



TAKING CARE OF YOUR PENSION

Ilmarinen's Annual and Sustainability Report 2021

ILMARINEN

1 We safeguard your income

What should you know about the Finnish pension system? We will tell you how Ilmarinen works in your best interest and takes care of your pension.

2 Joining the working life transformation

How is working life changing and what support do people need at the various stages of their career? We will also disclose how earnings-related pension accrues and how Ilmarinen can help you specifically. You will also find a review of how we ensure that your information remains safe with us.

3 We help maintain work ability

What kind of security does pension insurance offer employees and self-employed persons during their career, if the unexpected happens? We also explain why it is wise to take care of your work ability proactively.

4 Towards retirement

What wonderful things are in store for you when you retire? You will also learn what our study revealed about today's pensioners.

5 We invest responsibly

Responsible investment of pension assets is a key part of our corporate responsibility. Our goal is to achieve a carbon neutral investment portfolio by the end of 2035.

7 We work to protect your pension

We will tell you how we manage your pension. You will gain an insight into our ways of working and our sustainability principles.

8 Ilmarinen's GRI index

You will receive information on the GRI Standards reporting framework applied by us and our sustainability KPIs. You can also read an independent assurance report.

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We safeguard your income

1. We safeguard your income

The year 2021 was marked by the Covid-19 pandemic, which affected people's and companies' daily lives. At the same time, economic growth was strong and pension assets generated excellent returns to safeguard current and future pensions. In the midst of all the changes, we still have your future at heart.

1.1 Pension security for you

Each and every person working in Finland has access to the statutory earnings-related pension system. Employees accrue pension on their salary and entrepreneurs on the pension contribution collected on their YEL income. Part of the TyEL pension contribution is funded for the payment of current and future pensions.

Earnings-related pension is much more than just old-age pension after working life. Disability pension brings security if work ability declines. Survivors' pension provides the surviving spouse and children with security when their loved one dies.

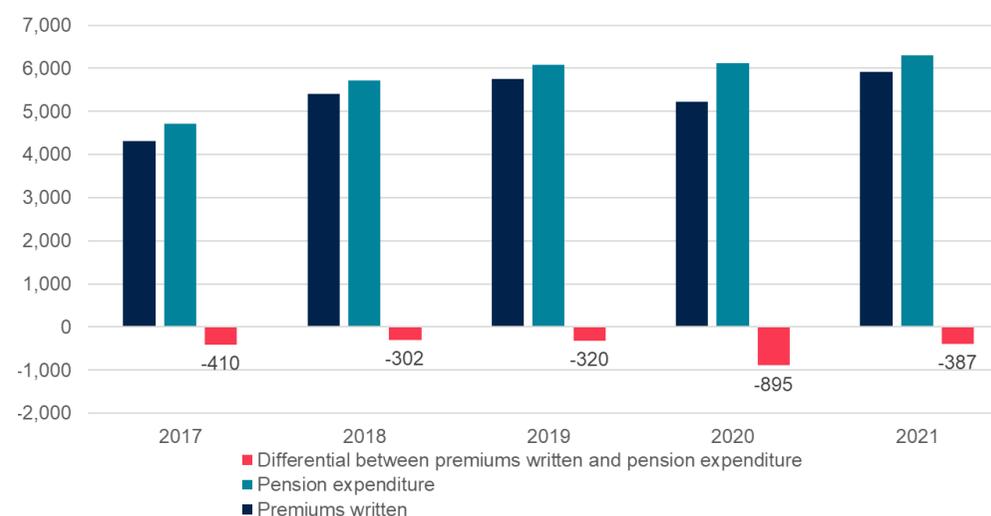
Through the pension assets funded since the 1960s, the earnings-related pension system is a key component of Finnish financial markets. The majority of

the assets are invested abroad, however, which means that our operations have a global reach.

The funding of earnings-related pension assets is also a reminder of the pension system's strong link to generational continuity. In 2021, the birth rate grew slightly from the previous year but remained at a historically low level. The funding of future pensions cannot rely on the birth rate returning to a track in line with the projections made in previous decades.

Along with the development of employment and salaries, the birth rate is one of the most important factors in determining how much money will be available for the payment of pensions in future. Another parameter related to the development of the population size is immigra-

Difference between premiums written ja pension expenditure, EUR mill.



The pension contributions we collect during the year are mostly used to pay pensions. Those who are currently working are paying the pensions of those who have retired. This is called a pay-as-you-go system. Those who pay pension contributions accrue pension for themselves, and their pension will be paid to them later based on the same principle.

Premiums written mean the pension contributions collected on the wages and salaries and entrepreneurs' YEL income during a year. Pension expenditure is the total sum of the pensions we have paid. Since 2012, premiums written have been lower than the pension expenditure, which means that we have required returns on pension assets for the payment of pensions.

tion, and particularly work-based immigration. Alongside these, the number of employed in relation to pensioners, and more widely, society's old-age dependency, is a key issue.

As an employment pension insurance company, we are part of Finland's social security system. We provide statutory and mandatory employees' pension insurance and self-employed persons' pension insurance for those who work in Finland. Earnings-related pension secures people's livelihood at various stages of their lives. (GRI 102-2, 102-4, 102-6)

We are responsible for the pensions of more than 1.1 million people. We are a mutual company, which means that the company is owned by its customers: the policyholders and the employees insured with the company. In addition, all pensioners are our customers. We have two products: employees' pension insurance, i.e. TyEL insurance, and self-employed persons' pension insurance, i.e. YEL insurance. Both of them provide security not only for retirement, but also in the event of disability and the death of the family provider. (GRI 102-5)

To safeguard the financing of current and future pensions, we

responsibly invest our shared investment assets amounting to more than EUR 60 billion. The investments have been diversified, for example, across equities and bonds throughout the world. As part of its investment activities, Ilmarinen develops and rents apartments and office premises. In addition, Ilmarinen's investment activities include, among things, providing corporate financing through loans. As part of managing statutory earnings-related pension insurance, we also provide vocational rehabilitation. (GRI 102-2)



More financial stability to the pension system

Autumn saw the publication of Professor Torben M. Andersen's evaluation of the Finnish pension system, commissioned by the Finnish Centre for Pensions. The evaluation praised our pension

system and found that Finland's situation is very good globally speaking. Some challenges were also identified.

The key issues raised were related to financial sustainability, the regulation of investment activities and the risk of inequality widening among pensioners. The report reinforced the view that pension contributions will need to be raised in the coming decades. Therefore, the evaluation recommended that the situation be addressed as soon as possible to minimise the course correction required and the impact on equality between generations.

A key theme in the recommendations was the role of automatic adjustment mechanisms. Automatic adjustment mechanisms refer to a kind of decision rule according to which the pension benefits or the contribution level is tied to a variable affecting the financial balance of the system. One example of such mechanisms used in the Finnish pension system is the life expectancy coefficient.

Automatic adjustment mechanisms are theoretically attractive. Their downside is that they can transfer risks from the pension system to individual insured persons or pensioners. That said, it would be worthwhile to explore the mechanisms, for example because of the objectivity they bring. It would be great for the whole nation to feel more strongly that we are in the same boat when it comes to creating the prerequisites for employment. If the pension benefits accrued by wage-earners were more directly tied to the number of employed, possible measures to improve employment might be politically less painful.

MATIAS KLEMELÄ

Chief Financial Officer and Head of Risk Management



Our key sustainability themes:

- Easy and reliable pension provision
 - We invest sustainably
 - Open and transparent
 - Meaningful work
- [Read more about our material sustainability themes on page 68.](#)

Happy at work – 60 years of Finnish pension security

2021 marked our 60th anniversary as a provider of pensions for Finns and as a partner for working life. The theme of the anniversary year was supporting young people to engage in working life and thus extending careers.

Read more about our campaign to support young people's engagement in working life at ilmarinen.fi/mie-lleaan-toissa (in Finnish).

Ilmarinen's strategy (GRI 102-16)

Most attractive working life partner – responsibly, for you

Better working life
PERSONNEL EXPERIENCE
We succeed together, reinforcing our expertise
One of the best workplaces in Finland

CUSTOMER EXPERIENCE
We operate with a focus on customers and promote work ability
Best solutions and customer experience

SOLVENCY
We invest profitably, securely and responsibly
Best investment returns

EFFICIENCY
We digitalise our service processes and continuously improve our operations
The most efficient pension insurance company

GROWTH
We grow profitably together with our customers
Profitable and faster than market average growth

Our main task is to ensure the earnings-related pension cover of our customers.

Openness | Responsibility | Co-operation

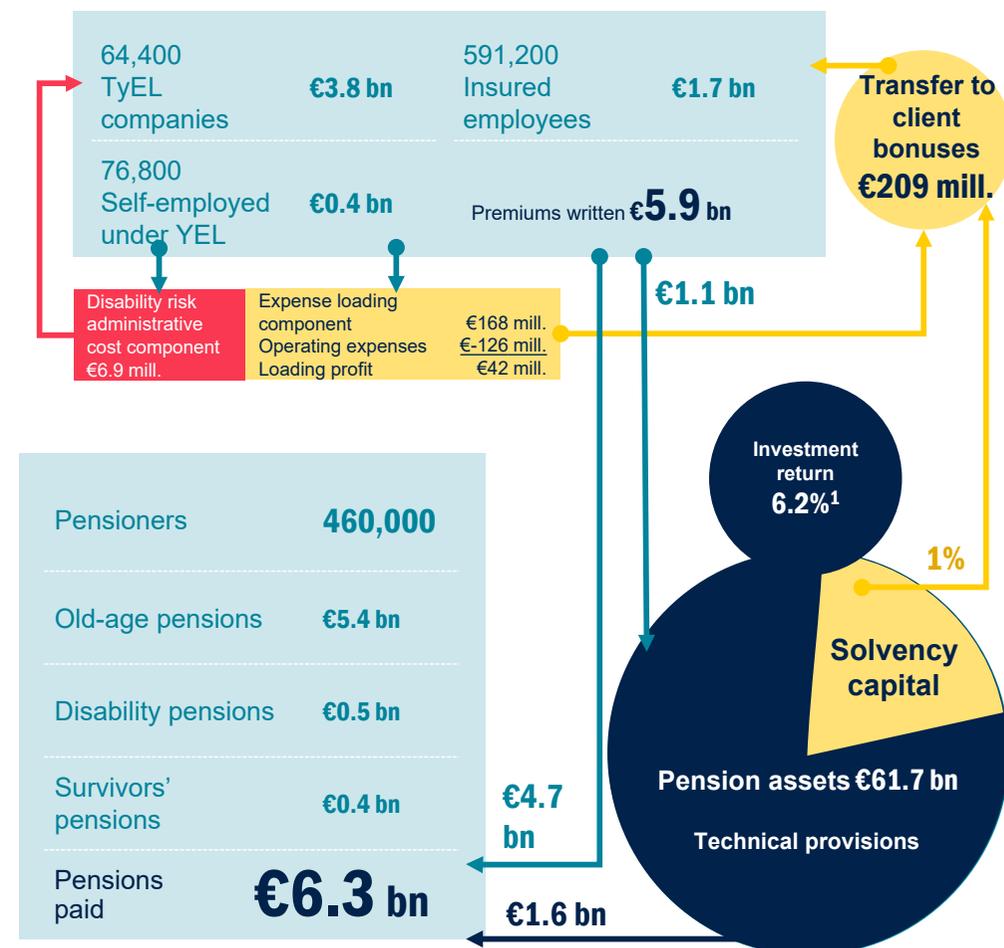
ILMARINEN

Our long-term goal is to be one of Finland's best places to work, offer the best customer experience and the best solutions in the sector, and grow profitably and faster than the market. Our goal is to be the most efficient earnings-related pension insurance company, with the sector's best return on investments.

Social income distribution calculation (GRI 201-1, 201-2)

Social income distribution calculation, EUR million	2021	2020
Income information		
Premiums written	5,922.0	5,220.5
TyEL, employer's contribution	3,824.8	3,225.5
TyEL, employee's contribution	1,709.0	1,607.2
YEL (self-employed persons)	388.2	387.8
Reduction of client bonus transfer carried out in previous year	55.4	163.4
Net investment return excluding operating expenses	8,126.7	3,561.9
Other income and expenses	0.1	0.0
Total income	14,104.1	8,945.9
Income distribution		
To pensioners	-6 309.12	-6,115.6
TyEL pension recipients	-5 902.08	-5,700.6
YEL pension recipients	-407.04	-415.0
Provision for future pensions	-1 678.7	-1,612.4
Provision for future risks	-5 721.2	-1,001.1
Buffering against fluctuations in investment return	-5 721.2	-1,001.1
Buffering against fluctuations in underwriting result	0.0	0.0
Client bonuses	-209.4	-55.4
Carried forward to next year's client bonuses	-209.4	-55.4
Staff expenses	-61.2	-61.6
Other service providers	-114.5	-96.8
Taxes withheld at source	-10.1	-3.1
Interest on guarantee capital	0.0	0.0
Donations	-0.1	-0.1
Total income distribution	-14 104.1	-8,945.9

We are responsible for the pension security of 1.1 million Finns



The income distribution calculation indicates what cash flows our operations consist of. An employment pension insurance company does not produce a profit for its owners, because the funds from pension contributions are meant to be used for pension provision.

1) Long-term (1997–2021) nominal return 6.2% pa. and real return for the same period 4.6% pa.

Cost-effective management of pension cover (KPI 2)

Loading profit, ratio of operating expenses to expense loading components and total operating expenses 2017–2021



Cost effectiveness is one of the key indicators of our operations. The administrative cost component included in the pension contributions is used to finance all our activities, with the exception of the investment of pension assets. Investment charges are covered from the investment income.

The size of the administrative cost component depends on two factors: the amount of wages and salaries paid by our customers to their employees during the year and the expense loading rate. In 2020 and 2021, the Covid-19 pandemic rattled the economy, reducing the number of employees and thus also the amount of wages and salaries paid by our customer companies, i.e. the payroll. The expense loading rate determines how large a percentage of the payroll constitutes the administrative cost component that is intended for our operations. The rate was lowered most recently in 2017 and 2020. From an employer's perspective, a lower rate means a slightly lower pension contribution than before.

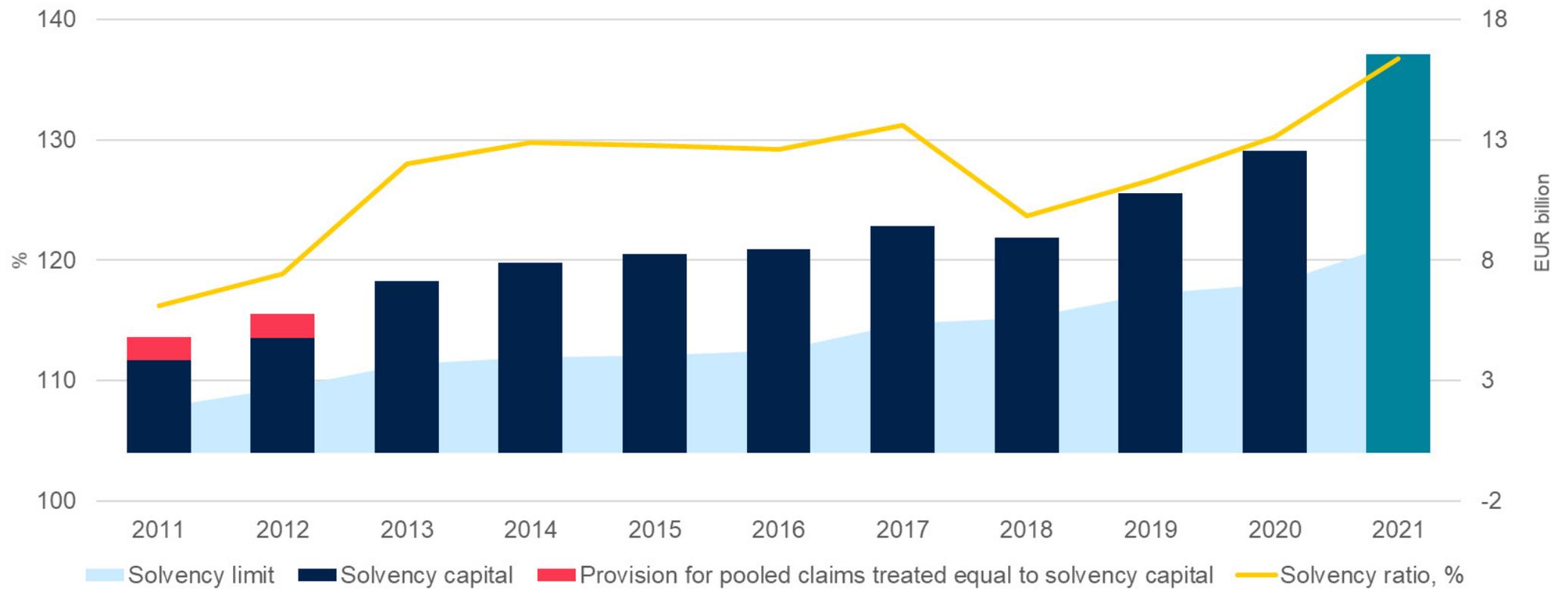
Cost-effective management of pension cover (KPI 2)

EUR million	2021	2020
Ratio of operating expenses to expense loading components	75	73
Loading profit	42	43
Total operating expenses	176	158

The reduced payroll and expense loading rate have also led to a decrease in the loading profit and the ratio of operating expenses to expense loading components, despite the fact that we have increased the efficiency of our operations and spent less money on them than in previous years. The loading profit is the difference between the loading income and the operating expenses financed with it. The ratio of operating expenses to expense loading components is the proportion of the operating expenses financed using loading income of the administrative cost component we receive. The smaller the ratio of operating expenses to expense loading components, the larger the part of the administrative cost component we can refund to our employer customers. This way we reduce the pension system costs for employers and do our part in reducing the cost of employment.

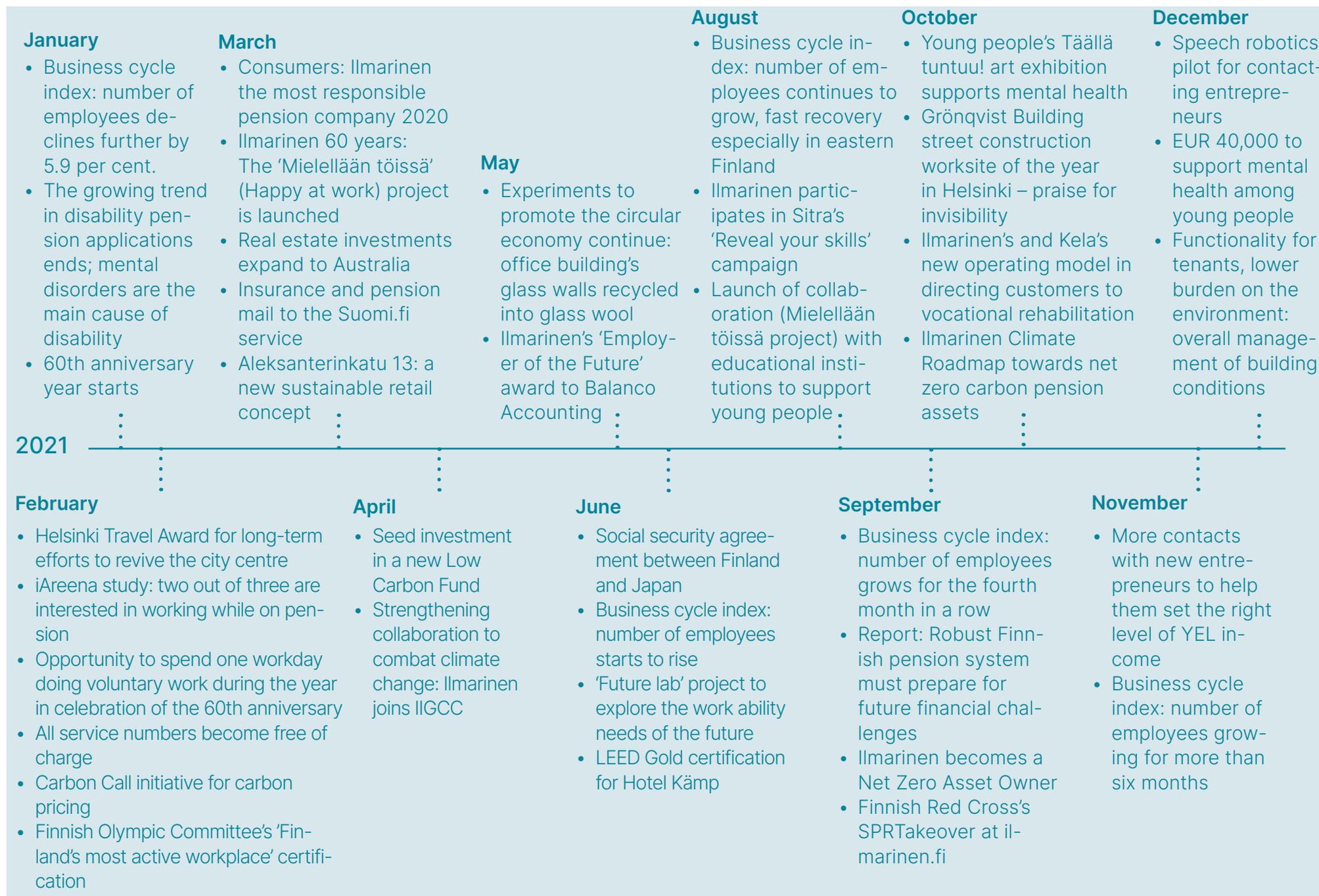
In 2021, the operating expenses financed using loading income included EUR 18 million in write-downs for intangible assets and effects of a change in the amortisation period. Calculated without the write-downs and the change in the amortisation period, the operating expenses financed using loading income decreased by EUR 10 million year-on-year due to the improved cost effectiveness of the operations.

Solvency



Solvency describes our ability to cope with the risks that are related to managing pension provision and pension assets. That is why solvency, or our ability to face investment risks, also affects the amount of excess assets that we can refund to employers.

1.2 Ilmarinen in 2021



1.3 President and CEO's review

2021 was an excellent year for Ilmarinen. Investment assets and solvency capital rose to record levels and strong development continued in customer acquisition and in improving cost effectiveness. Our customers benefit from the excellent result through our client bonuses, which amounted to a record high EUR 209 million.

Performance in the investment markets was strong, especially thanks to the sharp rise in the equity markets. The return on Ilmarinen's investments at current value was 15.3 per cent, i.e. EUR 8.1 billion. Our investment assets rose to almost EUR 61 billion, and our solvency strengthened. Premiums written also grew, driven by the rise in our customers' payroll and our excellent performance in customer acquisition.

The first target period of our strategy, which was updated in 2019, came to a close, and the results are good across the board. Our solvency has risen clearly above the sector average. Our cost-effectiveness has improved substantially, and the synergy benefits from the merger carried out in 2018 have been realised in full. The organisation, corpora-

te culture, management system and ways of operating have been renewed, and both the employee experience and the customer experience have improved. The development of sales results and customer retention speaks of the trust our customers have in us: people want to become our customers and stay with us.

The successful implementation of the strategy has provided the opportunity to revisit the priorities and to set even more challenging targets. An up-to-date strategy that evolves with the times ensures that we are ready and poised to face tomorrow's challenges. We want to continue to be the most attractive working life partner – responsibly, for you.

We manage the risks brought about by climate change by seeking to achieve a carbon neutral investment portfolio by 2035. During the year, we published climate road maps for listed equities and Finnish real estate, describing asset class specific interim targets, measures and tools for achieving the carbon neutrality target.

December 2021 marked the 60th anniversary of the establishment of Ilmarinen. The objective of the project named Mielellään töissä (Happy at work) launched

during the anniversary year was to participate in the discussion on young people's engagement in working life and the prevention of marginalisation among young people, and to find ways in which the young people themselves, schools and companies can support their entry into working life.

2021 was a strong year also for the pension system as a whole. Pension assets generated very good returns and solvency strengthened. The average retirement age rose by six months to 62.4 years. The employment rate of the aged improved, and the number of those retiring on a disability pension declined to 17,500. As the exceptional situation caused by Covid-19 continued, it is too early to draw the conclusion that this is a more permanent trend.

