

TAKING CARE OF YOUR PENSION

ILMARINEN'S SUSTAINABILITY
REPORT 2018

ILMARINEN

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WE ARE BUILDING AN EVEN MORE CUSTOMER-FOCUSSED AND ATTRACTIVE ILMARINEN – BY OPERATING OPENLY AND RESPONSIBLY AND ACHIEVING SUCCESS THROUGH TEAMWORK

2018 was a historical year for Ilmarinen. In the beginning of the year, we merged with Etera, forming Finland's largest employment pension company in charge of the earnings-related pension cover of close to 1.2 million Finns. We are working to make the post-merger Ilmarinen an even more customer-focussed, efficient and attractive earnings-related pension partner.

Ilmarinen is an employment pension insurance company owned by its customers, which puts the customer at the core of its operations. At the end of 2018, more than 73,000 companies with more than 625,000 insured employees, and more than 74,000 self-employed persons had chosen Ilmarinen as their pension company. The insurance portfolio was strengthened by OP Financial Group's decision to transfer its personnel's statutory pension insurance from the OP-Eläkekassa pension fund to Ilmarinen as of 31 December 2018.

During the year, we received EUR 5.4 billion in premiums written and paid EUR 5.7 billion in pensions to around 460,000 pen-

sioners. We made a total of close to 34,000 new pension decisions. We prepared for the introduction of the national Incomes Register and actively communicated also to our customers on the changes caused by the Incomes Register. As of the beginning of 2019, employers report the wages and salaries paid by them to the Incomes Register, where it will be available in real time to employment pension companies and other parties who require the information. Separate annual or monthly notifications to employment pension companies will no longer be required.

A better working life

Customers expect from their pension company straightforward online insurance and pension services and support for the management of work capacity risks and rehabilitation. Based on feedback from our customers, we strengthened our work capacity services and structured the management of work capacity risks and rehabilitation into a business division in its own right.

PHOTO: MIKKO KÄKELÄ



Jouko Pölonen's first day as Ilmarinen's CEO was 1. August 2018.

A total of 3,200 projects to support work capacity were carried out in 2018 together with our customer companies. These projects covered around 176,000 employees insured with Ilmarinen, costing a total of EUR 5.9 million. In addition, we organised 54 coaching sessions to support work capacity management throughout Finland, attracting 3,100 people. The Master in Work Capacity training programme proved to be highly popular, with the first participants completing their course in spring 2018. Our customers are also satisfied with our services: eight out of ten would recommend our work capacity services.

We support the management of work capacity risks in our client companies also through vocational rehabilitation. In 2018, we issued 9,400 rehabilitation decisions. We wish to offer our customers the best services, expertise and data to anticipate and manage disability risks and rehabilitation also going forward.

A challenging year-end for the investment markets

Global economic growth was brisk in 2018, although the expanding trade war and tightening monetary policy weakened the outlook. During the final quarter of the year, equity markets took a massive downward turn, which pushed Ilmarinen's full-year investment return 1.4 per cent into the red. The value of investment assets at year-end stood at EUR 46 billion. The solvency ratio fell to 124 per cent due to the merger and low investment income. Solvency continues to be on a good level, allowing Ilmarinen to take investment risks in line with its long-term investment strategy.

Investing pension assets is a long-term business. Ilmarinen's annual average return since 1997 has been 5.6 per cent, which corresponds to a real return of 4.0 per cent. This clearly exceeds the current 3.0 per cent real return assumption used by the Finnish Centre for Pensions in its long-term calculations.

In December, Ilmarinen's Board of Directors approved the updated responsible investment policy which outlines the goals and principles of investment operations from the perspective of environmental and human rights impacts and active ownership. Ilmarinen's efforts to promote responsible investment received global recognition in 2018. We were ranked in the top ten in AODP's international investor comparison, and our Sustainability Report came second in the competition organised by the international publication Responsible Investor.

Cost-effectiveness for the benefit of customers

In the post-merger Ilmarinen, we built a common operating culture and even more efficient, harmonised ways of operating and eliminated overlaps. The co-determination negotiations related to the merger were held in spring, resulting in a reduction of 65 in the number of permanent employees. Despite the changes, personnel's work satisfaction remained stable. At the end of the year, Ilmarinen employed 649 permanent employees and 35 temporary employees. All our activities start with competent, motivated and thriving employees who provide the best solutions and services for our customers' needs. An excellent employee experience and an excellent customer experience

are key goals for us alongside growth, efficiency and solvency.

The information systems were integrated gradually and the work continues in 2019. The integration costs and the write-downs of duplicative IT systems burdened the loading profit for 2018 by around EUR 23 million. The loading profit was EUR 30 million and the ratio of operating expenses to expense loading components available for them, measuring cost-effectiveness, was 83 per cent. The synergies gained through the merger will result in improved cost-effectiveness and, in turn, even better client bonuses for upcoming years. The target set for the merger – savings of at least EUR 20 million in total expense loading – will likely be achieved as planned in 2020. The savings in expense loading will be returned to our customers in full. As for the costs related to investment operations, the synergy target of EUR 20 million will be achieved already this year.

Thanks to our good solvency and cost-effectiveness, the client bonuses that we pay our customers for 2018 in the form of discounts on insurance contributions amount to EUR 120 million, which is 0.6 per cent of our customer companies' total payroll.

At the end of the year, we started working on a strategy update which is due for completion in spring 2019. The future strategy will focus on the continuous improvement of customer experience and effectiveness.

Responsibility for future generations

Responsibility is one of Ilmarinen's values and an integral part of all our activities. Finland has a well-functioning, reliable and open pension system. In the international Mercer Global Pension Index, the Finnish pension system rose for the first time to the top three and was selected for the fifth time in a row as the world's most reliable and transparent system. Ilmarinen, for its part, was rated as the most responsible Finnish pension company in the broadest brand survey ever conducted in the Nordic countries.

As a pension company, we bear responsibility not only for the pension cover of current generations but also for that of future ones. In the longer term, the sustainability of the earnings-related pension system is primarily impacted by the development of employment and payroll, the development of the investment markets, demographic changes and the birth rate, which has been exceptionally low in recent years.

* * *

I would like to warmly thank our customers, personnel and partners for the past year. We are building an even more customer-focused and attractive Ilmarinen in line with our values: we operate openly and responsibly and achieve success through teamwork.

Jouko Pölonen
President and CEO



SUSTAINABILITY AT THE CORE OF OPERATIONS

Ilmarinen is a mutual employment pension insurance company owned by its customers. (GRI 102-5) Our task is to ensure that employees and self-employed persons receive the pension they earned from employment. We promote a better working life and work capacity and help our customers succeed.

We take care of statutory pension cover in Finland. (GRI 102-6) Our statutory basic task means that we have a considerable responsibility in our society: we take care of the pension security of employees and the profitable and secure investing of the pension assets of both current and future pensioners. This task calls for responsibility from each and every employee.

Ilmarinen provides two types of insurance. Employees' earnings-related pension insurance (TyEL) is statutory insurance which employers take out for their employees. Self-employed persons take out self-employed persons' earnings-related pension insurance (YEL) for themselves. We serve all private companies and self-employed persons regardless of the size of the business activities or the sector.

In 2018, following Etera's merger with Ilmarinen, we insured more than 600,000 employees and more than 70,000 self-employed persons. We paid pensions to close to half a million pensioners. Altogether we manage the pension cover of close to 1.2 million Finns and are the largest earnings-related pension insurer in Finland's private sector, measured in customer numbers. (GRI 102-10)

Sustainability is one of Ilmarinen's values and an integral part of all our activities. In 2018, Ilmarinen was rated as the most

responsible Finnish pension company in the broadest brand survey ever conducted in the Nordic countries. The survey aimed to explore how Finns perceive the sustainability of well-known companies.

We collect and invest pension assets responsibly. We are a major real estate investor and we rent premises and flats. Our services also include corporate financing. We have invested more than EUR 11 billion, i.e. almost 25 per cent of our investment assets, in Finland. Europe, the US and Asia are also important investment markets for us.

All our employees are based in Finland. Our head office is located in Ruoholahti, Helsinki. Through our co-operation with OP Financial Group, our service network covers the whole of Finland. (GRI 102-4)

Values guide our operations

Following Etera's merger with Ilmarinen at the beginning of 2018 we have revised our strategy. In the next few years, we will focus on offering the best client benefits, serving digitally, investing productively and succeeding in the merger. We will further revise the strategy in 2019.

Our vision is to be the most attractive earnings-related pension partner. We operate openly and responsibly and achieve success through teamwork. We believe that responsibility in our operations strengthens our attractiveness as an earnings-related pension partner and supports efficient business.

TABLE 1.

KEY FIGURES OF ILMARINEN'S BUSINESS AND ORGANISATION (GRI 102-7)	2018	2017
Number of employment relationships at the end of the reporting period	687	567
Premiums written, EUR million	5,410	4,312
Net investment income at fair value, EUR million	-641.6	2,693
Turnover, EUR million	5,965	6,805
Value of investment assets, EUR million	46,024	39,355

Ilmarinen's values (GRI 102-16)



OUR BASIC TASK

is to ensure that our customers receive the pension they earned from employment.

TABLE 2.

ILMARINEN'S SOCIAL INCOME DISTRIBUTION CALCULATION (GRI 201-1)

SOCIAL INCOME DISTRIBUTION CALCULATION, EUR MILLION	2018	2017
INCOME FORMATION		
Premiums written	5,409.9	4,311.6
TyEL, employer's contribution	3,665.8	2,885.3
TyEL, employee's contribution	1,369.8	1,081.0
YEL (self-employed persons)	384.3	345.2
Previous year's client bonuses	136.4	102.1
Net investment return excluding operating expenses	-599.8	2,730.7
Other income and expenses	0.0	0.0
Total income	4,946.5	7,144.3
INCOME DISTRIBUTION		
To pensioners	-5,711.7	-4,721.8
TyEL pension recipients	-5,365	-4,372.7
YEL pension recipients	-346.7	-349.1
Provision for future pensions	-1,684.8	-813.8
Provision for future risks	2,778.1	-1,327.2
Buffering against fluctuations in investment return	2,617.5	-2,254.9
Buffering against fluctuations in underwriting result	160.6	927.6
Client bonuses	-120.0	-120.0
Staff expenses	-66.4	-50.8
Other service providers	-128.1	-99.5
Taxes withheld at source	-13.5	-11.1
Donations	-0.1	-0.1
Total income distribution	-4,946.5	-7,144.3

Key figures and income distribution in society

In 2018, we received EUR 5.4 billion in premiums written from employers, employees and self-employed persons and paid EUR 5.7 billion in pensions. Net investment return at current value amounted to EUR -641.6 million. The value of investment assets at year-end stood at EUR 46 billion.

