of continuous themes of environmental responsibility:

- Developing aircraft noise control at Helsinki Airport
- Developing water pollution control at the airports
- Reducing Finavia's emissions and increasing the use of renewable energy
- Investigation and reconditioning tasks related to contaminated soil
- Supporting air navigation services regarding environmental efficiency of flight methods and airspace
- Development of environmental reporting and environmental communication

Goals and achievements of environmental responsibility	Goals for 2018	Results	Goals for 2019
Development of water pollution control at Helsinki Airport	<ol style="list-style-type: none"> 1. Completion of the Kylmäoja ditch arrangements and reconditioning regarding the fishing industry (to be continued in 2019). 2. Planning a pilot for the wetland area to be built in Veromiehenkylänpuro. 3. Reconstruction of the area 120 de-icing locations in Apron 1 (continuing in 2019). 	<ol style="list-style-type: none"> 1. The ditches have been completed. Reconditioning regarding the fishing industry is in progress, to be implemented in 2019. Construction of the Kylmäoja ditch biofiltration pilot began in 2018 and will be completed in spring 2019. 2. The planning work has started, the supporting Smart & Clean research project was completed in December 2018. 3. Two locations have been completed according to plans (continuing in 2019). 	<ol style="list-style-type: none"> 1. Reconditioning of the Kylmäoja ditch regarding the fishing industry, particularly the trout spawning grounds. 2. Commissioning of the Kylmäoja biofiltration pilot and initiation of the follow-up study. 3. Building of the Veromiehenkylänpuro wetland pilot and initiation of the follow-up study. 4. Finishing touches on the area 120 de-icing locations in Apron 1.
Development of aircraft noise control at Helsinki Airport	<ol style="list-style-type: none"> 1. Regularising the work of the Collaborative Environmental Management (CEM) cooperation forum (Finavia, ANS Finland, airlines). 2. Report on the use of runways in the future, considering capacity and noise control. 	<ol style="list-style-type: none"> 1. The CEM working group has started its work, a joint declaration has been signed, a noise control development programme has been produced. 2. The capacity of runways in relation to noise control has been assessed as part of MasterPlan work. 	<ol style="list-style-type: none"> 1. Optimisation of arrival routes and approach methods in the STAR 2019 reform. 2. Update of the CDO instructions as part of CEM cooperation. 3. Definition of the instructions for noise control with approach methods (LP/LD).
Development of de-icing and water pollution control at network airports	<ol style="list-style-type: none"> 1. Equipping the apron at Tampere-Pirkkala Airport with de-icing locations with soil protection. 2. Development of de-icing activities at airports in Lapland and general planning of the de-icing infrastructure and glycol handling in Rovaniemi, Ivalo and Kittilä as part of expansion projects. 3. General plan for the technical management of glycol emissions at Oulu Airport. 	<ol style="list-style-type: none"> 1. Completed, in use. 2. Conveying the waters from the apron at Ivalo Airport to a treatment plant implemented, development of water pollution control measures for Kittilä and Rovaniemi being planned for a proposal regarding environmental provision, will be implemented as a continuation of the investment programme in 2019–2020. 3. Due to resource-related reasons, the planning is scheduled for completion in February 2019. 	<ol style="list-style-type: none"> 1. Enhancement of glycol collection measures at Jyväskylä Airport by constructing a storage pool. 2. Leading the glycol-containing waters at Rovaniemi Airport to the treatment plant by constructing a storage pool and drainage system. 3. General plan of water pollution control measures for de-icing operations at Kittilä Airport, construction plan and implementation. 4. General plan for the technical management of glycol emissions at Oulu Airport.
Surveying the level of contamination of fire drill areas at airports and the required reconditioning measures	<ol style="list-style-type: none"> 1. Participation in the Finnish environmental administration's PFARA research project to investigate PFAS compounds. Planning maintenance activities for fire drill areas in Joensuu and Varkaus on the basis of project results. 2. Monitoring PFAS compounds at Helsinki and Tampere-Pirkkala Airports. 	<ol style="list-style-type: none"> 1. The project of public authorities has been delayed, will be completed in Q1/2019. 2. Done, continues. 	<ol style="list-style-type: none"> 1. Planning of the PFAS reconditioning work of the fire drill area at Joensuu Airport in compliance with the new risk management instructions.
Improving energy efficiency and reducing atmospheric emissions	<ol style="list-style-type: none"> 1. ACI/ACA Level 3 certification for the Lapland Airports group. Parts of the certification: 2. Renewable diesel is started to be used in Rovaniemi, Ivalo and Kittilä. 3. ACI/ACA Level 3+ certification maintained at Helsinki Airport. Parts of the certification: 4. Fire trucks start to use renewable fuels. 5. Flush mounted lights on Runway 3 replaced with LEDs. 	<ol style="list-style-type: none"> 1. The ditches have been completed. Reconditioning regarding the fishing industry is in progress, to be implemented in 2019. Construction of the Kylmäoja ditch biofiltration pilot began in 2018 and will be completed in spring 2019. 2. The planning work has started, the supporting Smart & Clean research project was completed in December 2018. 3. Two locations have been completed according to plans. Continues in 2019. 	<ol style="list-style-type: none"> 1. Reconditioning of the Kylmäoja ditch regarding the fishing industry, particularly the trout spawning grounds. 2. Commissioning of the Kylmäoja biofiltration pilot and initiation of the follow-up study. 3. Building of the Veromiehenkylänpuro wetland pilot and initiation of the follow-up study. 4. Finishing touches on the area 120 de-icing locations in Apron 1.
Development of Finavia's environmental responsibility communication and communication with people living in areas adjacent to the airport	<ol style="list-style-type: none"> 1. Launching educational cooperation with Vantaa that deals with the significance and impact of air traffic and Helsinki Airport. 2. Preparing a conceptual plan for the Helsinki Airport visitor centre. 3. Defining and implementing sustainability development activities for commercial services. 	<ol style="list-style-type: none"> 1. The city has devised a diverse learning package for some 8th-grade students. To be implemented for the first time on week 15/2019. 2. Has not progressed. 3. Finavia's Supplier Code of Conduct published in November 2018. The analysis of waste management of the commercial operations at the airport is in progress, will be completed at the end of 2018. It will be followed by waste management instructions to operators and possibly a programme for reducing the use of plastic/amount of waste. 	<ol style="list-style-type: none"> 1. The first diverse learning package for comprehensive school students will be implemented with the basic education services of the City of Vantaa. 2. Airlines start using renewable aviation fuel at Helsinki Airport. 3. The ground handling companies operating at the airport start using renewable diesel fuel. 4. Production of the programme of Helsinki Airport and Lapland Airports for reducing the use of plastic and its implementation together with companies.
Environmental responsibility criteria for Finavia's purchases	Developing the procurement process to ensure different elements of social responsibility. Developing an operating method to monitor the fulfilment of social responsibility in service production to the extent required.	<ol style="list-style-type: none"> 1. One audit of a contract supplier has been performed regarding fulfilment of social responsibility on the basis of reports compliant with the Act on the Contractor's Obligations and Liability when Work Is Contracted Out. 	<ol style="list-style-type: none"> 1. Finavia's Code of Conduct for suppliers is to become a standard part of competitive tendering processes. 2. Reducing the use of plastic will be taken into account in all procurement tenders.

Environmental impacts

The most significant environmental impacts of airports and air traffic result from anti-icing treatments for runways, anti-icing and de-icing operations for aircraft, and flight operations.

We bear the responsibility for the environmental impacts of our operations. As an airport operator, we are also partly responsible for the environmental impacts of our partners operating at the airport areas.

The main environmental aspects of Finavia's own operations are winter maintenance of airfield areas (aquatic and soil emissions), waste management (including soil removed in construction work), the maintenance of the built infrastructure (energy consumption, emissions), and the de-icing and anti-icing treatments of airplanes conducted by ground handling companies (aquatic and soil emissions). Significant environmental impacts of airport operations are caused by air traffic (aircraft noise, emissions and energy consumption) which Finavia controls through the activities of ANS Finland, a company responsible for air navigation services.

The figure and table on the next page provide information on airport-related activities and their environmental impacts. Finavia is responsible for some of these activities.

The environmental impacts of air traffic



Airport infrastructure and ground traffic

- 1. Road connection to the airport
- 2. Parking and public ground transport
- 3. Passenger terminal
- 4. Air traffic control tower (ANS Finland)
- 5. Airport office building
- 6. Airport maintenance equipment hall
- 7. Aircraft hangar
- 8. Runways and taxiways

Aircraft anti-icing and run-off waters

- 9. Aircraft anti-icing and de-icing
- 10. Tanks for anti-icing and de-icing agents (propylene glycol)
- 11. Apron level and drainage of water from it

Anti-icing treatment of runways and run-off waters

- 12. Maintenance equipment and public utilities
- 13. Tanks for anti-icing agents (formates, acetates)

Aircraft fuel supply

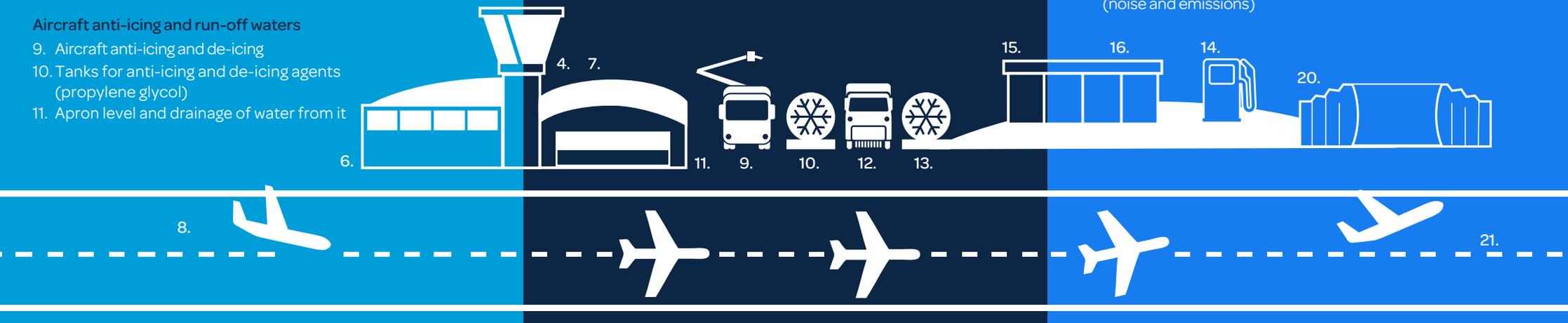
- 14. Fuelling of airplanes
- 15. Aviation fuel storage

Maintenance equipment and public utilities

- 16. Fuel supply for maintenance equipment
- 17. Municipal solid waste
- 18. Hazardous waste
- 19. Public utilities for premises (water and heating)

Movement of airplanes

- 20. Maintenance test use of airplanes
- 21. Take-offs, landings and taxiing of airplanes (noise and emissions)



Action causing environmental impact	Operation	Substances deployed	Environmental impact	Responsibility for the action
Anti-icing treatment of runways	<p>Mechanical methods primarily used for anti-icing treatment: sweeping and ploughing</p> <p>Chemical de-icing agents are utilised for removing frost and ice from the runway surface and for proactive skid prevention</p>	Sodium acetate, potassium acetate, sodium formate and potassium formate in granular and liquid form	Consume oxygen in waterways, but only have a minimal negative impact on the environment considering all anti-icing agents	Finavia
Anti-icing and de-icing treatments of aircraft for ensuring their manoeuvrability and performance	Spraying anti-icing and de-icing agents on the aircraft	Propylene glycol	Not classified as hazardous, but upon disintegration, consumes oxygen and emits an odour	FinGround forwarding agents (operations), Finavia (management of run-off water)
Aviation by airlines, private planes, the authorities and the Finnish Defence Forces	Aviation, taxiing, test operation for maintenance purposes	-	Noise, atmospheric emissions	Aviation operators (equipment), municipalities (land use planning), Finavia through ANS Finland (flight methods, actions by air traffic control)
Maintenance of airport premises	Heating, waste water management and waste management	-	Direct or indirect atmospheric emissions	Finavia

Environmental permits

Proper management of environmental issues is a prerequisite for the existence of airports. By ensuring it, airports obtain the permits required and earn social acceptance.

The environmental permit includes provisions on airport operations and related environmental impacts. Airport operations are also governed by many international and national aviation regulations.

Eighteen of Finavia's airports have an environmental permit compliant with the Environmental Protection Act that entered into force in 2000. A small number of airports do not need an environmental permit, unless the scope of their operations substantially changes. In 2018, a decision was issued regarding the application to review the permit regulations for Mariehamn Airport. At the end of 2018, the permit application for Kajaani Airport was being processed by the permit authorities. Furthermore, the appeals regarding the decision to review the permit regulations for Utti Airport were still being processed by the Administrative Court of Vaasa. In November 2018, the Uusimaa ELY centre filed an initiative regarding a revision of the permit regulations for Helsinki Airport.

Preparation of reports and plans will continue after the environmental permit has been granted

The provisions of environmental permits include numerous reporting and planning obligations concerning such issues as water pollution and noise control. The Regional State Administrative Agency for Western and Central Finland issued its decision on the survey by Vaasa Airport regarding the impact of flooding on its activities. A decision on a survey regarding the collection of water containing glycol at Turku Airport was obtained from the Regional State Administrative Agency for Southern Finland. Finavia appealed the decision to the Administrative Court of Vaasa where the matter is still being processed. The Administrative Court of Vaasa rejected the appeals against the surveys regarding the reconditioning needs of urban runoff discharge channels at Helsinki Airport, and Finavia has already implemented some of the actions compliant with the decision. The

Regional State Administrative Agency for Southern Finland is currently processing the report regarding enhancement of the glycol recovery process at Helsinki Airport. Furthermore, the Regional State Administrative Agency for Western and Central Finland is currently processing the urban runoff and noise reports of Tampere-Pirkkala Airport.

The environmental risk assessments and preparedness plans of Helsinki Airport and Kokkola-Pietarsaari Airport were updated in 2018. The work to be carried out in 2019 includes the plan concerning reduction of surface water and groundwater loading at runways 1 and 2, as well as the urban runoff survey at Vaasa Airport. Noise management plans were completed at Helsinki and Turku Airports, and similar plans will be produced in 2019 for several other airports. In 2018, a noise survey was conducted at Helsinki Airport, together with a separate noise survey regarding noise at the new run-up area. In 2019, noise surveys will be conducted at Turku, Savonlinna and Helsinki Airports.



Reports on Helsinki Airport's flight operations to licensing authorities

In 2015, Traficom issued a decision, whereby it did not impose any restrictions on night-time traffic at Helsinki Airport, as the noise control target will be fulfilled without any night-time restrictions if flight operations develop as predicted. The decision acquired legal force in June 2018.

In accordance with the previous permit that acquired legal force in 2015, Finavia has in September 2018 provided the Regional State Administrative Agency for Southern Finland with a report of the decision issued pursuant to the Aviation Act, as well as a report on night-time flight operations.