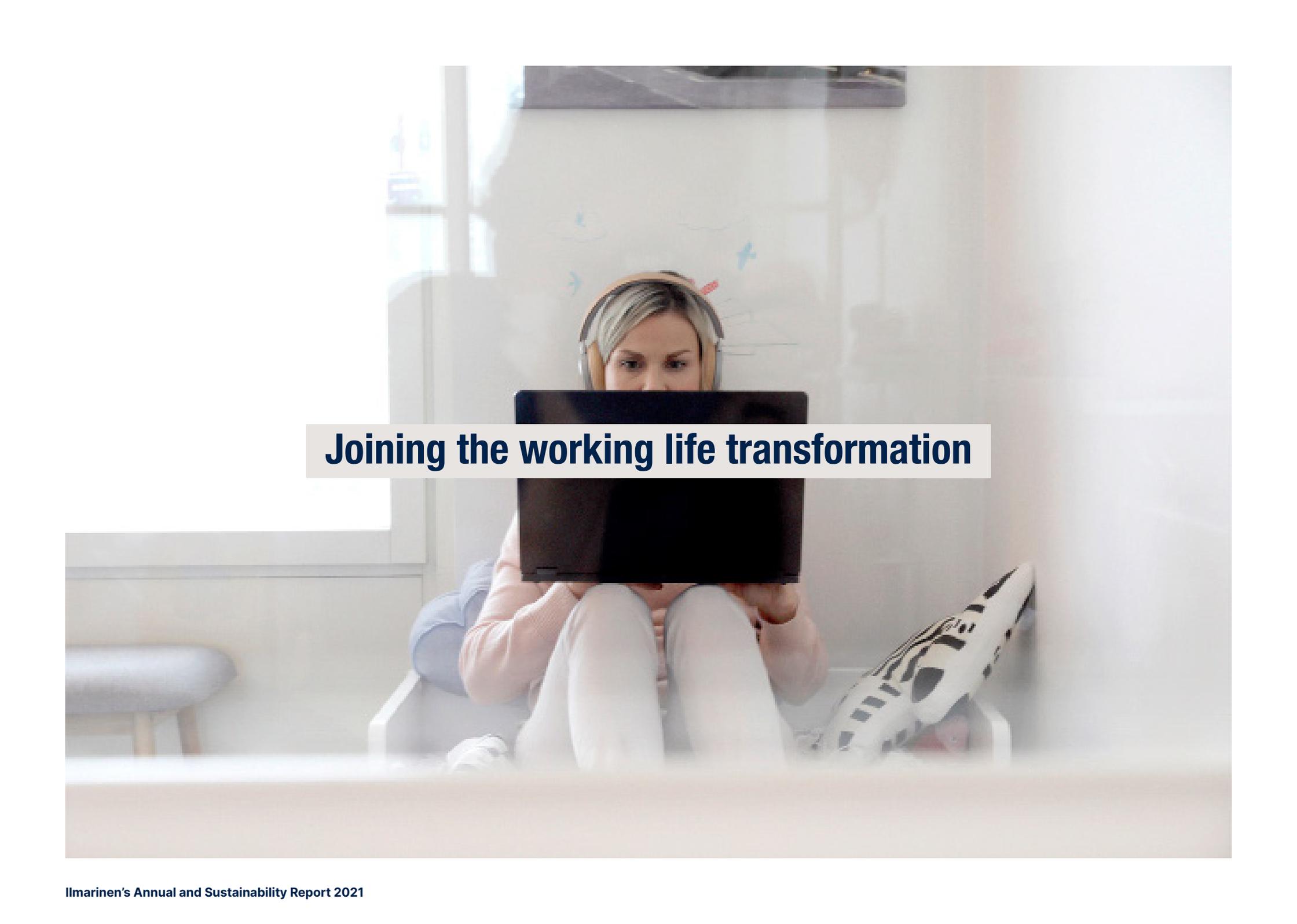
Driven by the good results, Finland's pension system is in good shape to take on new challenges. Accelerated inflation and possible changes in interest rate and monetary policy are creating economic uncertainty. The Covid-19 pandemic has receded to the background due to the rapid change that took place in the geopolitical situation in February. Russia's invasion of Ukraine and new sanctions against Russia are creating uncertainty in the econo-



my and safety. The people that find themselves in the midst of the war suffer the most, but the increasing uncertainty has both short-term and long-term implications on the financial situation of Finns, too.

Our earnings-related pension system also needs to be continuously developed. The ageing of the population and the low birth rate will challenge the system's financial sustainability. That is why it is important to find ways to improve employment and extend careers, create a population policy that increases the birth rate, and facilitate labour immigration. The development of solvency regulation should ensure that pension institutions can achieve the best possible return on pension assets in the long run, which in turn will help ease the pressure to raise pension contributions.

Jouko Pölönen
President and CEO, Ilmarinen



Joining the working life transformation

2. Joining the working life transformation

Whether you are self-employed or an employee, you contribute to your pension security. However, the perspective from which you view pension security depends on your role.

When you work as an employee or a self-employed person, you accrue your earnings-related pension. In your role as an employer, you see to it that the pension contributions for your employees are paid and the pension accrues. We support you all in achieving these targets: by providing support in preventing disability, we help our customers to secure their income now and in the future.

2.1 As an employee you accrue pension on your work

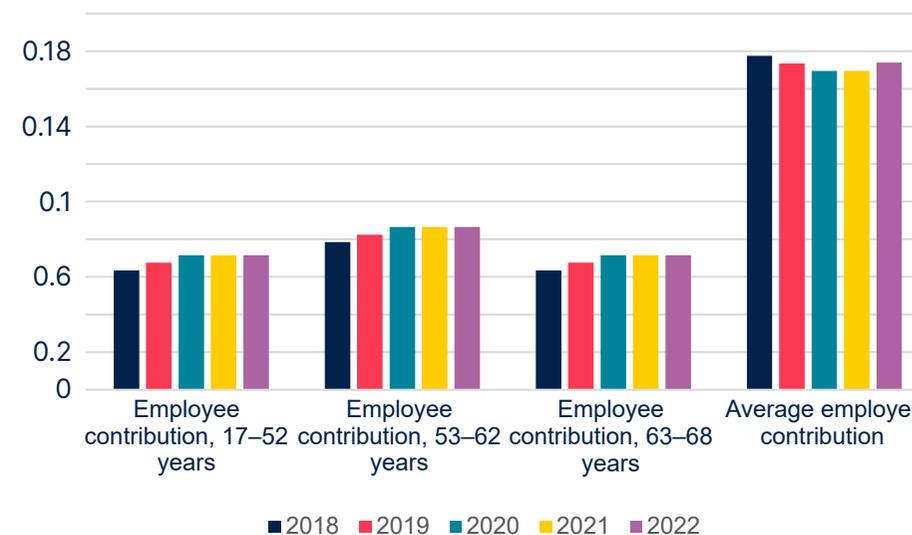
Did you know that earnings-related pension starts to accrue from your very first paycheck?

There are some specific conditions for that, though. Pension accrues if you have turned 17 and are not over 68. If you are self-employed, the lower age limit for pension accrual is 18.

The basic idea of the Finnish earnings-related pension system is that everyone accrues their pension from their own earnings. In addition, studies leading to a degree, some of the social benefits and childcare leave for children under three accrue pension. During maternal, paternal or parental leave, you accrue earnings-related pension based on your earnings, or actually even more: when calculating your pension, your annual income that forms the basis for your pension is increased by 21 per cent.

You can see your future pension in our online service already while you are still working. From your pension record, you can check which employment relationships have accrued pension and how much. If you are at the beginning of your career, the pension accrual is almost inevitably small. Remember that pension

Pension contributions (TyEL), % of salary



In 2021, the earnings-related pension contribution was on average 24.4% of an employee's salary. Pension contributions vary little from year to year. The labour market organisations negotiate them annually. Based on the outcome of the negotiations, the pension companies' actuaries submit an application, proposing the contributions for the next year. The Ministry of Social Affairs and Health confirms the contributions. The employer's contribution is an average because, in the case of larger employers, liability for employees who end up on disability pension affects the pension contribution. The pension company's client bonuses also affect the size of the final contribution. In 2022–2025, the contribution will be affected by the temporary reduction on the employer's contribution granted in 2020 due to the Covid-19 pandemic. The employer's contribution was 14.35% between 1 May and 31 December 2020.

The Ministry of Social Affairs and Health proposes that the administrative cost component included in the earnings-related pension insurance contribution be determined on a company-specific basis starting in 2023. The long prepared change will improve the transparency and clarity of insurance management costs. The change is expected to increase cost competition between pension institutions, creating even stronger incentives to increase operational efficiency.

accrues throughout your career. Therefore, you should check from time to time that your employers have fulfilled their obligations regarding pension security.

[Check your pension record](#)

2.2 Happy at work – Ilmarinen turns 60

The challenges of engaging in working life have evolved over the years. The disability pensions of young people in particular are showing a worrying growth trend. A key factor is an increase in mental health issues. This trend is bad news for both the pension system and society at large.

The engagement of young people in working life is important for the individual, the pension system and the whole of society. Therefore, it was natural for us to make the theme of our 60th anniversary year supporting young people to engage in working life and thus extending careers. Through the Mielellään töissä (Happy at work) project's workshops, school visits and gaming days, we reached a total of more

than 2,000 young people.

In the project, we wanted to listen to young people and increase encounters between them and companies. The outcomes include the Mielellään töissä games, workshops and gaming days with secondary school students, webinars and the Täällä tuntuu! exhibition showcasing young people's feelings and works of art. In addition, we handed out the Employer of the Future award to an employer, which, alongside growing its business, has helped young people find employment and engage in working life. In autumn, we were also strongly involved in the Must x tuntuu! event organised by MIELI Mental Health Finland's local association Lapinlahti Mielenterveysseura.

Our collaboration with educational institutions included the workshop model designed by Youth Academy and young people and the Mielellään töissä game, which was built based on ideas gained from young people's idea labs. The workshops led by teacher trainees and a few voluntary workers addressed working life skills and coping in a positive spirit. The youths were also provided with information about

the accrual of earnings-related pension and the Finnish earnings-related pension system.

More than 500 young people from across Finland attended the workshops. A total of more than 20 school visits were organised in 7 cities and towns. The

game was played in 22 cities and towns. The workshops were well received by both the students and the teachers: of the young people, 79 per cent said that they had learned something new and 82 per cent affirmed that they would attend a similar workshop



Our anniversary year was a good time to address themes that concern the pension system and the whole of society – themes that we work with every day at Ilmarinen. Young people's disability pensions have increased at a worrying pace in recent years, primarily due to mental health issues. Therefore, we wish to participate in the discussion on young people's engagement in working life and the prevention of marginalisation among young people, and contribute to finding ways in which the young people themselves, schools and companies can help them enter working life. The discussion and the efforts will continue after the anniversary year.

LIINA AULIN

Executive Vice President, Communications and Corporate Responsibility

again. All of the teachers also said that they had gained new ideas for their work.

Secondary school classes can also play the game independently. A total of more than 50 classes played the game in 2021, and it has already reached more than a thousand young people throughout Finland.

2.3 Self-employed person's pension insurance – more than just a pension

Unlike employees, entrepreneurs are responsible for their pension contributions in full. An entre-

preneur's pension contribution is determined based on the value of their work input, i.e. YEL income.

YEL insurance is the basis for an entrepreneur's pension and social security. The statutory YEL insurance secures the self-employed person's income in the event of old age, disability and the death of a family provider. The benefits paid by Kela, such as sickness allowance and parental allowance, are also determined based on the confirmed YEL income. In addition, the YEL income determines the level of unemployment benefits.

In 2021, the Covid-19 restric-

tions impacted the income of many entrepreneurs. This is illustrated, for example, by the record number of new payment agreements we made during the spring. Agreeing on the payments in advance reduced the number of demands for payment and invoices transferred to collection agencies compared to normal. However, the number of YEL contributions transferred to enforcement grew in spring when the payments left from the flexible payment arrangements agreed on during 2020 moved on to the next stage of the collection process. The lifting of legislative restrictions also led to an increase in the number of more drastic collection measures in the spring.

Over the spring, we enhanced communications with our self-employed customers, stressing the importance of the YEL income for their social security at all stages of their life.

Later in the year, we specified in more detail the procedure for confirming the YEL income by adding new terms and conditions and questions to the electronic service for new YEL insurance applications. Manual applica-

tion processing increased in the processing of applications where the gap between the YEL income applied for and the recommendation was too wide. The YEL income to be confirmed was tied more strongly to the YEL income recommendation for the company's sector.

The YEL income levels of our self-employed customers show positive development. In autumn 2021, entrepreneurs raised their YEL income more than they lowered it, whether measured in euro or in the number of changes made. Furthermore, the proportion of low YEL income among new entrepreneurs decreased and their median YEL income in autumn 2021 grew compared to spring 2021.

The YEL income that forms the basis for pension insurance has an impact not only on pension accrual, but also on the self-employed person's other social security benefits before retirement. The YEL income affects the sickness and parental benefits paid by Kela, unemployment security and the possibility to take out self-employed persons' accident insurance. Because of the Covid-19 pandemic, many

Pension data to the Incomes Register

The Incomes Register introduced in 2019 gathers all earnings data in one location. Employers report their earnings payment data to the Incomes Register, where it is available to us and a number of society's other institutions. Since the beginning of 2021, data on the pensions we have paid to our customers and other social benefits they have received has also been collected in the Incomes Register.

entrepreneurs have had to get to grips with benefits such as the infectious disease allowance, which is also determined based on YEL income. Self-employed persons' pension insurance also enables the entrepreneur to take a leave after the birth of a child. Entrepreneurs receive the same parental benefits from Kela as employees do.

From the perspective of earnings-related pension legislation, a self-employed person refers to those who have, under the Self-employed Persons' Pension Act, the obligation to take out self-employed persons' insurance, i.e. YEL insurance, for themselves. YEL is the only mandatory insurance for all self-employed persons.

As a self-employed person you must take out YEL insurance no later than six months after the start of the entrepreneurial activity as of the date when the value of your work input exceeds the minimum YEL income specified by law.

To make things easier for new entrepreneurs, every new entrepreneur is entitled to a 22-percentage reduction in YEL contributions for the first four years.

Despite the discount, pension and other social benefits accrue in the same way as for other entrepreneurs.

The working life transformation calls for a YEL reform

Self-employed persons' pension has been subject to a lot of pressure to change in recent years. Entrepreneurs' trust in the system is weak. Underinsurance – setting a YEL income that is too low – is a common issue. The average YEL income has been following a downward trend.

A working group of the Ministry of Social Affairs and Health has been evaluating the need to reform the pension legislation concerning self-employed persons. Underlying the need for reform is the transformation taking place in working life and entrepreneurship, self-employed persons' low confidence in the pension system and the growing share of state financing. In 2021, the working group focussed on the determination of entrepreneurs' YEL income and the related underinsurance. The earnings-related pension sector is hoping to see, as quickly as possible, legislative

adjustments to achieve an unambiguous definition of YEL income.

The Financial Supervisory Authority (FIN-FSA), which supervises employment pension insurance companies, has also looked into how the sector ensures compliance with the regulations in confirming entrepreneurs' YEL income. FIN-FSA has also carried out a thematic assessment to review the adequacy of the information provided to entrepreneurs.

We have reviewed our own practices in confirming YEL income. Over the spring 2021, we enhanced communications with our self-employed customers, stressing the importance of the YEL income for their social security at all stages of their life.

Later in the year, we specified in more detail the procedure for confirming the YEL income by

adding new terms and conditions and questions to the electronic service for new YEL insurance applications. Manual estimates of YEL income carried out by specialists increased if the YEL income applied for by a new entrepreneur fell below the recommendation.

In December, we successfully conducted an experiment with speech robotics to increase contacts with entrepreneurs. The objective of the experiment was to prompt entrepreneurs to think about their YEL income and its impact on their social security and pension. The robot is intended to supplement, not to replace, personal contacts with entrepreneurs.

The call robot reached a large number of entrepreneurs quickly and several hundreds of entrepreneurs raised their YEL income

Do you need to take out YEL insurance?

Take the test available on our website to find out whether you need to take out YEL insurance.

[Go to the test](#)

Satisfaction with services GRI 102-43

	2021	2020
NPS for online services	48	35
NPS for phone services	74	72
NPS for insurance services	47	29
NPS for pension services	49	46

TyEL insurance and customer retention (GRI 102-7)

	2021	2020
Insured under TyEL	591,197	555,029
TyEL policies	64,436	69,386
Customer retention, employers and self-employed persons	97.3%	97.2%

We keep your information secure (KPI 4)

	2021	2020
Notifications of personal data security breaches to the Office of the Data Protection Ombudsman, number	8	2

In 2021, no large-scale data leaks occurred in our operations. We also did not receive any complaints concerning breaches of customer privacy or loss of customer data from authorities or external parties. (GRI 418-1) On a monthly level, we recorded a few data protection incidents that were mainly due to isolated human errors. We deal with data protection incidents in our Data Protection Committee. We assess all cases from a development perspective to avoid similar incidents in the future.

YEL insurance policies (GRI 102-7)

	2021	2020
YEL insurance policies / Self-employed persons who have taken YEL insurance from Ilmarinen	76 781	76 147

Whereas employees' pension contributions are calculated based on paid wages and salaries, a self-employed person's pension is based on the YEL income. We confirm for self-employed persons an annual YEL income that corresponds with their work input. When confirming the YEL income, we take into account the entrepreneur's own estimate of their YEL income. The YEL income may be different from the actual income the self-employed person receives from the company in the form of earned income or capital gains. YEL income means the calculated value of an entrepreneur's work input: it should be equal to the salary paid to an employee for the amount of work carried out by the entrepreneur during a year.

As a self-employed person, you are your own employer, which means that you are responsible for your pension contribution in its entirety. A self-employed person's pension contribution is roughly at the same level as an employee's contribution, when taking into account the portions paid by both the employee and the employer. As a self-employed person, you can deduct the pension contributions in your taxation, which is not possible for employees.

as a result. The experiment showed that automated calls need to be designed with care so that the recipient can be sure that it is not a scam call.

2.4 We keep your information secure

We process the data of thousands of customers every day. If, for example, you apply for vocational rehabilitation or disability pension from us, you disclose information about your health to us. This type of information is called sensitive personal data. Data concerning companies falls within the scope of insurance secrecy.

Information security covers everything that has to do with data processing. The basic requirement of information security is to ensure the retention, availability and integrity of the data and safeguard it against abuse. This means, for example, that sensitive data related to disability pension decisions is not disclosed to outsiders, while ensuring that it is available for making a pension decision, for example.

Questions related to information security are an integral part of developing digital services.

This means more than just working on the technical requirements, such as data encryption. Technical solutions are effective only if the people using them follow the correct practices. Technical solutions can reduce the risks related to human activity, but not eliminate them completely. That is why we maintain information security by regularly training our personnel to identify and control risks. Our information security architecture and controls are based on a multilayered approach.

In 2021, we extensively developed and reinforced our operations. The objective has been to transfer online as many of the messages we send to our customers as possible. Digital services have been developed using both cloud services and modern technologies.



The biggest information security risks occur in daily work

The digitalisation of society and trends such as increasing remote work have brought cyber threats closer to our daily lives. The trend has been gaining momentum for a while, and now cyber threats have become a permanent part of organisations' main risks.

It is not realistic to assume that there will never be any data protection incidents. According to the General Data Protection Regulation, any deviations shall be duly reported, their root causes shall be identified and operations shall be improved to prevent the same mistake from happening again. Trust is maintained through transparent reporting.

Discussions about information security often tend to revolve around technology. However, data protection threats are related to practices and human errors.

Modern platforms and automation help reduce errors. Automation is often used to reduce human contact points in routine processes, not to profile customers for marketing purposes. The relevant question is how data is protected and who has actually access to it.

TEIJO PELTONIEMI

Director, Enterprise Architecture and Cyber Security



We safeguard work ability

3. We safeguard work ability

Employees' and self-employed persons' pension insurances are more than just pensions. Both pension insurances also provide security against unexpected situations before the old-age retirement age. It is important to take care of work ability in a proactive manner. By anticipating risks we reduce the cost of disability for individuals, the earnings-related pension system and the whole of society.

3.1 Disability is costly

In 2021, the number of those retiring on a disability pension was the lowest recorded in the 2000s in Finland: 17,500 persons. One of the assumed reasons is the care debt accumulated during the Covid-19 pandemic, which means that people have postponed seeking medical attention. Therefore, it is possible that the favourable trend will end in the coming years.

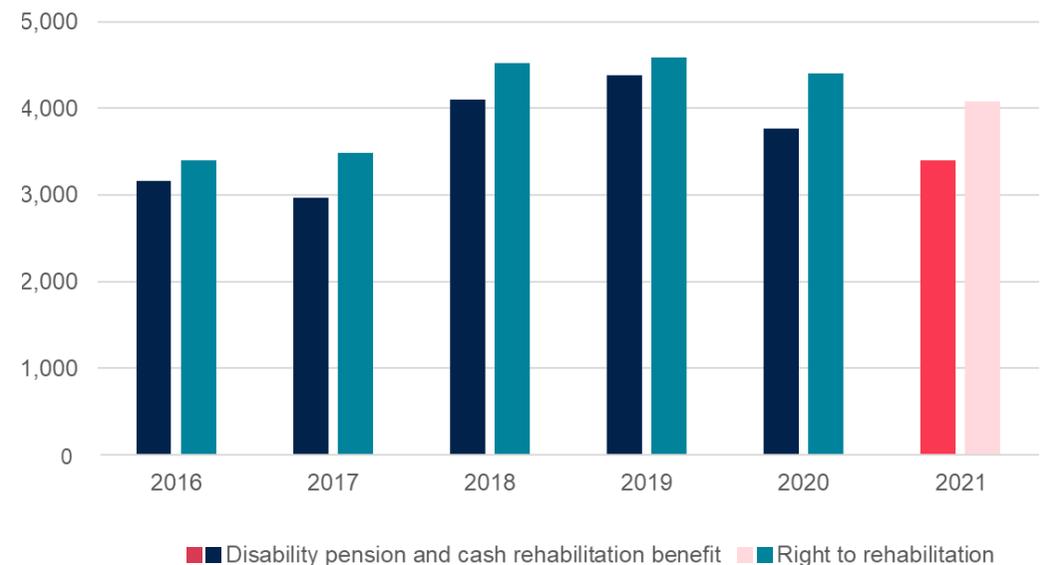
Good work ability is in the interest of the individual, company and society. That is why it is worth cherishing. Anticipating and managing work ability risks can support coping at work and lengthen careers. Close and systematic collaboration between employees, supervisors, employers and occupational health

services brings the best results in work ability management. Each prevented disability pension is not only important on a human level, but it also saves our common assets.

Work ability risks should be assessed regularly: the risks can be related to the near future or materialise in many years' time. Severe illnesses and accidents, for example, can have a quick impact on work ability. Physical or mental strain affects health over a number of years. That is why work ability and factors influencing it should be looked into, in an effort to identify how a decline in work ability could be prevented beforehand. From a pension insurance company's perspective, this is a question of managing insurance risks.

Research has shown that in

Rehabilitation and persons retired on disability pension



certain sectors, professions and workplace situations, the risks of declining work ability are higher. An individual's ability to resist physical and mental strain varies

from person to person and according to age.

The second consecutive Covid-19 year challenged work ability, and the consequences will not

become apparent until later. It is unlikely for Finns' health and work ability to have improved as much during the Covid-19 pandemic as the disability pension and rehabilitation application statistics suggest. The exceptional period resulting from Covid-19 may have caused many kinds of health issues, whose impacts on work ability will not show up until later.

The disability pension contribution of large and medium-sized companies is affected by the contribution category, the reform of which has also been investigated for several years. To date, no unanimous solution has been found. The employment pension insurance companies are hoping for a solution to eliminate concerns over potential disability expenditure caused by hiring an older employee. Also going forward, the contribution category model must be fair and encourage the employer to manage disability risks.

1.2 We promote work ability

At Ilmarinen, we promote the work ability of our client companies' employees together with our customers. We support our client

companies in anticipating and managing work ability risks. The objective of work ability activities is to prevent the risk of employees insured with Ilmarinen ending up on disability pension. For the work to bring results, it must be systematic and goal-oriented. The earlier the factors affecting work ability risks are identified, the more certain we can be that we will achieve impactful results.

To help our customers promote work ability and anticipate work ability risks, we at Ilmarinen have built a digital service offering, the Work Ability Hub. The Work Ability Hub brings together strong research data on work ability risks and proven workplace practices. The Work Ability Hub's themes include strategic work ability management, well-functioning occupational health services collaboration, mental health support, promotion of musculoskeletal health and early support.