After Etera's merger with Ilmarinen, co-determination negotiations were held to eliminate overlapping operations and reor-

ganise the company. Ilmarinen employed 649 persons at the end of 2018.

The majority of Ilmarinen's income is paid as pensions to current pensioners. It is equally important to prepare for tomorrow and ensure that there are sufficient pension assets for future generations. The social income distribution calculation describes what makes up Ilmarinen's income and how it is distributed among the various stakeholder groups. At the same time, it describes our impact on society.

Ilmarinen's services (GRI 102-2)

**OUR VISION IS TO BE
THE MOST ATTRACTIVE
EARNINGS-RELATED
PENSION PARTNER.**





**EASY AND
RELIABLE
PENSION COVER**

We manage pension cover

We wish to offer the best customer service in the earnings-related pension sector. We develop our services to ensure that insurance-related matters are easy and effortless for our customers. In accordance with our strategy, we have focused our efforts on developing digital services. Digitality enables faster and more individualised service. (GRI 103-2)

Earnings-related pension is part of the social security that aims to secure basic cover for all people in all life situations. In 2018, following the merger of Etera and Ilmarinen, we were responsible for the pension cover of more than a third of all Finns working in the private sector. We provided insurance for more than 74,000 self-employed persons and more than 73,000 companies which employed in total over 600,000 employees. Last year, we collected EUR 5.4 billion worth of earnings-related pension contributions and paid pensions to 460,000 people worth more than EUR 5.6 billion. Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The comparison figures do not include the impacts of Ilmarinen's and Etera's merger or portfolio transfers, which means that they are not fully comparable with the 2018 figures. (GRI 103-1)

Insurance services

In insurance services, Ilmarinen's year was marked by preparations for the introduction of the national electronic Incomes Register. All payroll notifications concerning wages and salaries paid after 1 January 2019 are

made in real time and per payment to the Incomes Register.

The Incomes Register replaces the payroll notifications made to Ilmarinen, the Tax Administration, Kela and the Unemployment Insurance Fund. The data is reported to the Incomes Register in conjunction with the payment of wages and salaries. The key benefit of the system is that the employer only needs to report the information once. Ilmarinen receives all the information it needs to calculate insurance contributions and pensions directly from the Incomes Register.

Ilmarinen prepared for the Incomes Register by revamping IT systems and informing and training customers. Ilmarinen has provided information on the Incomes Register through its online service, newsletters, articles, events, webinars and the sector's joint publications, among other channels. We also extended the opening hours of our customer service and implemented chat services to support customer service. However, small companies were less well prepared for the Incomes Register than large companies and accounting firms.

We have also communicated to our customers that small employers in particular should consider the various payroll calculation, salary payment and reporting options available when transferring to the Incomes Register. The options include various online services, such as Palkka.fi and SuoraTyö.fi. The advantage with using Palkka.fi or SuoraTyö.fi is that these services send the payroll notifications directly to the Incomes Register on behalf of the employer.

After Ilmarinen's and Etera's merger, the decision was made to use two different systems for insurance in 2018 to give us

TABLE 3.

CUSTOMER RETENTION	2018	2017
Customer retention	94.9%	94.5%

TABLE 4.

NET PROMOTER SCORE (NPS) GIVEN BY ILMARINEN'S CUSTOMERS (GRI 102-43)	2018	2017
NPS for online services	33	33
NPS for phone services	67	74
NPS for pension services	36	31
NPS for insurance services	30	34

The worst possible score is -100 and +100 is the best possible score.

time to develop the systems so that they are suited to the management of our shared insurance portfolio. The use of different systems made work somewhat more difficult for our specialists and slowed the building of a common operating culture. In 2019, shared systems will be adopted, speeding up the creation of a harmonised Ilmarinen. Our objective is also to develop our customer information system and our digital services to provide our insurance customers with an even better and more personalised service.

We continuously improve our services related to our basic task. We wish to offer customers insurance services that are as effortless as possible. In 2018, we continued to develop our online services and clarify their use with the Incomes Register in mind.

Pension services

Ilmarinen's task is to ensure that our customers receive the pension they earned from employment. Our customers usually apply for pension just once, which is why pension services have to be a complete success in every service situation. In processing pension applications, we focus particularly on speed, or processing time, and high quality. Once the pension decision has been issued, pension payments are initiated quickly and the pensions are in their recipient's account in a few banking days. Our success and customer satisfaction are measured regularly. (GRI 103-1, 103-2)

In 2018, the NPS survey score measuring the satisfaction of those having received a pension or rehabilitation decision was 44 (2017, 54; 2016, 40). The reasons for declining satisfaction included the long pension application processing time and the backlog building up in our customer

services during the summer months due to the reorganisation of the pension service. On the other hand, our customers found that the quality of our pension decisions was good: the average responses varied between 4.2 and 4.4 on a scale of 1 to 5. In our customers' opinion, our decisions were clear and easy to understand. For 2018, we report as a sustainability KPI the speed of pension decisions, i.e. pension processing times in days. Our target was to maintain the 2017 level; we were able to achieve an even better result this year in spite of the challenges brought by the merger.

Last year, pension services were affected by the merger of Ilmarinen and Etera. Etera's and Ilmarinen's best practices were put into use in organising pension services. Work to renew Ilmarinen's post-merger pension processing system began on 1 March 2018. The goal is to adopt an approach which enables one employee to process the pension application from start to finish, assisted by automation. The one-processor approach will expand our personnel's expertise while also speeding up our customer service.

Following the merger, Ilmarinen had different systems in place in pension processing. In May 2018, we entered all new pension applications into a single pension system. The integration of the IT systems was a major tour de force, which required planning and care. This work inevitably ate into our resources, which was reflected in our customer service at times.

In pension services, preparations were also made for the introduction of the national Incomes Register at the start of 2019. The up-to-date information provided by the Incomes Register increases the accuracy

of the data and speeds up the pension decision process.

In 2018, about two out of three old-age pension applications were submitted online. As of February 2019, we will be able to issue a decision on the majority of the online old-age pension applications within approximately one hour. Our objective is also to expand our online service offering to all of Ilmarinen's pension recipients, regardless of the type of pension.

The number of disability pension applications increased by approximately 10 per cent in 2018. The processing times of disability pension applications shortened somewhat. In 2018, processing took an average of 73 days compared to 76 days in 2017. However, we were still unable to achieve our target speed. Those who received a disability pension decision from us were, on average, more dissatisfied with the processing time than the applicants of other types of pension.

The number of Finns receiving disability pension has declined steadily in recent years. At the end of last year, slightly under 145,000 persons received disability pension from the earnings-related pension system. Ten years earlier, the number of disability pension recipients was less than 220,000. The decline in disability pensions can partly be attributed to the vocational rehabilitation provided by earnings-related pension providers. However, the number of those retiring on disability pension from the earnings-related pension system took an upward turn in 2018. The reasons for this increase are being analysed in terms of the entire pension system.

Pension legislation was renewed at the

TABLE 5.

SPEED OF PENSION DECISIONS (KPI 2)	2018	2017
Percentage of pension decisions issued prior to and during the month in which the pension began of all pension decisions	64.1%	69.5%
Percentage of pension decisions issued before the start of the pension of all pension decisions (fast pension decisions)	35.6%	42.6%

TABLE 6.

DISABILITY PENSION DECISIONS UPHELD (KPI 3)	2018	2017
Percentage of negative decisions of all disability pension decisions	30.1%	34.9%
Percentage of decisions amended by the Pension Appeal Court	14.8%	15.6%

The percentage of negative decisions of disability pension decisions is calculated based on the disability pension decisions issued by Ilmarinen during a year (new full and partial disability pension applications). The percentage of decisions amended by the Pension Appeal Court is calculated based on the decisions that have been taken before the Pension Appeal Court.

start of 2017. A key change brought by the pension reform was that, in future, the retirement age will rise annually by three months and the pension accrual in all age classes will be 1.5 per cent annually. In 2018, the minimum old-age retirement age was 63 years 3 months for those born in 1955. As a responsible pension company, we notify our customers about changes to the pension age and remind them that continuing work until the target pension age accrues their pension security.

The number of old-age pension applications declined by around nine per cent

in 2018. The baby-boomers have already retired, which has naturally reduced the number of old-age pension applications. The pension reform resulted in two entirely new pension types, the partial early old-age pension and the years-of-service pension. The partial early old-age pension makes it possible for a person to draw part of their pension even before they retire on the actual old-age pension. The partial early old-age pension clearly gained popularity in 2018, whereas the years-of service pension has remained quite marginal. A high number of partial early old-age pension applications

TABLE 7.

EFFECTIVENESS OF WORK CAPACITY SERVICES (KPI 4)	2018	2017
Effectiveness of work capacity projects (customer experience of benefit on a scale of 1–5)	4.6	4.5
Customer's willingness to recommend (NPS, Ilmarinen's own services)	85	82
Customer's willingness to recommend* (NPS, including purchased services)	75	-

*) Measured since 2018.

were submitted in early 2017 when the new pension type entered into force. This year, the number of applications received has decreased by some 20 per cent from last year.

We encourage applicants to carefully assess whether the partial early old-age pension is a suitable option for them. The partial early old-age pension can result in additional income for the final years of the career but it does reduce the final amount of pension for the rest of the pensioner's life. Using a survey, we looked into the reasons people applied for partial early old-age pension and their life situations. The majority of applicants applied for pension for additional income and continued to work alongside their pension. Self-employed people worked part-time more often than others and senior salaried employees worked full-time.