The aircraft noise control plan was also updated as part of the report. The plan offers a broad depiction of the traffic's time structure and the airlines' aircraft equipment, as well as describes the different noise control measures, such as the user policies of runways.

Environmental investments

Our most important environmental investments during 2018 concerned improvements in the de-icing infrastructure at airports.

Finavia’s environmental investments amounted to EUR 10.0 (7.85) million. The most significant environmental investments were directed towards reducing the load on the aquatic environment from the de-icing and anti-icing treatments at Helsinki, Tampere-Pirkkala and Ivalo Airports.

Foundation structures were constructed to protect the soil at aircraft ramps intended for de-icing use at Tampere-Pirkkala and Helsinki Airports. The development programme at Helsinki Airport began in 2014 and will continue until 2020. At Ivalo Airport, a melting area for glycol-containing snow was constructed with appropriate soil protection measures and preparedness for conveying the melting waters to the waste water sewer. The construction of extensive protective structures is a challenging operation in an airport environment, as it is subject to strict load-bearing requirements.

Environmental costs are also incurred for reducing carbon emissions, such as the use of renewable diesel fuel, procurement of wind-generated electricity and compensation of the remaining emissions.

Main environmental investments



The development programme of Helsinki Airport receives high environmental rating

Responsibility and minimising the environmental impacts have been taken into account in the Helsinki Airport development project from its very beginning. The year 2018 was a year of efficient construction work at Helsinki Airport.

A third of the construction of a solar power plant was executed together with the construction of the South Pier, completed in 2017. The rest of the plant will be completed in conjunction with the construction of the West Pier. The new solar panels produce 10% of the new terminal areas' electricity.

The aim has been to maximise the circulation of materials during the construction phase of the development programme. The South Pier was the only new building project in Finland to receive the international BREEAM environmental certificate in 2018. In order to receive the certificate, attention has to be paid to various aspects including energy and water consumption, the materials used, operations during construction, land use and traffic. BREEAM has guided the design, planning, construction and the use of the building.

Responsibility indicators of the Helsinki Airport development programme



Environmental report



Aircraft noise control

We are mitigating aircraft noise, among other things by controlling the use of runways and flight routes as well as by developing take-off and landing methods.

Examples of noise control measures in 2018

A CEM (Collaborative Environmental Management) working group was established in 2018 for discussing the technical and operative noise control measures at Helsinki Airport in cooperation with the provider of air navigation services and major airlines. The internationally used CEM model of operations is applied for defining the framework of cooperation in the working group's activities. The working group discusses e.g. the possibilities for developing the noise control methods used during approach.

The take-off method defined for runway 1 (22L) at Helsinki Airport and management of the traffic destined for the Estonian airspace were further developed in cooperation between Finavia, ANS Finland and Estonian air navigation services with the changes published in April 2018. The purpose of the changes was to have even better control of the growing traffic destined for the Estonian airspace in terms of geography and volume. Noise measurements along the take-off route were continued throughout 2018.

The Helsinki Airport aircraft noise control plan was updated at the end of 2018. Like the previous version,

the updated plan was also published in printed form for distribution to public authorities and stakeholders.

Continuous descent is used in 74 per cent of all approaches

In continuous descents, the aircraft approaches the runway without the horizontal flight previously used as the basic premise, which required flying at an altitude of a few hundred metres by using high engine power. In continuous descents, noise is controlled by maintaining a higher altitude for longer, opening the flaps and landing gear as late as possible and by steadily adjusting the speed.

In 2018, 74 per cent of planes landing at Helsinki Airport used the continuous descent approach (71 per cent in 2017). The percentages at different times of the day were as follows: 72 per cent of landings between 7 a.m. and 10 p.m. used the continuous descent, while the percentage was 82 at night between 10 p.m. and 7 a.m., thus exceeding the target values in the environmental permit. The trend has been positive for years as a result of cooperation with the air traffic control of ANS Finland and airlines. At other airports, there is more scope for using the method as their airspace has less traffic.

"74% of the aircraft arriving at Helsinki-Vantaa landed using continuous descent."

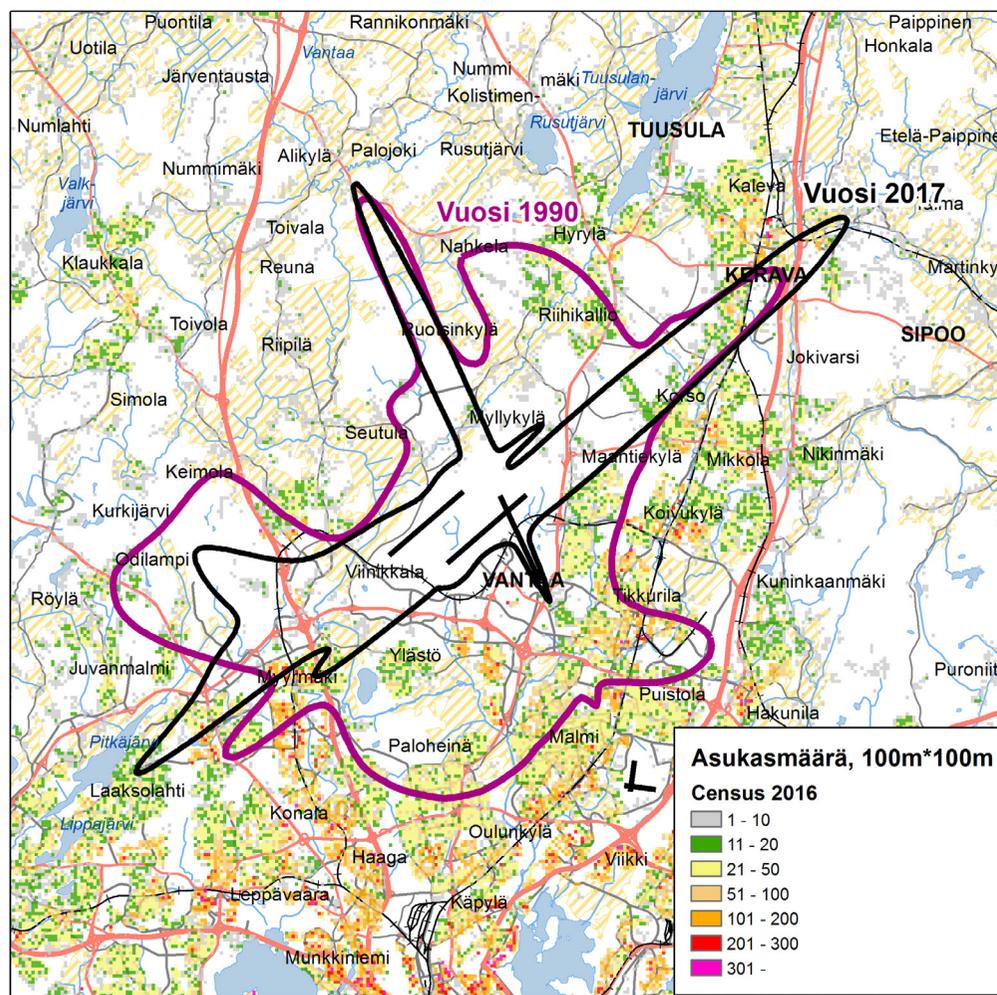
The noise area at Helsinki Airport has decreased by two thirds in the long term

There are ten measurement stations in the noise monitoring system (ANOMS) at Helsinki Airport. Finavia uses the system to monitor the noise situation and to produce reports. The [WebTrak](#) service publicly displays data collected by ANOMS on Finavia's website. The measurement results of different measurement points can be viewed in real time for different aircraft routes during a chosen period.

In the long term, the noise area has reduced to one-third thanks to developments in aircraft technology and the methods applied by air traffic control. In 1990, a total of 97,000 people lived in the aircraft noise area. In 2017, the corresponding number was 25,000 (23,000). The shape of the noise area and the number of people living in it vary every year due to wind conditions and runway renovation operations. In 2017, the number of people living in the calculated noise area was particularly affected by the fact that the number of planes descending from the direction of Nurmijärvi was small in the statistics covering the whole year due to the renovation of Runway 2 (15/33), which took over four months. The extensive terminal and apron development programme at Helsinki Airport will not affect the use of runways and, therefore, will not change the spread of aircraft noise.

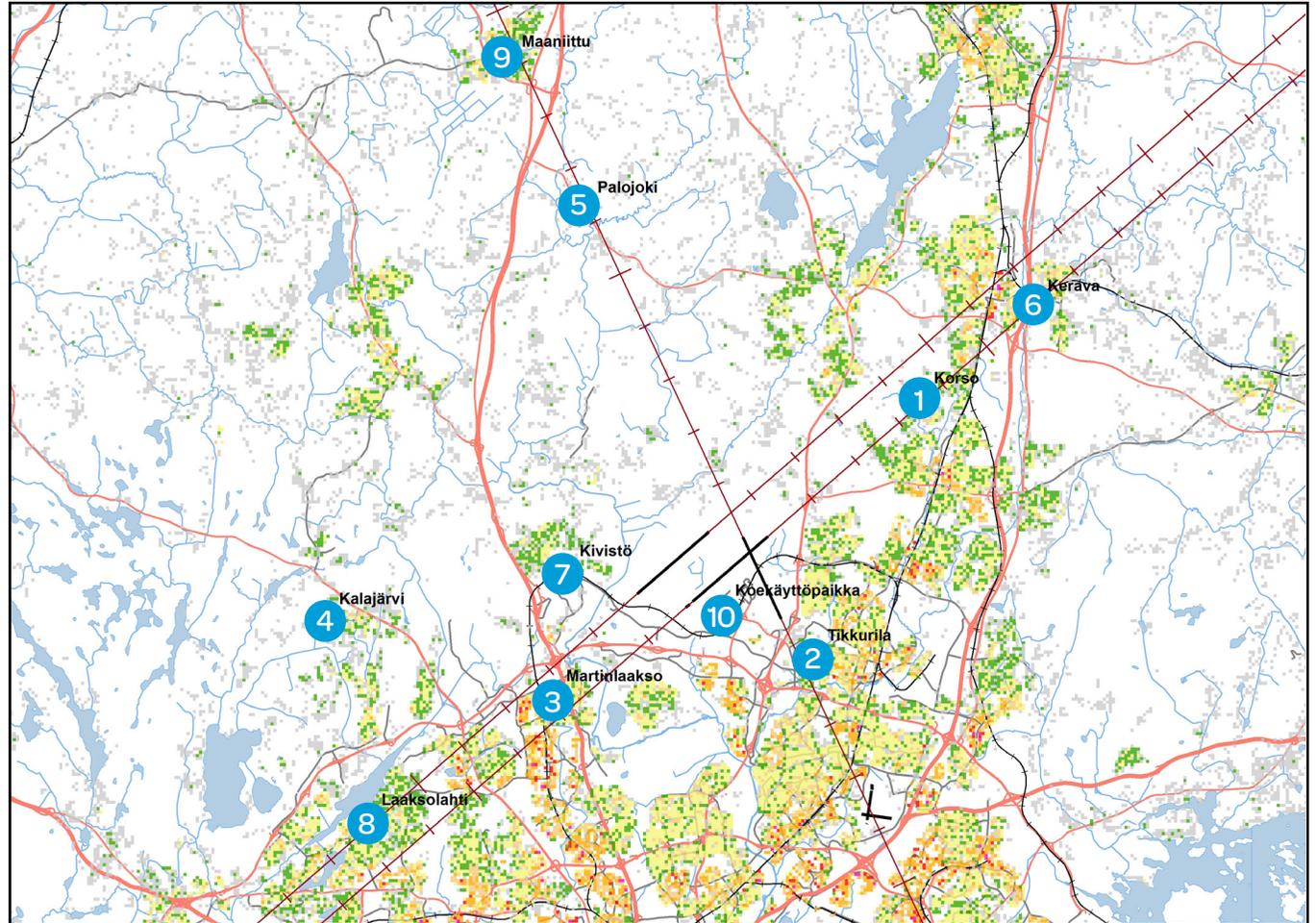
The L_{den} (day, evening, night) indicator is most commonly used in Finland to calculate aircraft noise in accordance with the EU's Environmental Noise Directive. The indicator describes the annual weighted average noise energy recorded over a 24-hour period, where aircraft noise readings taken in the evening (between 7 p.m. and 10 p.m.) are increased by 5 dB, and aircraft noise readings taken at night (between 10 p.m. and 7 a.m.) are increased by 10 decibels.

The development of aircraft noise area (L_{den} 55 dB) at Helsinki Airport between 1990 and 2017



- 1 Korso
- 2 Tikkurila
- 3 Martinlaakso
- 4 Kalajärvi
- 5 Palojoki
- 6 Kerava
- 7 Kivistö
- 8 Laaksolahti
- 9 Maaniittu
- 10 Test run area

Aircraft noise measurement stations at Helsinki airport



Runway usage and distribution of traffic

Helsinki Airport has three runways, which are used as required by weather conditions, traffic and environmental considerations. Safety is always the highest priority in the selection of runway.

Taking off and landing into a headwind is the safest option for aircraft. The runway to be used is chosen by applying the principle of primacy: in addition to the direction and speed of the wind, noise control and the volume of traffic are taken into account. Runways sometimes have to be closed for repair and construction work. No extensive runway renovations took place in 2018. The development programme of Helsinki Airport, started in 2013, does not affect the use of runways or change the direction of noise.

About 20 different runway combinations in use

The runways for landings and take-offs are always chosen whilst taking traffic and prevailing conditions into account. The choices are interdependent. There are about 20 different runway combinations.

- For southerly and westerly winds, the primary runway for landings is runway 2 (15) from the northwest, from the direction of Nurmijärvi, or runway 1 (22L) from northeast, from the direction of Kerava. The primary runway for take-offs is runway 3 (22R) towards the southwest, in the direction of western Vantaa and Espoo. Low-

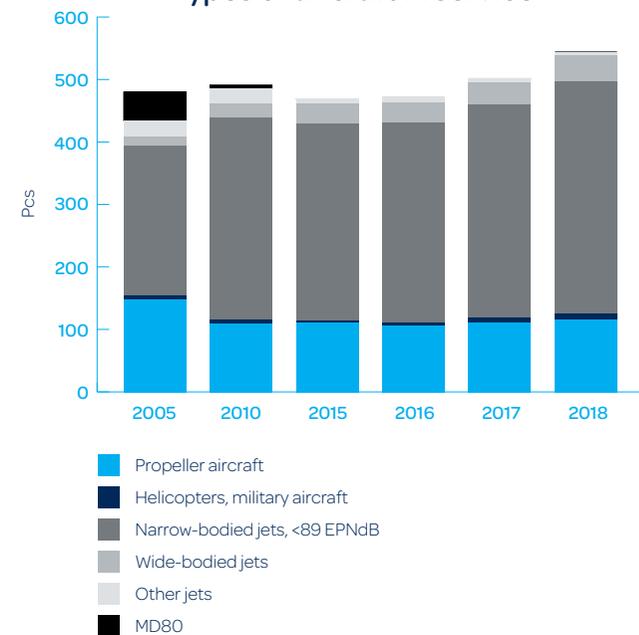
noise aircraft can take off from runway 1 (22L) towards the south at the same time. During peak hours in the afternoon, airplanes also land from the direction of Kerava on runway 3 (22R).