In our Future Lab project, we identified, developed and shared good work ability management practices together with our customers. The objective was to anticipate work ability risks and survey challenges and opportunities related to future work and

work ability management. The project involved HR and work ability management specialists from Ilmarinen and companies from various sectors.

The project consisted of workshops, interviews and service design. The questions addressed included how to make proactive and strategic work ability management an integral part of corporate responsibility and what

kind of work ability management will be required in the future. The approach was based on the framework of developmental work research. The intention is to make the Future Lab a permanent feature, which will be organised each year with a new group.

Vocational rehabilitation supports returning to work

Your work ability and health may deteriorate so that you are

Effectiveness of rehabilitation (KPI 3)

	2021	2020
Effectiveness of rehabilitation	79.2%	78.9%
a) coming from working life	80.5%	80.5%
b) coming from fixed term pension	72.7%	68.9%
Usefulness of services and their impact on employees' work ability (customers' assessment 0–5)	4.1	3.7

Percentage of rehabilitees available to the labour market after completing rehabilitation.

Effectiveness of work ability projects (KPI 3)

	2021	2020
Perceived customer benefit (scale 1–5)	46	44
NPS, Ilmarinen's own services	91	89
NPS, sourced services	64	41

no longer able to do your work properly. Vocational rehabilitation is an option for you when other measures to support your return to work are not sufficient or possible for you – and when your work ability has declined to a point where you risk losing it completely. Its objective is to enable you to continue in working life or return to work after sick leave. The earlier you start thinking about how you are getting on and coping at work, the more likely it is that you will be able to continue in your job and in working life.

Your vocational rehabilitation can be, for example, a work trial, job coaching or retraining for a new profession. You can apply for rehabilitation whether you are an employee or a self-employed person.

If you have applied to us for a disability pension, we will always first look into whether vocational rehabilitation could help you.

Vocational rehabilitation is an employee's statutory right. Effective rehabilitation linked with work extends careers and creates an opportunity for a better working life. Successful vocational rehabilitation has a positive impact on

the rehabilitee's income for the rest of their life. If the rehabilitee continues working, they earn a larger pension for themselves. From the earnings-related pension system's point of view, pension expenditure decreases and premiums written increase.

A person's work ability is the sum of many factors. Work ability management is a collaborative effort between the employee, employer, HR, supervisors and occupational health services. The rehabilitee's own motivation is also paramount to the success of the rehabilitation process.

Vocational rehabilitation is part of disability risk management. We provide our client companies' HR specialists and supervisors with advice on vocational rehabilitation and offer specialist support. In late 2021, we launched, together with Kela, a pilot with the aim of charting the vocational rehabilitation services required by customers early enough. The objective of the new approach is to prevent prolonged disability through timely vocational rehabilitation. The pilot is targeted at customers with prolonged disability due to a musculoskeletal disease or severe depression,

and whose pensions and vocational rehabilitation Ilmarinen is responsible for. The new approach combines Kela's and the employment pension sector's expertise in the field of rehabilitation. The goal is to create a model that could be used by all pension insurance providers in the future. The pilot was continued in January 2022.

The piloted approach starts with Kela calling the customer. During the call, the customer's situation is evaluated as a whole and the customer is asked whether they wish to look into the available vocational rehabilitation options together with Ilmarinen. If the customer wishes to be contacted by Ilmarinen, Kela will request the customer's

consent to exchange information with Ilmarinen. We will then contact all customers who have given their consent. If vocational rehabilitation seems possible, we will ask the customer to send us an application.

Projects related to work ability risk management

	2021	2020
Work ability training	40	39
Separate courses and well-being at work projects	1,441	1,528
Employees covered by well-being at work projects	183,000	198,000
Persons participating in work ability training	2,627	2,987

Uninterrupted income (KPI 1)

Old-age pension and disability pension processing time in relation to other pension insurance companies	2021	2020
Old-age pensions (difference compared to other employment pension insurance companies), days	3	2
Preliminary rehabilitation decisions, difference compared to other employment pension insurance companies	5	2
Disability pensions (difference compared to other employment pension insurance companies), days	1	-5
Old-age pension processing time, days (year average)	8	9
Processing time of preliminary rehabilitation decisions, days (average for the year)	19	19
Disability pension application processing time, days (year average)	40	38
Disability pension decisions upheld by the appeals court and difference to competitors	2021	2020
Proportion of negative decisions	37.0%	36.3%
Proportion of decisions amended by the appeals court	8.7%	14.2%
Difference to competitors	-2.8%	1.5%

Rehabilitation decisions

	2021	2020
Right to rehabilitation application processing time, days	19	19
Number of new rehabilitation decisions	4,085	4,400
Rehabilitation decisions in total during the year	8,018	8,360

In most cases, the reason for a negative decision was the absence of a risk of disability specified in earnings-related pension legislation. Of the persons retiring on a disability pension, 32 per cent were granted pension due to mental health reasons, while musculoskeletal diseases were the main reason in 29 per cent of the cases and other illnesses in 39 per cent of the cases.

The decline in the number of disability pension applications continued, slowing towards the end of the year. As the exceptional situation caused by Covid-19 continued in 2021, it is too early to draw the conclusion that this is a more permanent trend.

The pension application processing time remained at a good level and customers were satisfied with the processing. More than half of old-age pension decisions were issued within two days.

The number of electronic pension applications grew and around 75 per cent of old-age pension applications arrived at Ilmarinen through the MyPension service. Customers participated in developing the electronic services and satisfaction with online services increased.



When you grow up, you'll be a pensioner

4. When you grow up, you'll be a pensioner

Finland's statutory earnings-related pension system guarantees that you will receive pension until the end of your life. Around 75 per cent of all pensions are old-age pensions.

4.1 Retirement age based on birth year – pension level based on earnings history

The old-age retirement age is determined based on the birth year. If you were born in or before 1958, you can retire on old-age pension at the earliest after having turned 64. For those born thereafter, the old-age pension age rises steadily by three months a year, until the retirement age of 65 years is reached. The lower limit for old-age pension for those born in 1962–1964 is 65 years. If you were born in or after 1965, your retirement age is tied to life expectancy.

You need to apply for old-age pension, and the easiest way to do so is through Ilmarinen's MyPension service. In 2021, we succeeded in further reducing

the time required for processing pension applications. More than half of old-age pension decisions were issued within two days, and the average old-age pension processing time in December was three days.

In 2021, the number of electronic pension applications continued to grow, with around 75 per cent of old-age pension applications arriving through the MyPension service. Customers participated in developing the electronic services and satisfaction with online services increased.

Submitting the application online is the fastest way to apply for pension. At the same time, you can check your up-to-date pension record, which shows your accrued pension amount before submitting the application. If the

application contains all the necessary information and the granting of pension does not require any particular further clarifications, the decision can often be issued during the same day. You should remember that your employment relationship must end before your pension begins.

You can also check online in

real time if the pension decision has already been issued. Usually, we first issue a provisional pension decision based on the earnings data contained in the Incomes Register. Once the employer has reported the last earnings data to the Incomes Register, we issue the final pension decision. The difference in

Number of pensioners

	2021
Old-age pensions	343,710
Partial early old-age pensions	8,220
Part-time pensions	10
Disability pensions	34,860
Survivors' pensions	68,951
Years-of-service pensions	24
Total number of pensioners	455,775

Surviving spouse's pension provides security if your spouse dies

The death of a spouse is one of the greatest sorrows that can occur in life. Surviving spouse's pension means pension that is paid after a spouse has died. In addition to the surviving spouse, pension is also paid to the children.

The Survivors' Pensions Act was revised at the start of 2022. The reform improved the position of families with children, and survivors' pension will also be paid to common-law spouses under certain conditions. Before 2022, only those who had contracted marriage or a registered partnership were entitled to the surviving spouse's pension.

A person applying for survivors' pension is often faced with a sudden change in their family's finances due to the new life situation. Income decreases but expenses remain almost unchanged, because mandatory expenses, such as the rent or the mortgage, insurance and other bills will still have to be paid. The payment of pensions is an employment pension insurance company's basic task, and when it comes to survivors' pension, smooth

and fast processing of the pension application is particularly important.

According to the new legislation, surviving spouse's pension is a fixed-term benefit that is paid for ten years or until the youngest child turns 18. This provides the parents of young children with very good security. However, the changes do not apply to current surviving spouse's pensions; they will continue to be paid as before. The ten-year fixed term applies to surviving spouses born in 1975 or thereafter.

The survivors' pensions paid to children are also changing. Going forward, children are paid pension until the age of 20 instead of the previous 18 years. This is also an improvement for families with children. Furthermore, if the deceased person did not have a surviving spouse entitled to survivors' pension, the calculated share of the surviving spouse will be paid to the children. The changes also apply to orphan's pensions whose payment had started when the act entered into force. The pension company will make the changes to the children's pensions without a separate application.

The amount of survivors' pension raises questions and sometimes even causes puzzlement. Why does one surviving spouse receive a much bigger pension than another? First of all, the amount of survivors' pension depends on the earnings-related pension that the deceased spouse was collecting at the time of death or the earnings-related pension that they had accrued by the time of death. Secondly, the amount depends on the earnings-related pension paid to the surviving spouse or on the estimate of the surviving spouse's future earnings-related pension. The third factor affecting the amount of pension is the number of children entitled to survivors' pension. When a spouse with a low income dies, the survivors' pension will also be smaller. If, on the other hand, the surviving spouse's income is significantly higher than their spouse's, it is possible that no survivors' pension will be paid to the surviving spouse. Our survivors' pension calculator can be used to estimate the amount of survivors' pension.

the size of pension is usually very small between the provisional and final decisions.

4.2 Sort out your pension well ahead of time

When you approach the retirement age, it is a good idea to also find out about other pension options. Partial early old-age pension means that you can start drawing part of your pension while working. This can result in additional income for the final years of the career but it will reduce the final amount of pension for the rest of your life. You can determine, together with your employer, how much you will work alongside the partial early old-age pension, if at all.

The years-of-service pension is intended for people aged 63 and over, who have had a long career in a tough and strenuous job and whose work ability has weakened due to an illness or injury. In 2021, we made 50 years-of-service pension decisions. Although the number of pension decisions is low, it has risen by 52 per cent from the previous year.

The basic rule of the earnings-related pension system is that all earnings accrue pension.

In addition, a degree completed in or after 2005, some of the social benefits, and childcare leave for children under three accrue pension. The accrual rules and some other parameters, such as age limits, have changed over the years.

When calculating the earnings-related pension, a wage coefficient is used to ensure that the amount of pension corresponds with the level of earnings during the career. In the wage coefficient, the portion of change in wages accounts for 80 per cent and the change in prices for 20 per cent.

The earnings-related pension index, in turn, is used to adjust the paid earnings-related pensions. When calculating the earnings-related pension index, the portion of change in wages accounts for 20 per cent and the change in prices for 80 per cent.

Pension inevitably lowers the income level. Preparing for it is possible, but you should start early enough. It is easier to prepare when you know the level of your own pension well ahead of time.

The easiest way to check the amount of your pension is to log in to our MyPension service. You



Senior Deed of the Year

In 2021, the Central Union for the Welfare of the Aged and Ilmarinen granted the Senior Deed of the Year award to Kuntopaikka HH's KotiTV, a TV service channel dedicated to promoting the well-being and functional capacity of older people.

KotiTV's objective is to do away with the digital gap and provide senior citizens with access to daily low-threshold remote guidance and service communications with a wide reach and on an equal footing. KotiTV's daily offering includes remote exercise sessions, guidance on the use of digital services and advice related to well-being, broadcast directly to the TVs of the elderly living at home or in service housing environments.

The Central Union for the Welfare of the Aged and Ilmarinen look for candidates for the Senior Deed of the Year award every year.

The award, EUR 5,000, is granted to an act or project that benefits the welfare of the aged. The award was distributed for the 14th time in 2021. Its aim is to support the development of methods to promote the welfare of the aged and increase appreciation for work with the elderly.

can also use the calculator available in the service to estimate the amount of your future pension. You can use the calculator to find out, for example, how much retiring on partial early old-age pension would permanently reduce your old-age pension or how much continuing to work longer than your minimum old-age pension age would increase your pension.

Private and public sector pension systems will remain separate

The project prepared in the pension sector to merge the municipal and private sector pension systems was suspended in September 2021. The working group established by the Ministry of Social Affairs and Health could not find a solution that would be unanimously accepted by all parties. The most difficult issue proved to be implementing the merger in a cost-neutral way, and especially a method and schedule for implementing a neutralisation fee.

A neutralisation fee would have ensured the merger's cost-neutrality and that the private-sector earnings-related pension system

would not have to pay the municipal sector's higher pension liabilities, which are mainly due to the predominance and longer life expectancy of female municipal employees.

On iAreena seminar's agenda: working while on pension

In February 2022, Ilmarinen and the Central Union for the Welfare of the Aged arranged, for the 12th time, the iAreena seminar on topical themes that are relevant to the elderly. This time, the theme was 'Being a pensioner in Europe – pensioners' energy level and finances in the 2020s'.

Pensioners consider their financial situation to be reasonable and most have prepared for retirement themselves. More than a third of pensioners are worried about their financial situation. Many pensioners would like to work after retirement, and one out of three has actually done so. According to a recent study, pensioners think that changes in attitudes, taxation and the supply of jobs would be required in order to make working while on pension more appealing.

Ilmarinen's survey looked into the financial situation of pension-

ers and working after retirement. A total of 1,210 pensioners responded to the survey in January 2022.

Ilmarinen's pensioners: age and gender in 2021

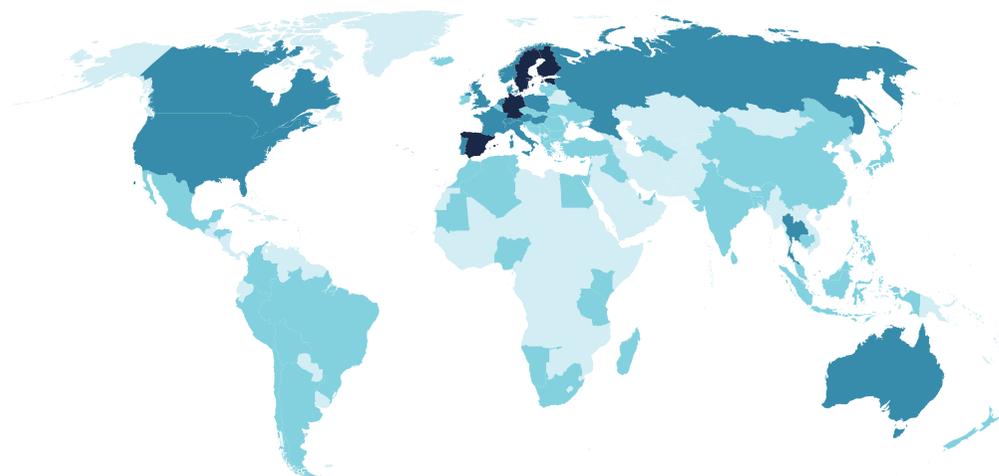
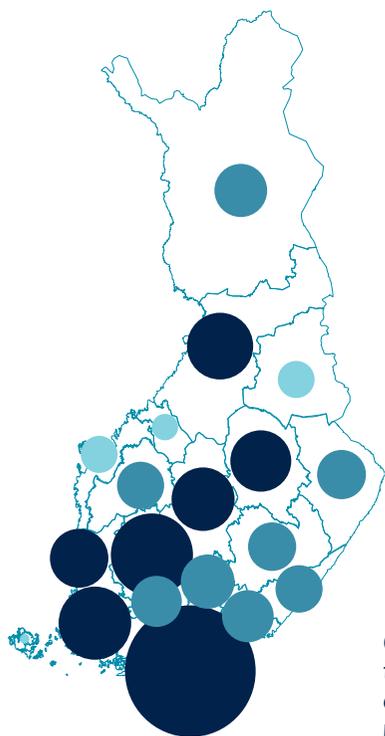
Age	Male	Female
100+	0.0%	0.1%
90-99	1.5%	4.2%
80-89	9.6%	14.1%
70-79	21.3%	18.9%
60-69	14.5%	10.2%
50-59	1.8%	1.4%
40-49	0.6%	0.5%
30-39	0.2%	0.2%
18-29	0.1%	0.1%
Under 18	0.4%	0.3%

Pensions paid, EUR million

	2021	2020
Total	6,309	6,116
TyEL	5,902	5,701
YEL	407	415

Ilmarinen's pensioners in Finland and other countries in 2021

	%
Helsinki-Uusimaa	25.0%
Pirkanmaa	9.9%
Southwest Finland	7.7%
North Ostrobothnia	6.4%
Central Finland	5.8%
North Savo	5.4%
Satakunta	5.0%
Päijät-Häme	4.2%
Lapland	4.0%
Kymenlaakso	3.8%
Kanta-Häme	3.8%
North Karelia	3.5%
South Savo	3.4%
South Karelia	3.2%
South Ostrobothnia	3.2%
Kainuu	2.1%
Ostrobothnia	2.0%
Central Ostrobothnia	1.0%
Åland	0.1%
No information	0.3%



Karttojen lähde © Karttakeskus

Our pensioners live in 86 different countries and represent 98 different nationalities. After Finland, the highest number of people receiving pension from us, close to 5,500 people, live in Sweden. Then comes Estonia, with around 1000 pensioners and Spain with around 800 pensioners. After Finns, the most common nationality is Swedes, at some 2,700, followed by Estonians, at around 1,600.



A man wearing a light blue suit and a white helmet is riding a kick scooter on a paved path. The path is lined with large, leafy green trees, and the scene is brightly lit, suggesting a sunny day. In the background, other people can be seen walking on the path. A white rectangular box with blue text is overlaid on the center of the image.

We invest sustainably

Responsible investment highlights in 2021

1

We published the Ilmarinen Climate Roadmap that defines our path to the net zero carbon portfolio of 2035. The Roadmap sets the interim targets and identifies means and indicators that will help us navigate the journey ahead. The Roadmap outlines Ilmarinen's approach and provides a detailed description of Ilmarinen's climate action in Finnish real estate investments and direct listed equity investments.

2

Ilmarinen joined IIGCC. IIGCC is an international investor organisation which, through global collaboration in the field, provides its members with support and concrete tools for their journey towards decarbonisation and net zero carbon portfolios.

4

We approached all the Finnish listed companies in our portfolio with a climate letter, stressing the fact that climate action is needed from everyone. In the letter, we encourage companies to set climate targets, measure and report on their emissions and continuously improve their operations, because climate action cannot wait.

3

Ilmarinen became a Paris Aligned Investment Initiative Net Zero Asset Owner. We have committed to developing our investment portfolio so that we support the 1.5 degree scenario in line with the Paris Agreement.

7

We developed the processes of active ownership. In nomination committees, for example, we endeavour to further promote the integration of ESG matters into board work. We also joined a global investor engagement network whose aim is to encourage global companies operating in Myanmar to conduct heightened due diligence with respect to human rights risks and their impacts.

5

We adopted GRESB to gain more sustainability data on international real estate investments.

6

We also engaged in active dialogue with the Finnish listed companies in our portfolio on general meeting issues, especially remuneration reporting. We approached the companies with a letter, stating our expectations for transparent reporting on remuneration.

5. We invest sustainably

In order to be able to pay current and future pensions, we need the income we get from investing pension assets. We invest our customers' shared pension assets profitably, securely and responsibly. We prepare for long-term risks in the investment markets by seeking to achieve a net zero carbon investment portfolio by the end of 2035. Our new Climate Roadmap describes the practical tools and actions needed to reach that goal.

5.1 Excellent year for the investment of pension assets

Performance in the investment markets was strong, especially thanks to the sharp rise in the equity markets.

In 2021, the global economy continued to recover from the depression caused by the Covid-19 pandemic, growing at an estimated rate of 6 per cent. As a consequence of the quick recovery of economies, logistics chains suffered some problems, which were reflected in the rapid rise in freight prices and, at times, in the shortage of components in the manufacturing industry. Despite the brisk economic growth during the year, concerns over slowing growth increased in late 2021.

Inflation markedly accelerated in 2021. Although the inflation is partly due to the lifting of lock-

downs, and it is temporary in nature, concerns over increasing long-term inflationary pressures have increased, putting pressure on central banks to tighten monetary policy. The European and US central banks continued their exceptionally expansionary monetary policies during the year, but many countries already started to tighten theirs.

As a result of the accelerating economic growth and rising inflation, the US Federal Reserve, i.e. the Fed, in particular has started sending clearer messages about the gradual tightening of monetary policy. In the initial phase, tightening monetary policy will probably mean the gradual curtailing of securities purchase programmes, followed by a key interest rate hike. The reversal of the monetary policy cycle is a significant event especially now

that the interest rate level has been exceptionally low for so long.

A low interest rate level and economic growth have enabled an extensive rise in asset values. The underlying sentiment in the capital markets was favourable throughout the year, and the performance of the equity markets was strong in early 2021 in particular. Towards year-end, the markets continued to rise, although they were impacted by the faster-than-expected acceleration of inflation, the spread of the Omicron variant and expectations of slowing economic growth.

Sustainability has also taken a more prominent role in the investment markets. There has been an overall increase in the inflow of assets to ESG products that incorporate the various aspects

of responsibility. The international Climate Change Conference in Glasgow (COP26) addressed climate change themes, emphasising the fact that they are also connected to other responsibility issues. Investors and markets are driven by increasing understanding of systemic level sustainability and climate-related risks. An indication of the more prominent role of responsibility is also the fact that central banks have included it in their agendas. This has led to responsible investment becoming mainstream. The majority of major global investors are taking responsibility into account at least in some way. There is also more data and analytics available to this end, and we also make extensive use of it.

Ilmarinen's investments and solvency (KPI 5)

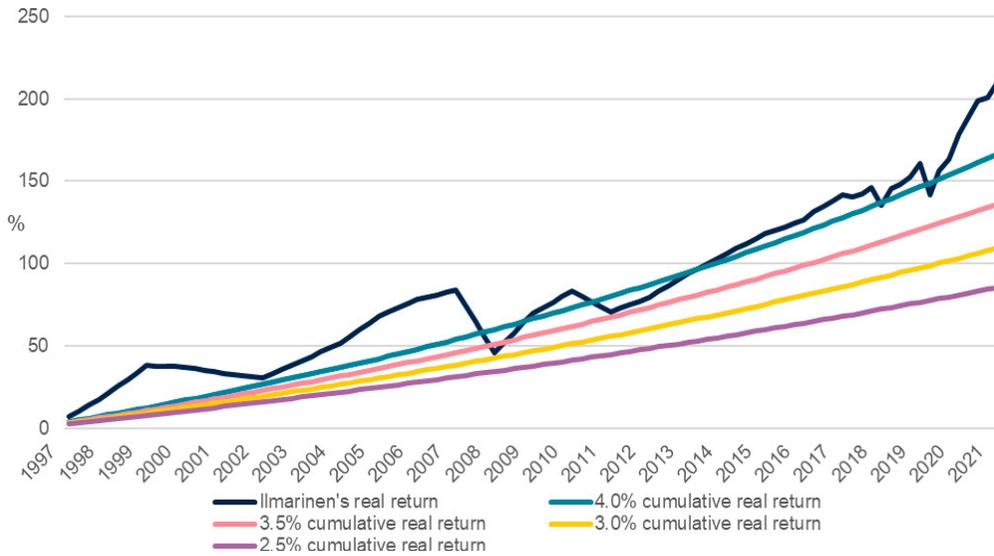
	2021	2020
Pension assets, EUR million	61,656	54,014
Investments at current value, EUR million	60,773	53,284
Net return on investments at current value, EUR million	8,086	3,529
ROCE, %	15.3	7.1
Solvency ratio, i.e. the ratio of pension assets to technical provisions, %	136.7	130.2
Solvency capital, EUR million	16,539	12,542

The time horizon in managing pension assets is always longer than a year. We must maintain a risk level that allows us to meet the requirement of productivity and security at all times. Success in this target can be measured through, for example, solvency and long-term returns on investments.

The need to improve solvency regulation once again surfaced when the Finnish Centre for Pensions published Torben M. Andersen's international evaluation of the Finnish pension system. In an effort to address the financial challenge, the earnings-related pension system has been looking for opportunities to improve return on investments. The significance of investment returns for the financing of pensions will increase in the future when the working-age population declines.