The years-of-service pension is intended for people 63 years of age and up, who have had a long career in a tough and strenuous job. In 2018, we made approximately ten years-of-service pension decisions. At the end of the year, two customers received years-of-service pension from Ilmarinen. In future, the old-age retirement age will rise gradually, so the significance of the years-of-service pension is expected to rise.

In the early part of the year, we published a survey according to which four out of five Finns who have just retired on old-age pension estimate that they are in good health. An increasing number of pensioners also think that they would have had the physical and mental resources to continue in working life. Based on the survey, it is also safe to say that the rise in the retirement age included in the pension reform will not constitute a problem in terms of people coping at

work. The foundation for good health during retirement is laid already during the working years.

A better working life and longer careers

A better working life is built through regular actions in line with the strategy, based on data confirmed by research. We offer our customer companies a range of services that support the work capacity of their employees. Together with customers, we improve the quality of working life, prevent disability risk and increase productivity. We provide our customer companies with digital tools, tested work capacity management services and coaches. (GRI 103-2)

After Ilmarinen's and Etera's merger, work capacity services were reorganised to increase their customer focus. We gained more resources not only for customer interaction but also for research. Through research, we can focus work capacity management measures optimally, monitor the development of work capacity management and prepare for the challenges brought by changes in working life. One example of our research projects in 2018 is an extensive project carried out together with Aalto University and Hintsa Performance, looking into the work capacity management practices of approximately 50 customer companies.

Ilmarinen also participated in the 'Future CEO 2018' survey targeted at the managing directors of companies with more than 100 employees. The survey showed that managing directors think that good people skills and personnel management skills are important. We also had a survey carried out by Taloustutkimus on the working life of

youth, which revealed that 76 per cent of young people under 30 studying for a professional qualification would prefer to work than draw social benefits, even if the salary paid for the work would be less than the unemployment allowance, social assistance and other benefits combined. Young people also wish to secure their ability to participate in the labour market: 80 per cent are ready to retrain if they do not find a job in their own field.

Kristiina Halonen, who previously worked at the Finnish Institute of Occupational Health, joined Ilmarinen in June as the company's new Head of Work Capacity. The role of work capacity risk management and vocational rehabilitation in Ilmarinen's operations was strengthened further: as of the beginning of October, they form a new business division together with insurance medicine. In addition to Helsinki, Ilmarinen has work capacity managers in Oulu, Tampere and Turku. The objective is to offer our customers the best services, expertise

and data to support work capacity management.

Projects to improve work capacity

Projects to improve work capacity are development projects carried out jointly by Ilmarinen and its customers, aimed at improving the client company's co-operation with occupational healthcare or management practices, for example. Co-operation with customers is systematic and goal-oriented. Projects are always targeted at jointly identified challenges related to work capacity management. We make written agreements on all co-operation. The results produced by the services are monitored through indicators agreed on together with clients and customer surveys, for example. A total of EUR 5.9 million was used for managing disability risk in client companies during the year.

In 2018, Ilmarinen focused on building a better working life together with its customers, more actively than ever before.

During the year, 3,200 distinct training or other projects to maintain work capacity were underway in co-operation with clients. These projects covered around 176,000 employees insured with Ilmarinen. Around 50 per cent of the projects are related to the development of work capacity operating models and supervisors' skills, 40 per cent to employees' work capacity and 10 per cent to the development of the work communities' collaborative skills.

In 2018, 54 coaching sessions to support work capacity management were also organised for client companies throughout Finland, attracting approximately 3,100 people. Ilmarinen's Master in Work Capacity training concept, which brings together information on work capacity management and disability risk management, has been especially popular and has received good feedback. The participants network with one another and complete an assignment linked to the development of work capacity management models in their own organisation during the training programme. The training programme has been organised three times, and more than 160 professionals have already completed it.

We have reduced the use of external service providers in our work capacity activities and focussed on developing our own services for client companies. Ilmarinen's For a Better Working Life service package helps client companies identify work capacity risks and monitor the effectiveness of measures. The service package is made up of Luotaamo, Valmentamo and Ohjaamo. Luotaamo helps customers assess the work capacity situation of their company. It offers, for example, the Parempi vire (work capac-

ity improvement) service, which motivates personnel to promote work capacity. In May 2018, Luotaamo introduced the new 'Energy in the work community' (Työyhteisövire) study that provides a comprehensive overview of the work community's energy, strengths and improvement areas. Valmentamo offers our customers new information and ideas for the management of work capacity and disability risk, both digitally and through face-to-face studies. Ohjaamo, in turn, offers services for monitoring the development of work capacity.

We measure the quality of our work capacity management activities through the benefits our customers feel they gain from the co-operation and the willingness of our customers to recommend them. The effectiveness of the work capacity projects and the Net Promoter Score (NPS) given by customers participating in the work capacity projects grew in 2018.

Our goal is to build awareness of issues linked to maintaining work capacity also through our own media, such as blogs, articles and speeches. During the year, the Finnish TV channel MTV presented, in connection with the Huomenta Suomi morning show, the Duunikunto series in which Ilmarinen participated as an expert partner. Our measures in 2018 included the selection of the Happiest Entrepreneur of Finland and Finland's Best Boss and the distribution of a work capacity award. There is always a theme behind the awards, such as management, which we consider a key topic for good work capacity management.

TABLE 8.

PRELIMINARY REHABILITATION DECISIONS	2018	2017
Number of preliminary rehabilitation decisions	4,522	3,485

TABLE 9.

EFFECTIVENESS OF REHABILITATION (KPI 5)	2018	2017
Percentage of rehabilitees available to the labour market at the end of the rehabilitation	74%*	69%

*) The percentage of 2018 is not decisive and former Etera's percentage is not included.

Vocational rehabilitation

Ilmarinen also supports the management of disability risks in its client companies through vocational rehabilitation. Effective rehabilitation linked with work extends careers and creates an opportunity for a better working life. A person's work capacity is the sum of many factors. Work capacity management is a team effort between the employer, HR, supervisors and occupational healthcare. The rehabilitee's own motivation is also paramount to the success of the rehabilitation process.

Ilmarinen's and Etera's merger at the start of 2018 also affected the rehabilitation services. Separate pension processing systems were used in the early part of the year. A shared system was implemented later on in the year. As of the beginning of October, work capacity risk management and rehabilitation form a business division in its own right. The objective is to offer our customers

the best services, expertise and data to support work capacity management.

Ilmarinen's rehabilitation services offer expert support for both supervisors and employees. A personalised rehabilitation plan is drawn up for each rehabilitee so that it accords with the requirements of both the person and the workplace. Each of our rehabilitees has a designated rehabilitation specialist who provides support and advice throughout the rehabilitation process. In drawing up the rehabilitation plans, Ilmarinen is assisted by its nation-wide network of service providers. The network is made up of 11 rehabilitation partners with nation-wide operations, with which we co-operate closely in accordance with the agreed quality criteria.

The number of applications for vocational rehabilitation has increased in recent years. Vocational rehabilitation is available to employees and self-employed persons with an

illness or injury that makes their work more difficult or threatens to completely undermine their work capacity. Rehabilitation is also an effective way of reducing the costs resulting from disability pensions. Our goal is to reduce the number of disability pension applications through preventive work capacity actions and vocational rehabilitation.

As of the start of 2015, direct decisions on the right to vocational rehabilitation have been issued to persons applying for a disability decision, without separate application. We have a service in place that offers persons who have received a decision the chance to take part in personal guidance. Preliminary decisions for rehabilitation are in force for ten months. If needed, we contact the rehabilitee during the validity of the decision and encourage him or her to make use of our vocational rehabilitation services.

Our rehabilitation services also utilise automation and artificial intelligence in routine steps of the application processing, which shortens processing times. The time freed up by technology is primarily used for customer interaction, which, based on feedback received from rehabilitees, is very important. We have also extended our phone service hours. The phone service for rehabilitation received a good NPS of 76 for 2018.

Back to work

According to preliminary information, around 74 per cent of Ilmarinen's rehabilitees returned to work last year. Until today, rehabilitation at the workplace – work trial, job coaching and apprenticeship training – has been the most widely used and most effective method for continuing in working

life. However, training is gaining popularity. Currently almost a half of our rehabilitees can find a new career through training.

In 2018, Ilmarinen and the Rehabilitation Foundation carried out a survey among those who had received a rehabilitation allowance decision from Ilmarinen in 2015–2017. According to the survey results, those under 40 and those who have worked or collected daily sickness allowance before rehabilitation need less support after rehabilitation and find gainful employment more often than others. Of the nearly 800 respondents, 40 per cent worked full- or part-time after rehabilitation. Of the unemployed who started rehabilitation, more than one in five returned to full- or part-time work after rehabilitation and just as many started studying.

The survey results show that those who had undergone rehabilitation for mental health reasons returned to work from a fixed-term disability pension more often than those who had participated in rehabilitation for other reasons. They also experienced less need for support after the rehabilitation period than others. In 2019, one of the priorities for Ilmarinen's rehabilitation services is to support mental health rehabilitees.

A person with only partial work capacity is still capable of working, provided that his or her work capacity is enhanced, for example through rehabilitation. According to a calculation made by Ilmarinen, ensuring better employment for persons with partial work capacity holds a significant untapped potential of around EUR 1.3 billion a year. Together with the Association of People with Physical Disabilities, the Vates Foundation, the Rinnekoti Foundation, the vocational

college Spesia and the Service Foundation for People with an Intellectual Disability, we created the 'Suitable Work for Everyone' online service portal to support the employment of those with partial work capacity. It provides information to employers in particular and serves as a portal to other online information sources. The objective is to increase awareness of the employment of persons with partial work capacity and influence employers' attitudes towards partial work capacity.

Information security

Ilmarinen has a special responsibility to manage statutory earnings-related pension cover and related pension assets and for the information security of data processing. We process a large volume of confidential information on a daily basis. Our stakeholders consider ensuring data protection as one of the key areas of our corporate responsibility.

By information security, we mean matters pertaining to data protection and information security. Data protection concerns the processing of natural persons' personal data and the protection of privacy. Personal data is considered to be any information that can be directly or indirectly linked to an individual. The personal data we process relates, for example, to insured persons, pensioners and our employees.