- When the wind is from the north or east, runway 3 (04L) and runway 1 (04R) are usually used for landings, i.e. for approaches from the southwest, the direction of western Vantaa and Espoo, while runway 1 (04R), towards the northeast in the direction of Kerava, is used for take-offs.

Choice of runway minimises noise pollution

The aim is to handle traffic so that as few people as possible are living in the area affected by aircraft noise. At night-time, landings are primarily made using runway 2 (15) from the northwest, i.e. from the direction of Nurmijärvi, and take-offs using runway 3 (22R) towards the southwest, in the direction of Western Vantaa and Espoo. Jet plane landings on runway 2 (33) from the southeast and take-offs from runway 2 (15) towards the southeast are only carried out on a few days in a year due to the dense population, apart from a few exceptions.

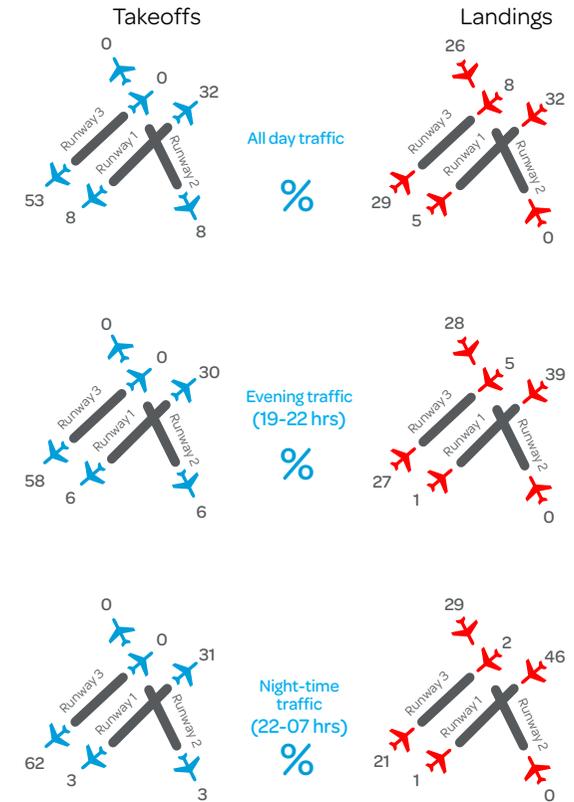
Types of aircraft in service



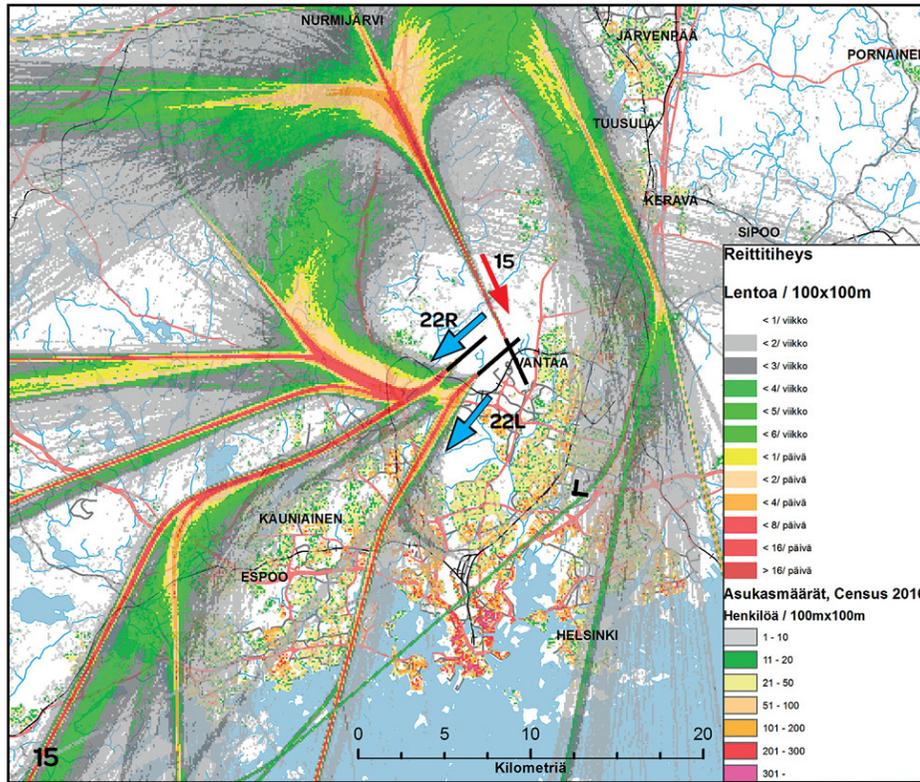
At night-time, operations towards the southeast are also prohibited, unless otherwise dictated by air traffic safety. Air traffic safety is the main reason for not always being able to choose the optimal runway for noise control.

“The runways for landings and take-offs are always chosen whilst taking safety, prevailing conditions and noise control into account.”

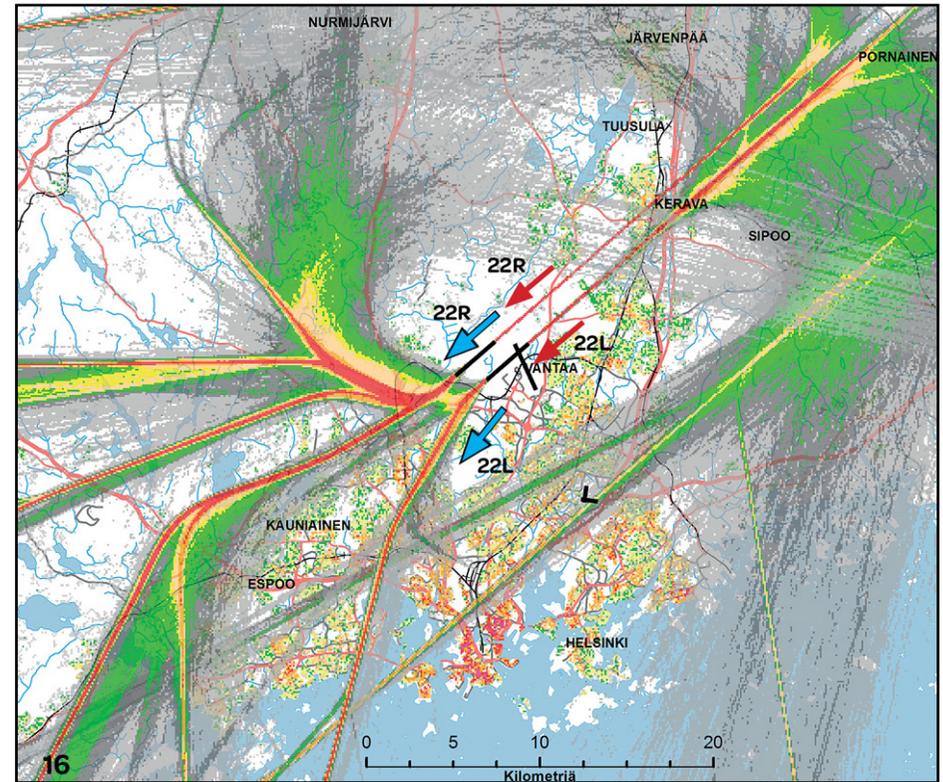
Runway use throughout the day



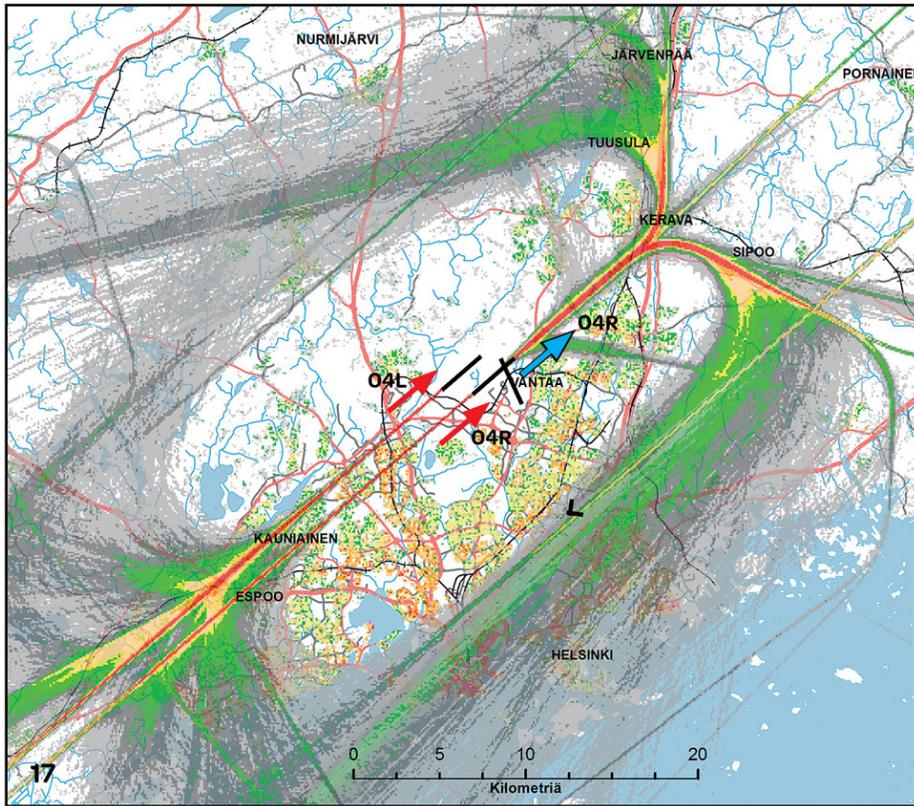
Route frequency map for northerly and easterly winds, plenty of descending traffic



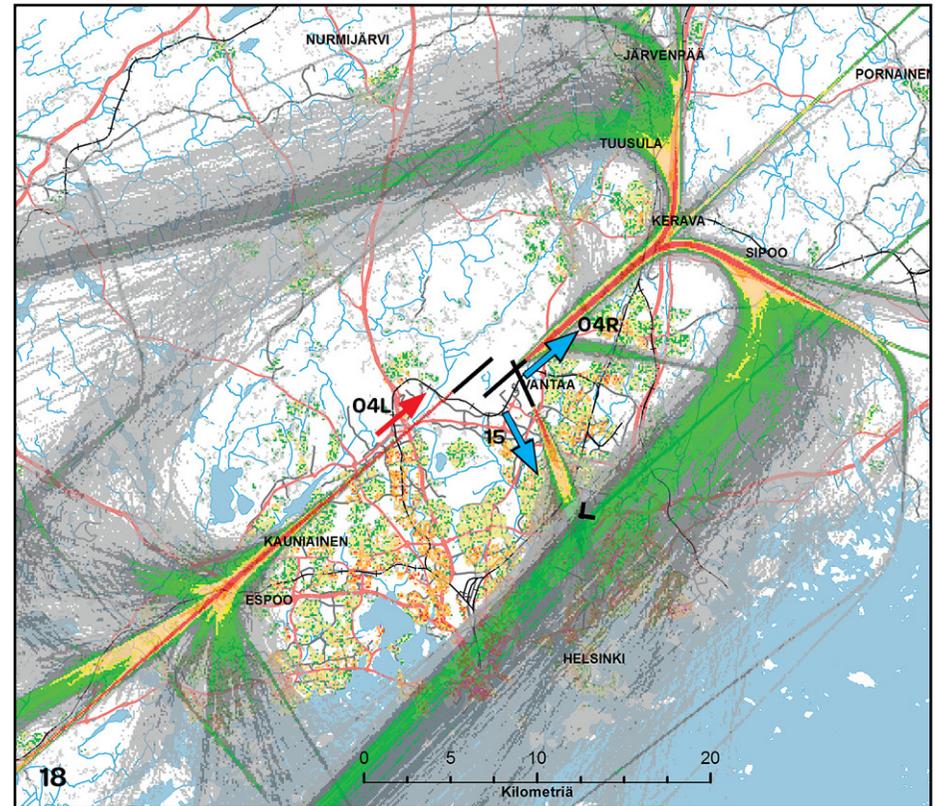
Route frequency map for northerly and easterly winds, little descending traffic



Route frequency map of runway combination for westerly and southerly winds



Route frequency map of parallel use of runways for westerly and southerly winds



Runway usage comparison – 24-hour traffic

Every year, runway closure due to renovation has an impact on the distribution of runway usage. No extensive reconditioning of runways took place in 2018.

Distribution of traffic at Helsinki Airport

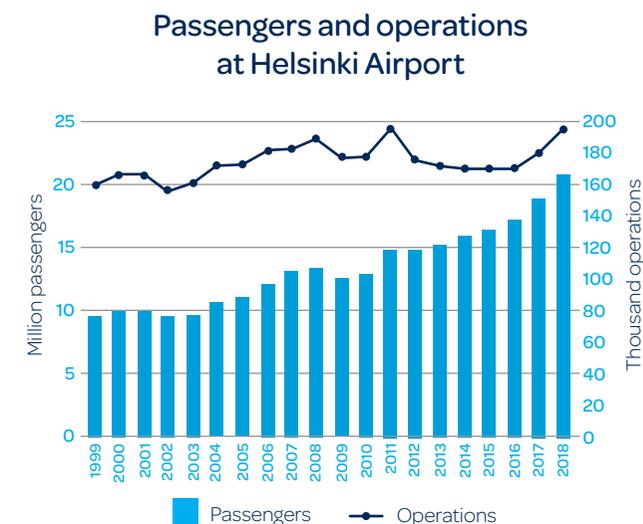
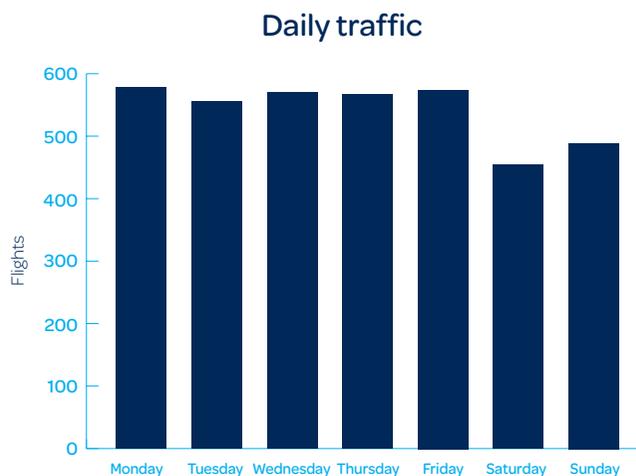
In 2018, there were a total of 195,000 departures and arrivals at Helsinki Airport. Despite the steady growth of passenger volumes, the number of operations has not increased at the same rate.

Weekdays are the busiest days in air traffic. In 2018, an average of 427 jet planes (391) and 126 propeller planes (126) arrived or departed Helsinki Airport during weekdays. About 22 per cent of all passenger flights are operated with propeller planes.