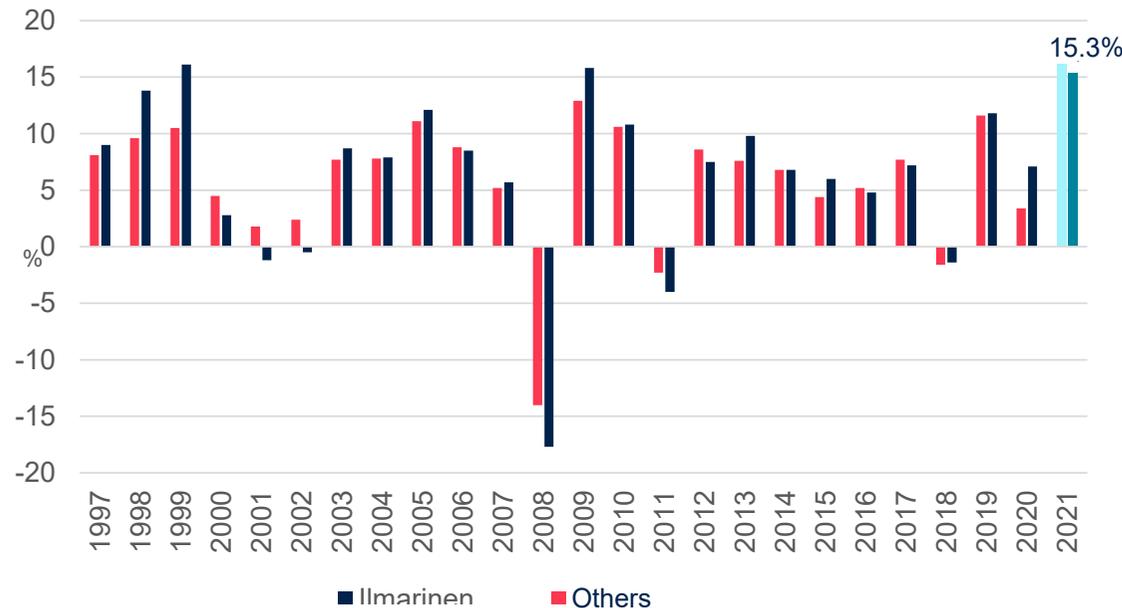
The Ministry of Social Affairs and Health has proposed to bring more flexibility into the funding of pensions by introducing a lower return requirement for pension institutions in a poor investment return environment and, correspondingly, a higher return requirement in a favourable return environment. The sector's working groups are looking into ways to strengthen the risk-bearing capacity of pension institutions by developing the regulations concerning technical provisions and solvency requirements.

Cumulative net return on investment



The long-term return is used by the Finnish Centre for Pensions in forecasting future changes in pension contributions. The Finnish Centre for Pensions has estimated in its calculations that an average of 2.5 per cent real return will be achieved on pension assets until 2028. After that, the real return is assumed to rise to 3.5 per cent.

Net return on investment at current value



The comparison figures of the other companies are partly unaudited.

Long-term nominal return (1997-) 6.2%
 Long-term real return (1997-) 4.6%

5.2 Finnish ownership is important, but so is international diversification

As an individual investor, we hold a key position on the Finnish in-

vestment and financial markets.

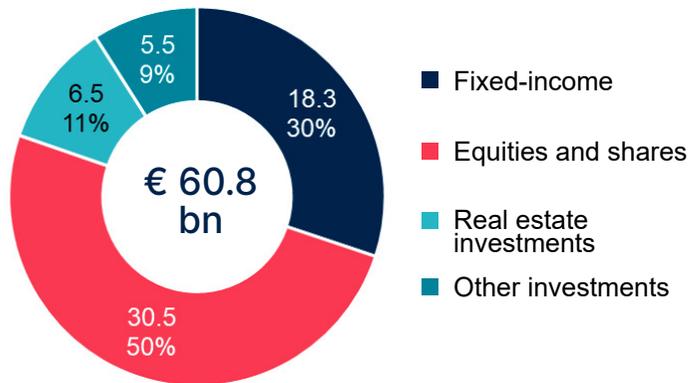
The success of Finnish companies affects the return on the pension assets managed by Ilmarinen, for example, through the performance of listed shares.

Around a quarter of the pension assets we manage are invested in Finland.

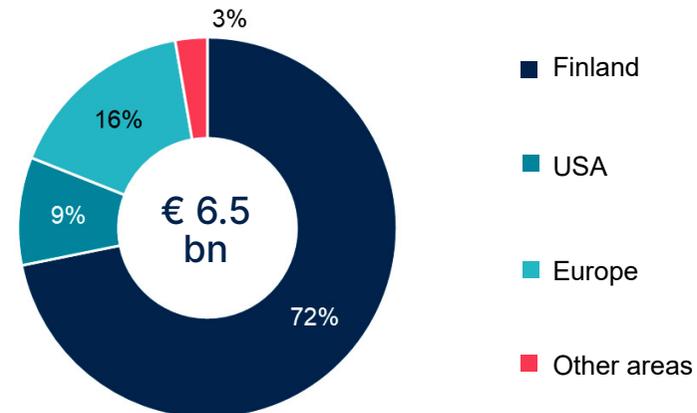
We are also a major property developer in Finland. We build new business premises and resi-

dential buildings and develop our existing properties to meet our customers' needs. (GRI 203-2)

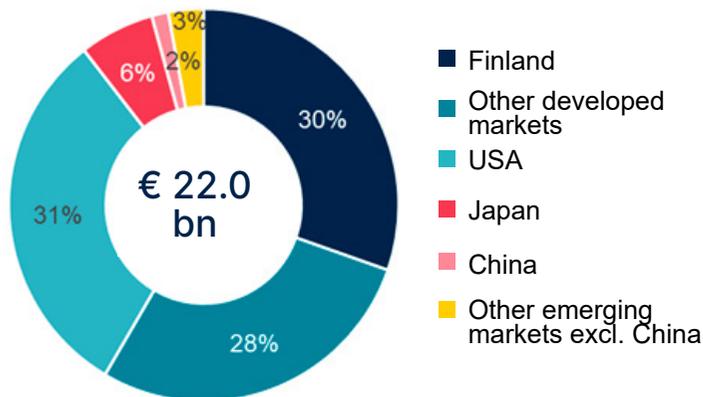
Investment allocation by asset class



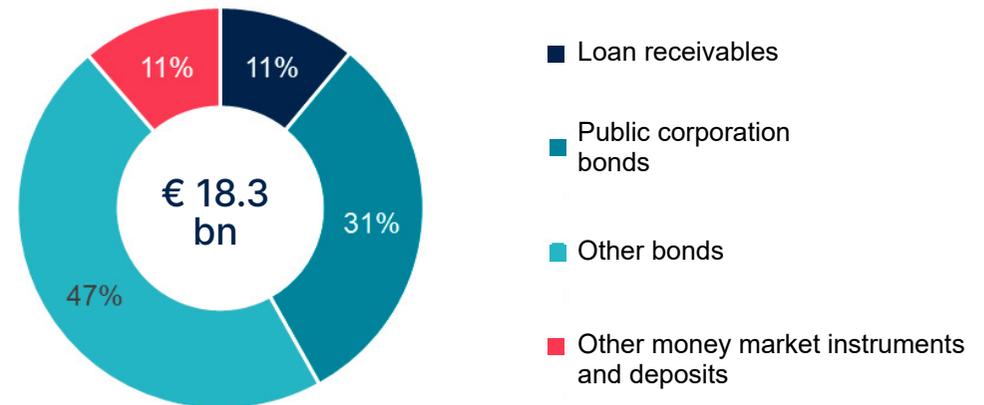
Real estate investments by geographical area



Listed equities and shares by geographical area



Fixed income investments by asset class



5.3 Return on investments requires taking risks – risks must be managed

Ultimately, all our investment decisions are governed by the statutory requirement that pension assets must be invested profitably and securely. This is only possible if we prepare well enough for the risks involved in investment activities and are able to take into account all aspects related to the performance of our investees.

Our Board of Directors annually approves an investment plan that guides the investment activities and monitors its implementation. The plan lays down the targets for risk-taking and investment allocation, i.e. the distribution of investments across various asset classes. In our view, the selection of the strategic allocation is the key determinant of risk and return. We diversify investment risks to optimise returns. It is never possible to fully predict all risks.

The Board of Directors also decides on investment authorisations within which Ilmarinen's investment organisation manages investment operations.

An essential part of investment risk management consists of identifying global and local developments that shape companies' operating environments and affect their opportunities and ability to produce economic added value for their owners. That is why we take factors related to the environment, human rights and good governance into account when making investment decisions.

The aspects of responsible investments are often referred to as environmental, social and governance issues, or ESG issues.

Our view on responsible investment is described in our Responsible Investment Policy. The fact that the Policy is submitted to Ilmarinen's Board of Directors for approval bears testimony to how much weight we give it in our activities. The Policy applies to all Ilmarinen's asset classes from listed investments to non-listed companies, corporate bonds and real estate. The special characteristics and requirements of each asset class are taken into account. The Responsible Investment Policy was most recently updated at the end of 2021, when it was supplemented with



In investing pension assets, it all starts with the fact that we must be able to secure the payment of earned pensions now and in the future. Our task, as specified in legislation, is productive and secure investing. The way we see it, this is best achieved by integrating the various aspects of responsibility into every investment decision we make.

Pension liabilities span over decades. That puts us in a fairly good position to predict the cash flows that will be necessary for the payment of pensions in the years and decades ahead. This enables long-term investment activities.

The past investment years with their ups and downs have shown that the regulation of risk-taking should also guide investors towards thinking more long term. The investment of pension assets is governed through solvency regulations. The current investment environment poses the risk that pension companies, on account of the solvency limits, are forced to invest too procyclically when they should be seeking higher returns through countercyclical risk-taking. In practice, this means that if the equity market falls, they could buy instead of being forced to sell equities at falling prices.

In the context of the current market development, we have endeavoured to minimise investments in government bonds. We have held them to the extent that is required for liquidity reasons or to back other investment instruments. Correspondingly, we have increased the number of listed equities as much as possible.

MIKKO MURSULA,
Chief Investment Officer

the Ilmarinen Climate Roadmap, among other things. Our activities are also governed by the Responsible Investment Guidelines, which are approved by the Responsible Investment Executive Committee. The Responsible Investment Policy was supplemented with practices related to tax matters in early 2021.

Our investment operations are guided by compliance with international norms, active ownership and the integration of responsibility into portfolio management. (GRI 102-16)

5.4 Climate Roadmap towards carbon neutrality

The Climate Roadmap we published in October defines the actions and interim targets on our journey towards carbon neutral pension assets in 2035. We invest pension assets profitably, securely and responsibly. From the sustainability perspective, climate change is a key factor that affects investments globally.

The Climate Roadmap defines targets for the whole portfolio and, more specifically, targets and means for direct listed equity investments and Finnish real estate. The work on more detailed roadmaps started from these asset classes because they make up a

considerable part of the investment portfolio. Furthermore, the data available on these asset classes is sufficient for drawing up roadmaps. We will add new asset classes in the coming years.

The implementation will be a process where the targets are continually updated as new information becomes available. Data forms the basis for setting targets and modelling their impacts on investment activities. The work builds on previous activity: the first Climate Roadmap covered the years 2016–2020.

Collaboration is key for reaching climate goals

We promote collaboration between investors and other stakeholders. Political decisions must support climate action and its target setting. We participate in many investor collaboration platforms, promoting the integration of climate change into investment activities.

We also strive to support the decarbonisation of society. When investing in high-emitting sectors, we endeavour to select the best performers in each sector by considering the carbon risk.

We invest in companies that are implementing the transition to low-carbon technologies, and we strive to increase investments in climate solutions. Supporting the low-carbon transition through engagement is essential, and that is why we engage with companies on climate action both directly and together with other investors.

We seek to decarbonise our portfolio through investment decisions, enhanced due diligence on sectors with high risk from the climate perspective, for example, and coal exclusion. We require high-carbon-risk companies to have sufficient emission reduction targets and data to show on its achieved reductions. We lowered the limit for high-carbon-risk investees from 30 per cent to 20 per cent in 2021 and will lower it gradually to 10 per cent by 2025. We do not invest in companies that are planning new investments in coal-based energy production (2021) or that are extracting thermal coal (2021). In the future, we will also exclude companies engaging in arctic oil drilling or oil sand business (2023). After 2030, we will not invest in companies that generate energy from coal. As we continuously develop our activities, we

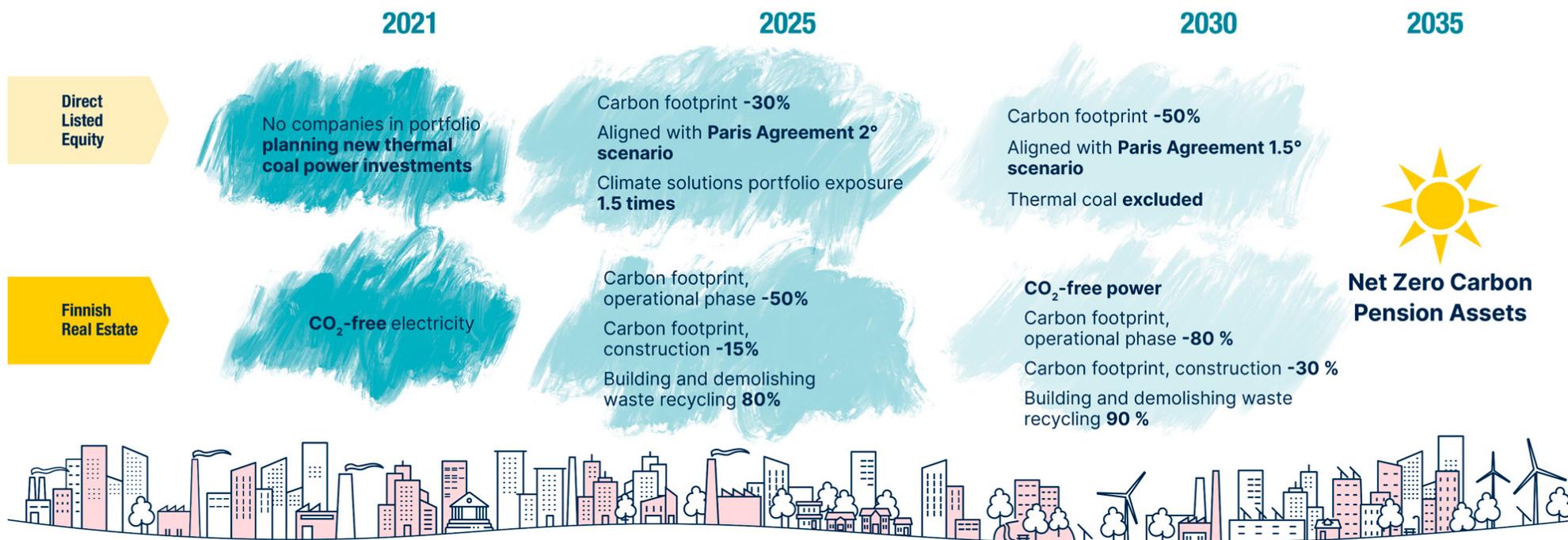
can also adopt faster or stricter measures. For example, in 2021 we decided to adopt more stringent coal risk limits than previously planned in 2021–25.

Our target is to reduce the carbon footprint of our direct equity investments by 30 per cent from the 2020 level by 2025, and by 50 per cent by 2030. We also strive to increase investments in climate solutions to at least one-and-a-half times their level in 2020. Our target is for the portfolio to be aligned with the two-degree warming scenario in 2025 and with the 1.5-degree scenario in 2030. The 2020 benchmark is ambitious, considering that we have carried out measures to reduce the portfolio footprint already previously, and in 2020 new climate exclusions were added to our benchmark index, significantly reducing the index's footprint.

We expect our investees to set climate targets, measure and disclose their emissions, in accordance with the Science Based Targets framework where possible, and to report on their progress.

The roadmap for real estate covers the buildings' whole life cycle from city planning to demoli-

We invest in a sustainable future – Net zero carbon pension assets 2035



CLIMATE ROADMAP 2021–2035				
<p>Principles for Responsible Investment 2006</p> <p>Climate Roadmap 2016–2020</p> <ul style="list-style-type: none"> Investments in sustainable development doubled The carbon footprint of real estate -14% <p>TCFD-reporting 2019</p>	<p>Joining IIGCC's Paris Aligned Investment Net Zero Asset Owner -alignment</p> <p>Two asset specific roadmaps</p>	<p>Advocacy, collaboration, and engagement to support transition</p> <p>Increasing internal knowledge about climate issues, integrating climate targets as part of remuneration</p>	<p>Integrating climate risk to long term return and solvency scenarios</p>	<p>Continuous development of climate roadmaps</p> <p>New asset specific roadmaps</p>



tion. Our target is energy-efficient, healthy and safe buildings that generate renewable energy and whose energy generation is higher than their consumption. In 2021, we only used CO₂-free electric-

ity. By 2030, the district heating we use will also be CO₂ free. We improve energy efficiency and increase the generation of renewable energy where applicable. Our target is to reduce the

in-use carbon footprint of our real estate by 30 per cent by 2025, and by 80 per cent by 2030. By 2025, the construction phase carbon footprint will decrease 15 per cent and by 2030,

30 per cent from the average in 2018–2020. The demolition waste recycling rate will be raised to 80 per cent by 2025 and to 90 per cent by 2030.

5.5 We take the risks caused by climate change on investment activities into account – TCFD reporting

TCFD guides disclosures on climate change impacts on business

TCFD, the Task Force on Climate-Related Financial Disclosures, is an international disclosure framework that helps companies incorporate climate-related financial disclosures into their reporting. In this section, we look at our own operations in light of how they are affected by climate change. There are three themes: governance, strategy and risks. In addition, we

address the metrics and targets set for the operations.

Governance (G)

a) Board supervision in climate-related risks and opportunities

Our Board of Directors approves the Responsible Investment Policy, which also addresses the Environmental Policy and the Climate Policy included therein. In the Climate Policy we have identified high-level risks and opportunities that are related to climate change. Ilmarinen's Board of Directors has approved the carbon neutrality target to be achieved by the end of 2035. We present the results of the climate work

to the Board of Directors at least once a year as part of reporting and approval of policies.

b) Executive management's role in assessing and managing climate-related risks and opportunities

The Responsible Investment Executive Committee is responsible for ensuring that the policies are implemented in our day-to-day work. The Responsible Investment Executive Committee provides guidance and defines how risks and opportunities are integrated into the process of making investment decisions. The Responsible Investment Executive Committee sets interim targets as part of achieving the carbon neutrality target. The Climate Roadmap approved in 2021 defines the interim targets for two asset classes. The aim is to also integrate the targets into Ilmarinen's operations through reward systems, for example. The Responsible Investment Executive Committee includes the President and CEO, the Chief Investment Officer and persons from Ilmarinen's Executive Group, investment unit, legal department and communications.

Strategy (S)

a) Identifying and managing climate-related risks and opportunities with different time perspectives

The most significant and largest-impact climate risks and opportunities are related to our investment assets. Indirect risks mainly arise through our customers' business. We address climate-related themes as part of normal portfolio management in meetings with company management and in connection with engagement processes. We have described the identification and management of climate-related risks and opportunities in more detail in our Climate Roadmap published in October 2021. You can find more information about it in the previous chapter and climate disclosures concerning the portfolio, such as transition risks and physical risks, in this chapter.

b) Impacts of climate-related risks and opportunities on business, strategy and financial planning

Our Board of Directors addresses climate issues at the policy level and approves the long-term climate targets included in the Responsible Investment Policy.



Ilmarinen's climate disclosures on the physical risks resulting from climate change to its investments were used as an example in the updated guidelines published by the Task Force for Climate Related Financial Disclosure (TCFD) framework in October 2021 [2021-Metrics Targets_Guidance-1.pdf \(bbhub.io\)](#)

The Responsible Investment Executive Committee manages and identifies climate risks and opportunities and decides on the climate target's interim targets and measures within the framework of responsible investment. The significance of climate impacts depends on, for example, the industry and geographical location of investees. As part of the carbon neutrality target, we do not invest in companies with carbon-intensive operations that are highly dependent on fossil fuels and do not have sufficient emission reduction targets. We favour investees with lower emissions than their peers and which are in a good position to strengthen the competitive advantage through new business opportunities in a low-carbon economy. Furthermore, we encourage our investees to set science-based targets and to incorporate the objectives of the Paris Agreement into their strategies. We also engage in continuous dialogue with index and data service providers to ensure that the available solutions best support us in reaching our climate goals.

Practical interim targets for achieving carbon neutrality have been set for 2021–2035 for two

asset classes. Continuous learning is key, as climate-related approaches are currently evolving at a fast pace. That is why we continuously review the interim targets in light of our experiences and new information. In 2022, we will develop our Climate Roadmap further to cover more asset classes and instruments.

c) Sustainability of the climate strategy under scenario analysis

Calculation methods need to be developed further before the scenarios can be used as a material part of portfolio management. At the moment, scenario analyses mainly provide useful information for meetings with investee representatives and engagement processes, and for the indicative assessment of developments at the portfolio level. They also help identify investees that require further investigation. We have adopted new data and analytics, and in this report, we disclose, among other things, the transition risk and the physical risk associated with the equity and bond portfolios for listed companies, as well as their alignment with the Paris Agreement's two-degree scenario. The data and calculation methods are constantly

evolving, and as we see it, the data should be considered indicative at this point.

Risk management (R)

a) The company's processes for identifying, assessing and managing climate risks

We use company-level climate-risk data from various sources and we have incorporated that data into internal analysis and made it part of databanks and tools available to portfolio managers. We also conduct portfolio-specific analyses on climate risks. Our portfolio managers have at their disposal various databanks and analyses that also take into account other themes that are important for responsible investment along with climate risks. In real estate investments, for example, we have applied the life-cycle approach in calculating the profitability of projects for a long time. We apply for LEED certification for all new construction projects. The minimum requirement is Gold level. GRESB is used for global real estate investments to obtain climate data also on real estate investments.

The sustainable financial regulation also covers climate topics.

The investment team collaborates with other functions, such as the legal function, in terms of monitoring and implementing the regulation in the area.

b) The company's processes for integrating climate risks as part of overall investment risk management

At this stage, we focus on identifying and assessing climate risks at both the company and portfolio levels. We are currently looking into how climate risks are integrated into the whole organisation's risk management. This requires increased availability of climate-related data and analytics for a growing number of asset classes. Our goal going forward is to use scenario modelling to quantify climate-related risks on, for example, portfolio returns and the solvency ratio, over various time horizons.

Metrics and targets (M)

a) the calculation methods used in assessing climate-related risks and opportunities

We use an external service provider for analysing climate-related risks and opportunities at both the company and portfolio levels.

This includes both backward-looking analysis, such as the carbon footprint, and forward-looking analysis, such as the two-degree scenario modelling and the assessment of transition risks and physical risks. The figures for 2021 are calculated by S&P Trucost, as in the previous year. The calculations are based on sector averages where no public, verified data on emissions is available. Furthermore, we use data produced by various service providers to assess climate-related risks and opportunities. As different service providers apply different methodologies, we also conduct, as required, scenario analyses on our portfolios using other available tools to compare the data at our disposal.

b) Scope 1 and 2, also scope 3 where possible

We disclose the carbon footprint of both our direct and indirect listed equity investments and corporate bond investments (scope 1 and 2 and separately scope 1 + 2 + 3, where scope 3 covers the supply chain), and the carbon footprint of our government bonds. In addition, we report comprehensively on the climate impacts of our real estate investments, for example. It should be recognised that the differences

between the various calculation methods are still large and the same emission sources are included several times over, which is why we take the figures and the resulting conclusions with a grain of salt.

c) Setting and monitoring of targets related to the management of climate risks and opportunities

Our long-term goal is to achieve a carbon neutral investment portfolio by the end of 2035. As part of our Climate Roadmap, we have published interim targets for two

main asset classes. As part of our corporate responsibility reporting, we monitor the realisation of the targets on an annual basis. The targets are regularly reviewed in light of our experiences and new data. We will continue working on and expanding our Climate Roadmap in 2022.