In 2018, our greatest effort in terms of information security was the implementation of the EU's General Data Protection Regulation (GDPR) at Ilmarinen in May. The GDPR significantly changed our information security obligations. We have been preparing for the GDPR since 2015. As part of our preparations, we charted existing practices and information systems and compared them with the requirements of the new regulation. Based on the results, Ilmarinen's information security was found to be at a fairly good level, but a number of improvement areas were nonetheless identified. A separate project was started up to ensure compliance with the GDPR. The project took into account the merger of Ilmarinen and Etera at the beginning of the year.

The project was made up of 15 development areas related to both technical chang-

es and ways of operating and training. It included, among other things, analysing the data protection of the various systems and the use and processing of personal data. Approximately 100 Ilmarinen employees contributed to the project in different ways, which goes to show the magnitude of the effort.

In 2017, a new procedure for personal data processing was completed, describing the main structures and ways of operating related to personal data processing at Ilmarinen. In addition, Ilmarinen has an information security policy, which contains an insight into the goals, principles and implementation of information security, approved by Ilmarinen's management. Based on the information security policy, Ilmarinen maintains information security guidelines. Internal guidelines were also revised to meet the requirements of the GDPR.

The GDPR essentially forbids using identifiable personal data in service development and testing. In 2018, we have developed ways which will allow us to ensure the functioning of our programmes by using anonymised or pseudonymised data. The solution model is ready and work to apply it in practice will continue in 2019.

Ilmarinen has over 50 service providers whose systems or services involve the processing of personal data. We were also obligated to review various agreements, such as those related to information systems and information technology, from the perspective of the new regulation.

The merger of Ilmarinen and Etera also brought new service providers and information systems to the company. The ones that were retained were charted in terms of

data protection. Over the course of 2018, Ilmarinen's and Etera's practices have been merged, retaining the best ways of operating.

We have taken the data protection requirements concerning the management of consent and non-consent into account in our online services and marketing. This concerns, for example, the use of cookies and direct digital marketing. The sending of e-marketing messages to a private customer requires the customer's prior permission. This does not, however, apply to messages sent for the purpose of managing the customer relationship.

Under the GDPR, data must be erased when it is no longer needed for the original purpose. However, due to legal obligations, earnings-related pension companies must retain the data for long periods. The safe retention of data has therefore been a key focus when designing the existing systems. Following the entry into force of the GDPR, Ilmarinen, just like other parties that retain data in various systems in a similar way, must pay particular attention to data erasure

practices. To establish these practices, Finnish legislation concerning the obligation to archive needs to be revised; the legislative revision is currently under preparation.

In addition to data protection pertaining to personal data, we also comply with a number of non-disclosure provisions in our operations. We ensure that confidentiality is achieved through data protection procedures that secure information technology, premises security and personnel's data protection know-how, among other things. Our information systems and work processes and methods must meet the demands of non-disclosure and good data management.

The business units are responsible for implementing information security and data protection in their own operations. Ultimately, Ilmarinen's management is responsible for the legality of our operations, also in terms of data protection. The realisation of data protection is monitored by the Data Protection Committee together with the Data Protection Officer, while the premises security is the responsibility of the security

manager. The Legal Department monitors legislative projects and provides legal support in data protection issues.

We regularly organise data protection and information security training for our employees. Practically all employees have completed the online information security course and participated in the Cyber Awareness Training which focussed on monthly themes in 2018. The training is a mandatory part of the induction of new employees. Last year's special priority was Ilmarinen employees working on the development of services and systems.

In 2018, we did not receive any complaints concerning breaches of customer privacy or loss of customer data. On a monthly level, we recorded a few data protection incidents due to human errors. These cases were handled by the Data Protection Committee and they did not result in an obligation to report to the Data Protection Officer. All cases are also assessed from the perspective of developing the operations. (GRI 418-1)

” ALTHOUGH THERE IS NO SUCH THING AS PERFECT INFORMATION SECURITY, AT ILMARINEN WE PROMISE TO MAINTAIN AND DEVELOP OUR SERVICES SO THAT OUR CUSTOMERS NEED NOT BE CONCERNED ABOUT THEIR DATA CONTAINED IN OUR REGISTERS.

Juhani Karjasilta, Chief Information Security Officer



**RELIABLE AND
TRANSPARENT
A SHARED
RESPONSIBILITY
FOR PENSIONS**

We handle our basic task cost-effectively

Responsible management of the pension cover requires cost-effective operations. Cost-effectiveness is a major competitive edge for us and a key requirement in terms of the whole system's sustainability and legitimacy. As a major player, we have a considerable impact on the cost-effectiveness of the pension system.

We finance our operations through the expense loading component included in the earnings-related pension insurance contribution. The costs for the investment operations are covered through investment returns. The indicator used for comparing the operational efficiency of pension insurance companies is the ratio of operating expenses to expense loading components. It describes the company's own operating expenses in relation to the loading income. The more efficiently we operate, the larger the loading profit and the better the client bonuses we can pay. In addition to cost-effectiveness, also the solvency of a pension company impacts the amount of client bonuses.

The earnings-related pension company

Etera merged with Ilmarinen on 1 January 2018. The merger resulted in Finland's largest earnings-related pension company in terms of the number of customers. Following the merger, the total number of persons insured with Ilmarinen and receiving pension from Ilmarinen increased to close to 1.2 million, the company's market share rose to some 37 per cent and pension assets to more than EUR 45 billion.

Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The comparison figures do not include the impacts of Ilmarinen's and Etera's merger or portfolio transfers, which means that they are not fully comparable with the 2018 figures.

The objective of Ilmarinen's and Etera's merger is to annually save at least EUR 20 million in total expense loading, beginning in 2020. Furthermore, our goal is to achieve direct and indirect annual cost savings of altogether EUR 20 million in investment operations. In addition to personnel costs, savings will be sought by, among other things, eliminating duplicative IT, premises and administrative costs and by streamlining

operations. The savings in expense loading will be allocated in full to the client bonuses paid to client companies, which means that they will reduce our customers' pension insurance contributions.

Ilmarinen's Board of Directors sets an annual goal for the company's cost-effectiveness. On that basis, Ilmarinen's management sets cost-effectiveness targets and draws up action plans for the organisation's functions and monitors and assesses the implementation of these targets. In 2018, we covered our operating expenses with the expense loading component included in earnings-related pension contributions, which stood at EUR 148.8 million. The loading profit was EUR 29.9 million and the ratio of operating expenses to expense loading components was 83.2 per cent. The integration costs and the write-downs of duplicative IT systems burdened the loading profit by around EUR 23 million.

The pension insurance contributions confirmed by the Ministry of Social Affairs and Health are the same for everyone regardless of the chosen pension company. This is why one of the key competitive factors between pension companies is the amount of client bonuses paid to customers as discounts. As of the start of 2017, it has been possible for pension companies to return the entire

loading profit to their customers. For 2018, EUR 120 million will be allocated for client bonuses. The client bonuses reduce the earnings-related pension contributions paid by corporate customers by an average of 0.6 per cent in relation to the payroll.

The new client bonus bases that entered into force at the start of 2018 further increased the customer benefits of improved cost-effectiveness. Pension companies now decide themselves on the distribution of client bonuses to their customers. The reform introduced company-specific client bonus calculation bases. Client bonuses based on the new bases will be paid in 2019.

In addition to the ratio of operating expenses to expense loading components, we also measure Ilmarinen's operational efficiency through absolute operating expenses in euros. We report on the forecasts concerning the ratio of operating expenses to expense loading components and the operating expenses to Ilmarinen's Board of Directors. Ilmarinen's total operating expenses were EUR 194.6 million. The growth in total operating expenses resulted from the expenses related to the merger of Ilmarinen and Etera at the start of 2018 and from large IT projects related to, among other things, the Incomes Register.

THE MERGER RESULTED IN FINLAND'S LARGEST EARNINGS-RELATED PENSION COMPANY.

TABLE 10.

ILMARINEN'S RATIO OF OPERATING EXPENSES TO EXPENSE LOADING COMPONENTS AND TOTAL OPERATING EXPENSES (KPI 1)	2018	2017
Ratio of operating expenses to expense loading components	83.2%	81.1%
Total operating expenses	194.6	150.3

Open stakeholder dialogue

Due to the societal nature of our task, Ilmarinen has many kinds of stakeholders. To be able to improve our operations, we engage in open dialogue with, for example, our customers, their representatives, authorities, NGOs and our other stakeholders.

Stakeholders are all parties who are affected by our operations or whose operations affect us. In addition to customers and our personnel, our key stakeholders include labour market organisations, societal decision-makers and authorities, which also have an impact on the legislation concerning the sector or the preparation thereof. Additionally, supervisory authorities and the media play a central role.

We also participate actively in several working groups and committees of trade organisations and lobbyists, such as the Finnish Pension Alliance TELA, the Finnish Centre for Pensions, Finance Finland and the construction sector association RAKLI. In addition, Ilmarinen has representation in other parties, such as on the Finland Chamber of Commerce's Legislation Committee and the Actuarial Society of Finland's Regulation Working Group.

As we want to be an active owner, we maintain a dialogue and engage with the companies we own in Finland and abroad. We are regularly in touch with the media and participate in public dialogue in our role as a provider of earnings-related pension cover, through our own media on our online service ilmarinen.fi, for example.

The media in particular have given us top grades for our transparency and responsibility in recent years. In a PR Barometer survey carried out in 2018 by Taloustutkimus, a

Finnish market research company, Ilmarinen was the best company in the pension sector and placed seventh overall. The survey explores reporters' perceptions on how companies and other business players manage their media relations. (GRI 102-40, 102-42, 103-3)

TABLE 11.