Air traffic at Helsinki Airport is at its peak in the afternoon and from 8 a.m. to 9 a.m. in the morning. There are a large number of arrivals from 2 p.m. to 4 p.m., while the peak hours for departing traffic are from 4 p.m. to 6 p.m. There is little traffic at night from 1 a.m. to 6 a.m., and landings account for most of the operations during those hours. The busiest month in 2018 was May. The traffic was at its lowest in February.

In 2018, a total of 69 per cent (69) of all passenger aircraft using the airport were low-noise jet planes. Wide-bodied aircraft accounted for 8 per cent (7). Propeller planes accounted for 21 per cent (23) of all flights. The noisier MD80 planes are no longer used.

24-hour traffic	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
04L take-offs (Runway 3 towards northeast)	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
04R take-offs (Runway 1 towards northeast)	32%	31%	17%	25%	26%	27%	16%	28%	27%	32%
22L take-offs (Runway 1 towards southwest)	7%	9%	7%	23%	8%	8%	7%	5%	7%	8%
22R take-offs (Runway 3 towards southwest)	59%	57%	72%	49%	64%	63%	67%	62%	62%	53%
15 take-offs (Runway 2 towards southeast)	2%	2%	3%	3%	2%	2%	9%	5%	4%	6%
33 take-offs (Runway 2 towards northwest)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
04L landings (Runway 3 from southwest)	23%	23%	13%	15%	18%	18%	11%	20%	20%	26%
04R landings (Runway 1 from southwest)	9%	8%	5%	10%	8%	10%	6%	9%	8%	8%
22L landings (Runway 1 from northeast)	26%	25%	34%	39%	37%	37%	33%	44%	46%	29%
04L take-offs (Runway 3 towards northeast)	2%	2%	4%	3%	4%	4%	20%	5%	5%	5%
15 landings (Runway 2 from northwest)	40%	42%	42%	33%	32%	37%	29%	22%	21%	32%
33 landings (Runway 2 from southeast)	0%	0%	2%	1%	1%	0%	1%	0%	0%	0%



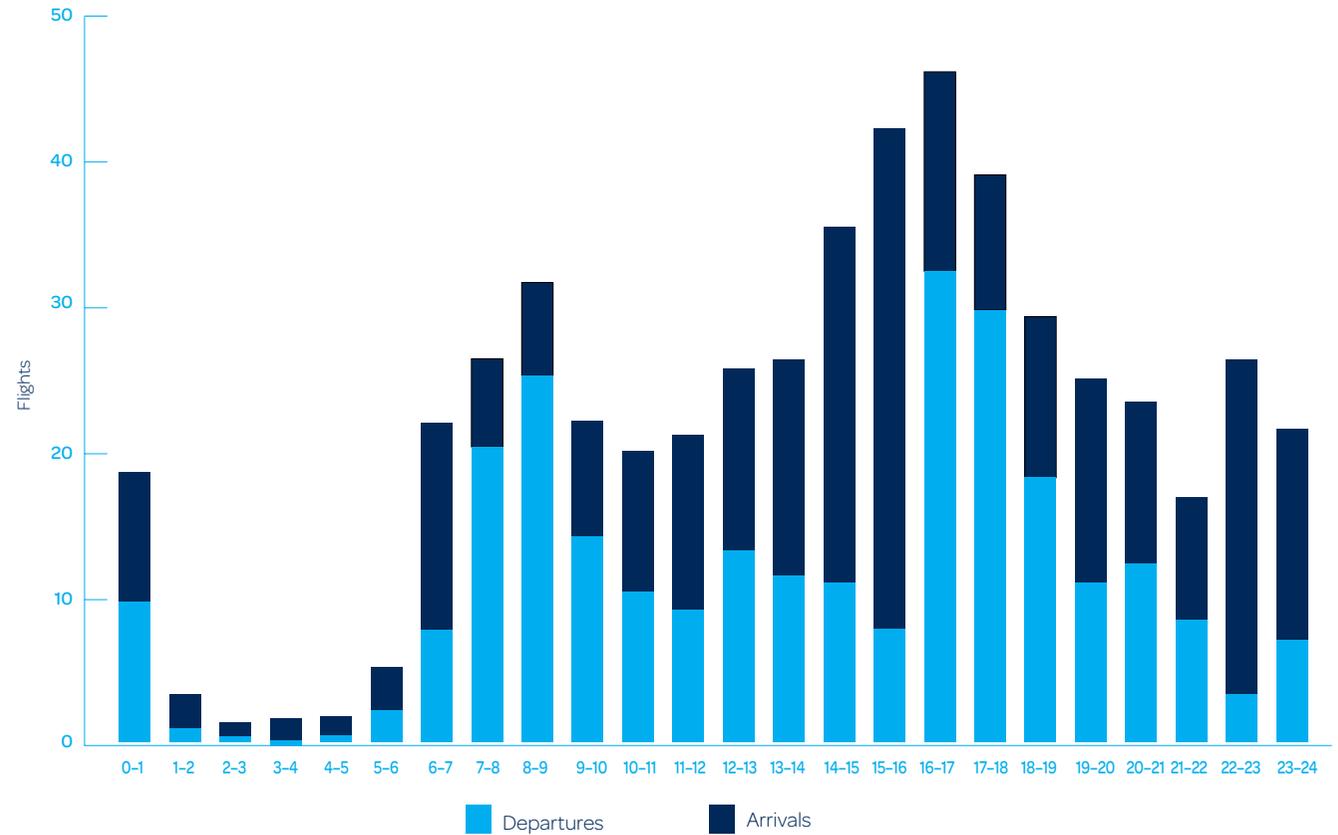
Distribution of traffic at Finavia airports

The total number of passengers at our airports reached a new record in 2018. International travel and growing demand at airports in Lapland pushed the number of passengers to a new high.

A total of 24,986,502 passengers (22,699,881) travelled through Finavia's airports in 2018, an increase of 10.1 percent compared to the previous year. Of all passengers, 24 per cent (24) took domestic flights and 76 per cent (76) international flights.

There was a further increase in the number of commercial aviation landings last year; they totalled 125,680 (116,895), which was 7.5 per cent more than in the previous year. Having taken an upward turn in 2017, the passenger numbers have increased every year over the past years.

Hourly traffic



Landings at Finavia airports

Airport	Commercial aviation (pcs)	Military aviation (pcs)	General aviation (pcs)	Total (pcs)	Commercial aviation (Change %)	Military aviation (Change %)	General aviation (Change %)	Total (Change %)
Enontekiö	91	0	2	93	13.8	-100.0	-33.3	8.1
Halli	1	1,503	860	2,364	0.0	12.2	336.5	53.7
Helsinki Airport	94,009	749	2,308	97,066	8.9	-11.4	-8.3	8.3
Ivalo	1,165	123	104	1,392	13.5	23.0	-12.6	11.8
Joensuu	1,387	32	594	2,013	0.8	0.0	9.4	3.2
Jyväskylä	1,086	11,256	2,187	14,529	2.9	-3.0	25.5	0.9
Kajaani	1,094	37	101	1,232	0.1	-61.1	-4.7	-4.8
Kemi-Tornio	1,032	0	815	1,847	6.8	0.0	3.6	5.4
Kittilä	1,678	13	115	1,806	4.7	225.0	23.7	6.3
Kokkola-Pietarsaari	1,486	23	1,454	2,963	-7.5	-77.9	4.0	-4.7
Kuopio	2,060	5,606	3,768	11,434	1.8	-6.2	4.7	-1.4
Kuusamo	729	2	36	767	37.0	-66.7	56.5	36.7
Mariehamn	1,390	0	873	2,263	-2.5	0.0	46.7	12.0
Oulu	5,166	945	4,340	10,451	12.3	6.5	63.2	28.3
Pori	528	82	9,135	9,745	-41.5	7.9	-10.1	-12.5
Rovaniemi	2,791	4,658	2,290	9,739	14.5	0.4	-9.6	1.3
Savonlinna	463	40	115	618	0.9	53.8	49.4	10.0
Tampere-Pirkkala	2,633	3,505	18,636	24,774	-3.6	-12.7	2.2	-0.8
Turku	3,997	413	7,336	11,746	5.7	95.7	14.6	13.0
Utti	1	2,329	590	2,920	0.0	5.0	5.2	5.0
Vaasa	2,893	64	2,867	5,824	0.0	-45.3	45.6	16.9
Total	125,680	31,380	58,526	215,586	7.5	-2.9	7.7	5.9

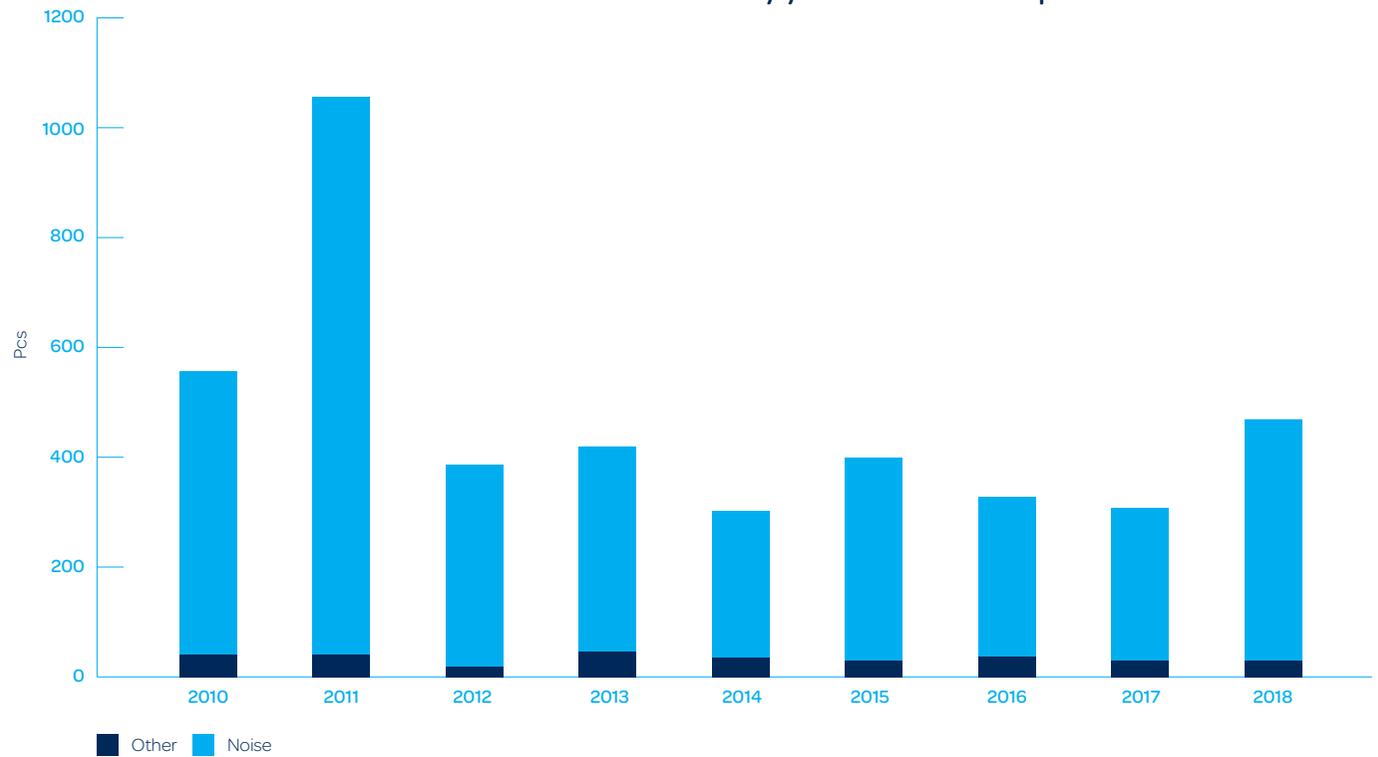
Environment-related feedback

Aircraft noise affects the neighbours of our airports, in particular. It is subsequently not surprising that most of the environmental feedback we receive is noise-related.

In 2018, we received 469 (308) queries regarding environmental issues at Helsinki Airport. Approximately half of these were recurring. Noise was the subject of 93 (90) per cent of the feedback. No extensive closures of runways affecting their use took place in 2018. There were more exceptional conditions (such as fog or strong southern/northern wind) in 2018 than in the previous years, which increased the number of contacts. The eastern winds persisting for a long time in July 2018 dictated the use of directions towards Espoo and Western Vantaa (Direction 04), which also gave rise to many contacts. Other feedback concerned atmospheric emissions, water and soil issues, and permit matters. The total number of all environment-related queries in the network was 493 (337).

We respond to all environment-related contacts and report the amount of feedback to environmental authorities on an annual and quarterly basis. The reports are available on Finavia's website.

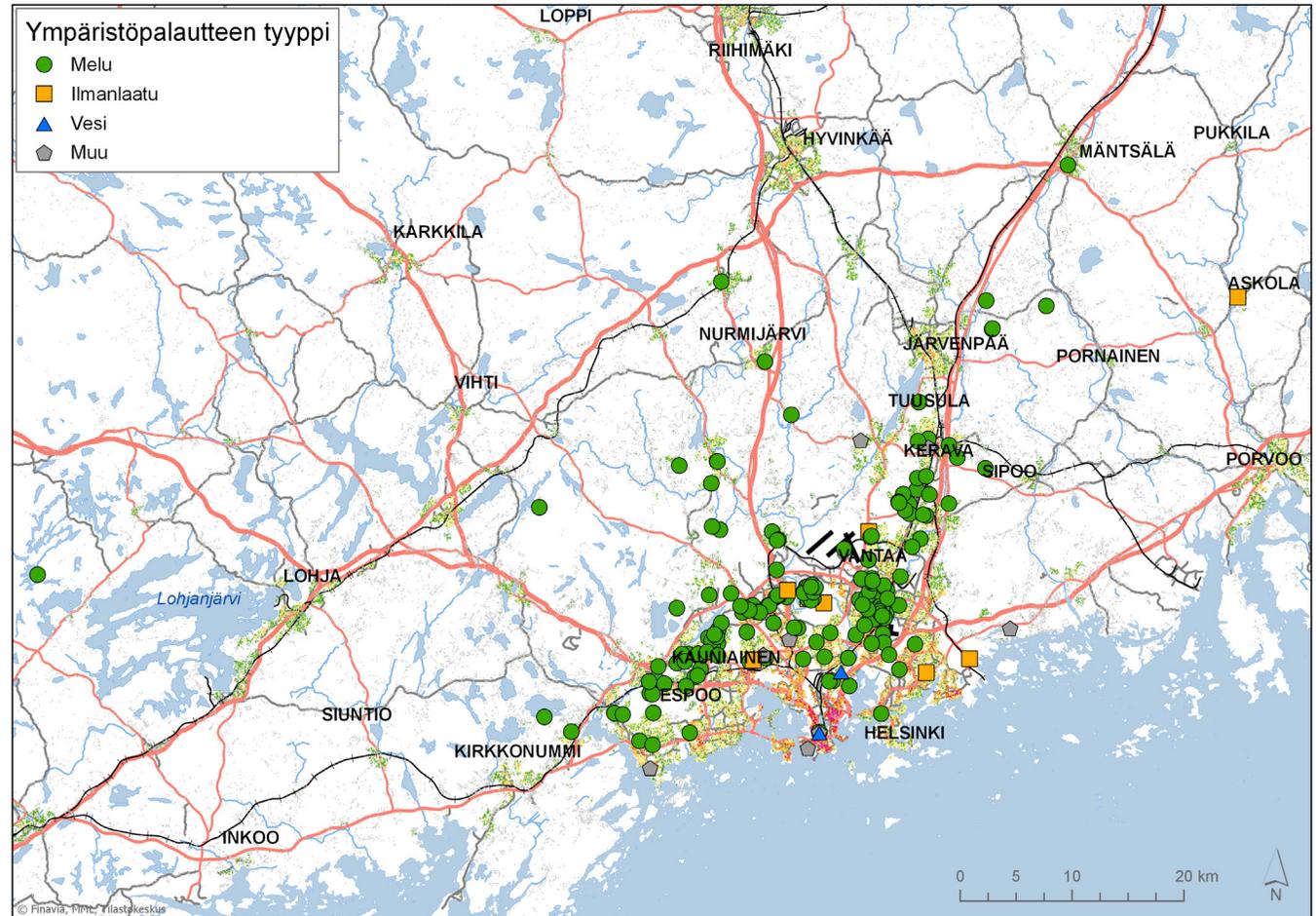
Environment-related contacts by year at Helsinki Airport