Investment footprint (KPI 6)

	2021	2020
High carbon risk level max. 30% of the operations of the investees. Target 10% by 2025.	20%	30%
Calculated effect of energy savings measures on the energy consumption of properties, MWh/yr	1,616	2,080

TETS and VAETS refer to the Ministry of Economic Affairs and Employment's energy efficiency agreements that we have committed to. The target was to cut consumption by 7 per cent by the end of 2021 and by 10.5 per cent by the end of 2025 compared to the 2015 baseline. With new measures becoming necessary every year, this work must be continued ambitiously and resolutely in order to achieve the target set for 2025.

Companies that have reported on greenhouse gas emissions

	2021	2020
Proportion of investments with reported greenhouse gas emissions, listed equities	86%	84%
- share of comprehensive reporting, listed equities	99%	99%
Proportion of investments with reported greenhouse gas emissions, corporate bonds	67%	66%
- share of comprehensive reporting, corporate bonds	99%	99%

5.6 Carbon footprint of invested pension assets

Instead of a parent index, we use ESG indices, which include the companies with the highest environmental, social and governance rated performance in their respective sectors and geographical areas, as the benchmark indices for international direct listed equity investments. The weighted average carbon intensity of these

indices is significantly lower than that of parent indices.

The direct listed equity portfolio's weighted average carbon intensity (WACI) declined compared to the previous year and is very close to the weighted average carbon intensity of the benchmark index. The carbon footprint in relation to invested euros was below the benchmark index, falling slightly from the previous year. The direct listed equity

portfolio's absolute scope 1 and 2 emissions grew, however, less than the portfolio's size did compared to the previous year. That means that the portfolio's carbon footprint efficiency improved.

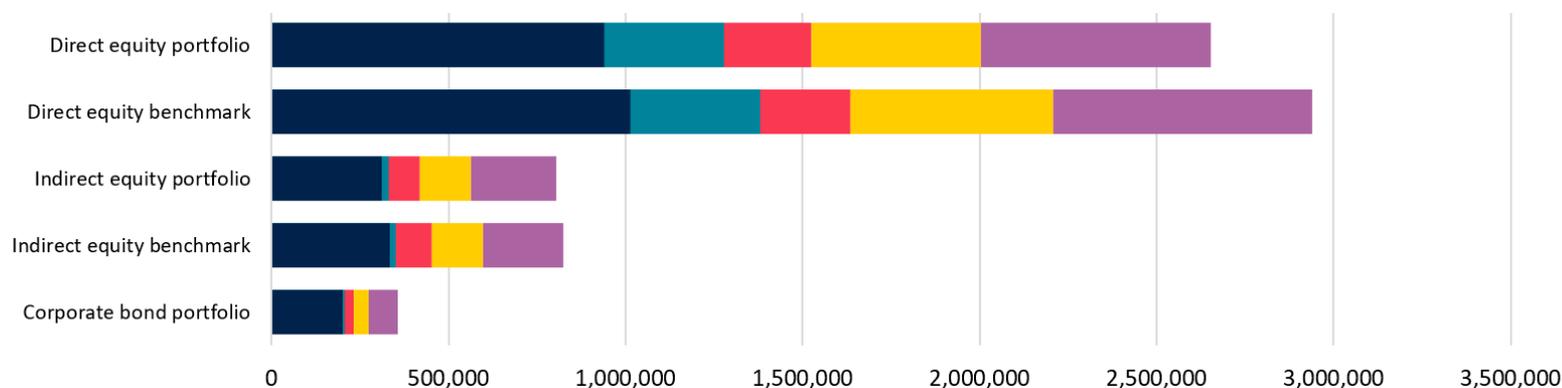
In relative terms, the materials sector and electricity generation made up the largest proportion of the direct listed equity portfolio's footprint.

This year we reported, for the first time, the weighted average

carbon intensity of indirect listed equity investments, which was lower than the comparison index. The greatest weight in the indirect equity portfolio is in ESG ETF investments.

The weighted average carbon intensity (WACI) of the direct corporate bond portfolio was very close to the previous year's level. The carbon footprint in relation to a million euros invested decreased from the previous

Total Tonnes of CO2e Apportioned by Scope



	Corporate bond portfolio	Indirect equity benchmark	Indirect equity portfolio	Direct equity benchmark	Direct equity portfolio
■ Direct CO2e (Scope 1)	199,635	334,014	311,853	1,014,192	939,724
■ Direct CO2e (Other)	6,759	17,501	20,199	364,940	338,379
■ Purchased Electricity CO2e (Scope 2)	24,886	102,704	86,196	255,101	245,560
■ Non-Electricity First Tier Supply Chain CO2e (Scope 3)	44,069	144,174	144,965	573,074	481,665
■ Other Supply Chain CO2e (Scope 3)	80,346	226,252	241,487	731,801	648,956

Greenhouse gas emissions of Ilmarinen's investments (GRI 305-4)

	2021	2020
Direct listed equity portfolio		
Weighted carbon intensity (tCO ₂ e/MEUR sales, WACI, S1+S2)	154	216
Weighted carbon intensity in relation to aggregate benchmark (per EUR 1 mill. net sales)	1%	2%
Weighted average carbon intensity compared to the parent index (per EUR 1 million of net sales)	-11%	-
Weighted carbon intensity (tCO ₂ e/MEUR sales, WACI, D+FTI)	273	334
Weighted carbon intensity in relation to aggregate benchmark (per EUR 1 mill. net sales)	-3%	16%
Carbon intensity (tCO ₂ e/MEUR invested, S1+S2)	83	86
Carbon intensity in relation to aggregate benchmark (per EUR 1 mill. invested)	-7%	6%
Absolute emissions (tCO ₂ e, scope 1+2)	1,185,284	975,751
Absolute emissions (tCO ₂ e, scope 1+2+3 upstream)	2,315,905	2,069,803
Indirect listed equity portfolio		
Weighted average carbon intensity (tCO ₂ e/EUR 1 million of net sales, WACI, S1+S2)	134	-
Direct listed corporate bond portfolio		
Weighted carbon intensity (tCO ₂ e/MEUR sales, WACI, S1+S2)	270	269
Weighted carbon intensity (tCO ₂ e/MEUR sales, WACI, D+FTI)	312	311
Carbon intensity (tCO ₂ e/MEUR invested, D+FTI)	124	340
Absolute emissions (tCO ₂ e, scope 1+2)	224,521	616,934
Absolute emissions (tCO ₂ e, scope 1+2+3 upstream)	348,936	889,873
Direct government bond portfolio		
Weighted carbon intensity (tCO ₂ e/GDP, WACI, D+FTI)	1,028	1,092

The calculation includes the scopes 1 and 2. (GRI 103-1) For the carbon footprint, we have reported the amount of carbon dioxide equivalents, i.e. the amount of various greenhouse gas emissions of all of our investee companies, commensurated into carbon dioxide tonnes in relation to the companies' net sales, weighted by the share of the investee in the investment portfolio. This is the reporting method recommended by the TCFD reporting framework and our primary reporting method. We also report the amount of greenhouse gas emissions in relation to invested euros. In addition, we report the absolute greenhouse gas emissions of the investees in tonnes of carbon dioxide equivalents, i.e. financed emissions. This calculation method was added to the TCFD recommendations in 2021. We also report the direct and first tier supplier emissions in accordance with the methodology applied by the new service provider, which includes, in addition to purchased energy, also greenhouse emissions outside of the first tier supply chain and the Kyoto Protocol, which have global warming potential. These include CCl₄, D₂H₃Cl₃, CBrF₃ and CO₂ from biomass. The portfolio data reflects the situation as per 31 December 2021, with the exception of the composition of indirect active equity portfolios, the data for which reflects the situation as per 30 November 2021.

year. The absolute emissions of the direct corporate bond portfolio decreased substantially compared to the previous year. However, this can largely be explained by a change in the methodology. Due to the method of calculation, the ownership share of one investee was significantly larger in 2020 than in 2021, which means that the related emissions in the portfolio were also larger.

In 2021, the weighted average carbon intensity of the government bond portfolio was slightly lower compared to the previous year. This is attributable to the growth of the portfolio weights in areas where emission intensities have fallen from the previous year.

The results of the calculation of an investment portfolio's carbon footprint are affected by many factors, such as the scope of the calculation in terms of direct and indirect emissions, the greenhouse gases that are taken into account, and the investments that are included in the calculation.

Paris Agreement and the two-degree scenario

Our goal is to achieve a carbon-neutral investment portfolio by the end of 2035. One of the

ways we use to assess the development of the portfolio is the two-degree scenario model in line with the Paris Agreement. What should be recognised in connection with the analysis is that the data is purely indicative, as the calculation models are constantly evolving and the coverage of the calculation in the listed equity portfolio, for example, is around 70 per cent and in the corporate bond portfolio only some 45 per cent. The low coverage of the bond portfolio can be explained by the proportion of non-listed companies in the portfolio.

The coverage is thus lower than in the calculation of many other disclosures. Due to the lower coverage, the reliability of the data is weaker. However, we expect the quality of the data to improve in the next few years, which is why we want to monitor both the development of the calculation and the indicative results already at this point.

Our goal in the Climate Roadmap for direct listed equities is to achieve a portfolio aligned with the two-degree scenario by the end of 2025. In 2021, the direct listed equity portfolio exceeded the two-degree scenario by 15 per cent, up around a quarter

A number of different methods can be used to calculate the carbon footprint

There are many methods available for calculating the carbon footprint, three of which are described below. Each of them produce different results. That is why it is essential to know what method was used when interpreting the results.

Weighted average carbon intensity (WACI)

This widely used method is sensitive to changes in net sales. Even if emissions grew, the investee's carbon intensity may decrease if its net sales grow more in relative terms. However, the WACI methodology is widely used, because it enables the disclosure of the various asset classes' carbon footprint. In addition, it makes it possible to compare the carbon footprint data of portfolios of different sizes. The intensity based on net sales also enables simplified comparisons between sectors.

Absolute emissions of an investment portfolio

This method, also called financed emissions, in contrast, gives a better picture of real emissions. However, it also has its limitations. It does not enable comparison of portfolios of different sizes and is sensitive to changes in market values, especially when the method is used to measure the emissions of corporate bond investments. The method consists of multiplying the investee's absolute emissions with the investor's ownership share and adding these together.

Carbon intensity in relation to the value of the investment

In this method, the emissions calculated according to the ownership share are divided by the value of the investment. This figure also enables comparisons of portfolios of different sizes but is sensitive to changes in the market value. This figure has been included in our reporting for several years.



Sustainability aspects incorporated in the fixed income index

In equity investments, we have long been using an index integrating environmental, social and governance (ESG) criteria as the benchmark index, and in 2021, we took steps in this direction also for fixed income investments. We looked into the possibility of introducing an ESG index also for the fixed income portfolio. As of the beginning of 2022, we switched over to ESG indices in emerging market fixed income investments.

The offering of responsible investment products for fixed income investments is rapidly expanding. In 2021, we participated as a seed investor in a new low-carbon corporate bond fund whose strategy integrates ESG criteria, and more specifically decarbonisation and efficient water use. The fund's goal is to achieve a significantly lower carbon footprint than the benchmark index. Investments that are harmful to the climate have been excluded from the fund.

In 2022, we will develop our approaches relating to climate in particular, and continue monitoring the development of new products and indices that integrate sustainability and responsibility criteria.

compared to 2020, when the portfolio exceeded the scenario by around 20 per cent. In 2021, the bond portfolio exceeded the two-degree scenario by 15 per cent, which is a significant improvement compared to 2020, when the portfolio exceeded the scenario by 22 per cent.

Although the performance for 2021 was good, we also expect low-carbon technologies to improve step by step and that the transition will not necessarily be linear in all years. Against this backdrop, although we would very much like to move towards the two-degree scenario in a linear manner, we are more likely to have a more winding road ahead of us. In any case, our next goal is to develop means that will enable us to narrow the gap to the two-degree carbon budget. Our goal is to be below the two-degree scenario at the latest in 2025, after which we will start working towards alignment with the 1.5 scenario at the latest by 2030. At the same time, it is also important to improve the coverage of the calculation.

Fossil-free fuels and renewable energy

In 2021, in line with our Climate Roadmap, we excluded from our direct listed equity portfolio investments in companies that make new investments in coal-based energy production or thermal coal mining. Thermal coal mining accounted for clearly less than 0.1% of the portfolio-level net sales of the direct listed equity investments, which is the target specified in the Climate Roadmap.

In 2021, less than 2% of the cumulative net sales of the direct listed equity portfolio's investments came from the extraction or energy use of fossil fuels. The majority of this was made up by natural gas, as in the previous year. The proportion of fossil fuels in our portfolio was lower compared to the ESG index. The proportion of net sales from renewable energy grew relative to the previous year. The proportion of net sales from fossil fuels in the corporate bond portfolio was clearly below 1%, slightly up from the previous year. The proportion of net sales from renewable energy also grew relative to the

previous year.

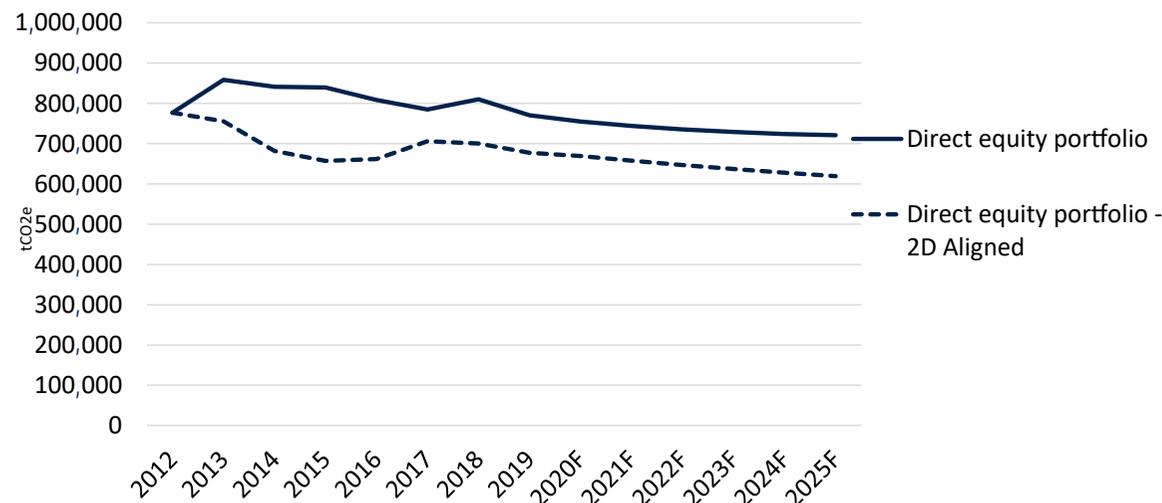
The target of the Ilmarinen Climate Roadmap is for at least 40% of the portfolio's energy production to be renewable energy by 2030. In 2021, the proportion of hydropower, solar and wind power and biomass of the portfolio's energy production (GWh) was close to the target. The proportion weakened somewhat compared to the previous year, however.

Ilmarinen's target for direct equity investments for 2030 is to have no coal-based energy production in the portfolio. For calculation reasons, coal-based energy production accounted for a larger proportion of power production in 2021 than in 2020. We have identified our portfolio's most significant companies using coal in energy production and we are engaging in active dialogue based on the targets of our Climate Roadmap.

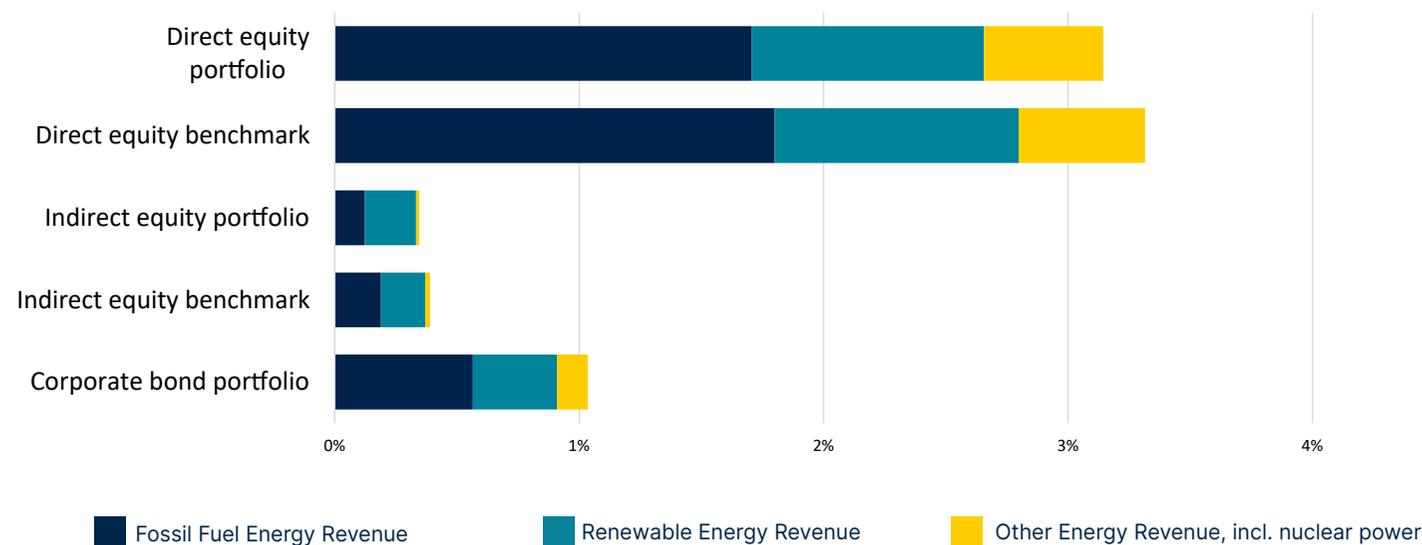
Carbon pricing and transition risk

Investors play a major role in the transition to a sustainable economy, but the involvement of all social actors is paramount. Carbon pricing is a key instru-

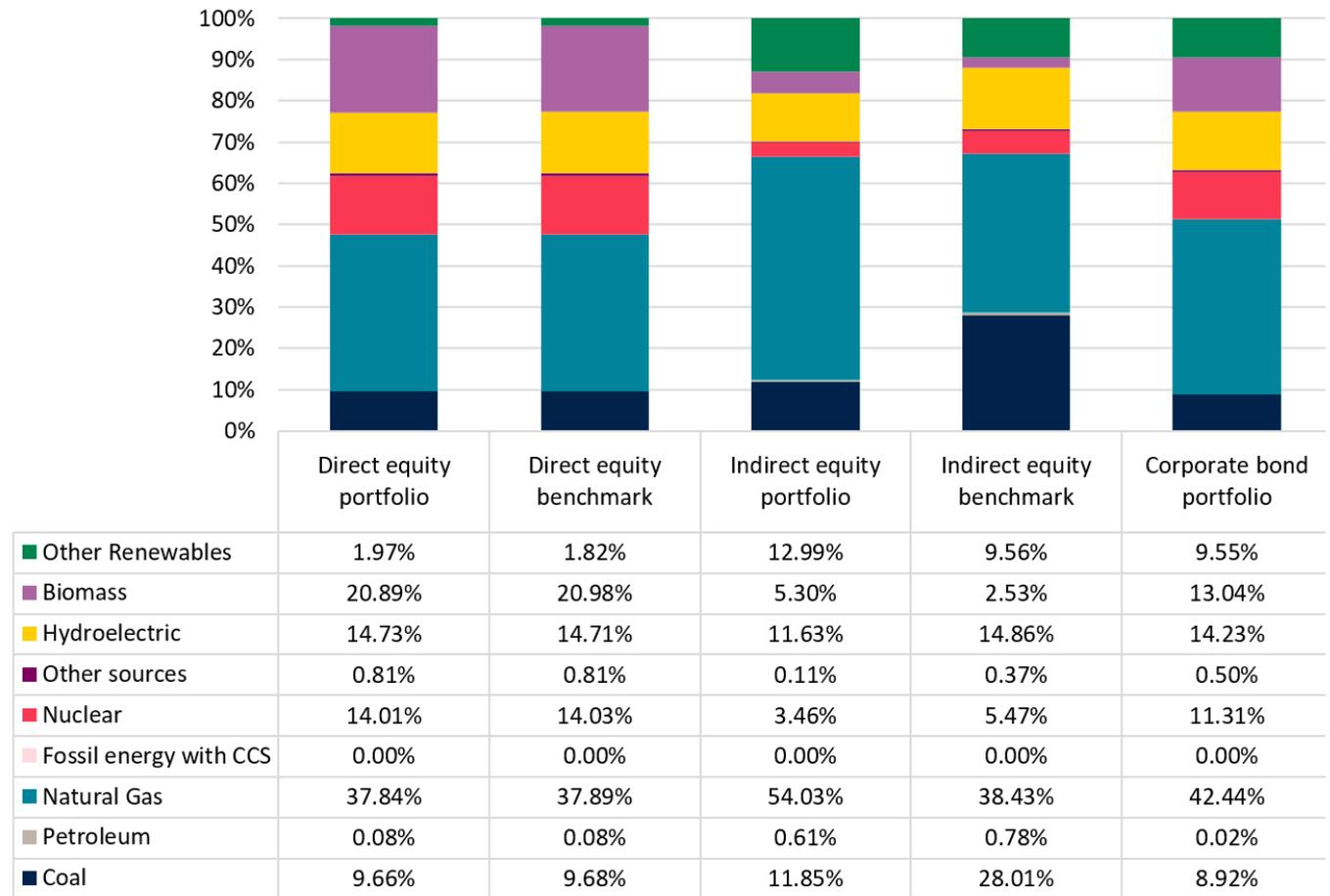
Emissions (tCO2e) Trajectory vs. 2 Degree Aligned Levels, 2012-2025



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Energy production, relative to the two-degree scenario, % of portfolio's GWh



ment in supporting a sustainable transition. Governments' climate action plays a central role especially when it comes to carbon pricing mechanisms. A controlled transition is in the best interests of all participants, and timely and sufficient carbon pricing is one way to achieve this. The more the pricing is postponed, the larger

and more unpredictable the one-time impacts will be, if changes are made too late and too quickly. Today, the pricing of greenhouse gas emissions only covers less than a quarter of the emissions. Since the pricing of greenhouse gas emissions is still lacking, investors can use scenario modelling to examine the possible

impacts of the evolving pricing on their investments. The assessment takes into account companies' emissions and the potential coal pricing developments in the future.

Sector-wise, the greatest risk in the portfolio is related to electricity generation and the materials sector. On the part of

the corporate bond portfolio, the greatest risk related to non-priced emissions lies in the industrials and materials sectors.

Physical risk

The physical risks affecting an investment portfolio can be, for example, sudden occurrences or

phenomena that develop gradually over time. Examples of physical risk are storms, flooding and local climate-related changes in precipitation and temperature, for example. Physical risks affect companies in a number of ways, such as interruptions of production and disruptions in the supply chain. The physical risk analytics are still new, and at this stage, we assess the risk as indicative data on the portfolio level.

Among our equity portfolio's modelled potential physical risks, water stress was the single largest source of risk. Fires, heat waves and floods were also a significant

source of risk. Data concerning physical risks is constantly improving. The water stress risk was heightened compared to the previous year. This is most probably to do with the significant improvement in the service provider's data coverage and evaluation methods compared to the previous year, particularly when it comes to the water stress. The same sources of physical risk were the most significant also for the corporate bond portfolio. Overall, the exposure of both portfolios to a loss caused by physical risks is at the lower end of the assessment scale.

Passive equity investments in responsible products

We believe that we can reduce the risk of passive investments in the long term by tying the investments to responsible equity indices.