STAKEHOLDER	STAKEHOLDER'S KEY EXPECTATIONS	INTERACTION CHANNELS, FREQUENCY AND MEASURES
Customers	Best know-how in the sector. Manages issues openly, transparently and responsibly. Takes care of work capacity. Coherent and clear interaction and easy contacts.	Frequent meetings and co-operation with clients. Customer involvement in the development of services. High-quality work capacity services. Active development of customer services. Coherent customer material.
Personnel	Responsible personnel management, smooth interaction, equality, positive workplace atmosphere and working conditions as well as competitive remuneration.	Leadership that supports success and developing expertise. Clear goals, monitoring and remuneration. Comprehensive and evolving well-being at work activities. Close interaction.
Current and future pension recipients	Responsible and long-term management of statutory pension cover. Easy, coherent and fast pension service. Focussing efforts on the quality of working life.	High-quality customer service, providing understandable pension information, fast processing times, efforts to enhance work and securing pension assets. Continuous interaction through studies, surveys, events and customer service, among other things.
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. 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 good level of pension provision and retirement age as well as keeping the system's costs at a reasonable level.	Communication through Ilmarinen's Board of Directors, Supervisory Board and Advisory Committees. 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. Minimising misconduct and adverse effects.	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. Interaction also through the traditional media
Investments and investment partners	Open communication, clear objectives, competitive investment terms, professional and long-term operations, fast response times to questions.	Clear communication concerning investment criteria and the operations' principles and objectives, coherent investment strategy, fast decision-making. Interaction both regularly and as required.

Current topics in interaction

The interaction is implemented by Ilmarinen's management and specialists and, as part of their work, the entire personnel. We organise stakeholder meetings and participate in various events on a regular basis. In 2018, we held discussions with our stakeholders on, among other things, the Incomes Register that concerns all parties that pay wages or salaries, the need to develop the Self-Employed Persons' Pensions Act (YEL), and climate change. We also put forward themes related to responsible investment and the utilisation of the circular economy in property development. The subjects addressed in our blog posts included the impact of the declining birth rate on the population projection, public finances and the financing of the earnings-related pension system (see pull-quote). The media was particularly interested in the merger of Ilmarinen and Etera, our expertise in the field of work capacity management and working life transformation as well as the outlook for the economy and investment markets. Together with employment pension players and Kela, we carried out a survey among persons responsible for recruitment in various organisations to explore their insights into the skills required in future working life, the maintenance of well-being at work and their attitude towards employees under 30 and over 50. We share our finance-related expertise in an economic forecast that we publish twice a year. We also publish a monthly business cycle index, which describes the change in companies' personnel numbers compared to the previous year. In co-operation with

EY, we organised the Fokus 2018 finance seminar focussing on the competitiveness of Finland and Finnish companies, with opinion leaders in Finnish business life as guest speakers. We also took part in organising several campaigns and competitions aimed at raising important themes related to work capacity or earnings-related pensions. In the 'Happiest Entrepreneur of Finland' competition, we reward small-scale entrepreneurs who promote a positive work atmosphere and bring joy to their customers. At the same time, we shine a light on entrepreneurs' work capacity and well-being. The winner of the competition was Lauri Salmi, who has been an entrepreneur in the beauty sector for 15 years. We also selected and awarded many distinguished managers across Finland in the 'Finland's Best Boss' competition. Heikki Meriläinen, Executive Director of the Forest Management Association Kainuu LKV, was chosen as Finland's Best Boss. The Finnish Association for the Welfare of Older People and Ilmarinen granted the Senior Deed of the Year award 2018 to the mobile resource centre, operated jointly by Turun Lähimmäispalveluyhdistys and the City of Turku. We also offered use of the visitor flow to the front page of our website to the Finnish Red Cross's Hunger Day collection. (GRI 102-42, 102-44, 103-3)

Donations and sponsoring

Ilmarinen annually donates money for research and purposes of general interest. In accordance with the policy outlined in spring 2018, we support activities that aim to prevent disability and lengthen careers and to promote youth employment.

The decision concerning the sum to be allocated for donations each year is made by the Annual General Meeting. In 2018, that sum was EUR 50,000. The decisions about donations are made by the President and CEO.

In 2018, we made donations to the Finnish Psychiatric Research Foundation, Suomen Icehearts ry, the Finnish Association for Mental Health, the Finnish Red Cross, the Finnish Association of People with Physical Disabilities, Team Rynkeby, Suomen Tenniksen Tukisäätiö, Rajamme Vartijain Säätiö and Maanpuolustuksen

tuki ry.

Sponsoring is marketing communications carried out against payment. Our principles of sponsorship and sponsorship and donation recipients are published each year on our website. In 2018, we sponsored NewCo Helsinki, Maria01, Future Board ry, Tampere Chamber of Commerce, Junior Chamber International Finland, Helsinki Stadion Management, Badminton Finland, Oulun Kärpät and the Finnish Association for the Welfare of Older People. In addition, we sponsored some targets that came to us through Etera, such as HIFK, Veiterä, Iitti Golf and Kuhmo Music Society. In accordance with Ilmarinen's sponsorship principles, we did not give financial support to political parties or make art or other purchases from them in 2018. (GRI 415-1)

→ Donations and sponsoring

” THE WINNER OF THE COMPETITION WAS LAURI SALMI.

DECLINING BIRTH RATE CHANGES THE POPULATION PROJECTION AND SUSTAINABILITY ESTIMATES

The population projection published by Statistics Finland in November 2018 looks gloomier than before. According to the projection, Finland's population will start to decline in 2035. The most significant change behind the weaker outlook is the sharp decline in the birth rate that started in 2012. 2018 marks the third consecutive year when deaths have exceeded births in Finland.

In 2010, Finland was still one of the European countries where the Total Fertility Rate (TFR) describing the average number of children born to a woman over her lifetime was close to the good Nordic level. The relatively high birth rate seemed to bring some relief to the weakening of the old-age dependency ratio due to an ageing population. In Finland, the TFR was, for a long time, around 1.8, which was better than in many other European countries. Demographic renewal would require a TFR of 2.1. However, this is a level that no industrialised country has reached in a long time.

In recent years, the situation has dramatically worsened, with the TFR falling to around 1.4 and the number of births per year decreasing from around 60,000 to fewer than 50,000. This change means that already in the 2040s, the working-age population will be around 100,000 persons smaller than was previously anticipated. By 2050, the working-age population will decrease by 200,000 persons from the current level.

Employment and the payroll are the pillars that lay the financial foundation for public finances and largely also for earnings-related pensions. A sustained or permanent decline in the birth rate will reduce future premiums written, leading to a pressure to raise earnings-related pension contributions. A change of this magnitude will inevitably impact future calculations. These calculations are made by, among others, the Finnish Centre for Pensions, which assesses the financial sustainability of the pension system, and the Ministry of Finance, which assesses

the long-term sustainability of public finances as a whole. They will publish their own estimates on economic sustainability in early 2019.

The weakening of the population projection due to the declining birth rate will inevitably make these calculations gloomier, launching a debate on how to adapt to the public finance problems looming on the horizon.

In general, projections do not materialise. Calculations, especially if they reach far into the future, are exposed to future changes, which we cannot anticipate today. Luckily, the impacts of demographic changes are slow to surface, and they can be reacted to. It is possible that the birth rate will begin to rise again at some point. This could happen if the reason behind the downward trend observed in recent years is simply people deciding to have children later in life. The population can also begin to rise again due to a possible increase in immigration. Statistics Finland's population projection does not anticipate these types of turns.

At the moment, what interests us most is why the birth rate is declining. This is not just a Finnish phenomenon, as similar developments can be observed in other industrialised countries as well. Therefore, the explaining factors may have a broader, international dimension.

It is unclear whether the reason behind the declining birth rate is the increased pessimism after the financial crisis, climate anxiety or the weakened labour market position of young people. The population projection launched a discussion on what could be done to turn the trend in a better direction. It would be important to obtain research data on what lies behind the change and possible means to influence the development.

Jaakko Kiander
Chief Communications Officer

” EMPLOYMENT AND THE PAYROLL ARE THE PILLARS THAT LAY THE FINANCIAL FOUNDATION FOR PUBLIC FINANCES AND LARGELY ALSO FOR EARNINGS-RELATED PENSIONS.

Consistent position-taking

We collaborate with supervisory authorities, the sector's interest groups and organisations. We interact actively with decision-makers and labour markets organisations in order to reinforce the efficiency, openness and reliability of the earnings-related pension system.

The Finnish Pension Alliance TELA, an interest group for pension insurers that manages statutory earnings-related pension cover, and Finance Finland (FFI) are important interest groups for us. In labour market issues, we operate in FFI in the role of employer. Jouko Pölönen, who started as Ilmarinen's President and CEO in August, also became the first deputy chairman of TELA's Board and a member of the FFI Board and the chairman of the Employee Pension Executive Committee. Both TELA and FFI also have specialist working groups, such as FFI's corporate responsibility committee, which includes a specialist from Ilmarinen.

In 2018, we received statement requests from, for example, the Ministry of Social Affairs and Health, the Ministry of Finance, the Ministry of Justice, the Parliament's Social and Health Affairs Committee and the Finnish Competition and Consumer Authority. As a general rule, statement requests and the issuance of statements concerning the earnings-related pension sector are co-ordinated by TELA. We participate in formulating TELA's statements and, if required, we also issue statements directly.

Ilmarinen's specialists directly respond to statement requests that are related to the more technical aspects of their areas of expertise, such as construction. The

contact details of our Executive Group and many specialists have been published on our website for many years. This allows, for example, reporters to directly contact the company's senior management. Media representatives also have a phone number through which they can contact Ilmarinen's communications.

We are also active in social media. We serve our customers and engage in dialogue with our stakeholders in various social media channels. We were the first pension company in Finland to start actual customer service in social media in 2016. (GRI 102-13)

Tax transparency

The tax footprint means the tax income that a company's operations generate for society. Ilmarinen's tax footprint consists of the payment of taxes by its operations, insurance and investment operations, and indirectly the investee companies. We promote transparent and sustainable reporting practices both in our operations and in those of our investee companies.

In line with our Ownership Policy, we wish the companies we own to report on their tax policy and their tax footprint and to present them in the Annual General Meeting. In 2018, we sent Ilmarinen's Ownership Policy to all Finnish listed companies that we own. With this, we wanted to inform them of Ilmarinen's ownership principles related to, among other things, governance practices and annual general meetings.