Environment-related contacts by municipality in 2018, Helsinki Airport	Different persons	Total contacts
Espoo	41	47
Helsinki	66	82
Järvenpää	0	0
Kauniainen	5	7
Kerava	7	8
Nurmijärvi	6	25
Sipoo	2	128
Tuusula	3	4
Vantaa	68	138
Others	21	30
Total	219	469

Environment-related contacts in 2018, all airports	Different persons	Total contacts
Helsinki Airport	219	469
Turku	5	5
Utti	2	5
Tampere-Pirkkala	3	3
Jyväskylä	3	3
Oulu	2	2
Vaasa	1	1
Ivalo	1	1
Rovaniemi	1	1
Kittilä	1	1
Kuusamo	1	1
Pori	1	1
Total	238	493

Types of environmental feedback in the vicinity of Helsinki Airport



Air quality

We are continuously monitoring air quality in the Helsinki Airport areas part of the air quality measurement programme in the Helsinki region. We also carry out our own measurements on a regular basis.

Most of the total emissions in the airport area are generated by aircraft; however, these emissions are rapidly diluted as emission heights increase. Their impact on ground-level air quality is low. The impact of ground-level emission sources on local air quality is higher. Therefore, the impacts of emissions on air quality are limited to the immediate proximity of the airport.

Improved air quality

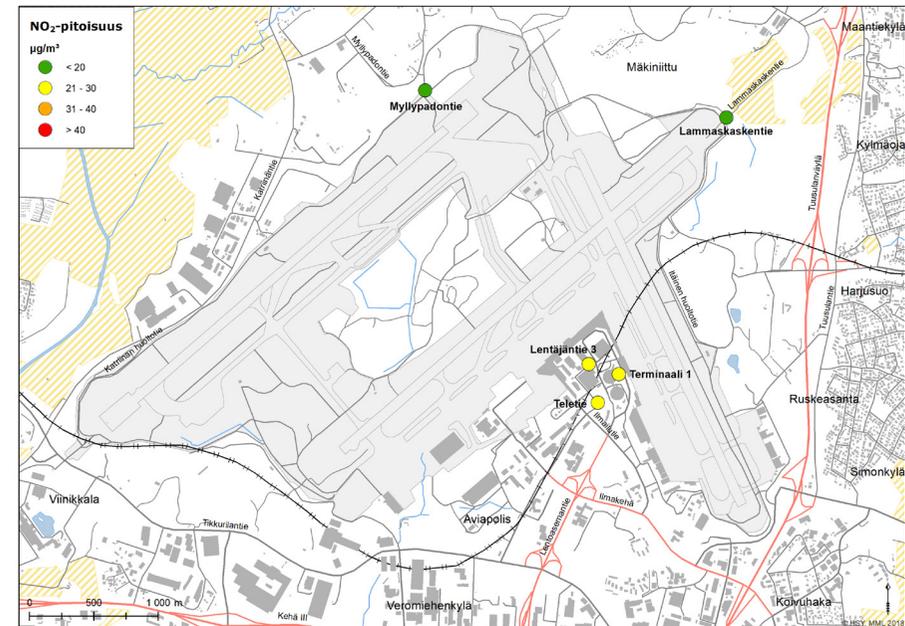
The results of Finavia’s own measurements are presented in a map journal, available through the following [link](#). Over the years, air quality has improved at nearly all measurement points.

For several years, Finavia has participated in the air quality measurement programme in the Helsinki region organised by the Helsinki Region Environmental Services Authority (HSY). The nitrogen oxide concentrations measured using a passive sampler have remained below the guideline values. Nitrogen dioxide emissions generated by air traffic and airport operations have a local impact on air quality. It is mostly limited to the airport area and areas adjacent to it.

Passive samplers’ annual average NO ₂ concentration, µg/m ³	2014	2015	2016	2017	2018
Airport Terminal 1	37	37	31	29	29
Airport Teletie				23	25
Airport Rahtitie	23	23	23	20 *	
Airport Lentäjätie 3	20	21	21	20	22
Airport Myllypönttie	12	12	12	12	13
Airport Lammaskaskentie	12	12	12	11	13

* Measurement wagon had to be moved in October because of a construction site.

Passive samplers’ locations



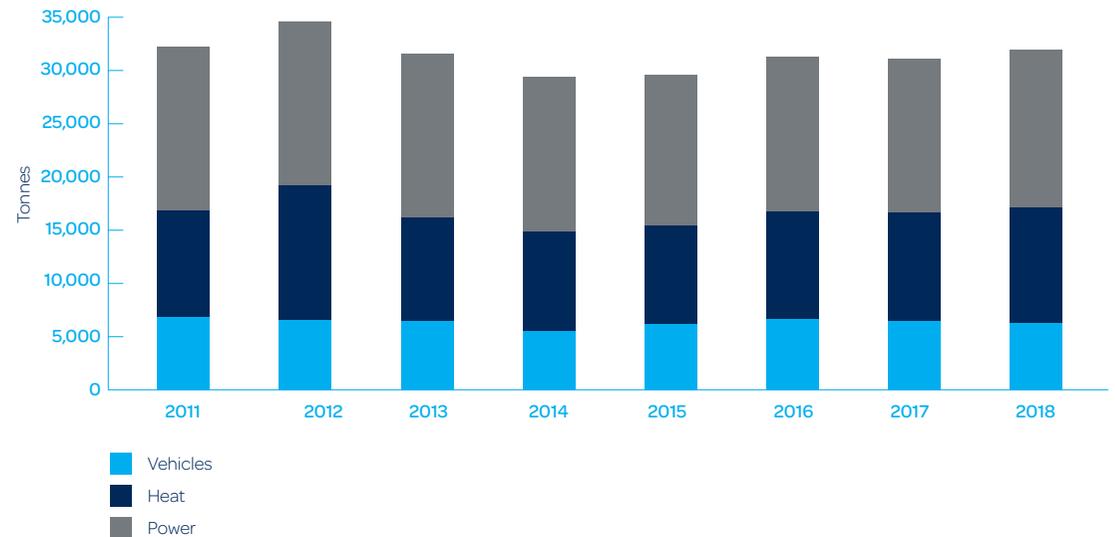
Energy and water consumption and emissions

Our work for improving energy efficiency and reducing emissions at airports is constantly developed. Emissions per passenger are decreasing.

Among other things, airports use energy for heating, ventilation, cooling, illumination and maintenance equipment. In the future, we will increase the use of automated methods to control the systems based on demand. The requirements laid out in the BREEAM environmental certification system for buildings are considered in the planning and implementation of the Helsinki Airport development programme. The objectives guide energy efficiency, activities during the construction stage and well-planned commissioning of the buildings.

The South Pier of Helsinki Airport’s development programme was granted the BREEAM certificate with Excellent rating as the only Finnish construction project in 2018. The West Pier and Aukio plaza have also been granted interim certificates of the same level. The same standard is also the goal for the design of the expansion of Terminal 2.

Carbon dioxide emissions from Finavia’s own operations



One of the new terminal buildings' technical innovations is to use heat pump technology to connect the new building to the exhaust air systems of the old terminal in order to improve energy efficiency of both buildings.

The first 124-kWp phase of the solar energy system at the non-Schengen area of Helsinki Airport operated in 2018 in the expected manner. The system will be finalised in spring 2019, after which its total power will be over 500 kWp. In addition, in conjunction with the new parking house opening in 2020, an installation of 250 kWp of additional power generation is planned.

In 2018, Helsinki Airport renewed its level 3+ certificate (highest level) under the ACA (Airport Carbon Accreditation) carbon dioxide emissions reduction programme of the Airports Council International (ACI). [Finavia's operations at the airport are carbon neutral](#) because there has been a continuous reduction in the emissions index and the remaining emissions, and business travel of the personnel has been compensated for with emission units purchased from carbon markets. [The units were purchased from biogas, solar and wind](#) power projects completed in India. All units had been verified in accordance with the Gold Standard.

In 2018, the airports in Lapland (Enontekiö, Ivalo, Kemi-Tornio, Kittilä, Kuusamo and Rovaniemi) achieved level 3 (Optimisation) in the ACA programme.

Finavia has concluded a cooperation agreement with Nordic Environment Finance Corporation (NEFCO) regarding compensation projects concerning greenhouse gas emissions. NEFCO is a Nordic company financing environmental and climate projects. From now on, Finavia will acquire the required emission units from projects identified by NEFCO.

All electricity used at Helsinki Airport in 2018 was generated with Nordic wind power (guarantee of origin under the RES-GO system). With this choice, CO₂ emissions have been reduced by approximately 10,000 tonnes.

To reduce vehicle emissions, the apron buses at Helsinki Airport switched to renewable diesel fuel (Neste MY) produced from waste and leftovers in 2017. Use of the product was extended at Helsinki Airport to cover all of Finavia's diesel-powered vehicles in autumn 2018. At the same time, Kuusamo, Rovaniemi, Kittilä and Ivalo Airports also started using the product, which reduces emissions by up to 90%. In 2018, we reduced CO₂ emissions by 720 tonnes by using renewable diesel fuel.

LED technology was introduced to all lighting systems at Tampere Airport in connection with an extensive infrastructure renovation project. Renewing the lighting system at Terminal 1 of Helsinki Airport by using LED technology was a significant energy efficiency project. It was possible to reduce the number of light fittings to less than half, while energy consumption decreased by up to 80 per cent.

Finavia's own airport maintenance operations (heating, waste water management and waste management) cause both direct and indirect atmospheric emissions. Ten of Finavia's airports are heated by using pellets or wood chips with zero emissions. As an airport company, we also look at the emissions and fuel consumption of aircraft using our airports and produce separate estimates of other functions at the airports for the ACA programme.

Consumption of heat, electricity, and water

Airport	Electricity MWh	Heating MWh	Water m ³
Enontekiö	518	307	432
Halli	84	227	185
Helsinki Airport	56,000	26,381	137,875
Ivalo	700	1,941	2,269
Joensuu	657	1,148	1,405
Jyväskylä	1,143	1,400	3,308
Kajaani	630	978	1,160
Kemi-Tornio	641	920	728
Kittilä	1,585	2,094	4,515
Kokkola-Pietarsaari	520	819	1,317
Kuopio	1,674	2,360	3,904
Kuusamo	689	907	1,000
Mariehamn	451	830	557
Oulu	4,404	5,665	5,994
Pori	566	988	1,653
Rovaniemi	3,111	3,424	6,074
Savonlinna	460	0*	229
Tampere-Pirkkala	1,635	1,777	8,983
Turku	1,913	1,060	3,649
Utti	41	134	107
Vaasa	1,437	2,331	3,255
Total	78,859	55,691	188,599

* Savonlinna airport uses geothermal heating. The heating energy consumption has been combined with electricity consumption.

LTO (Landing and Take-Off) cycle emissions of aircraft by airport

Airport	LTO-cycle (number)	CO [t/a]	HC [t/a]	NO _x [t/a]	SO _x [t/a]	CO ₂ [t/a]	Fuel [t/a]
Enontekiö	100	1	0	0.8	0.1	200	60
Halli	900	10	0.2	0.01	0.003	30	9
Helsinki Airport	95,700	870	80	770	60	194,300	62,100
Ivalo	1,200	10	1.4	10.3	0.8	2,600	840
Joensuu	2,000	10	0.2	3.4	0.3	1,000	330
Jyväskylä	3,000	20	0.7	2.8	0.3	900	290
Kajaani	1,800	6	0.1	2.4	0.2	700	240
Kemi-Tornio	1,800	20	1.9	14.9	1.2	3,700	1,200
Kittilä	2,900	20	0.4	3.2	0.3	1,000	320
Kokkola-Pietarsaari	5,100	30	1.2	6.8	0.6	2,100	700
Kuopio	800	5	0.5	3.9	0.3	1,100	350
Kuusamo	600	4	0.3	2.8	0.2	800	250
Mariehamn	2,000	20	1.1	1.7	0.2	600	200
Oulu	8,600	70	4.7	35.4	3.1	9,600	3,100
Pori	9,600	120	2.6	1	0.1	700	220
Rovaniemi	3,800	40	3	21.9	1.8	5,700	1,800
Savonlinna	600	2	0.1	0.4	0.1	200	50
Tampere-Pirkkala	20,100	210	3.5	8.8	0.8	3,000	1,000
Turku	9,600	80	3.4	14.9	1.4	4,500	1,400
Utti	700	11	0.3	0.01	0.002	30	10
Vaasa	4,700	40	1.6	9.4	0.9	2,900	900
Total	175,600	1,599	107.2	914.82	72.71	235,660	75,369

Aircraft emissions and fuel consumption by airport

In 2018, the total amount of emissions and fuel consumption of aircraft during the LTO cycle increased by about 12 per cent compared to 2017.

The table shows the fuel consumption and emissions of aircraft flying at altitudes of less than 915 metres (3,000 feet) during the LTO (Landing and Take Off) cycle. Airplane emissions are calculated for the internationally specified LTO cycle. The calculation includes emissions from take-offs and landings up to 915 metres (3,000 feet) and the associated taxiing. For a large passenger aircraft, this means emissions from a distance of approximately six kilometres from the airport during take-off, and 18 kilometres during landing.

Ground equipment emissions and fuel consumption by airport

The total emissions and fuel consumption of Finavia's ground equipment remained on the same level compared to 2017, except for the carbon dioxide emissions. The amount of the ground equipment's CO₂ emissions was reduced due to the use of renewable diesel. Ground equipment includes the vehicles used for winter maintenance, apron control, repairs, and general maintenance. The emissions are calculated on the basis of fuel consumption figures and vehicle details.