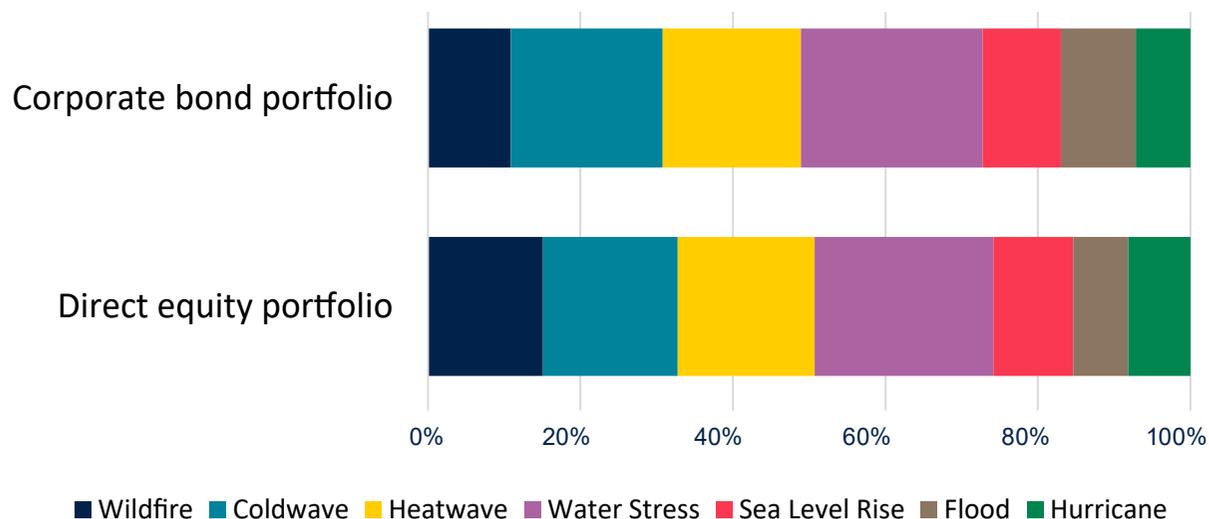
In 2019 and 2020, we exchanged our passive products invested in broad indices for responsible ESG products in Europe, the USA, Japan and the emerging markets. In 2021, we divested our emerging market investments and increased the proportion of Europe and Japan in the passive portfolio as part of

a change in the country allocation of equity investments.

At the end of 2021, more than 95 per cent of Ilmarinen's passive equity investments worth EUR 5.9 billion were in ETFs or index funds tracking the responsible ESG Leaders equity indices provided by MSCI. The indices include the companies with the best sustainability rating in each sector and area that represent 50 per cent of the market value of the corresponding parent index. Companies that manufacture, for example, tobacco products and certain controversial weapons, and companies that have committed serious breaches of international norms are also excluded from the indices.

The MSCI's ESG Leaders index uses broad sustainability indicators as the basis for sustainability ratings. Climate took a more important role in the rating in late 2020. In 2021, we made active efforts towards ensuring that more emphasis will be placed on climate also in the future.

Proportional shares of physical risk



5.7 More transparency and reporting – also in biodiversity

The availability of climate change data and analytics is constantly improving. Previously, carbon footprint reporting covered direct listed equity investments, corporate bonds, government bonds and real estate. This year, carbon footprint reporting also includes indirect equity investments as a new disclosure. Going forward, we will look for opportunities to increase the coverage of climate-related data and analytics and, as a result, the coverage of reporting, also when it comes to non-listed investments, for example.

Increasing data and analytics also enable a new kind of company and portfolio level analysis. However, it is important to bear in mind that, at this stage, the new kind of climate data is still subject to a lot of potential uncertainties and differences in the way the data is produced by the service providers. These include, for example, the coverage of the data, precision and the assumptions built into the models. As the amount of data increases, it comes down to identifying the

most relevant data in light of the investor's targets. In this context, it is important to understand the background of the data and the assumptions behind the models. It will be increasingly important for the users of the new data to look into the data and how it was collected and created, and to make strategic choices as to the data being used – for example as to what data will be incorporated in decision-making.

Forward-looking analysis covers both the company and portfolio levels. At this stage, we use the data as an indicative basis when holding discussions with companies at the company level and when assessing developments at the portfolio level. We will keep track of the development of climate-related data and analytics and we will also look into how the data could be integrated even more closely into the ESG analysis of individual companies. As we want to report openly and in a comprehensive manner, our reporting also includes disclosures about the forward-looking portfolio-level analysis, transition risks and physical risks, although the methodologies are still developing.

Companies' climate reporting

is important from the perspective of increasing availability of data and the quality of data. In 2021, a total of 86 per cent of the direct equity portfolio's companies disclosed their greenhouse gas emissions. In the corporate bond portfolio, that proportion was 67 per cent. The proportion of reporting entities grew slightly in both portfolios.

Going forward, we hope that the availability of data and analytics continues to grow, not only

in terms of the climate, but also in terms of biodiversity and natural capital. Today's ESG ratings incorporate biodiversity. However, we expect that the data related to the subject will increase in the next few years. Climate-related TCFD reporting, for example, has improved in leaps and bounds in a short amount of time. We monitor, for example, the TNFD's (Taskforce on Nature-Related Financial Disclosures) initiatives and various initiatives related to

UNICEF's Declaration of the Rights of the Child

We collaborate with various instances that promote responsibility. UNICEF, for example, published guidance for investors on children's rights in 2021. The guidance offers information on integrating children's rights into the ESG analysis performed on investees. Ilmarinen was one of the many industry players to comment on the guidance. Human rights and children's rights are essential sustainability themes for Ilmarinen. We will continue developing our operations around these themes in 2022 and beyond, and collaborating with the best actors in the industry. Link to the guidance: [Tool for Investors on Integrating Children's Rights Into ESG Assessment.pdf \(unicef.org\)](https://www.unicef.org/infocentre/files/2021/11/Tool-for-Investors-on-Integrating-Childrens-Rights-Into-ESG-Assessment.pdf)

Investors are increasingly zeroing in on biodiversity

Alongside climate change, securing biodiversity is becoming an increasingly strong priority for investors. That is good news, because biodiversity loss has numerous irreversible consequences. Unfortunately, biodiversity has decreased at an alarming rate in recent years, and this is something that must be addressed collectively, because it is a prerequisite for life.

In February 2021, the UK Ministry of Finance published a report on the economics of biodiversity. The key message of the report is that biodiversity and the services Nature supplies keep the economy's wheels turning. Natural capital should be accounted for in all decision-making the same way as other main asset classes, such as produced capital and human capital. According to the report, long-term economic growth will be limited to the Earth's ecological carrying capacity, and already now our production patterns and lifestyle require around 1.6 Earths. Therefore, we must transition towards economic and production systems that make use of the ecosystem services provided by natural capital. In investor terms, we should

live on the interest and not spend the capital.

The pressure created by consumers, legislators and markets is increasingly guiding the economy towards a more sustainable foundation. Investors, such as Ilmarinen, are instrumental in making this change happen. We still hope that the availability of data and analytics continues to grow, not only in terms of the climate, but also in terms of biodiversity and natural capital. Although today's ESG ratings incorporate biodiversity, we expect data on the topic to increase in the coming years. It seems that things are headed in the right direction, and climate-related TCFD reporting, for example, has improved in leaps and bounds in a short amount of time. We monitor the TNFD's (Taskforce on Nature-Related Financial Disclosures) initiatives and various initiatives related to accounting standards, such as the action programme published by IFRS Foundation in Glasgow on 3 November 2021. The next two years will see, for example, a collective effort involving various actors to develop TNFD into a biodiversity reporting framework

for companies and investors. A shared framework would be important for investors to use their influence and urge companies to also report on biodiversity. Increased uniform data will, in turn, improve investors' possibilities to account for biodiversity issues more comprehensively than before.

The year 2022 will be marked by high expectations and importance, with the launching, in October, of the first phase of the UN Conference of the Parties to the Convention on Biological Diversity (COP-15), which aims to set concrete targets for the coming years. Just like climate change, biodiversity issues are here to stay on investors' and companies' agendas. They should be addressed proactively to be able to build a long-term competitive advantage.

The coming years will also see action from investors. In addition to various initiatives, such as TNFD, which will increase the available data, investors can also make commitments, enter into partnerships to promote the topic and engage with investees. One example of engagement is the water engagement process within NEC, where Ilmarinen is involved.

accounting standards, such as the International Sustainability Standards Board.

NEC and engagement in water management

The measurability of biodiversity data is still in its infancy, and that is why other responsible investment tools, such as engagement, may be a viable alternative for taking biodiversity into account in investments.

One of the engagement themes in our Nordic Engagement Cooperation (NEC) is related to the sustainable use of water. The Localised Water Management (LWM) engagement theme has a geographical focus. Although water-related risks are global, the impacts vary a lot depending on the location. The companies that are engaged with are dependent on the water of the Tiete River in Brazil or the Vaal River in South Africa. NEC has chosen three out of twenty investee companies whose progress we will monitor more closely and participate in engagement discussions with the companies.

The engagement process was initiated in 2020 with an aim to

improve the companies' awareness of water-related risks and the local importance and benefits of water management, offer opportunities to collaborate in the area and encourage companies to take concrete measures and increase disclosures. The engagement theme has several KPIs, all of which developed favourably in 2021.

In 2021, the pandemic continued to affect the engagement processes. Stakeholder participation, for example, continued in virtual format. The focus of engagement calls last year was to encourage companies to better disclose information relating to the availability of water and public water management and to challenge companies to assess whether their current reporting is sufficient for investors to understand water-related risks.

More information on the LWM engagement theme and other engagement processes conducted within NEC can be found in the NEC's annual report to be published later in the course of spring.

5.8 Taxonomy gives a better picture of investments aligned with climate targets

What is taxonomy?

The taxonomy, a classification system for sustainable economic activities, is part of the EU's sustainable finance regulation. The taxonomy has an important goal: it strives to increase the market participants' common understanding of what constitutes sustainable economic activity. If the taxonomy reaches its goal, it will help market participants use a more uniform approach to identify and compare sustainable investments. The taxonomy classification is a new concept and parts of it are still incomplete. It is not entirely clear how each market participant will apply the classification in their operations, and how the taxonomy will impact the activities of different investors in the coming years. As any major reform carried out at a fast pace, the taxonomy also involves many kinds of unclear areas and pain points. That said, it is worth all the efforts, because if the

outcome is good, it will benefit everyone. It should also be noted that responsible investors have already accounted for responsibility and sustainability issues over the past decades. The taxonomy will thus not suddenly change the way all market participants operate, but in the longer term, it can create a more uniform understanding of sustainability.

The EU's Taxonomy Regulation entered into force in 2020, and the companies that are obligated to report according to it will disclose the taxonomy-eligibility of their operations for the first time in 2022. In the future, companies will also disclose the taxonomy alignment of their operations.

What does Ilmarinen disclose?

In the classification under Article 8 of the Taxonomy Regulation ((EU) 2020/852), earnings-related pension insurance providers belong to the category 'non-financial undertakings'. That means that only real estate business shall be reported on in the statutory taxonomy-eligible section. Ilmarinen discloses both mandatory and voluntary data.

Statutory disclosures

Based on the Financial Supervisory Authority's KPIs, the definition of real estate business includes direct real estate investments such that direct investments only include directly owned real estate belonging to the Group. The KPIs are calculated based on the consolidated financial statements prepared in accordance with Finnish legislation.

Taxonomy-eligible turnover under the EU's Taxonomy Regulation accounted for 2 per cent of Ilmarinen Group's turnover. Taxonomy-eligible capital expenditure was 250 per cent relative to the Group's capital expenditure, and taxonomy-eligible expenses were 3 per cent relative to the Group's expenses.

The taxonomy-eligible turnover is calculated as follows: the Group's turnover from real estate business (real estate income minus real estate expenses from the Group's investment net return breakdown) divided by the Group's turnover (the Group's net return on investment, premiums written and other income).

The taxonomy-eligible CapEx is calculated as follows: the Group's

real estate business's net capitalisations (acquisitions and realisations) divided by the Group's total net capitalisations (acquisitions and realisations).

The taxonomy-eligible OpEx is calculated as follows: real estate business costs (real estate investment costs from the Group's investment net return breakdown) divided by operating expenses and investment expenses (real estate investment and other investment costs from the Group's investment net return breakdown).

Voluntary disclosures on investment activities

In our view, taxonomy disclosures on investment activities are material information in terms of the operations of a pension company. That is why Ilmarinen also voluntarily discloses investment-related information on the taxonomy-eligibility under the EU's Taxonomy Regulation. In 2021, the proportion of taxonomy-eligible activities of Ilmarinen's investment portfolio^[1] was 24 per cent for climate change mitigation and 25 per cent for climate change adaptation. More detailed information:

- the proportion of taxonomy-eligible activities of the direct equity portfolio for listed companies was 29 per cent for climate change mitigation and 31 per cent for climate change adaptation.
- the proportion of taxonomy-eligible activities of the indirect equity portfolio for listed companies was 10 per cent for climate change mitigation and 10 per cent for climate change adaptation.
- the proportion of taxonomy-eligible activities of the direct corporate bond portfolio was 19 per cent for climate change mitigation and 21 per cent for climate change adaptation.
- the proportion of taxonomy-eligible activities of the indirect corporate bond portfolio was 23 per cent for climate change mitigation and 21 per cent for climate change adaptation.

As companies will only disclose their taxonomy data for the first time in 2022, the taxonomy-eli-

bility of our investment portfolio is calculated using data provided by an external service provider such that Ilmarinen's taxonomy reporting is based on the taxonomy classification provided by Factset. It determines companies' taxonomy-eligibility based on turnover, sector and activity. At the moment, data is not available on all asset classes through third-party service providers. The calculation thus only covers the asset classes for which data was available. These included listed equities, direct corporate bonds, indirect listed equities and indirect corporate bonds.

5.9 Sustainability analysis in a key role

Sustainability analysis is part of the process we use to select our investees. When selecting investees, our portfolio managers can view listed companies' sustainability ratings in our databases along with financial information. The basis for the ratings is a combination of sustainability

[1] Calculated for the following portfolios: direct listed equities and shares, direct corporate bonds, indirect listed equities and shares, indirect corporate bonds

rating standards created by third parties, which we adapt using analysis and conclusions from internal and external sources.

Since 2019, we have used an internal sustainability tool, which functions as a databank for portfolio managers. In 2021, we developed our tools further to be able to integrate more and more ESG data for use by portfolio managers.

The analysis on which the ESG ratings are based extends to the risks and opportunities associated with corporate responsibility, as well as materialised corporate responsibility risks and norm violations. Investing in companies with lower ratings always requires a more detailed due diligence process.

We can invest in companies for which a norm violation has been established only during an ongoing engagement process, if the company has failed to take corrective action. If we end the engagement process without finding a solution, we will sell our holding if possible. If the company committing norm violations subsequently rectifies its activities, investing in it can be reconsidered through the normal

investment process. (GRI 103-2)

ESG benchmark indices, which place an emphasis on sustainability, are used for listed equity investments. The ESG index is based on ratings created by MSCI. The index includes the companies with the best sustainability rating in each sector and area that represent 50 per cent of the market value of the corresponding parent index. Companies that manufacture, for example, tobacco products and certain controversial weapons, and companies that have committed serious breaches of international norms are also excluded from the indices. In 2020, companies that produce substantial emissions, such as coal-dependent companies, were completely excluded from the benchmark index.

The use of ESG benchmark indices creates an even closer link between responsibility and investment activities. The ESG benchmark indices do not cover Ilmarinen's listed equity portfolio in its entirety. The market value or net sales of many shares listed on the Finnish stock exchange, for example, are too small for them to be included in the indices. Consequently, non-inclusion in

the index does not automatically mean that the company is irresponsible; therefore, it is important to use a variety of tools to obtain an overall assessment of a company's sustainability.

Ilmarinen's Board of Directors decides on the Ownership Policy, which is included in the Responsible Investment Policy. The Responsible Investment Executive Committee decides on key practical measures relating to ownership in accordance with the Ownership Policy. In terms of General Meetings, the responsible investment team prepares voting instructions and positions on the largest owners' joint statements and proposals prior to General Meetings. Significant operational-level aspects related to active ownership are discussed in the Responsible Investment Executive Committee if required.

The Investment unit is responsible for operational sustainability analyses and their integration into the selection process as well as the sustainability monitoring of our investments. The responsible investment team includes the Head of Responsible Investments and two responsible investment specialists. (GRI 103-2)

5.10 Responsible investment reporting

We publish quarterly reports on the return on Ilmarinen's investments and solvency. This allows our current or future customers and other stakeholders to monitor how we have managed pension assets.

In addition, we annually report information related to the impacts of our investments in our Sustainability Report. We draw up this report using the international GRI framework and the international TCFD reporting recommendations. Ilmarinen discloses, for the first time, information on the taxonomy-eligibility of its business and next year also on the taxonomy alignment.

One of the TCFD's key recommendations is that companies should take into consideration different global warming scenarios in a changing business environment and make use of scenario analysis. Ilmarinen is already using different climate scenarios in the background analysis of its investment operations. There are challenges related to scenario analysis and different calculation methods, but we find it impor-

tant to make use of the currently available scenario models especially in portfolio-level analysis.

We assess that our operations largely comply with the TCFD's recommendations. However, the calculations and scenario analyses still involve challenges related to, for example, the reliability of information. These challenges occur, for example, in calculating the portfolio's carbon footprint, where it is possible to obtain different results depending on the calculation method. We wish to convey as realistic a picture as possible of our carbon footprint. The calculation method chosen for our report uses the industry averages for emissions for which no public, verified data is available. In accordance with the TCFD's recommendation, we disclose the weighted average carbon intensity. We also disclose the scope 1 and 2 carbon footprint and scope 3 production chain footprint. Due to the diversity of the calculation methods, we disclose both the scope 1 and 2 carbon footprint in accordance with the Kyoto Protocol and a more comprehensive carbon footprint, which also takes into account other direct global warming sources.

Alongside the Sustainability Report, we release information on our engagement processes once a year and on the companies we engage with in connection with the annual Nordic Engagement Cooperation report. We draw up a separate report on our responsible investment practices based on the Principles of Responsible Investment (PRI) guidelines. (GRI 102-12)

5.11 Active ownership

For some time, active ownership has been a central aspect of our work as a responsible investor. Our approach on how we operate as an active owner is outlined in the Ownership Policy. Active ownership is our perspective on how we take into account issues related to companies' good governance, i.e. the ESG aspects' governance issues.

The focal point of our active ownership is Finnish ownership and direct engagement, and in Nordic engagement co-operation. We implement Finnish active ownership, for instance, by participating in nomination committees and by voting in General Meetings. We engage in active dialogue with the management of

the companies we invest in, for example, on sustainability issues. In the case of indirect ownership, fund management companies are responsible for active ownership. We regularly ask them about the implementation of active ownership, whether in writing or in meetings. The managers of indirect passive equity funds also annually report to us on their voting behaviour.

Our Ownership Policy is included in our Responsible Investment Policy. Among other things, it describes our expectations of listed companies. We will continue developing our practices and this year we will specify in more detail our Owner Policy also in terms of our internal guidelines concerning non-listed companies. We disclose more detailed information on our ownership policy guidelines in the Responsible Investment Guidelines. We consider it important that the companies openly report on their operations, disclosing, in addition to financial information, information about their governance, their corporate responsibility principles, their tax footprint and their diversity principles. We also outline our expectations concerning the agendas of General Meetings,

the remuneration systems and the composition of the Board of Directors. In 2021, we sent the listed companies we have invested in a letter detailing our expectations concerning remuneration reporting.

As a rule, we participate in the General Meetings of all the Finnish listed companies that we have invested in and in the General Meetings of our largest foreign holdings. In 2022, we will substantially increase our participation in foreign General Meetings. We annually report on our website on our participation in the General Meetings of listed companies and the votes cast. If any of the General Meeting's motions are in deviation of our Ownership Policy, our primary goal is to hold discussions with the companies prior to the General Meeting and engage with them to reconcile the viewpoints.

Our Board of Directors approves any and all memberships of Ilmarinen employees in the governing bodies of listed companies. In addition, the Board of Directors approves all other memberships of the President and CEO and the members of the Executive Group in the governing bodies of corporations outside of

Active and engaging ownership (KPI 7)

	2021
Number of engagement processes (situation at year-end)	15
Engagement processes that reached the target during the year	2
Engagement processes ended otherwise (e.g. exit from ownership)	3

Active participation in general meetings

	2021	2020
Number of General Meetings of companies listed in Finland in which Ilmarinen participated	101	104
Number of General Meetings of companies listed in Finland owned by us	106	107
Rate of participation in the General Meetings of companies listed in Finland (measured in numbers)	95%	97%
Rate of participation in the General Meetings of companies listed in Finland (measured in investment assets)	99%	99%
Voting in the General Meetings of foreign companies	17	17
Rate of participation in the General Meetings of non-listed Finnish companies in relation to the value of the holdings	92%	92%

Ilmarinen's interaction in environmental and social matters with companies included in the investment portfolio

	2021	2020
Interaction and contacts in environmental or social issues, companies included in the investment portfolio	143	110
Number of companies in Ilmarinen's direct equity portfolio	800	655
Interaction and contacts in environmental or social issues, percentage of companies included in the investment portfolio	18%	17%
Companies subjected to engagement measures	174	139
Companies under an engagement process at year-end (Global Compact)	15	13
Companies subject to engagement processes, combating corruption and bribery	2	1
Engagement processes completed during the year (Global Compact)	5	6
Engagement in connection with proposals to General Meetings	70	32
Companies on whose nomination boards we participated during the year	30	31

Interaction includes both Ilmarinen's own measures through engagement processes and other contacts through dialogue.

Ilmarinen. The President and CEO approves all of the work-related memberships of the remaining personnel in the governing bodies of non-listed companies.

Nomination processes

As an owner, we participate in the nomination processes of the Board members of a number of Finnish listed companies. Through the nomination process, we promote the professional and responsible governance and management of the companies we have holdings in. As a member of Nomination Committees, we contribute to ensuring that the composition of the Board takes into account the company's business needs and development stages and the competence areas required by the Board of Directors and its committees, also when it comes to corporate responsibility. For us, diversity is one of the hallmarks of a well-functioning Board of Directors.

(GRI 103-2)

Engagement

We engage primarily in an encouraging way through active dialogue with our investees and

by getting companies to change their operations. Simply excluding an investee does not necessarily create motivation for change in the short term. The significance of exclusion is only visible in the long term and only if a sufficient number of investors begin to avoid the company or sector.

Companies need change agents, whether external or internal. We engage with companies, together with other investors and as part of a broader group. As a rule, our dialogue with companies is confidential. The best results are achieved through dialogue and positive change. In 2021, we identified, in our portfolio, international companies operating in Myanmar whose operations may involve human rights risks and impacts. As the companies in question are large multinationals, we joined other investors in a collective engagement initiative, hoping to gain leverage from working as a group.

One of the most important co-operations for us is Nordic Engagement Co-operation (NEC), in which we engage with investees together with other Nordic pension companies through the intermediary of a service provider. Previously, the co-oper-

ation focussed on engagement processes initiated as a result of norm violations, but in recent years it has evolved towards more proactive engagement. In 2021, we continued the engagement theme related to the TCFD reporting in the food sector and the engagement process related to sustainable water use in the beverage and chemicals sectors.

New channels for dialogue with companies

In 2021, we continued the practice of directly contacting companies with a poor sustainability rating. We also actively communicated with our investees on setting emission reduction targets. As part of our own carbon neutrality target, we expect our investees to set reduction targets and disclose them. We sent the Finnish listed companies we have invested in a letter detailing our expectations regarding climate issues. If the companies do not change the way they operate and engagement does not lead to the desired result, the last resort is to exit from ownership. We can invest in high-carbon-risk companies that have committed to change. However, it is important that the companies

make progress on their transformation journey, which is why active communication and monitoring are important to us when it comes to these companies.

The situation in companies is rarely static: companies create new strategies, look for new opportunities in new sectors and sell their operations. A company showing poor performance can improve from a climate perspective or vice versa.

The remuneration reports were presented to the General Meetings for the first time in 2021. We discovered many discrepancies in the reporting methods and contacted several companies during the general meeting season to address this. In autumn, we sent a letter detailing our expectations regarding the content of the remuneration report to our main-listed investees.

In 2021, we actively interacted with the non-listed portfolio's external asset managers in issues related to human rights and good governance due to cases that had arisen. Last year, we also actively held discussions with service providers on matters related to the investigation of human rights breaches and reporting, for example.



GRESB assessments for global real estate

For the first time in 2021, our international real estate investments participated in the global GRESB assessments of ESG performance. Our real estate earned four stars in the assessment.

GRESB (Global Real Estate Sustainability Benchmark) is a community established by investors in 2009, which provides its members the opportunity to measure, benchmark and develop the ESG performance of their real estate assets. With a membership base of over 140 institutional investors, GRESB's ESG data covers real estate and infrastructure assets worth around EUR 6,000 billion.

GRESB assessments cover the various dimensions of sustainability, from managing sustainability at the company level to the environmental efficiency of the real estate portfolio and stakeholder collaboration. GRESB assessments are conducted annually, with more than 1,500 entities from 66 countries participating in 2021.

The assessment was based on the reporting year 2020.