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

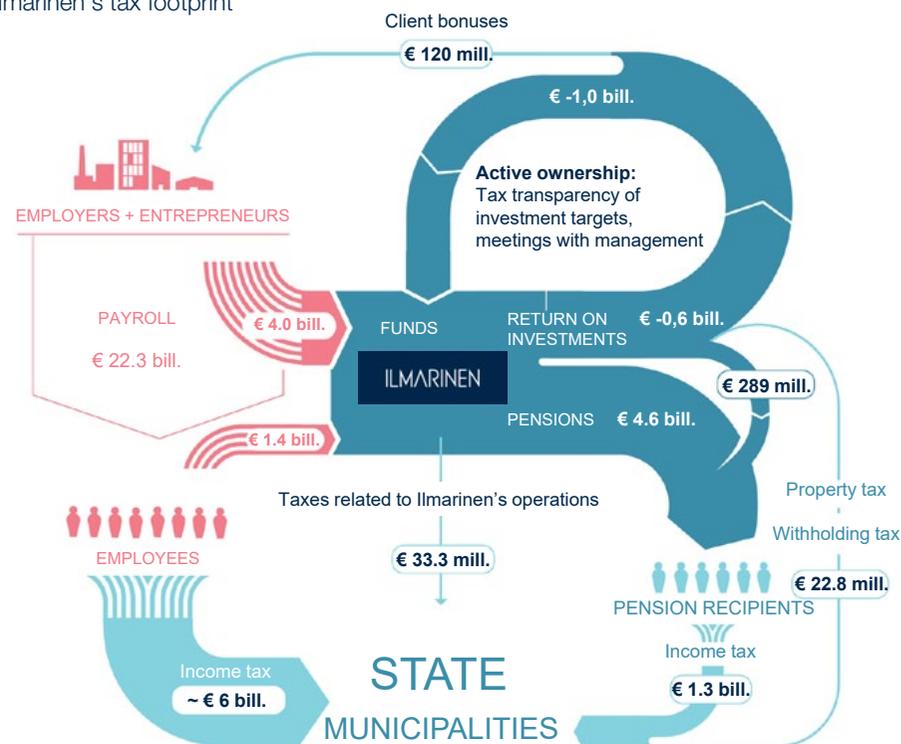
on pension savings and thus support the accrual of pension funds. Overlapping taxation creates pressure to increase pension contributions.

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. In 2018, Ilmarinen paid approximately EUR 5.7 billion in pensions, of which approximately EUR 1.3 billion in income tax was paid in the form of withholding tax.

Taxation of Ilmarinen's insurance and investment operations

The operations of an earnings-related pension company are subject to business income tax. Pension companies receive income from earnings-related pension contributions and investment operations. The majority of the income is used for the payment of pensions to current pensions and the rest is funded for future pensions. A pension company's liability for future pension commitments forms the company's

Ilmarinen's tax footprint



technical provisions. Technical provisions, in turn, consist of provisions for unearned premiums and claims outstanding. A return requirement is credited to technical provisions, which guarantees that the value of pensions is retained. Investment returns that exceed the return requirement accrue the solvency capital that acts as a risk buffer for investment operations.

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. An earnings-related pension company's result in the profit and loss account is determined according to the technical bases confirmed in advance by the Ministry of Social Affairs and Health, and its amount is determined by a reasonable return calculated on the guarantee capital or other capital and reserves.

As a mutual company, Ilmarinen does 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 2018, we paid EUR 13.4 million in tax withheld at source in accordance with tax agreements.

Ilmarinen invests 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 to ensure compliance.

Ilmarinen, like other pension companies, has 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.

The harmonisation of tax practices and structures is primarily the task of authorities. We keep a close eye on it and take it into account in our investment operations. The challenge with the existing structures is that an investor who wishes to act responsibly must significantly limit his or her choice of investment instruments.

Ilmarinen has set itself a target of putting together a document on tax principles, but

this target did not materialise in 2018.

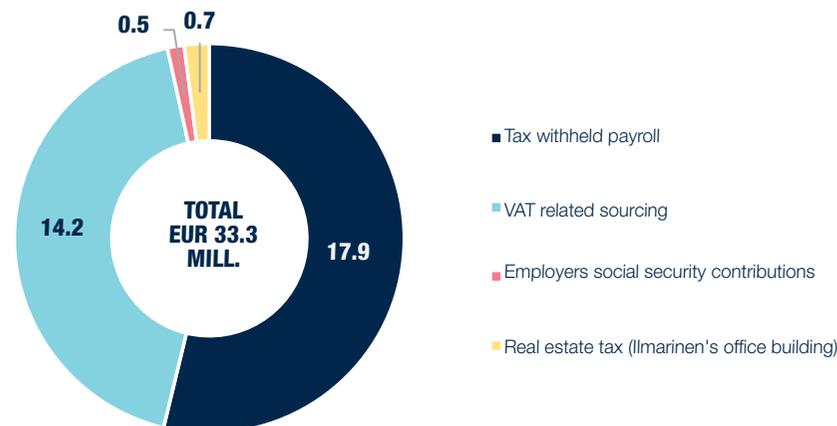
Ilmarinen is also a major real estate investor. The management costs and construction expenses for our properties include so-called hidden value-added tax (VAT). This refers to the VAT on, among other things, services and materials. Hidden VAT concerns properties to the extent where use of the properties is exempt from VAT, such as residential use. The amount of hidden VAT has not been monitored separately, because the number of taxable lease agreements varies monthly. To the extent where the tenants' business operations are subject to VAT, the received lease payments are subject to VAT and the costs are deductible.

Taxation related to Ilmarinen's operations

We spent EUR 194.6 million for our operating expenses in 2017. Around a third of these costs were related to personnel. We paid some EUR 18.4 million in withheld taxes and social security contributions on the wages and salaries and remunerations of our employees.

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. That is why Ilmarinen's purchases included around EUR 14.2 million in hidden value-added tax in 2018.

Taxes related to Ilmarinen's own operations



Compliance

Our operations are built on a foundation of good governance, compliance, openness and sustainability. Our operations must be responsible and reliable for all our stakeholders. This is especially highlighted in decision-making processes.

Ilmarinen has a full-time Compliance Officer who supports the company's Board of Directors, management and business operations in ensuring that corporate governance is reliable, that regulations are complied with, and that internal control is effective. In the Ilmarinen's governance structure Compliance Officer is part of the Legal and Compliance function, which is headed by the Chief Legal Officer. The Compliance Officer reports directly to the Board of Directors, the Audit and Risk Management Committee and the President and CEO. The Board of Directors annually approves the compliance action plan and monitors its implementation.

The compliance plan for 2018 put an emphasis on actions to support the assurance of reliable governance and prevent shortcomings in the post-merger company. During the year, the Compliance Officer also provided more in-depth training as needed, as well as assistance in interpreting practical issues related to the Code of Conduct, such as compliance with related-party guidelines. (GRI 205-2)

Ilmarinen's way of operating is determined in the company's Code of Conduct. The company's strategy defines the right things to do from Ilmarinen's and its customers' perspectives, while the Code of Conduct ensures that we do things right. The Code of Conduct also serves as an um-

rella for more detailed reliable governance guidelines. Ilmarinen's updated Code of Conduct was approved by Ilmarinen's Board of Directors in May. The Code of Conduct was supplemented by a new section, 'We invest responsibly'. In the document, we also specify, for example, that we maintain the equality and safety of our personnel, comply with good insurance practices, condemn bribery, identify and prevent conflicts of interest, do not abuse insider information, take care of data protection, know our customers, carry out responsible sourcing and engage in responsible co-operation in the earnings-related pension sector. (GRI 102-16)

Our Code of Conduct and other public policies can be found on our website. Policies have been drawn up concerning, among other things, insider information, internal control, sourcing policy, sponsoring and data processing. Our guidance, for example, on related-party matters and trans-

actions involving related parties, is more stringent than what is required by law. We monitor conflict-of-interest situations when preparing and making decisions involving the companies we own. We publish the key positions of trust of our management on our website.

The insider guidelines approved by Ilmarinen's Board of Directors were updated in 2018. The guidelines are aimed at harmonising and improving the processing of insider matters at Ilmarinen. Information on the holdings of public insiders is available on Euroclear Finland's NetSire service.

Compliance with the Code of Conduct and the more detailed operating principles is required of all employees. At the end of December, more than 92% of personnel had completed the online Code of Conduct training.

In 2018, Ilmarinen's Compliance Officer assessed that the company's compliance risk level was moderate. Compliance risks

refer to risks related to legal or administrative sanctions, financial losses or a loss of the company's reputation. These risks are a consequence of the company neglecting to comply with laws, decrees or other administrative regulations that apply to its operations. A compliance risk usually concerns internal violations or neglect and can thus be considered a part of operational risks.

The system for monitoring and reporting operational risks is also used to monitor the implementation of rectification measures related to compliance risks and observations. Risk management is developed based on information contained in the system. Risk management related to operations is described in more detail in the risk management note to Ilmarinen's financial statements. (GRI 102-11) Awareness of changes to national and EU-level legislation and the applicable local marketplace legislation and their impacts on our operations is an important part of managing compliance



OUR OPERATIONS ARE BUILT ON A FOUNDATION OF GOOD GOVERNANCE, COMPLIANCE, OPENNESS AND SUSTAINABILITY.

risks. Our objective is to be able to identify all significant compliance risks in advance, while at the same time ensuring the appropriate means for managing them. Changes in legislation are monitored in the Legal and Compliance function and through the committees of Finance Finland, for example. We were not subject to any fines or non-monetary sanctions related to failure to comply with legislation or regulations in 2018. (GRI 307-1, GRI 419-1)

FIN-FSA is the highest official body supervising the operations of earnings-related pension companies. Money laundering risks related to the investment operations of earnings-related pension companies differ from the risks of many other sectors subject to monitoring by the Finnish Financial Supervisory Authority (FIN-FSA), since, as an earnings-related pension insurance company, we invest only our own assets. Money-laundering risks related to pension insurance have been assessed as low both in our own assessment and in the joint risk assessment drawn up by the earnings-related pension sector.