Ground equipment emissions and fuel consumption per airport

Airport	LTO-cycle (number)	CO [t/a]	HC [t/a]	NO _x [t/a]	SO _x [t/a]	CO ₂ [t/a]	Fuel [t/a]
Enontekiö	0.2	0.1	0.5	0.03	0.001	60	20
Halli	0.4	0.2	1.4	0.07	0.001	150	50
Helsinki Airport	9.5	3.6	22	1.26	0.029	2,450	940
Ivalo	1.3	0.3	1.6	0.08	0.002	180	60
Joensuu	0.4	0.1	0.9	0.05	0.001	110	30
Jyväskylä	0.8	0.3	2.1	0.11	0.002	230	70
Kajaani	0.4	0.1	0.8	0.04	0.001	90	30
Kemi-Tornio	0.4	0.2	1	0.06	0.001	120	40
Kittilä	1.2	0.5	3.6	0.19	0.004	400	130
Kokkola-Pietarsaari	0.2	0.1	0.7	0.04	0.001	80	30
Kuopio	1	0.4	2.5	0.13	0.003	270	90
Kuusamo	0.3	0.1	0.6	0.03	0.001	60	20
Mariehamn	0.2	0.1	0.4	0.03	0.001	60	20
Oulu	1	0.5	3.1	0.17	0.003	350	110
Pori	0.2	0.1	0.6	0.03	0.001	80	20
Rovaniemi	1.3	0.6	3.9	0.2	0.004	400	130
Savonlinna	0.3	0.1	0.7	0.04	0.001	80	30
Tampere-Pirkkala	1.1	0.5	3.5	0.19	0.004	400	130
Turku	1.1	0.4	2.4	0.13	0.003	270	90
Utti	0.3	0.1	0.3	0.02	0.001	60	20
Vaasa	0.5	0.2	1.5	0.08	0.002	160	50
Total	22	9	54	3.0	0.07	6,060	2110

Energy, water and emission key figures in 2018 (CO₂ emissions excluding wind power and compensation)

Consumption of heat, electricity, and water	Year 2018	Change, %
Heating consumption	56 GWh	5.7%
Heating consumption per passenger	2.3 kWh/pax	-3.1%
Electricity consumption	79 GWh	2.6%
Electricity consumption per passenger	3.4 kWh/pax	-7.2%
Water consumption	189,000 m ³	10.5%
Water consumption per passenger	7.5 l/pax	0.0%
Ground equipment energy consumption	25 GWh	-3.8%
Ground equipment energy consumption per passenger	1.0 kWh/pax	-9.0%
Carbondioxide emissions per passenger	1.3 kg/pax	-7.1%
Number of passengers	25.0 million	10.1%

Key indicators for energy, water and emissions in 2018

The calculations of values per passenger do not include Halli and Utti Airports, since there is no regular passenger



Emissions into water and soil

The most significant environmental impacts of our airports result from anti-icing treatments of runways and from anti-icing and de-icing treatments of aircraft.

Acetates and formates are among the runway de-icing agents with the smallest impact on the environment. They are readily biodegradable and contain no nitrogen. The propylene glycol used for de-icing and anti-icing treatments is not classified as harmful, but it causes an environmental load on waterways by increasing oxygen consumption.

We aim to minimise the environmental load caused by substances used in winter operations of airports on waterways and soil. We monitor the groundwater quality at 14 airports and the surface water quality at 21 airports using approximately 380 monitoring points.

In 2018, the work for improving the management of urban runoff at Helsinki Airport continued.

This is how we reduce the environmental impacts of winter operations of airports

- Mechanical methods, such as sweeping and ploughing, are the primary methods for clearing snow off runways.

- Acetate-based and formate-based agents are used to prevent skidding. They readily decompose and contain no nitrogen.
- We are constructing and reconditioning de-icing and anti-icing stations where the agents used can be more efficiently collected. Overall, we invested a total of EUR 74 million in de-icing areas during 2010–2018. In addition to Helsinki Airport, glycol is collected at Tampere-Pirkkala, Jyväskylä, Oulu and Kuopio Airports.
- We closely monitor weather conditions in our airport maintenance work and develop our monitoring system.
- We set standard instructions for ground handling companies that carry out de-icing activities. We encourage companies to also use mechanical methods in the removal of snow from aircraft, such as compressed air.

Actions in 2018

- During the winter season 2017–2018, about 79 (80) per cent of the approximately 2.1 million litres of glycol used

at Helsinki Airport was recovered. The 2017 recovery rate was 56 (52) per cent in Tampere and 63% (70) per cent in Oulu. The recovery rates fluctuate yearly with the changing weather conditions. Some of the glycol sticks to the surface of the aircraft and cannot be recovered.

- Foundation structures were constructed to protect the soil at aircraft ramps intended for de-icing use at Tampere-Pirkkala and Helsinki Airports. At Ivalo Airport, a melting area for glycol-containing snow was constructed with appropriate soil protection measures and preparedness for conveying the melting waters to the waste water sewer.
- At Helsinki Airport, the implementation of ditch arrangements for leading urban runoff into Kylmäoja, which began in 2017, was completed in autumn 2018. Implementation of the urban runoff biofiltration area pilot site began in autumn 2018.
- A flood basin was implemented at Helsinki Airport for stabilising the flow rates of urban runoff led into Kylmäoja. The work was completed in August 2018.
- A laboratory study was carried out at Aalto University for establishing the materials and technical solutions suitable for the underground wetland planned for processing urban runoff. The study was part of the new Smart & Clean solutions project of the Metropolitan Area, the City of Lahti and Finavia for urban runoff management. The pilot structure of the wetland at Helsinki Airport will be implemented in 2019 for the Veromiehenkylänpuro brook catchment area. The results of the study will be utilised for planning the construction of wetlands.
- The refuelling station at Ivalo Airport was modernised to meet the requirements of the most recent standard. The oil separator at Kittilä Airport was replaced with a Class I separator.

Use of anti-icing agents

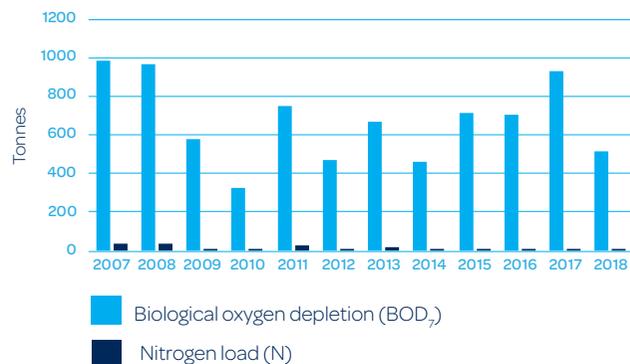
About one third of the total quantity of anti-icing agents is used at Helsinki Airport. The consumption is at its highest during mild winter weather. The volume of traffic also affects the consumption volumes. The use of chemicals has varied over the past few years, as have the weather conditions. We aim to optimise consumption with the help of continuous training, uniform instructions and weather monitoring systems. The use of anti-icing agents decreased at Helsinki Airport and network airports during 2018 compared with the previous years. Because of weather conditions, the most difficult months in terms of anti-icing operations were January, November and December. Test use of a betaine-based anti-icing agent at the Jyväskylä airport continued.

Loads caused by anti-icing and de-icing agents

The pollution load caused by anti-icing treatment agents on the aquatic environment has significantly decreased since the turn of the century, when the use of urea was discontinued. The nitrogen pollution load has almost entirely ceased, and the oxygen consumption load has decreased at best to one-third of what it was in the early 1990s. In the 2000s, we have switched at several airports to using liquid formate, which exerts a minimal load on the environment. In recent years, the load has varied due to the fluctuation in the use of the agents due to changing weather conditions.

At Helsinki Airport, water containing aircraft anti-icing and de-icing agents is collected by using suction vehicles and by conveying it to the waste water sewage system. The majority of agents can be collected for treatment. The urban runoff water that cannot be conveyed to a waste water treatment plant is discharged into the Vantaanjoki

Biological oxygen depletion and nitrogenous pollution caused by de-icing agents



and Keravanjoki rivers via six ditches.

In addition to Helsinki Airport, suction vehicles are also used for collecting glycol-containing runoff water at Tampere-Pirkkala, Oulu, Kuopio and Jyväskylä Airports. In 2018, a separate draining system was constructed for the aircraft ramp at Tampere-Pirkkala Airport for leading glycol-containing waters into a holding tank. At Ivalo Airport, a melting area for glycol-containing snow was constructed in connection with the extension of the apron. The melting waters can be led from the apron area to the waste water treatment plant.

The quantity of oxygen-consuming substances is described by their chemical and biological oxygen consumption. In addition to the surface water coming from the airport, the humus-containing water in the nearby swamps affects the chemical oxygen consumption in the

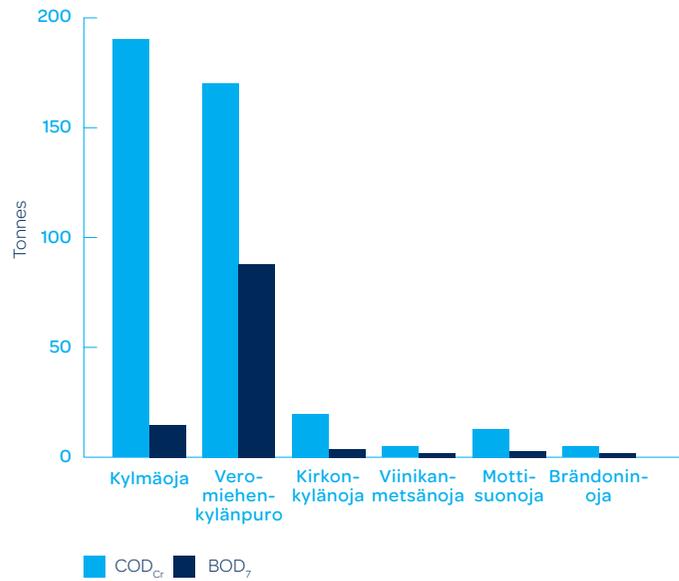
ditch waters. Our efforts in managing urban runoff water have produced good results, for example in Kylmäoja running on the western side of Helsinki Airport. The loading of Kylmäoja has decreased considerably from the early 2000s, thanks to better management of glycol-containing waters and the fact that aircraft de-icing and anti-icing operations are now concentrated in designated areas. As a result of improved water quality, the trout, for example, has returned to Kylmäoja. In addition, [Finavia has supported actions of the City of Vantaa to recondition fish breeding grounds](#). The work for developing the management of the quantity and quality of urban runoff will continue at Helsinki Airport during the coming years in treatment method pilot projects. Construction of the biofiltering area pilot site began in autumn 2018, and solutions suitable for implementing the underwater wetland were investigated in a laboratory study at the Aalto University. The underground wetland pilot will be built in 2019.

Fire drills

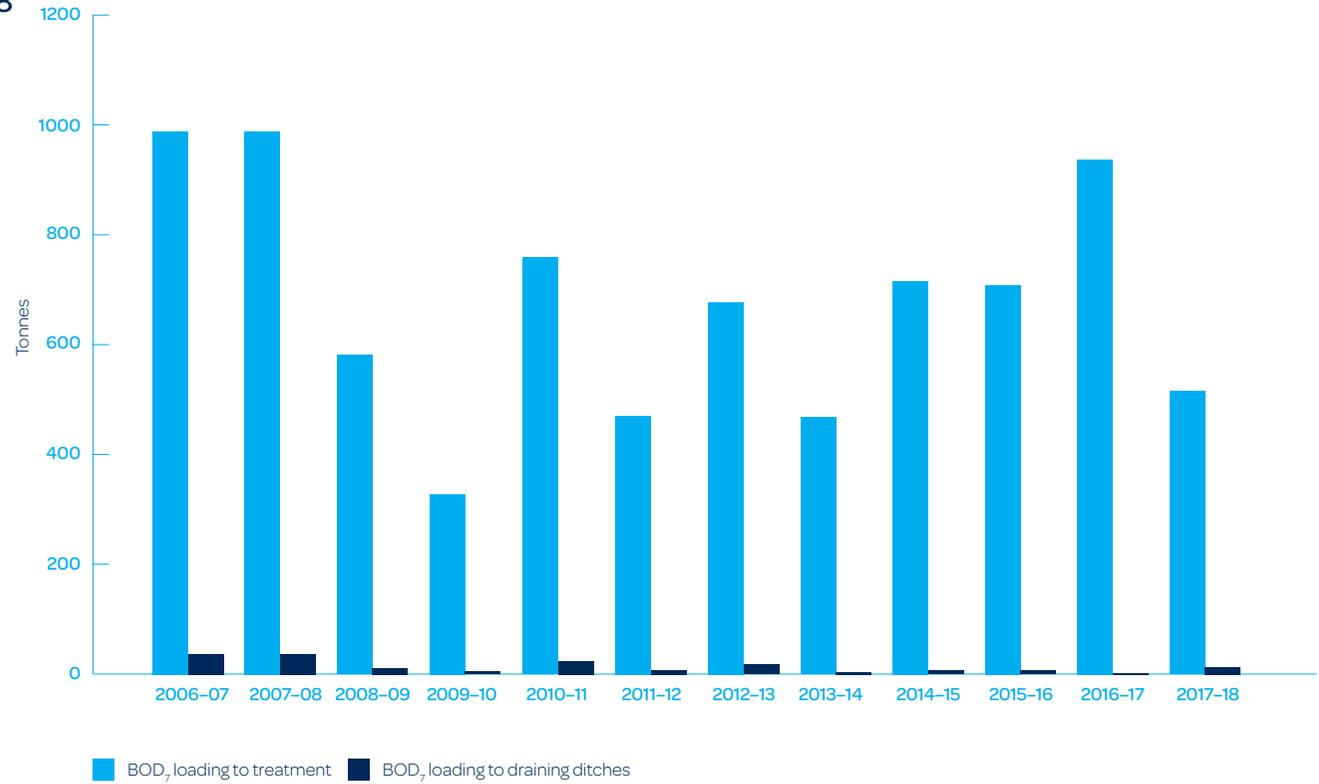
We have cooperated with environmental authorities regarding the deposits of perfluorinated compounds in the fire drill areas of our airports. Some of these compounds were commonly used in extinguishing foams for fuel fires until 2011, when their use was banned within the EU. These film-forming foams are no longer used in Finavia's fire drill operations; instead, fires are put out with water during the exercises.

The fire extinguishing drills are concentrated into the exercise areas of a few airports. The areas have been converted to use LPG in aircraft fire extinguishing drills. In 2018, a gas simulator was introduced at the new exercise area at Tampere-Pirkkala Airport.

Chemical and biological oxygen demand load in brooks at Helsinki Airport during winter 2017-2018



Biological oxygen demand load in treatment and brooks at Helsinki Airport



Waste

We are reducing the volume of waste generated in airport operations and deliver the waste primarily for recycling. The Helsinki Airport development programme requires subcontractors to provide detailed reports, for example regarding the treatment of waste generated in demolition work.