This was the first time we participated in the GRESB assessment for direct global real investments. The assessed real estate assets included 18 office buildings with a total value of close to EUR 3 billion. Ilmarinen earned four stars and 82 points out of 100, which can be considered an excellent achievement for a first-timer. We scored above average in GRESB points and placed among the strong average performers in our peer group.

In listed investments, we continued active engagement and dialogue with our investees.

5.12 Impacts on the built environment

Developing the construction sector

We are involved in developing responsible practices in the real estate and construction industry, for instance, by participating in the working groups of the construction sector association RAKLI and taking part in public dialogue. We monitor worksite-specific occupational health and safety indicators (MRV and TR) in property development.

We apply for LEED environmental certification for our Finnish properties in particular. LEED (Leadership in Energy and Environmental Design) is an international environmental certification system for buildings. The system is managed and maintained by the U.S. Green Building Council. LEED is the most extensively applied international environmental certificate for commercial buildings, which is used in 160 countries.

The certification has four levels of which LEED Gold is the second highest. We require all of the new commercial properties we have developed to achieve LEED Gold. In our in-use certification of properties, we use the LEED v4 tool kit version, which has the strictest criteria of the versions in use.

With LEED v4 certification, properties' tenants can impact their own premises and develop their sustainability. At the same time, the involvement of the property's users is a requirement for receiving in-use certification: in addition to technical solutions, especially the daily activities of the property and its users are monitored.

Focus on employees' rights

As a major property developer and real estate investor, we do our part in combating the grey economy in the construction sector in close collaboration with authorities. Ilmarinen's guidelines for combating the grey economy are applied in all of our new construction projects and renovation and refurbishment projects.

Business activities are affected by human rights risks in Finland too. In recent years, cases have

emerged in the construction and cleaning sectors, for example. Considering human rights is an important part of our investment activities, also in property development. That is why we bring to the fore employees' rights in our obligations to combat the grey economy.

For example, we require our contractors to join the Reliable Partner programme. Furthermore, the main contractor must have in place procedures to ensure that the product and service supply chain, including possible subcontractors and raw material purchases, complies with laws, collective agreements, interna-

Carbon footprint of real estate investments

	2021	2020
Domestic real estate		
Finnish real estate total CO ₂ e/m ²	24	27
Warehouses kg CO ₂ e/m ²	18	11
Free-time residential buildings kg CO ₂ e/m ²	6	25
Offices kg CO ₂ e/m ²	30	30
Institutional care buildings kg CO ₂ e/m ²	41	0
Parking facilities kg CO ₂ e/m ²	60	21
Other kg CO ₂ e/m ²	0	5
Commercial buildings kg CO ₂ e/m ²	22	32
Hotels kg CO ₂ e/m ²	32	36
Residential buildings kg CO ₂ e/m ²	22	24
Foreign real estate		
Offices kg CO ₂ e/m ²	54	50
Commercial kg CO ₂ e/m ²	70	55
All real estate kg CO ₂ e/m ²	33	35

Carbon footprint of new construction

	2021	2020
Carbon footprint per square metre (kg CO ₂ e/net m ² , emissions)	389	387
Carbon footprint per square metre (kg CO ₂ e/useful floor area m ² , emissions)	502	531
Carbon emissions from construction in relation to annual net sales (tCO ₂ e/EUR 1 million)	109	113

LEED-certified properties

Building Operations and Maintenance
Kämp real estate (hotel) (GOLD)

Energy intensity of the properties

	2021	2020
Energy consumption of flats, kWh/m ² /year	132.8	137
Energy consumption of office premises kWh/m ² /year	184.8	186
Energy consumption of foreign office premises kWh/m ² /year	172.85	159

Water intensity of the properties

	2021	2020
Water consumption of flats m ³ /m ² /year	1.16	1.14
Water consumption of office premises m ³ /m ² /year	0.16	0.18
Water consumption of foreign office premises m ³ /m ² /year	0.37	0.40

tional human rights and minimum labour standards. We do not allow the assigning or chaining of contracts, save in exceptional cases based on discretion and subject to written approval.

We require equal treatment of employees. Regarding this, we require that foreign employees hired in Finland have pay and working conditions that are not below the general conditions that exist in the labour market in Finland. Employment must be voluntary; employees must not be required to pay a deposit, placement fees or other securities in exchange for an employment contract. Employees must also have the freedom to leave the workplace after their work shift has ended.

If requested to do so, the main contractor must be able to prove that our requirements have been

met and the workers' rights have been respected. One of Ilmarinen's practices is to reserve the right to have a third party carry out an audit or to contact the employees of the main contractor and its subcontractor without prior notification to ensure that the main contractor and the subcontractors comply with the requirements concerning their employees' rights.

In the beginning of 2022, we also became aware of irregularities related to remuneration that had occurred in 2021 at one of our renovation worksites. The cases concerned the pay level of a subcontractor used by the main contractor. Investigations were conducted to find out whether the workers posted from abroad were paid appropriate wages in line with their professional skills.

We take all issues related to

human rights, working conditions and remunerations very seriously. Once the issue came to our attention, we immediately started investigating it and terminated the contracts with the subcontractor in question with immediate effect, although this required hiring another contractor for the worksite. Collaboration with the company in question can be continued once all potential irregularities have been cleared and the errors have been duly rectified.

Additional information on the way we work can be found in our Guidelines for combating the grey economy.

5.13 Taxation of pension assets impacts society

The tax footprint describes tax revenue that accumulates for society from a company's op-

erations. Companies' attitude towards taxes and how much tax they pay is under continuous societal debate. Our tax footprint consists of the payment of taxes by our operations, insurance operations and investment activities, and indirectly the investee companies.

Pension system taxation follows the same principles in Finland as in many other countries. A common feature is that all countries wish to avoid overlapping taxation on pension savings and thus support the accrual of pension funds. Overlapping taxation creates pressure to increase pension contributions.

The earnings-related pension contributions paid by employers, self-employed persons and employees are income-tax deductible. When an employee or a self-employed person begins to receive pension, he or she pays income tax on it.

Transfers of investment returns to the solvency buffer are also tax-deductible, which means that annual fluctuations in investment returns do not result in tax consequences. The calculation principles confirmed by the Ministry of Social Affairs and Health in advance define the employment

Real estate key figures

	2021	2020
Customers' overall satisfaction with leased office premises	4.0	4.0
Overall satisfaction with real estate maintenance	4.2	4.3
Customers' overall satisfaction with leasing, office premises	3.9	4.0
Completed homes (flats)	194	379
Accessibility surveys in Ilmarinen's flats	54	113
Overall satisfaction with real estate development	4.2	4.4

pension insurance company's profit in the profit and loss account. Its amount is determined by a reasonable return calculated on the guarantee capital or other capital and reserves.

As a mutual company, we do not have any guarantee capital, and thus no profit distribution. The company's capital and reserves belong entirely to the policyholders and insured. Even though the calculated annual return is taxable income for the pension company, no tax payable has arisen. The taxable income has been reduced by the tax buffers accumulated in the previous years.

Ilmarinen discloses all of its largest equity and fund investments with their domiciles in the notes to its financial statements. Investment returns from abroad, such as dividends, are subject to tax withheld at source in accordance with the tax agreements, which is tax payable on the returns to the country in question. The amount of the tax withheld at source and the applicable tax agreements vary from country to country and depending on the investment.

In line with our Ownership Pol-

icy, we wish the companies we have holdings in to report on their tax policy and their tax footprint and to present them in the General Meeting.

We have also drawn up a Tax Policy, which is included in our Responsible Investment Policy. It helps us increase the transparency of our investment activities. Our policies take into account that our statutory task is to invest pension assets in a profitable and sustainable manner that enables us to pay out the insureds' pensions well into the future. We thus take the best interests of the insured persons into account also from a tax standpoint and therefore strive to make our investments, where possible, without being exposed to international double taxation which is contrary to the principles of international taxation. Our Tax Policy also outlines our expectations of investment partners regarding compliance with tax legislation. We do not participate in aggressive tax planning nor make investments through investment structures the purpose of which is to avoid reporting obligations related to the exchange of information between countries resulting from

an investment, or whose purpose is to prevent tax authorities from identifying the beneficial owners of investment returns.

We invest in non-listed foreign and some domestic companies as part of consortiums that include other Finnish and foreign investors. They often involve a tax specialist who plans an investment structure that is as tax-efficient as possible from the viewpoint of investors. This is a requirement of international investors in particular and the prevailing practice in the sector. The advance assessment of tax consequences is also important in order for us to be able to predict the net return on investment with regard to the beneficiaries, i.e. current and future pensioners. We monitor tax legislation and changes thereto in both Finland and internationally, to ensure

compliance.

We, like other pension companies, have investments in countries that, according to some definitions, are considered tax havens. Such investments are practically impossible to avoid if the goal is to diversify the investment portfolio to a sufficient extent both geographically and across asset classes. We disclose all our largest equity and fund investments, including the funds' domiciles, in the notes to the financial statements.

Pension companies' operations are predominantly free of value-added tax. While Ilmarinen also pays VAT on its acquisitions, it cannot deduct these paid taxes from the VAT it charges, unlike parties that engage in taxable operations.

Taxes related to Ilmarinens' own operations

	2021
Tax withheld payroll, EUR million	15.3
VAT related sourcing, EUR million	10.4
Employers social security contributions, EUR million	0.7
Real estate tax (Ilmarinen's office building), EUR million	0.7
Total, EUR million	27.1



Work to protect your pension

6. Work to protect your pension

All of our work is geared towards ensuring that you get the pension you have earned. We see to it that our team has the best possible expertise. We operate openly and transparently – in dialogue with our stakeholders. Reporting is an essential way to ensure that all our stakeholders have sufficient information about our operations.

6.1 Reliable and transparent pension provision

An extensive study into the trust that social institutions enjoy was published in September. The study *Luottamusta ilmaassa, mutta kuinka paljon?* (Trust in the air, but how much?) commissioned by the Finnish Pension Alliance Tela, Sitra and the Association of Finnish Municipalities from the research organisation E2 examined, among other things, to what extent people trust the pension system.

According to the study, there is a divide among Finns concerning pension security. The younger the respondent, the more likely it was that they had no trust in the pension system. Young respondents typically felt that the system was unjust and had little relevance. Young people generally believed that if they were

paid a pension some day, it would start unreasonably late or not be enough to cover their living expenses.

According to the study, the greatest distinction between respondents of different ages was how they felt about pension security. Overall, trust in the pension system is average, but among those over 60, it is high. Those aged 31–44 had the least trust. Trust is affected by factors such as the experience of fairness. Young people in particular questioned the fairness of the system.

In concrete terms, the biggest concerns lie with the future payers of pensions.

In light of the birth rate, employment development and immigration data, concerns about the limited number of future payers are justified. At present, immigration is not enough to rectify the

distortion of the demographic structure.

One of the factors eroding trust is the continuous adjustment of the system through pension reforms, or at least talk about the need to do so. On the other hand, the respondents considered one of the system's weaknesses to be how slow it is to change.

At the same time, for the eighth time running, Finland's pension system was assessed to be the world's most reliable and transparent pension system. The assessment is based on the comparison carried out by the Australian consulting firm Mercer. In the overall comparison, our pension system was ranked seventh – two places lower than the previous year. Finland's ranking on the list fell because new countries were included in the comparison. In any case, our system is at a good level on a global

scale.

When assessing the trust we enjoy in Finland, we are not primarily compared with international peers, however. One of the features that make the Finnish pension system different from the systems in place in other EU countries is that the implementation is decentralised to private companies, such as Ilmarinen.

We updated our general-level pension policies in late 2021. The public policies approved by the Board of Directors describe the cornerstones of the earnings-related pension system that form the basis for our positions on the development of the earnings-related pension system and its implementation. The way we see it, a sustainable pension system is accepted by society and worthy of trust, financially sound and one that extends careers and provides sufficient income for pen-

sioners. Ilmarinen wants to make its competence and expertise in the earnings-related pension sector available to society in the best possible way to enhance the development of the pension system and support decision-making. Our objective is to contribute to the responsible improvement of the pension system and its implementation with long-term sustainability in mind.

Code of Conduct

Pension provision is part of Finnish social security, so compliance with regulations, openness and a culture of doing what is right are the key premises of our operations. Good governance and the culture of doing what is right must be constantly maintained and developed. Compliance with regulations in day-to-day life requires us to be conscious of all regulatory changes related to our operations. The changes can apply directly to employment pension insurance companies or pension legislation, but equally to investment operations and related reporting in any marketplace where we have investments. In practice, the operations of employment pension insurance com-

panies are subject to a number of regulations, both national and international. All specialists play a key role in monitoring changes and the work is supported by a separate legal and compliance function. We have reinforced the human resources of both the legal and the compliance functions in recent years.

The independent compliance function of the so-called second defence line holds a special role in ensuring the company's legal compliance and good governance. In 2021, we reinforced our compliance function with a new Chief Compliance Officer. This increased the function's headcount to two. Compliance reports on its operational activities directly to the Board of Directors, the Board's Audit and Risk Management Committee and the President and CEO. The Board of Directors approves the compliance policy and adopts the annual compliance plan. In administrative terms, compliance is part of the legal and compliance function operating under the Chief Legal Officer.

In practice, each employee is responsible for complying with regulations, regulatory guidelines and good governance princi-

ples and for intervening in any problems they observe. There is an anonymous whistleblowing channel for our employees, through which they can report any detected or suspected misconduct. In 2021, we received one report through the channel. The report was investigated in line with the process in place. The investigation concluded that the report was unjustified and it did not require any further measures. However, it is important to report all detected and suspected misconduct. If the threshold for reporting is too high, there is a risk that cases of misconduct remain hidden.

We were not subject to any fines or non-monetary sanctions related to failure to comply with legislation or regulations in 2021.

The online Code of Conduct training, which provides guidance on good governance, is part of the introduction training for new employees. Of the employees joining the company in 2021, 77 per cent have completed the online Code of Conduct training. Of the employees joining the company in 2021, 24 per cent have completed the onboarding training where they have been informed of the Code of Conduct.

The Code of Conduct document that describes our business principles is available to all on our website. (GRI 102-16, 205-2)

Previously, compliance and risk management coordinated their work through separate internal networks. However, compliance, risk management and corporate responsibility are all functions that contribute to promoting the culture of doing what is right, each from their relevant perspectives. In 2021, we decided to merge our compliance network and our internal operational risk networks and to also incorporate corporate responsibility aspects into the work. The network consists of named representatives of the business and support functions.

We provide guidance, for example, on related-party matters and transactions involving related party companies. We monitor conflict-of-interest situations when preparing and making decisions. We deal with any transactions with our related parties in accordance with the internal guidelines approved by Ilmarinen's Board of Directors.

As an investor, we operate with care also when it comes to insider matters. Insiders are all of the

persons who have the opportunity to influence decision-making involving the investment of the company's assets or who otherwise gain access to information related to investment decisions. Information on the holdings of insiders is available on Euroclear Finland's NetSire service. Ilmarinen's insider guidelines set forth a process and procedures for dealing with insider matters.

Good governance

Ultimate corporate control in Ilmarinen rests with the Annual General Meeting, where our shareholders exercise their voting rights. The Annual General Meeting adopts the financial statements and the consolidated financial statements, decides on the use of the profit based on the Board of Directors' proposal, and discharges the Supervisory Board, the Board of Directors and the President and CEO from liability. Furthermore, the Annual General Meeting elects the auditor and the members of the Supervisory Board.

Our Corporate Governance Statement is available in its entirety on our website. The attendance of the members of the

Board of Directors and the Supervisory Board in meetings in 2021 is stated in the statement.

Risk management

Risk management contributes to ensuring that the company's strategy and goals are reached and is an important component of management and internal control practices. Risk management is implemented through our management and supervisory system and is based on our principles that support management and accountability. Risk management is part of the company's operating culture, ways of operating and decision-making. In practice, that means that risk management falls in the area of responsibility of the management and is a natural part of our employees' daily work. Risk management is integrated into all of the company's processes, including strategic planning and change management.

Risk management covers all of the company's functions, including outsourced functions. Risk management is made up of all of the procedures and practices used to identify and assess risks threatening the company's operations and objectives and carry

out the measures required by the assessment in order to manage risks. Risk management is a tool not only for reducing threats but also to better take advantage of opportunities.

The objective of risk management is to prevent the realisation of risks threatening our operations, minimise the financial and other damage caused by realised risks and to ensure the continuity of operations. Another objective is for us to be able to utilise the opportunities offered by controlled risk-taking in business operations, especially in investment activities: in investments risk and return always go hand in hand. The most essential goal is to secure the company's statutory operations and the rights of the

insured, pensioners and policyholders in all situations.

Our risk management function, including monitoring of investment risks, and reporting to the Board of Directors fall under the responsibility of the Senior Vice President in charge of planning and monitoring the company's operations. Reporting on investment activities and risk monitoring are thus independent from the risk-taking function. The Board of Directors reviews and approves Ilmarinen's risk management system's operating principles and investment plan annually. The Board of Directors and the executive management draw up the strategic decision-making and risk management policies as part of the annual own risk

Ilmarinen's sourcing (GRI 102-9)

	2021	2020
Number of suppliers, operating expenses	679	883
Number of suppliers, real estate costs	1 009	1 148
Number of domestic suppliers, operating expenses	575	788
Number of domestic suppliers, real estate costs	1 006	1 142
Number of foreign suppliers, operating expenses	104	95
Number of foreign suppliers, real estate costs	3	6
Total purchases, operating expenses, EUR million	113	127
Total purchases, real estate costs, EUR million	192	238

and solvency assessment, which assesses the impact of the most significant risks on the company and the measures that are necessary to manage these risks.

Our most significant risk is associated with the management of solvency in both the short and the long term. The single largest risk factor in solvency management is related to the development of investment returns. The risk level of investment activities is continuously monitored by, for example, monitoring the investment restrictions and estimating the future development of solvency through scenario analyses and stress tests.

In 2021, we continued the active and systematic development of risk management in terms of, for example, regular and situation-specific risk reporting. We also significantly increased risk management continuity exercises. They are carried out to test how our organisation reacts when critical processes are disrupted. The continuity exercises also allow us to develop our procedures with the aim of ensuring disruption-free operations.

Our risk management is described in more detail in the notes to the Report on Operations and

financial statements. (GRI 102-11)

Dialogue with stakeholders

The other side of openness is active dialogue and listening. Based on surveys and feedback, we easily seem distant to many of our customers and stakeholders.

There is plenty to do in terms of improving people's knowledge of the pension system. For example, people are not very knowledgeable about their own pension, which is necessary for the long-term planning of their finances.

In 2021, for the fourth time in a row, Finns rated Ilmarinen as the most responsible pension company. The Sustainable Brand Index survey showed that attitudes towards pension companies' sustainability were positive.

Pension concerns each and every employee and self-employed person. We work hard to promote responsible investing, for example, and strive to increase its prominence. We believe that people, also in Finland, are increasingly interested in how their pension assets are invested.

We engage in dialogue with our stakeholders also in associations and other partner organisations.

In 2020, we were a member of more than 30 different associations. In addition, a few of our employees participated in the operations of trade associations closely linked to their work.

Key memberships in terms of responsible investment include PRI (Principles for Responsible Investment), Finsif (Finland's Sustainable Investment Forum) and NEC (Nordic Engagement Co-operation). As a real estate investor, our key memberships include the real estate sector co-operation organisation RAKLI ry, the European Association for Investors in Non-Listed Real Estate Vehicles (INREV) and the Green Building Council Finland, which focuses on the environmental impacts of construction. Our Construction Manager Niina Nurminen is also a member of GBC Finland's Board of Directors until 2022. We are also a member of the Association for Finnish Work.

We are a member of the representative organisation Finance Finland and the Finnish Pension Alliance TELA. Of the insurance sector associations, we are a member of the Actuarial Society of Finland. Individual members are involved in Suomen Vakuutusyhdistys. Our personnel have

the opportunity to participate in the activities of the insurance and financial sector's sports club VUFI. (GRI 102-12, 102-13)

Reporting

Openness and transparency require continuous efforts. Our aim is to make sufficient information on our operations available to everyone. This allows our customers and other stakeholders to assess our operations.

We identified sustainability as a central theme in our strategy and vision approved by the Board of Directors in 2019. The main policies on the practical implementation are made by the President and CEO and the Executive Group. We report on sustainability-related themes in this report as well as in the Report on Operations signed by the Board.

Our Sustainability Manager is responsible for overall sustainability reporting and assembles the report together with our financial monitoring and other experts. The Sustainability Manager is also responsible for preparing updates to our key performance indicators for sustainability for the Executive Group. We call these indicators by their established name Key

Stakeholder	Stakeholder's key expectations	Interaction channels, frequency and measures
Customers (policyholders)	Easy insurance. Expert service and proactive communication. Support for knowledge management and personnel's disability risk management.	Frequent meetings and co-operation with clients. Customer involvement in the development of services. Risk-based and impactful work ability services. Active development of customer services. Coherent and timely customer communications.
Current and future pensioners (insured)	Responsible and long-term management of statutory pensions. Easy, coherent and fast service.	High-quality customer service, providing understandable pension information, fast processing times, safeguarding pension assets.
Personnel	Responsible personnel management, smooth interaction, equality, positive workplace atmosphere and working conditions as well as competitive remuneration.	Leadership that supports success and developing competence. Clear goals, monitoring and remuneration. Comprehensive and evolving well-being at work activities. Continuous interaction.
Authorities and decision-makers	Good co-operation and flow of information and interaction which facilitate decision-making. Common goal: decisions and reforms that benefit society as a whole.	Open dialogue with authorities and decision-makers. Providing expertise. Regular meetings and communication through various working groups and events.
Labour market organisations	Good co-operation and good flow of information to support decision-making and negotiations. Shared goal: ensuring a sufficient level of pension security and keeping the system's costs at a reasonable level.	Communication through Ilmarinen's Board of Directors, Supervisory Board and Advisory Committees. Providing expertise. Regular meetings and other close-knit communication through, for instance, various working groups and events.
Industry organisations	Good, open co-operation. Ilmarinen's expertise made available to the entire industry. Shared goal of ensuring the sustainability and effectiveness of the pension system.	Comprehensive co-operation with, for instance, the Finnish Pension Alliance TELA, The Finnish Centre for Pensions and Finance Finland. Channels include working groups, regular negotiation groups and various events.
Media	Openness of communications, reliability of information and quick service. Ilmarinen's expertise made available for the media: introducing new perspectives, active statements and making difficult issues easier to understand.	Open and active communication through various channels. Regular meetings and communication. Quick and open response to media requests.
Educational and research institutions	Ilmarinen's expertise made available to educational institutions. Offering summer jobs and internships. Shared research projects and open flow of information. Developing the pension system and increasing its prominence.	Co-operation with students, e.g. in thesis work. Taking part in various university and school events. Recruiting summer workers.
Civil society	Open and active dialogue. Sustainability and reliability of business. Offering Ilmarinen's expertise for use through various communication channels.	Open and active communication and willingness to engage in dialogue with stakeholders. Interaction at, for example, various seminars and meetings, and in the social media.
Investees and investment partners	Open communication about expectations, consistent and long-term operations, fast response times to questions.	Clear communication concerning active ownership, consistent investment strategy, fast decision-making. Interaction both regularly and as required.

Performance Indicators or KPIs.

We prepare our Sustainability Report from the standpoint of Ilmarinen Mutual Pension Insurance Company, i.e. our parent company. If the calculation limit of a key figure contrasts with the parent company's limits, it is mentioned in the GRI Content Index in connection with the key figure. In addition to the parent company, Ilmarinen's corporate structure includes, for example, real estate companies linked to real estate investments. (GRI 102-46, 102-45)

The key figures for financial responsibility are based on Ilmarinen's financial reports, accounting and adopted financial statements, which are prepared in accordance with the Accounting Act, the Companies Act, the Insurance Companies Act, and the Act on Employment Pension Insurance Companies. Ilmarinen's financial statements also comply with the Ministry of Social Affairs and Health's decree on the financial statements of insurance companies and related consolidated financial statements, the accounting decree, the calculation principles and regulations approved by the Ministry of Social Affairs and Health, and with

the regulations and guidelines of the Finnish Financial Supervisory Authority.

The key personnel figures for social responsibility cover the personnel of Ilmarinen's parent company and they have been calculated based on data from the company's personnel data systems.

6.2 Meaningful work

In our strategy, we have set as an objective to be one of the best workplaces in Finland. We believe that the well-being of personnel directly impacts how well we achieve all of our other goals.