The personnel have access to the Whistle Blowing channel launched in 2016, through which any suspicions of misconduct can be reported anonymously. The possibility to report suspected misconduct anonymously is very important in ensuring reliable governance and operations that are in compliance with regulations. In 2018, one report was made through the channel. The report was investigated and declared unfounded. (GRI 103-2)

→ Code of Conduct

Ilmarinen's sourcing

Ilmarinen's business consists of providing services, which means that Ilmarinen does not have long supply chains. Our main purchases are related to IT systems and the development and maintenance of real estate. We also purchase different work capacity management services. Other significant purchases are consulting services, cleaning, security and catering and sourcing related to company cars. Additionally, we source other services and materials needed to carry out our work. We apply Ilmarinen's sourcing policy to all purchases. Company-level sourcing guidelines based on the sourcing policy specify in more detail the bidding and contract process for all sourcing activities.

We carry out sourcing based on good market practices and sourcing is, as a general rule, put out to tender. The selection criteria include the company's competence, reliability, sustainability, resources and competitive price of the delivery.

As a result of Ilmarinen's and Etera's merger, the number of suppliers increased temporarily, but will decrease as overlapping operating models are eliminated. At the end of 2018, we launched a project to develop sourcing practices and processes and make them more systematic. The objective is to concentrate sourcing on a smaller group of contract suppliers while at the same time making sourcing activities more systematic, responsible and monitorable. The project continues in 2019.

We apply the Act on the Contractor's Obligations and Liability when Work is Contracted Out when we function as a contractor or a customer when ordering renovation, management or maintenance services. The Act may also be applicable in lease work agreements and other assignment or subcontractor agreements. This is the case when the employees of the party carrying out the work on Ilmarinen's premises or at Ilmarinen's worksite, and the tasks to be carried out, are related to tasks normally carried out in Ilmarinen's operations. Our sourcing policy is published on our website.

→ Sourcing policy

TABLE 12.

ILMARINEN'S SOURCING AND SUPPLY CHAIN (GRI 102-9)	2018	2017
Number of suppliers, operating expenses	1,132	1,306
Number of suppliers, real estate costs	1,167	804
Number of domestic suppliers, operating expenses	1,023	1,216
Number of domestic suppliers, real estate costs	1,161	799
Number of foreign suppliers, operating expenses	109	90
Number of foreign suppliers, real estate costs	6	5
Total purchases, operating expenses, EUR million	142	121
Total purchases, real estate costs, EUR million	321	218

**WE INVEST
RESPONSIBLY**

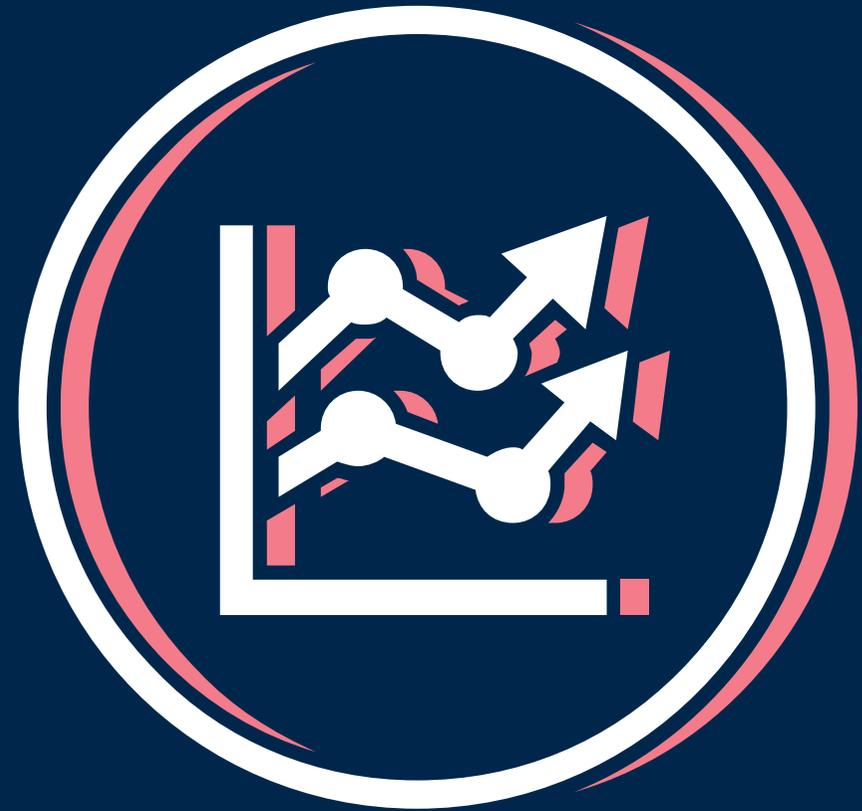


TABLE 13.

Managing pension assets

Profitable and secure investing of pension assets is provided for by law. By successfully investing the pension assets under our management we ensure that the employees of our client companies and entrepreneurs will receive the pension they earned from employment. At Ilmarinen, responsibility is an integral part of our investment operations. Responsible investment means that we take into consideration not only economic aspects, but also environmental, social and governance (ESG) issues in making investment decisions. (GRI 103-1)

In 2018, the return on the pension assets under Ilmarinen's management was -1.4 per cent. The market value of investment assets at year-end stood at EUR 46 billion and the solvency capital amounted to EUR 8.9 billion. The solvency ratio, i.e. pension assets in relation to technical provisions, was 123.7 per cent. The solvency ratio was 1.6 times the solvency limit required by law. Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The comparison figures do not include the impacts of Ilmarinen's and Etera's merger or portfolio transfers, which means that they are not fully comparable with the 2018 figures. (GRI 102-46, 103-1)

Our real, i.e. inflation-adjusted annual investment return on pension assets has been 4.0 per cent on average since 1997. This exceeds the return level applied by the Finnish Centre for Pensions (ETK) when forecasting the development of the pension contribution. According to the estimate used by ETK in its calculations, a three-per cent real return will be achieved on pension

assets in 2017–2026, after which the real return will rise to 3.5 per cent.

In recent years, the earnings-related pension system's premiums written have lagged behind the development of the pension expenditure. Since 2012, Ilmarinen has also paid out more in pensions than we have collected in pension contributions. In 2018, the difference was approximately EUR 289 million. This situation has been prepared for by funding on average a quarter of the earnings-related pension contributions.

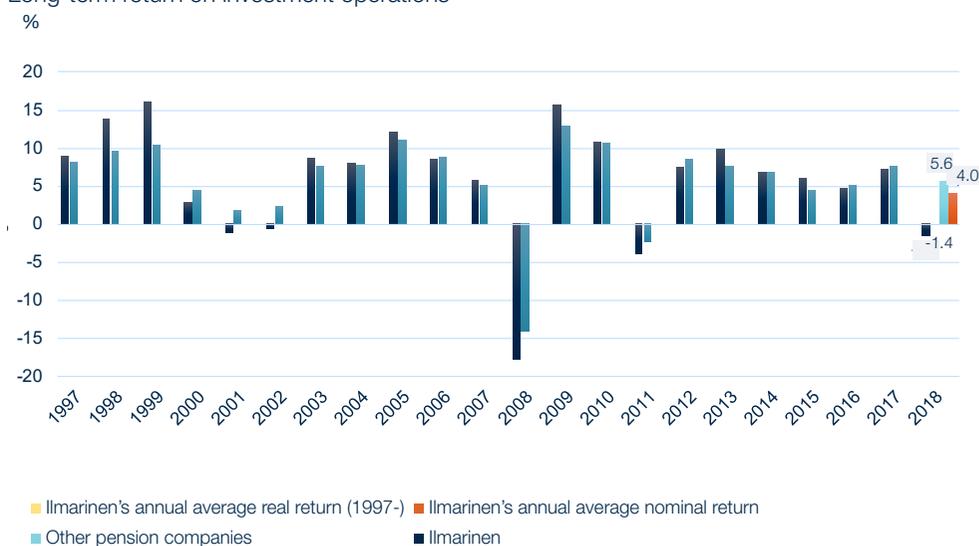
Most of the premiums written are used to pay current pensions. The assets are diversified across various investments, such as equities and shares, debt instruments and real estate. The geographical diversification of investments brings security when market performance in a certain area is weaker.

Through professional risk management we maintain good solvency and meet the solvency requirements. Good solvency protects pension assets against investment risks while also enabling sufficient risk-taking with regards to the targeted investment return. Thanks to good solvency, we are also able to pay higher client bonuses.

Ilmarinen's Board of Directors approves each year an investment plan that guides the investment operations 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. The Board of Directors also decides on investment authorisations. Ilmarinen's investment organisation is in charge of investment operations. We publish quarterly reports on the return on Ilmarinen's investments and solvency.

TOTAL RETURN ON ILMARINEN'S INVESTMENTS AND SOLVENCY RATIO (KPI 6)		
	2018	2017
ROCE, %	-1.4	7.2
Solvency capital, % of technical provisions	123.7	131.2

Long-term return on investment operations



GOOD SOLVENCY PROTECTS PENSION ASSETS AGAINST INVESTMENT RISKS.

Finnish ownership

Ilmarinen is a major player in the Finnish investment and financial markets. The success of Finnish companies, in turn, affects the returns on the pension assets managed by Ilmarinen, for example, through the performance of listed shares.

We improve companies' productivity by supporting the work capacity of our client companies' employees. The better employees feel and the longer they continue in working life and the better Finnish companies succeed, the higher the employment rate and payrolls. Work carried out in Finland is directly linked to pension contribution accrual and to the financial sustainability of the entire pension system.

Ilmarinen plays a major role in the capitalisation of Finnish industry. At the end of the year, we had invested more than EUR 11 billion, i.e. around 25 per cent of our investment assets, in Finland. Through our financing and corporate bond decisions we enable business development and growth. More than a quarter of our listed equity investments are invested in Finnish listed companies. At the end of the year, the value of our real estate investments was EUR 6.1 billion, of which 74% were in Finland. We build new business premises and residential buildings and develop our existing properties to meet our customers' needs. (GRI 203-2)

Ilmarinen's most significant Finnish listed equity holdings

	EUR MILL.	31.12.2018	31.12.2017
↑	Neste Oyj	274	250
↓	Kojamo Oyj	264	IPO 19.6.2018
↓	Stora Enso Oyj	216	246
↑	UPM-Kymmene Oyj	200	182
↑	Nordea Bank Abp	190	128
↑	Kone Oyj	188	187
↑	Nokia Oyj	184	123
↑	Fortum Oyj	170	102
↑	Wärtsilä Oyj	166	157
↓	Sampo Oyj	155	169

Sustainability as part of investment decisions

We believe that responsibility is a key component of profitable and secure investment operations and effective risk management. We contribute to the development of society through our investment decisions. Investment decisions have an influence not only on investment returns but also on the financial success of many companies. Companies' operations and success are affected by participation in share issues, bond issues or other financing projects.