We revised the airport waste details reporting system in 2016. It now allows the compilation of more detailed information about the locations where waste is deposited, for example. Mixed waste is increasingly used at energy plants of municipalities or companies, as a result of which the volume of mixed waste disposed of at landfill sites has decreased and the volume of recycled waste has increased.

Of the waste volumes generated by the airports' ordinary operations in 2018, 34% was recycled as materials, 43% utilised as a source of energy and 23% sent to final disposal. A total of 3,181 tonnes of contaminated soil discovered during construction was rehabilitated at the Helsinki and Ivalo airports.

“We deliver the waste primarily for recycling.”

Total quantity of waste collected by the Finavia-managed waste system and utilised as material and source of energy or sent for final disposal. The amount of waste comes from the airport's ordinary operations.

Airport	Recyclable waste (t)	Energy waste (t)	Disposal waste (t)
Enontekiö	0.1	0.1	27.5
Halli	2.9	3.0	2.6
Helsinki Airport	1,012.8	1,432.7	710.2
Ivalo	1.1	31.6	21.3
Joensuu	6.9	11.1	1.2
Jyväskylä	28.4	16.0	2.5
Kajaani	7.3	3.8	77.7
Kemi-Tornio	8.7	4.9	0.2
Kittilä	58.2	161.5	21.1
Kokkola-Pietarsaari	16.1	4.6	18.2
Kuopio	74.3	50.9	4.1
Kuusamo	2.0	18.0	6.9
Mariehamn	10.8	5.9	1.3
Oulu	49.3	58.1	2.8
Pori	14.7	21.7	2.2
Rovaniemi	74.3	47.5	34.4
Savonlinna	14.8	0.0	16.3
Tampere-Pirkkala	34.1	58.5	17.3
Turku	59.8	4.2	2.0
Utti	24.0	0.6	18.1
Vaasa	23.2	0.0	25.2
Total	1,523.9	1,925.9	1,012.9

Material efficiency targets steer construction work at Helsinki Airport

Targets have been set in the Helsinki Airport development programme for the utilisation of demolition and construction waste, and all contractors must observe these targets. We are also investigating the best ways to utilise the excess soil excavated in the construction projects carried out as part of the development programme.

In 2012, Finavia obtained an environmental permit for reusing crushed tarmac in the Helsinki Airport area. A total of some 13,300 tonnes of crushed tarmac that had been removed during the resurfacing of a runway and apron was reused in 2018, e.g. for maintenance road paving and airfield structures. Crushed tarmac containing coal tar removed during the runway and apron reconstruction work was transported for appropriate processing. Coal tar was used in the 1950s and the 1960s for binding purposes below the asphalt layer.

The waste management campaign started in 2016 was continued at network airports. During the campaign, waste management training has been provided for airport personnel and reviews have been conducted at airports to offer guidance on the sorting, packaging and labelling of regular and hazardous waste, as well as responsibilities related to transportation. Proper containers for hazardous waste were also acquired for all airports. The campaign will continue and airports will be supported to keep their areas clean and in good order.

GRI



Reporting principles

Finavia's corporate responsibility reporting complies with the core scope of application of the Global Reporting Initiative (GRI Standards 2016) guidelines. In addition, the indicators specified in the Airport Operators Sector Supplement (AOSS) are used in reporting. The Finnish Government's decision-in-principle regarding the owner policy of the Finnish state and its requirements for corporate responsibility reporting are taken into account in reporting.

Scope of reporting

The information in this responsibility report covers the entire Finavia Group. However, some information, such as the entire environmental responsibility section, only applies to Finavia Corporation. Such cases are separately indicated. Reporting and key indicators cover the period of 1 January – 31 December 2018. In addition, the Annual Report includes individual information from January–March 2019. Such information has been separately indicated. Mitopro Oy, a specialist in corporate responsibility, has verified that Finavia's 2018 Annual Report corresponds with the GRI Standards 2016 guidelines and confirms that the reporting fulfils the core requirements of the guidelines.

Financial and administrative information

The financial indicators cover the operations of Finavia

Group. The figures are based on the company's accounts and financial statements. The Financial Accounting Standards (FAS) are observed in financial reporting. The financial indicators have been audited. Finavia complies, as applicable, with the Corporate Governance Code of Finnish listed companies approved by the Finnish Securities Market Association in 2015.

Air traffic data

Flight details are obtained from the air navigation systems of ANS Finland. Airline-specific details of passengers, freight and mail are collected from the forwarding companies operating at the airports. The data is collected in the traffic database. Air traffic statistics are based on traffic database data.

Environmental information

Traffic details, runway usage and distribution of aircraft types

Traffic details, the distribution of runway usage and aircraft type information are obtained from the Cognos system in which the information is recorded from the Airport2020 system of airports.

Locations of flight routes and noise information

Finavia operates at Helsinki Airport a continuous aircraft noise and route monitoring system (ANOMS), which uses the input from radars to record the route details and the noise measurement data from nine noise measurement stations to record noise details. The system data provides route distribution and routes for noise area calculations for reporting purposes.

Anti-icing agents

Airports register their anti-icing measures and the volume of chemicals used in an electronic maintenance journal, from which the Environmental Unit obtains data for reporting. With regard to Helsinki Airport, Airport Maintenance reports the monthly volumes of chemicals used. The correctness of information contained in the electronic journal is checked by the Traffic Area Services Unit.

The consumption of anti-icing agents is presented in the Annual Report as a 100% concentration, obtained by deducting the 50 per cent proportion of water from the quantities of liquid agents used. The oxygen consumption load caused by the anti-icing agents is calculated by using the biological oxygen demand (BOD7) factor of each product. An exception to this is urea, where the calculation factor used is its theoretical oxygen demand (ThOD) due to its decomposition process differing from the other agents. The factors used are shown in the table below. Of the anti-icing agents, urea and betaine cause nitrogen loading. A factor of 0.466 g/g is used to calculate the

	BOD, mg/g
Acetate solution	300
Granular acetate	670
Formate solution	90
Granular formate	170
Liquid betaine (Betafrost)	720
Solid betaine	1,440
Urea (ThOD)	2,100

nitrogen loading of urea, a factor of 0.12 g/g is used to calculate that of solid betaine and a factor of 0.06 g/g is used to calculate that of liquid betaine (Betafrost).

De-icing and anti-icing agents for aircraft

The ground handling companies performing de-icing and anti-icing treatments on aircraft keep a record of the treatments and the quantities of liquids used (types I and IV). Each month, the ground handling companies submit the daily data on liquid usage quantities and the number of treatments to the Environmental Unit and to the invoicing units of those airports where the recovery of glycol has been arranged. For other airports, the ground handling companies provide the Environmental Unit with monthly details of the quantities of different types of liquids used. The Environmental Unit asks smaller companies to provide monthly data about the volume of different liquid types used at six-month intervals.

In the Environmental Report, the annual usage volumes are presented as 100% propylene glycol, obtained by deducting the proportion of water from the quantities used. The proportion of water is 20% in type I liquid and 50% in type IV liquid.

Aircraft emissions

Aircraft emissions are calculated using the landing and take-off (LTO) cycle, an international standard. The emissions are calculated for flight altitudes below 915 m (3,000 ft.), taking into account different aircraft and engine types. The calculation includes emissions caused by take-off and landing up to 3,000 ft. and the associated taxiing. Each emission component has its own factor, obtained from the Emissions and Dispersion Modeling System (EDMS) database developed and maintained by

the US aviation authority. Finavia has its own software for calculating the LTO cycle.

Emissions from Finavia’s ground vehicles

The factors for different emission components are obtained from the Lipasto system maintained by VTT Technical Research Centre of Finland. The calculation is based on fuel consumption and takes into account the characteristics of different vehicles.

Finavia’s total emissions (CO₂)

Emissions caused by electricity and heating are calculated from the total consumption using airport-specific factors obtained from different sources. Heating energy is produced in different ways at different airports (pellets, district heating, etc.), and the factor for electricity varies annually with the production of electricity. Total emissions include all Finavia’s emissions from electricity, heating and ground vehicles.

Consumption of electricity, heating energy and water

The airports read the electricity, heating energy and water meters each month and enter the readings into Granlund Manager. Finavia’s Facility Services and Energy Unit checks the correctness of this information. The Environmental Unit obtains information about the consumption of electricity, heating energy and water from Granlund for environmental reporting.

The consumption figures per passenger are calculated by dividing the total consumption by the annual number of passengers. Consumption figures for Kauhava, Halli, Utti and Helsinki-Malmi Airports are deducted before this calculation, because they do not have any actual passenger traffic.

Waste

The airports obtain information about their annual accumulation of waste from the annual reports and invoices of waste management companies. The airports enter the data in Finavia's Environmental Information system, from where the Environmental Unit obtains it for environmental reporting.

In the report, the accumulated waste volumes are divided into mixed waste, recyclable waste and hazardous waste. Recyclable waste includes separately collected biowaste, metal, glass, recycled paper and cardboard, lubricant waste, used tyres, WEEE, as well as sorted construction waste and mixed waste sent for incineration.

Fuels

Refuelling volumes of vehicles and fleet are monitored at airports. Vehicles are filled with petrol at public service stations, and the volumes are monitored using receipts. Each year, the airports compile information about fuel used by ground vehicles in Finavia's Environmental Information system, from where the Environmental Unit retrieves it for environmental reporting.

Feedback on environmental issues

Feedback on environmental issues (including feedback received through the WebTrak system) is registered in a browser-based feedback system, in which it is also archived. The number of feedback messages and their nature are obtained from the environmental feedback system for environmental reporting.

Personnel details

Personnel details for key indicators are obtained from different HR systems. The key indicators cover either the

Finavia Group or Finavia Corporation; this is shown for each indicator. The calculation of key indicators is also guided by the general instructions of the Accounting Board regarding the calculation of the personnel indicators shown in the Annual Report.

Person-years refer to regular annual working hours excluding overtime and other hours outside regular working hours. Periods without pay reduce the employee's person-year contribution.

Years of service are calculated from the date the uninterrupted employment began. The age and gender distribution show the number of individuals in permanent employment relationships divided according to age and gender in accordance with the average number of personnel in 2018. Personnel turnover describes the turnover of permanent employees so that the departure turnover is the percentage of leaving employees and the incoming turnover is the percentage of recruited employees of total personnel.

Accidents and sick leave are calculated as calendar days, so that a day of absence is recorded when an accident or illness causes an absence for the whole day. Training days are also calculated as whole days.

All personnel are included in the scope of performance appraisals. Performance appraisals are activated and saved annually in the HR system. The number of appraisals held is based on the number of appraisals activated during the year.

Passenger satisfaction

Information for the network's passenger satisfaction survey is collected through personal interviews in the departure gate areas of 15 different airports. The number of interviews is proportional to passenger volumes, and

200–570 interviews per airport are conducted each year. (In total, about 5200 interviews were conducted in 2018.) The results are calculated using the overall averages of the average scores for nine measured parameters. Red Note conducted the survey in 2016 and 2018.

Customer satisfaction at Helsinki Airport is monitored through an international Airport Service Quality Survey measuring passenger satisfaction at airports. At Helsinki Airport, the information is collected through personal interviews in the gate areas in accordance with the passenger structure. Roughly 350 interviews are conducted every month, and about 4,184 passengers were interviewed in 2018.

Feedback on Finavia's corporate responsibility reporting can be sent to comms@finavia.fi.

GRI Index

GRI Standard		Disclosure	Location	Notes
GRI 101: Foundation				
General Disclosures				
GRI 102: General Disclosures	Organizational profile			
	102-1	Name of the organization		Finavia Oyj
	102-2	Activities, brands, products, and services	About Finavia (Finavia.fi/en) Value creation Report of the Board of Directors / Development of business operations and changes in group structure	
	102-3	Location of headquarters		Vantaa, Finland
	102-4	Location of operations		Finavia only operates in Finland
	102-5	Ownership and legal form	Report of the Board of Directors / Shares and share capital Report on the Governance and Management System	
	102-6	Markets served	Year 2018 / Key figures Report of the Board of Directors / Operating environment, Traffic development	
	102-7	Scale of the organization	Year 2018 / Key figures Report of the Board of Directors / Key figures	
	102-8	Information on employees and other workers	Information on Finavia's personnel	
	102-9	Supply chain	Managing corporate responsibility Stakeholder cooperation Value creation Environmental impact	
	102-10	Significant changes to the organization and its supply chain	Report of the Board of Directors / Development of business operations and changes in group structure	

GRI Standard		Disclosure	Location	Notes
	102-11	Precautionary Principle or approach		Finavia observes the precautionary principle in all its operations. In all its operations, Finavia takes measures to avoid or reduce environmental risks and adverse impacts.
	102-12	External initiatives	Stakeholder cooperation	
	102-13	Membership of associations	Stakeholder cooperation	
Strategy				
	102-14	Statement from senior decision-maker	CEO's review	
	102-15	Key impacts, risks, and opportunities	Responsibility themes Operating environment Value creation Report of the Board of Directors / Operating environment	
Ethics and integrity				
	102-16	Values, principles, standards, and norms of behavior	Strategy Managing corporate responsibility Report on the Governance and Management System / Internal control, risk management and internal audit Equality and non-discrimination Value creation	
Governance				
	102-18	Governance structure	Report on the Governance and Management System / Administrative and operative bodies Managing corporate responsibility	
	102-19	Delegating authority	Managing corporate responsibility Report of the Board of Directors Report on the Governance and Management System / Administrative and operative bodies	
	102-20	Executive-level responsibility for economic, environmental, and social topics	Managing corporate responsibility	

GRI Standard		Disclosure	Location	Notes
	102-22	Composition of the highest governance body and its committees	The Board of Directors (Finavia.fi/en) Report on the Governance and Management System / Administrative and operative bodies	
	102-23	Chair of the highest governance body	The Board of Directors (Finavia.fi/en) Report on the Governance and Management System / Administrative and operative bodies	
	102-25	Conflicts of interest	Report on the Governance and Management System / Audit	
	102-26	Role of highest governance body in setting purpose, values, and strategy	The Board of Directors (Finavia.fi/en) Report on the Governance and Management System / Administrative and operative bodies Personnel development	
	102-29	Identifying and managing economic, environmental, and social impacts	Managing corporate responsibility Report on the Governance and Management System / Internal control, risk management	
	102-30	Effectiveness of risk management processes	Report on the Governance and Management System / Internal control, risk management	
	102-31	Review of economic, environmental, and social topics	Managing corporate responsibility Report on the Governance and Management System / Internal control, risk management	
	102-35	Remuneration policies	Report on the Governance and Management System / Salary and compensation report	
	102-36	Process for determining remuneration	Report on the Governance and Management System / Salary and compensation report	
Stakeholder engagement				
	103-40	List of stakeholder groups	Stakeholder cooperation	
	103-41	Collective bargaining agreements	Information on Finavia's personnel	
	103-42	Identifying and selecting stakeholders	Stakeholder cooperation	
	103-43	Approach to stakeholder engagement	Stakeholder cooperation	
	103-44	Key topics and concerns raised	Stakeholder cooperation Services and customer experience Report of the Board of Directors / Development of business operations and changes in group structure	

GRI Standard		Disclosure	Location	Notes
	Reporting practice			
	102-45	Entities included in the consolidated financial statements		All Group companies are included in the consolidated financial statements. The associated company Taxi Point Oy was disregarded due to its negligible impact on group equity. The information in the responsibility section of the Annual Report covers the entire Group. However, some information only applies to Finavia Corporation. These cases are separately indicated.
	102-46	Defining report content and topic Boundaries		Finavia has determined the content of the environmental responsibility report in accordance with the reporting principles laid out in GRI 101 standard.
	102-47	List of material topics		Reporting principles Responsibility themes Material aspects
	102-48	Restatements of information		There are no material restatements of information provided in previous reports.
	102-49	Changes in reporting	Responsibility themes	Material aspects were updated in 2018.
	102-50	Reporting period		Calendar year (1.1.–31.12.2018)
	102-51	Date of most recent report		3/16/18
	102-52	Reporting cycle		Once per year
	102-53	Contact point for questions regarding the report		Communications, Finavia Oyj, Lentäjätie 3, 01530 Vantaa, comms(at)finavia.fi
	102-54	Claims of reporting in accordance with the GRI Standards		This report complies with the Core requirements of the GRI standards (2016).
	102-55	GRI content index	GRI Index	
	102-56	External assurance		The contents of the report have not been verified. Mitopro Oy has checked the compliance of the report with the GRI Standards.