When the remote work recommendation related to the Covid-19 pandemic ended in early autumn, we also returned to a new type of working life with the aim of combining the best parts of in-office and remote work to achieve the company's goals. The cornerstones of the new working life are trust, a sense of community and clear ground rules. However, we were only able to enjoy the new normal for a few weeks. In late November, remote work largely became the norm again, continuing well into the new year.

During the Covid-19 pandemic,

Influence on stakeholders' assessment and decision-making »

Ilmarinen's materiality analysis (GRI 102-47)



Significance of economic, social and environmental impacts »

- Easy and reliable pension
- Reliable and transparent
- We invest responsibly
- Meaningful work

We have drawn up this report in accordance with the GRI Standards of the Global Reporting Initiative (GRI). These guidelines involve the regular assessment of the materiality of different topics. We update the material sustainability topics in in-house workshops and through external stakeholder surveys, in alternating years. The next update will take place in 2021 due to the delay caused by the Covid-19 pandemic. The matrix illustrates the results of the stakeholder survey and the materiality analysis carried out internally in 2018 as a matrix. The matrix illustrates the mutual and relative order of the topics judged to be the most material. (GRI 102-47)

we have continued to develop our personnel's competence with the same intensity as in previous years, even though training has taken a virtual format. One of the top priorities during the year was naturally strengthening remote management through training on various themes – from virtual facilitation to building emotional intelligence and trust. To support a rapid and smooth transition to the virtual world, personnel were provided with extensive online training on the use of collaborative applications and other Office 365 applications.

Agile ways of working and continuous improvement were among Ilmarinen's company-wide focal areas for 2021. In line with this theme, 36 Ilmarinen employees were trained to be champions of continuous improvement. Those participating in the champion training will form the core team in charge of bringing about a cultural change towards continuous improvement at Ilmarinen. They have carried out concrete development trials to incorporate a culture of continuous improvement into the organisation. In addition to the champions, all Ilmarinen

employees will receive training in continuous improvement and will have the chance to participate in the trials. To support an agile way of working and self-direction, supervisors were provided with training on operating models that feature a coaching style of leadership.

Ilmarinen offers everyone an opportunity to develop as a specialist

Working life is clearly undergoing a transformation, and the accelerating pace of change and the evolving competence requirements pose a challenge to both individuals and companies. As jobs require fewer routine tasks to be performed, specialist work becomes increasingly demanding. Some roles even require both in-depth expertise and a broad understanding of issues. With the focus shifting towards multi-dimensional and complex specialist work, responsibility for the continuous development of their competence in a rapidly evolving world increasingly lies with the specialists themselves. Learning on the job is gaining more and more ground and, due to efficiency requirements, new skills are acquired just in time – not just in case. To ensure that there is

enough time for continuous learning, most functions have allocated regular time slots for studying new things.

Only by having the right, up-to-date competence as a company and as individuals can we be sure to succeed together also in the future. As a responsible player, the management set out, in spring 2021, to create a long-term competence vision for Ilmarinen. This vision makes it clear what competence needs to be increased, what will be needed less and what current competencies we will require also in the future. These reflections formed the basis for our development discussions, individual competence development and recruitment.

The importance of continuous competence development in 2021 was also highlighted by the fact that reinforcing competence and recognising expertise was selected as one of the main focal areas for the year. Under this umbrella theme, we have made our broad competence available to our customers in an even more visible manner than before. We have also shared competence development tips with one another internally within the campaign 'A rolling stone gathers no moss' –



The most active workplace!

In 2021, Ilmarinen was awarded the Finnish Olympic Committee's 'Finland's most active workplace' certification. The certification recognises successfully managed physical activity for employees and was granted based on the 'Finland's most active workplace' survey which evaluates the state of physical activity for employees. The results of the survey will be used to further develop the supporting of physical activity and well-being of Ilmarinen employees going forward. During the year, active commuting and other physical activity were promoted by participating in the cycling competition "Kilometrikisa" and offering employees the opportunity to have a company bicycle.

alongside other means to develop competence.

In spite of the prolonged Covid-19 situation, we continued to develop content expertise in key areas and learn important working life skills in a virtual format in 2021.

A major effort in 2021 was the training of continuous improvement champions on Lean philosophy through hands-on training consisting of eight modules. In addition to leading concrete development projects, the champions' duties also include guiding and supporting the rest of the organisation to bring the philosophy of continuous improvement into

daily work, with each employee being the "quality manager of their own work."

To ensure digital competence, a digital competence development training programme (DOK) was created in 2021. The DOK programme is primarily built for the technology and development function, but every Ilmarinen employee with an interest in digitalisation has had the opportunity to participate. The programme is available to all employees on the company's intranet.

Coaching-style leadership as a counterpart to self-direction was supported with supervisor coaching in 2021. The coaching



Help with childcare at the start of the summer holiday season

For the fifth time, we organised a childcare centre for our employees, which offered temporary assistance in June to help personnel combine their work and family life. The childcare centre is designed to help with childcare challenges during the workday, if suitable camps or social networks are unavailable. In addition, the centre enables families to spend more of their holidays together.

Employee experience (KPI 8)

	2021	2020
Employee experience: Ilmarinen's eNPS	38	38
Work energy ('Työvire') (0-5)	4.2	4.1

The employee experience was monitored during the year by pulse surveys carried out every two months, a more extensive work ability survey and surveys on specific themes, such as teleworking during the Covid-19 pandemic. The employee experience improved during the year. The employee Net Promoter Score (eNPS) was 32 and in October, it was at its highest level in our measurement history, at 51. The average for the whole year was 38. The eNPS can range from -100 to 100. Work energy describes the average score for the mandatory questions in the pulse survey conducted among employees every two months. The score may range from 1 to 5.

Key figures related to personnel

	2021	2020
Average retirement age	64.1	64.0
Employees average age	46.7	47.2
Average career length in Ilmarinen, years	13.2	14.1
Ilmarinen's employees' health	67%	68%
The rate of sickness absence	1.5%	1.3%

The health percentage indicates how large a percentage of our employees had no absences from work due to illness.

Cycling competition

	2021	2020
Active cyclists	101	102
Kilometers	64,284	71,042
Liters fuel saved	4,499	4,972
Kg CO ₂ -emissions saved	11,247	12,430

programme consisted of several modules and lasted the whole year.

2021 also saw the creation of Ilmarinen's own network of coaches, made up of persons from across the organisation whose job profile includes coaching and/or planning coaching sessions. The objective is to share competence and tips and to coordinate the internal coaching offering.

The business and support functions take care of the continuous development of content knowledge with a high degree of independence. The internal offering by HR and other support functions in 2021 covered topics such as self-leadership, agile learning, interaction in delicate situations, social media communications, security of individuals and premises, information on remote work ergonomics and mental well-being themes. All new employees joining Ilmarinen during the year were also provided with the same orientation as in normal conditions – the only difference being that it was carried out in a virtual format.

All employees who will not continue to work in the company due to organisational changes have

been offered a personal career coaching path.

One of the themes included in all our personnel surveys is competence development from different perspectives. The results for 2021 are at an excellent level. It is difficult to find an unambiguous indicator to measure competence development, but strong competence shows, for example, in the record-high customer retention rate, excellent NPS and world-class eNPS for 2021.

In addition to each function extensively maintaining and expanding the content knowledge within their respective areas of responsibility through multiple means, a strong focus in 2022 will be on digitalisation know-how from a number of perspectives, process know-how, data analytics, continuous improvement, responsibility and the various working life meta-skills. All this will support efficient and responsible customer work.

6.3 Equality and non-discrimination

An extensive personnel survey on the implementation of equality and non-discrimination was carried out. The survey looked into

employees' perceptions of the implementation of equality between employees of various ages and with different employment contracts and between genders, for example. The results of the survey indicate that, as a whole, equality is implemented successfully at Ilmarinen. The average score of all responses was 4.1 (on a scale of 0–5). Employees felt that career advancement and pay were the areas most in need of improvement in terms of equality and non-discrimination. When it comes to personal traits, the status of implementation of equality was perceived to be best in matters related to religion and belief. The survey was also a reminder that the principles and practices against bullying at the workplace need to be highlighted. The number of respondents who had detected bullying was low (16%), but on the same level as in the previous surveys. According to the survey, there is practically no sexual harassment, and the rare cases have always been addressed. Ilmarinen has a strict zero tolerance policy for harassment, discrimination and inappropriate behaviour.



Responsible summer jobs

Ilmarinen has long been part of the Responsible Summer Job campaign. The campaign challenges employers to offer more high-quality summer jobs to young people. Last summer, Ilmarinen had some 40 summer employees. Work experience during studies and accumulating competence are major factors when finding work later on. At Ilmarinen, summer employees are also given the chance to perform meaningful and responsible work that has long-term impacts.

Women's average pay in relation to men's pay, Executive Group (excluding the President and CEO) (GRI 405-2, KPI 9)

	2021	2020
	86%	90%

Women's average pay in relation to men's pay, all other employees (GRI 405-2, KPI 9)

	2021	2020
	83%	82%

Personnel covered by collective bargaining agreements (GRI 102-41)

	2021	2020
	92%	93%
	590	613

Rewards and remuneration

Our Board of Directors decides on our remuneration and incentive policy. Our goal is for our remuneration to be competitive, fair, equal, guiding and supportive. Remuneration is governed by the collective bargaining agreement for the insurance sector and the comparison with the development of other employers that we regularly conduct. Remuneration is based on how demanding the

work is and on personal performance and competence. We believe that this contributes to the fairness of the remuneration – also seen from the perspective of pay equality between men and women, among other things.

Our goal is to narrow the gender pay gap. The differences in pay between the genders in the same demand category primarily result from men and women seeking somewhat different types of roles and functions.

The equality of pay between genders can be measured using a number of different metrics. The gender pay gap among employees primarily comes from the highly uneven gender distribution in the different functions. The pay level in male-dominated functions, such as investments, IT and sales, is generally higher than in many other functions. The unbalanced gender distribution in various sectors is a social issue that needs to be addressed at the level of both society and individual companies.

As one of the metrics to measure the implementation of equality, we monitor that the gender distribution among supervisors reflects the gender distribution among employees. Based on this indicator, equality is implemented quite well, with women holding a slightly higher proportion of these demanding positions than men.

We have examined the equality of pay between genders also within the different demand categories. Demand categories provide a general framework for comparing jobs. Pay within the same demand category may vary due to, for example, work experience and education. The pay comparison within demand categories revealed that women's pay in relation to men's pay ranged from 90 per cent to 108 per cent. The variation average and median in the pay categories were both 97 percentage units. The examination does not include the President and CEO, the Executive Group, the personnel covered by sales commissions, part-time specialist physicians and demand categories where one of the genders is represented by fewer than 6 persons.

In our equality and non-discrimination plan, we have outlined that if the pay gap within a demand category is at least 5 per cent either way, the HR department will conduct a separate study on the reasons for the differences. If we find inexplicable differences, the HR department will initiate discussions with the relevant supervisors to further investigate and resolve the situation. These investigations will be carried out with a sharper focus during 2022.

New employee hires and employee turnover (GRI 401-1)

	2021	2020
Number of employment relationships at the end of the reporting period	640	662
New employment relationships	85	73
Ended employment relationships	72	48
Turnover of permanent employees, %	8.6	3.8
New employment relationships/permanent	53	47
Ended employment relationships/permanent	51	26
Number of summer employees	38	35
Employment relationships that ended on production and financial grounds	32	11

Employees and governance bodies by age (GRI 405-1)

	2021	2021%	2020	2020%
Employees				
Under 30	55	9%	52	8%
30-50	327	51%	342	52%
Over 50	258	40%	268	40%
Board of Directors				
Under 30	0	0%	0	0%
30-50	4	33%	6	55%
Over 50	8	67%	5	45%
Supervisory Board				
Under 30	0	0%	0	0%
30-50	9	30%	12	40%
Over 50	21	70%	18	60%

Average training hours per year per person (GRI 404-1)

	2021	2020
Average training hours, entire personnel	19	18
Average training hours, women	18	18
Average training hours, men	21	17
Average training hours, Executive Group	22	28
Average training hours, middle management	23	24
Average training hours, group supervisors 30 31	32	37
Average training hours, salaried employees and specialists	18	16

Employees and governance bodies by gender (GRI 405-1, KPI 9)

	2021	2021%	2020	2020%
Entire personnel	640		662	
women	389	61%	414	63%
men	251	39%	248	37%
Salaried employees and specialists	563		581	
women	339	60%	361	62%
men	224	40%	220	38%
Group supervisors	28		31	
women	21	75%	23	74%
men	7	25%	8	26%
Middle management	39		39	
women	24	62%	24	62%
men	15	38%	15	38%
Executive Group	10		11	
women	5	50%	6	55%
men	5	50%	5	45%
Board of Directors	12		11	
women	2	17%	1	9%
men	10	83%	10	91%
Supervisory Board	30		30	
women	12	40%	12	40%
men	18	60%	18	60%

Number of Ilmarinen employees by employment type, employment contract and gender (GRI 102-8)

	2021	2021%	2020	2020%
Permanent employment contracts, total	596	93%	627	95%
Permanent employment contracts, women	365	61%	395	63%
Permanent employment contracts, men	231	39%	232	37%
Permanent full-time employment contracts, total	552	93%	586	93%
Permanent full-time employment contracts, women	336	61%	364	62%
Permanent full-time employment contracts, men	216	39%	222	38%
Permanent part-time employment contracts, total	44	7%	41	7%
Permanent part-time employment contracts, women	29	66%	31	76%
Permanent part-time employment contracts, men	15	34%	10	24%
Fixed-term employment contracts, total	44	7%	35	5%
Fixed-term employment contracts, women	24	55%	19	54%
Fixed-term employment contracts, men	20	45%	16	46%



Ilmarinen's GRI index

We have used the international GRI Standards reporting framework for drawing up this report. Maintained by Global Reporting Initiative, the framework is one of the most widely used. In addition, we have made use of the international Task Force for Climate Change (TCFD) reporting framework, which aims to improve reporting on the impacts of climate change on business operations.

The GRI index compiles information related to the GRI Standards guidelines that we have reported. The index helps you find the information in our report and compare it with the information disclosed by other companies reporting under the GRI framework.

Disclosure	Name	Reporting, page
General disclosures		
Organisation profile		
102-1	Name of the organization	Ilmarinen Mutual Pension Insurance Company
102-2	Activities, brands, products, and services	p. 6
102-3	Location of headquarters	Porkkalankatu 1, 00180 Helsinki, Finland
102-4	Location of operations	p. 6
102-5	Ownership and legal form	p. 6
102-6	Markets served	p. 6
102-7	Scale of the organization	p. 6, 18, 73
102-8	Information on employees and other workers	p. 75
102-9	Supply chain	p. 65
102-10	Significant changes to the organization and its supply chain	No significant changes in the organisation in 2021.
102-11	Precautionary Principle or approach	p. 66
102-12	External initiatives	p. 54–55, 66
102-13	Membership of associations	p. 66
Strategy		
102-14	Statement from senior decision-maker	p. 12
Ethics and integrity		
102-16	Values, principles, standards, and norms of behavior	p. 7, 37, 64
Governance		
102-18	Governance structure	Financial Statement
Stakeholder engagement		
102-40	List of stakeholder groups	p. 66
102-41	Collective bargaining agreements	p. 72

102-42	Identifying and selecting stakeholders	Stakeholders were identified in the stakeholder analysis in 2015. Since then, stakeholder identification has not been described through a separate analysis.
102-43	Approach to stakeholder engagement	p. 67
102-44	Key topics and concerns raised	p. 6, 12, 16, 17, 27, 33, 69
Reporting practice		
102-45	Entities included in the consolidated financial statements	Financial Statement
102-46	Defining report content and topic Boundaries	p. 66, 68
102-47	List of material topics	p. 68
102-48	Restatements of information	-
102-49	Changes in reporting	GRI 102-7: the number of employees at the turn of the year will not be disclosed going forward. More detailed information on the company's employees during the reporting period is disclosed in the section concerning personnel. There will be no separate table for this indicator. The data is disclosed in connection with other data. The social income distribution calculation and the description of cash flows gives the best picture of the scale of the company's operations. The screening of investees for norm violations will not be disclosed going forward, because the coverage of norm-based screening in listed direct investments is 100% and the coverage of the company's own sustainability rating is also high. The data disclosed in the table indicated the percentage of listed direct investments of the entire portfolio; it did not provide information on the coverage of screening. The instruments for which Ilmarinen does not have its own sustainability rating are mainly smaller Finnish listed companies whose operations we monitor closely otherwise. For other non-rated instruments, norm-based screening does exist, however, and we have verified that these companies do not operate in sectors with a high percentage of carbon risk. Thus, they meet our minimum sustainability requirements.
102-50	Reporting period	1.1.-31.12.2021
102-51	Date of most recent report	The last report was published on 24.3.2021.
102-52	Reporting cycle	We publish this report annually. We publish it in Finnish, Swedish and English and it is only available online.
102-53	Contact point for questions regarding the report	info@ilmarinen.fi
102-54	Claims of reporting in accordance with the GRI Standards	We have reported on Ilmarinen's financial, social and environmental sustainability since 2007. This is the sixth time that we are reporting in accordance with the GRI guidelines, applying the Core option of the guidelines. The reporting partially exceeds the Core criteria, however.
102-55	GRI index	p. 77-82.
102-56	External assurance	p. 84, 85. The report has been assured by KPMG Sustainable Finance & Corporate Responsibility.

Management approach

General requirements for reporting the management approach

103-1	Explanation of the material topic and its Boundary	It is disclosed in connection with each material theme, however.
103-2	The management approach and its components	It is disclosed in connection with each material theme, however.
103-3	Evaluation of the management approach	It is disclosed in connection with each material theme, however.

Economic performance

201-1	Direct economic value generated and distributed	p. 8
201-2	Financial implications and other risks and opportunities due to climate change	p. 40–42

Indirect economic impacts

203-2	Significant indirect economic impacts	p. 5, 8–10, 21, 22, 30, 34
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Anticorruption

205-2	Communication and training about anti-corruption policies and procedures	p. 64
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Environmental sustainability

Emissions

305-4	GHG emissions intensity	p. 44. The calculation principles are explained in connection with the table.
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Environmental compliance

307-1	Non-compliance with environmental laws and regulations	No sanctions in 2021.
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Employment

401-1	New employee hires and employee turnover	p. 73 Personnel of parent company Ilmarinen. The age and gender distribution is not disclosed due to the low total number of new and ended employment relationships. The calculation takes summer employees into account as a separate group. Ended employment relationships cover all employment relationships that have ended on production and financial grounds. Data is not disclosed by geographical area because the operations take place in Helsinki with the exception of a few regional employees.
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Training and education

404-1	Average hours of training per year per employee	p. 74
404-2	Programs for upgrading employee skills and transition assistance programs	p. 69–70

Diversity and equal opportunities

405-1	Diversity of governance bodies and employees	p. 73–75. We do not report other figures considering diversity, because they are not available.
405-2	Ratio of basic salary and remuneration of women to men	p. 72 We do not report figures considering diversity, because they are not available. We do not disclose data by personnel group because, divided by function and position, the groups under review often include only a few persons or one person. For 2021, we have, however, analysed the implementation of pay equality between genders by demand category, but we do not disclose any figures for individual demand categories.

Public policy

415-1	Political contributions	We do not contribute political parties or politicians.
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Socioeconomic compliance

419-1	Non-compliance with laws and regulations in the social and economic area	No sanctions in 2021.
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Customer privacy

418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	p. 18, 19
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Key Performance Indicators for sustainability

KPI 1/21	Uninterrupted income	Fast pension decisions: processing time of old-age and disability pension applications compared to other employment pension insurance companies. Disability pension decisions upheld by the appeals court and difference with competitors.	p. 24
KPI 2/21	Cost-effective management of pension cover	Ratio of operating expenses to expense loading components and loading profit.	p. 9
KPI 3/21	We promote work ability	Effectiveness of rehabilitation: return-to-work rate in percentages: a) coming from working life b) coming from fixed term pension. Effectiveness of work ability projects.	p. 22
KPI 4/21	We keep your information secure	Notifications of personal data security breaches to the Office of the Data Protection Ombudsman.	p. 18
KPI 5/21	We manage pension assets	Return on investments and solvency ratio.	p. 34
KPI 6/21	Footprint of investment operations	High carbon risk level max. 30% of the operations of the investees. Target 15% by 2025. Energy saving measures in properties' energy consumption.	p. 42
KPI 7/21	Active and engaging ownership	Number of engagement processes. Engagement processes that reached the targets during the year.	p. 56
KPI 8/21	We will succeed together	The employee experience: Ilmarinen's eNPS.	p. 70
KPI 9/21	A fair and diverse work community	Equality between genders at work: the average salary of women compared to the average salary of men (excluding President and CEO / entire personnel) Balanced share of both genders in supervisory and leading specialist positions.	p. 72 p. 72

Other indicators

Ilmarinen's insurance contributions and pensions paid	p. 5
Solvency	p. 10
Pension contributions, TyEL	p. 14
TyEL policies	p. 18
Customer retention	p. 18
YEL insurance policies	p. 18
Disability pensions and rehabilitation benefits	p. 21
Ilmarinen's projects and coaching for work ability	p. 23
Key indicators for rehabilitation	p. 24
Pensions	p. 26
Ilmarinen's pensioners, demographics	p. 30
Key indicators for investments	p. 34–35
Market value of investment assets by asset class	p. 36
Percentage of companies that have reported greenhouse gas emissions	p. 42
Share of renewable energy and coal of the electricity production	p. 47
Ilmarinen's interaction in environmental and social matters with companies included in the investment portfolio	p. 56
Active participation in general meetings	p. 56
Engagement processes ended during the year	p. 56
Ilmarinen's most significant Finnish listed equity holdings	p. 36
Listed equity holdings by region	p. 36
Key indicators for real estate	p. 54
Calculated effect of energy savings measures on energy consumption	p. 42
LEED-certified properties	p. 58
Carbon footprint of new construction	p. 59
Water and energy consumption of the properties owned by Ilmarinen	p. 59
Tax related Ilmarinen's own operations	p. 61
Key indicators for sourcing	p. 65



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Independent Assurance Report to the Management of Ilmarinen Mutual Pension Insurance Company

This document is an English translation of the Finnish report

We have been engaged by the Management of Ilmarinen Mutual Pension Insurance Company (hereafter “Ilmarinen”) to provide limited assurance on sustainability indicators presented in Ilmarinen’s Annual and Sustainability Report 2021 (hereafter “Sustainability Information”) for the year ended 31 Dec 2021.

Management's responsibilities

The Management of Ilmarinen is responsible for the preparation and presentation of the Sustainability Information in accordance with the reporting criteria, i.e. GRI Sustainability Reporting Standards, and the information and assertions contained within it. The Management is also responsible for determining Ilmarinen’s objectives with regard to sustainable development performance and reporting, including the identification of stakeholders and material issues, and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

Our responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted

our assurance engagement on the Sustainability Information in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board IAASB. That Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Sustainability Information is free from material misstatement.

KPMG Oy Ab applies International Standard on Quality Control ISQC 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants IESBA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Procedures performed

A limited assurance engagement on Sustainability Information consists of making inquiries, primarily of persons responsible for the preparation of information presented in the Sustainability Information, and applying analytical and other evidence gathering procedures, as appropriate. In the engagement, we have performed the following procedures, among others:



- Interviewed the members of Ilmarinen’s senior management and relevant staff responsible for providing the Sustainability Information;
- Assessed the application of the GRI Sustainability Reporting Standards reporting principles in the presentation of the Sustainability Information;
- Assessed data management processes, information systems and working methods used to gather and consolidate the Sustainability Information;
- Reviewed the presented Sustainability Information and assessed its quality and reporting boundary definitions and;
- Assessed the Sustainability Information’s data accuracy and completeness through a review of the original documents and systems on a sample basis.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Inherent limitations

Inherent limitations exist in all assurance engagements due to the selective testing of the information being examined. Therefore fraud, error

or non-compliance may occur and not be detected. Additionally, non-financial data may be subject to more inherent limitations than financial data, given both its nature and the methods used for determining, calculating and estimating such data.

Conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidence obtained, as described above, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared, in all material respects, in accordance with the GRI Sustainability Reporting Standards.

Helsinki, 18. March 2022
KPMG Oy Ab

Juha-Pekka Mylén
APA

Tomas Otterström
Partner, Advisory

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