GRI Standard		Disclosure	Location	Notes
Material Topics				
GRI 200 Economic Standard Series				
Economic Performance				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Material aspects	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	Financial added value for our stakeholders	
	201-4	Financial assistance received from government	Finavia as a taxpayer	In 2018, Finavia received public subsidies to the amount of EUR 52,500.
Market Presence				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Material aspects Efficiency and profitability	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 202: Market Presence	AO1	Total number of passengers annually, broken down by passengers on international and domestic flights	Key figures	
	AO2	Total annual number of aircraft movements	Value creation Runway usage and distribution of traffic	

GRI Standard		Disclosure	Location	Notes
	AO3	Total amount of cargo tonnage	Report of the Board of Directors / Traffic development	
Indirect Economic Impacts				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Financial added value for our stakeholders	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 203: Indirect Economic Impacts	203-1	Infrastructure investments and services supported	Airports Charity and sponsorship policy	
	203-2	Significant indirect economic impacts	Financial added value for our stakeholders Finavia as a taxpayer	
Procurement Practices				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Material aspects Efficiency and profitability Environmental permits	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	Stakeholder cooperation	Percentage not reported

GRI Standard		Disclosure	Location	Notes
Anti-corruption				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Report on the Governance and Management System / Internal control, risk management and internal audit	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures		Familiarisation with ethical guidelines is part of the induction of new employees in all business units.
	205-3	Confirmed incidents of corruption and actions taken		No incidents during 2018.
Anti-competitive Behavior				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Responsibility themes	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 206: Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices		No cases during 2018.
GRI 300 Environmental Standards Series				
Materials				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	

GRI Standard		Disclosure	Location	Notes
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 301: Materials	301-1	Materials used by weight or volume	Emissions into water and soil / Loads caused by anti-icing and de-icing agents, Waste	
	301-2	Recycled input materials used		During the winter season 2017–2018 about 79 (80) per cent of the approximately 2.1 million litres of glycol used at Helsinki Airport was recovered. The 2018 recovery rate was 56 (52) per cent in Tampere and 63 (70) per cent in Oulu. The recovery rates fluctuate yearly with the changing weather conditions. Some of the glycol sticks to the surface of the aircraft and cannot be recovered.
Energy				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 302: Energy	302-1	Energy consumption within the organization	Energy and water consumption and emissions	
	302-3	Energy intensity	Energy and water consumption and emissions	
	302-4	Reduction of energy consumption	Energy and water consumption and emissions Environmental responsibility in Finavia	
	302-5	Reductions in energy requirements of products and services	Energy and water consumption and emissions	

GRI Standard		Disclosure	Location	Notes
Water				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 303: Water	303-1	Water withdrawal by source	Energy and water consumption and emissions	
Biodiversity				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 304: Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Turku, Kajaani and Joensuu Airports are located adjacent to protected areas and Natura sites. Helsinki, Vaasa, Oulu and Mariehamn Airports are located about 200–500 metres from protected areas or Natura sites.
Emissions				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	

GRI Standard		Disclosure	Location	Notes
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	Energy and water consumption and emissions	
	305-2	Energy indirect (Scope 2) GHG emissions	Energy and water consumption and emissions	Finavia's airport network in total: Greenhouse gas emissions (location-based calculation method): 30.300 tCO ₂ Greenhouse gas emissions (market-based calculation method) 17.300 tCO ₂
	305-3	Other indirect (Scope 3) GHG emissions	Energy and water consumption and emissions	
	305-4	GHG emissions intensity	Energy and water consumption and emissions	The CO ₂ emissions of Finavia's entire network total 32,000 tonnes.
	305-5	Reduction of GHG emissions	Energy and water consumption and emissions	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	Air Quality Energy and water consumption and emissions	
Effluents and Waste				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Material aspects Efficiency and profitability Environmental permits	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 306: Effluents and Waste 2016	306-1	Water discharge by quality and destination	Emissions into water and soil	
	306-2	Waste by type and disposal method	Waste	
	306-3	Significant spills	Emissions into water and soil	
	AO4	Quality of storm water	Emissions into water and soil	

GRI Standard		Disclosure	Location	Notes
	AO6	Aircraft and pavement de-icing / anti-icing fluid used and treated	Emissions into water and soil / Use of anti-icing agents	
Environmental Compliance				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Environmental responsibility in Finavia Environmental impacts	
	103-3	Evaluation of the management approach	Managing corporate responsibility Efficiency and profitability	
GRI 307: Environmental Compliance	307-1	Non-compliance with environmental laws and regulations		No cases in 2018
Noise				
	AO7	Number of people residing in areas affected by noise	Aircraft noise control	
GRI 400 Social Standards Series				
Employment				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Information on Finavia's personnel Personnel development	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 401: Employment	401-1	New employee hires and employee turnover	Information on Finavia's personnel	
Labor/Management Relations				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	

GRI Standard		Disclosure	Location	Notes
	103-2	The management approach and its components	Managing corporate responsibility Information on Finavia's personnel Personnel development	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 402: Labor/Management Relations	402-1	Minimum notice periods regarding operational changes		In co-determination negotiations, Finavia observes the time limits laid down in the law and in collective bargaining agreements.
Occupational Health and Safety				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Wellbeing at work and personnel satisfaction	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 403: Occupational Health and Safety	403-1	Workers representation in formal joint management-worker health and safety committees		Finavia has an occupational health and safety steering committee, airports have staff meetings or workplace committees (both are combined co-determination negotiation and work safety committees), Helsinki Airport has a separate work safety committee and co-determination negotiation committee. On Group level, also a co-determination negotiation committee.
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Wellbeing at work and personnel satisfaction	No fatalities.
	403-4	Health and safety topics covered in formal agreements with trade unions		The occupational health scheme offered by Finavia is considerably more extensive than that laid out in collective agreements. Finavia cooperates with trade unions, no new developments in 2018 concerning the topic.

GRI Standard		Disclosure	Location	Notes
Training and Education				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Personnel development	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 404: Training and Education	404-1	Average hours of training per year per employee	Information on Finavia's personnel Personnel development	Training days reported. Not grouped according to gender or personnel group.
	404-2	Programs for upgrading employee skills and transition assistance programs	Personnel development	
	404-3	Percentage of employees receiving regular performance and career development reviews		All employees are included in the development reviews.
Diversity and Equal Opportunity				
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Equality and non-discrimination	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Report on the Governance and Management System Equality and non-discrimination	At the end of 2018, Finavia's Board of Directors had 7 members of which 3 were women. The average age of the Board of Directors was 54 years. At the end of 2018, Finavia's management team had 9 members of which 2 were women. The average age of the management team was 50 years.
	405-2	Ratio of basic salary and remuneration of women to men	Equality and non-discrimination	

GRI Standard		Disclosure	Location	Notes
Non-discrimination				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Equality and non-discrimination	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken		In 2018, an individual alleged pay discrimination case, begun in 2017, was processed in the High Court. Like the lower court instances, the High Court rejected the complaint and the related appeal.
Public Policy				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Charity and sponsorship policy	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 415: Public Policy	415-1	Political contributions	Stakeholder cooperation	In accordance with Finavia's charity and sponsorship policy, donations are not given to political parties, politicians or political institutions.

GRI Standard		Disclosure	Location	Notes
Customer Health and Safety				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Safety and risk management Safety management system	
	103-3	Evaluation of the management approach	Managing corporate responsibility Safety management system	
GRI 416: Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	Safety and risk management Safety management system	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Safety and risk management	No cases during 2018.
Socioeconomic Compliance				
GRI 103: Management Approach	103-1	Explanation of the material topic and its Boundary	Responsibility themes Material aspects Reporting principles	
	103-2	The management approach and its components	Managing corporate responsibility Stakeholder cooperation	
	103-3	Evaluation of the management approach	Managing corporate responsibility	
GRI 419: Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area		No cases during 2018.

Material aspects

Essential operational priorities	Contents	Management practices	Information released for publication that is essential for Finavia's operations
Connectivity	<ul style="list-style-type: none"> We promote the mobility of people, goods and services by ensuring the operating prerequisites for air traffic. By doing this, we provide a solid basis for extensive domestic and international flight connections. 	<ul style="list-style-type: none"> Operational objectives Financial targets Finavia's management system 	<ul style="list-style-type: none"> GRI 202 Market presence GRI 203 Indirect economic impacts
Safety and security	<ul style="list-style-type: none"> Safety and security are at the core of all our operations. In cooperation with our partners operating at our airports, we ensure the safety of air traffic and air travel and the security of the information systems supporting them. Finnish Transport Safety Agency Traficom is the authority supervising flight safety in Finland. 	<ul style="list-style-type: none"> Managing corporate responsibility Risk management policy Corporate safety Safety management system Risk assessments Occupational safety and health management system 	<ul style="list-style-type: none"> GRI 416 Customer health and safety GRI 403 Occupational health and safety
Customer experience	<ul style="list-style-type: none"> An excellent customer experience and service attitude make flying smooth and easy. Our services make travel easier, offer memorable experiences, and are safe and efficient. 	<ul style="list-style-type: none"> Finavia strategy and key programmes Customer satisfaction survey 	<ul style="list-style-type: none"> GRI 416 Customer health and safety GRI 203 Indirect economic impacts
Responsible growth	<ul style="list-style-type: none"> Responsible operations and sustainable development of airports are at the core of Finavia's business. This means that we accept responsibility for the impact of our operations on people, the environment and society – carefully, conscientiously and with attention to the details. Our aim is to ensure that as we develop our operations, there is no increase in their environmental impacts. 	<ul style="list-style-type: none"> Managing corporate responsibility Finavia's strategy Environmental manual and environmental policy 	<ul style="list-style-type: none"> GRI 201 Economic performance GRI 203 Indirect economic impacts
Ensuring a high level of job satisfaction	<ul style="list-style-type: none"> We want to ensure a high level of job satisfaction in our work community and that Finavia is an attractive employer. A high level of job satisfaction ensures an excellent customer experience, safe travel and good cooperation with our customers and partners. None of this is possible without committed and skilled staff provided with opportunities for continuous occupational development. 	<ul style="list-style-type: none"> Managing corporate responsibility HR strategy and action plan Ethical principles Equality plan Age programme Personnel satisfaction survey 	<ul style="list-style-type: none"> GRI 401 Employment GRI 402 Labour/management relations GRI 403 Occupational health and safety GRI 404 Training and education GRI 405 Diversity and equal opportunity GRI 406 Non-discrimination

Essential operational priorities	Contents	Management practices	Information released for publication that is essential for Finavia's operations
Transparent cooperation in the value chain	<ul style="list-style-type: none"> Airlines, passengers, Finavia personnel, the thousands of companies operating at our airports, the authorities, decision-makers and local residents are our key stakeholder groups. We develop our operations and the sector by engaging in an open dialogue with our stakeholders. We want to be a good neighbour. 	<ul style="list-style-type: none"> Managing corporate responsibility Communications policy Stakeholder interaction Procurement principles 	<ul style="list-style-type: none"> GRI 201 Economic performance GRI 203 Indirect economic impacts GRI 204 Procurement practices
Capacity for renewal	<ul style="list-style-type: none"> In order to successfully compete with other international airports, Finavia and its airports must constantly renew themselves. We update our operating practices and apply technologies so that we can respond to the growing expectations of our stakeholders concerning smooth travel and services. We do this in cooperation with our partners. 	<ul style="list-style-type: none"> Finavia's strategy 	<ul style="list-style-type: none"> GRI 203 Indirect economic impacts
Global environmental impacts	<ul style="list-style-type: none"> We reduce the climate impacts arising from our own operations by ensuring the energy-efficiency of our airports through the use of renewable energy and by other means. We also work to enhance the energy-efficiency of air traffic through such measures as reduced taxiing. We also play an active role in the international development work in the sector. 	<ul style="list-style-type: none"> Managing corporate responsibility Environmental manual and environmental policy Environmental management system ISO 14001 	<ul style="list-style-type: none"> GRI 305 Emissions
Local environmental impacts	<ul style="list-style-type: none"> We develop solutions for air traffic noise management and work to reduce the environmental impacts of the anti-icing and de-icing agents used at airports. We cooperate with local residents, businesses located in areas adjacent to airports, municipalities, environmental authorities and air traffic actors. Airport operations are subject to strict environmental permits and compliance with them is supervised by regional ELY Centres (Centres for Economic Development, Transport and the Environment). 	<ul style="list-style-type: none"> Managing corporate responsibility Environmental manual and environmental policy Environmental management system ISO 14001 Procurement principles 	<ul style="list-style-type: none"> GRI 301 Materials GRI 302 Energy GRI 303 Water GRI 304 Biodiversity GRI 305 Emissions GRI 306 Effluents and waste GRI 307 Environmental compliance Noise
Complying with standards	<ul style="list-style-type: none"> We comply with laws and good corporate governance in all our operations. We communicate about our operations, management systems and remuneration practices in an open manner. Finavia observes the Corporate Governance Code of Finnish listed companies to the extent that it is appropriate, given the state ownership and the nature of our operations. 	<ul style="list-style-type: none"> Managing corporate responsibility Operating manual Ethical principles Procurement principles 	<ul style="list-style-type: none"> GRI 205 Anti-corruption GRI 206 Anti-competitive behaviour GRI 307 Environmental compliance GRI 419 Socioeconomic compliance
Influencing regulation	<ul style="list-style-type: none"> We work to anticipate the impacts of national and international legislation and regulation on Finavia's business operations. We engage in an active dialogue within the sector as well as with our neighbours and the authorities. Airport operations are governed by international aviation regulations and EU-level legislation and regulations. 	<ul style="list-style-type: none"> We are represented in national and international working groups and issue expert opinions on request. 	<ul style="list-style-type: none"> GRI 415 Public policy