For us, responsible investment means that, in addition to economic aspects, we take into account environmental, social and governance (ESG) matters when making investment decisions. The ESG impacts of business operations are reflected in the company's income, financing costs and reputation. Our principle is that a responsible company is a better investee than a

company that does not care about its wider impacts on the surrounding society.

According to law, pension assets must be invested in a profitable and secure manner. Responsible investment is not charity and it does not mean compromising on return targets. A good cause alone is not enough to justify an investment decision. To illustrate this: we do not invest in the world's most responsible company if it is not profitable or in the world's most profitable company if it does not operate responsibly. Investment decisions are always based on a financial assessment of returns, risks and sustainability. This way we bear our responsibility for securing pension assets also for future generations.

The importance of responsibility is increasing also when it comes to the availability and pricing of companies' capital funding. For example, company X can receive financing with a lower interest rate if it meets

	%	31.12.2018	31.12.2017
	Nurminen Logistics Oyj	19,84	19,84
↑	Talenom Oyj	17,19	0,00
	Digia Oyj	14,59	14,59
↓	Kojamo Oyj	13,09	IPO 19.6.2018
↓	QT Group Oyj	10,14	14,28
↑	Consti Yhtiöt Oyj	9,93	3,96
↑	Panostaja Oyj	8,11	0,00
	Martela Oyj	8,07	8,07
↑	Glaston Oyj	7,15	0,00
	Citycon Oyj	7,13	7,13

the financier's sustainability criteria. It is thus in companies' financial interest to operate responsibly. From a lender's perspective, financing granted to a responsible company involves fewer risks.

Monitoring violations of norms and excluding investments

We were the first Finnish investor to sign the UN-supported Principles for Responsible Investment (PRI) in 2006. In addition to national legislation, we require the companies we own to comply, among other things, with the principles of the UN Global Compact initiative and related international norms concerning, for example, human rights, labour rights, the environment and corruption.

An external service provider reviews our securities investments biannually and reports to us any detected and suspected norm violations. This review covers Ilmarinen's direct investments in listed equities,

TABLE 14.

SCREENING OF INVESTEEES FOR NORM VIOLATIONS REGARDING ENVIRONMENTAL AND SOCIAL ISSUES (FS11)	2018	2017
Screening for norm violations, percentage of listed equities	100%	98%
Screening for norm violations, percentage of listed corporate bonds	100%	96%
Screening for norm violations, percentage of Ilmarinen's total investment assets	54%	46%
Coverage of Ilmarinen's own sustainability ratings (percentage of direct listed equity investments)	90%	88%

corporate bonds and derivatives with a single company as the underlying security and, where applicable, also funds. We take the norm violations that we are aware of into account in making new investment decisions. The primary approach in norm violations is to engage with the investee. Norm violations can lead to both existing and new investees being screened out.

We do not invest in tobacco companies or companies that manufacture arms prohibited by international treaties (including nuclear weapons). We also do not invest in companies that are dependent on coal (share of coal more than 30 per cent), unless the company has a credible plan in place for discontinuing the use of coal.

Responsible Investment Policy

The objective of our Responsible Investment Policy is to guarantee that we operate according to Ilmarinen's values. Ilmarinen's Board of Directors approved the updated Responsible Investment Policy in December 2018. The new policy puts even more emphasis on the environment, human rights and ownership in managing responsibility. However, the basic definition of responsibility remains essentially unchanged, in other words, investment activities are still guided by compliance with international norms, active ownership and integrating responsibility into portfolio management.

Under the Responsible Investment Policy, we have divided responsibility into three themes. These themes are the environment (E), social responsibility (S) and good governance (G). These themes are governed by three key requirements: compliance with international norms, active ownership and

dialogue and the integration of sustainability analysis into investment decisions.

After the end of the reporting year, several cases concerning care services were brought to the public's attention. Some of these cases concerned care service companies owned by Ilmarinen. Ilmarinen's new Responsible Investment Policy describes how, according to our insight, a company that is sustainable and profitable in the long term takes care of its personnel, customers and other stakeholders in a way that supports its business. When the problems related to the care service companies owned by Ilmarinen emerged, we took action as described in our policy and practical guidelines.

One of the approaches described in our Responsible Investment Policy to assessing sustainability is to use the Sustainable Development Goals (SDG). The SDGs are a series of 17 goals approved by the UN General Assembly in 2015. Their purpose is to draw attention to global problems and their root causes, and to encourage the creation of solutions for these challenges. The goals were originally drafted with entire nations in mind, but many companies and investors have also adopted them as their guidelines.

The SDGs and solution-oriented business models are part of Ilmarinen's responsibility assessments and objectives. Due to the fact that the goals are interconnected, positive development can be achieved in more than one goal through the right solutions. The impacts of, for example, climate change are, in many ways, human rights issues and the goals for human rights issues benefit from solutions for mitigating climate change and adapting operations. The goal

for 2019 is to focus on promoting a few SDGs that have the largest impact and are the most important for us.

At Ilmarinen, responsibility analysis is part of investee selection. When selecting investees, our portfolio managers can view sustainability ratings in our databases along with financial information. The basis of the rating system is a combination of sustainability rating standards created by third parties, which we adapt with analyses and conclusions from internal and external sources. The analysis on which the sustainability ratings are based involves a broad spectrum of risks and opportunities linked to sustainability as well as realised business risks and norm violations. Investing in companies with lower ratings always requires a more detailed pre-assessment. Investing in companies for which a norm violation has been established and which has failed to take corrective action is only possible if an engagement process is underway. If the decision is made to end the engagement process on account of its unsuccessful outcome, the holding must be sold, 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)

Investment operations make use of ESG benchmark indices, which place an emphasis on sustainability. 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 or certain controversial weapons, and companies that have committed serious breaches of international norms are excluded from the indices. The introduction of ESG benchmark indices creates an even closer link between responsibility and investment practice. The ESG benchmark indices do not cover Ilmarinen's listed equity portfolio in its entirety. The market value or trading volume of many shares listed on the Finnish stock exchange, for example, is 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.

TCDF's climate disclosure recommendations

In 2018, Ilmarinen analysed how well our investment operations are aligned with the TCFD's (Task Force on Climate-related Financial Disclosures) recommendations. The TCFD outlines and develops recommended procedures for use by companies in providing information on the financial impacts of climate change. It provides the various players with information on climate risks and shines a light on the business opportunities linked to climate change mitigation.

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. In our opinion, it is also important to carry out various scenario analyses concerning the investment portfolio structure, regardless of challenges related to the analyses and calculation methods.

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. We will continue the development work in accord-

ance with the TCFD's recommendations in 2019. (GRI 102-12)

TCFD

COMPARABLE DISCLOSURES FOR INVESTORS, COMPANIES AND STAKEHOLDERS

TCFD is an international disclosure framework that helps companies incorporate climate-related financial disclosures into their reporting. The TCFD's objective is to improve climate-related disclosures not only for investees but also for investors. The comparison of Ilmarinen's operations with the TCFD's requirements can be found below.

The TCFD is divided into three sub-areas: governance (G), strategy (S) and risk management (R). In addition to these, metrics and targets have been specified separately (M).

GOVERNANCE (G)

a. Board supervision in climate-related risks and opportunities

Ilmarinen's Environmental Policy, of which the Climate Policy forms an integral part, has been approved by Ilmarinen's senior management, i.e. the Board of Directors. The Climate Policy identifies high-level risks and opportunities related to climate change. The results of climate work are presented 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

Ilmarinen's Board of Directors approves the Climate Policy as part of the Environmental Policy, and the responsible investment management team is responsible for implementing the policies in day-to-day work. The responsible investment management team's task is to determine how risks and opportunities are integrated into the process of making investment decisions. It is also responsible for setting climate targets.

STRATEGY (S)

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

Ilmarinen's most significant and largest-impact climate risks and opportunities are related to our investment assets. In terms of our own operations, the impacts are minor. 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 published a Climate Policy and related roadmap with targets. The targets were set with a five-year perspective. In 2019, we will prepare a new roadmap as the current targets extend to 2020.

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

The climate risks and opportunities that have an impact on Ilmarinen are mainly related to our investment assets. Ilmarinen's Board of Directors deals with climate matters on a principle level. The responsible investment management team manages and identifies climate risks and opportunities and decides on climate targets within the framework of responsible investment. The significance of climate impacts depends on, for example, the industry and geographical location of investees. We have removed from our direct investees companies for which coal accounts for at least 30% of net sales or energy production, in cases where at least 30% of the company's net sales comes from energy production. We are ready to renounce the 30-percentage limit if the company has a credible plan for

reducing the use of coal. Our objective is to take these requirements into consideration in our fund investments as well.

c. Sustainability of the climate strategy under scenario analysis

We have carried out some scenario analyses, but in our view, more scenarios must be carried out and the calculation methods must be developed further to be able to rely on scenarios as an essential element of portfolio management. At the moment, scenario analysis mainly provides useful information for meetings with investee representatives and engagement processes and help identify investees that require further investigation.

RISK MANAGEMENT (R)

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

In addition to external service providers, we also use in-house analysis for identifying and assessing 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, and we apply for LEED certification for all new construction projects.

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

At this stage, we are still focussing on making point one more systematic on the portfolio management

level before integrating climate risks into the whole organisation's overall risk management.

METRICS AND TARGETS (M)

a. The calculation methods used in assessing climate risks and opportunities

We use an external service provider for calculating the carbon footprint, for example. The figures for 2018 were calculated by Engaged Tracking. The calculations are based on averages where no public, verified data on emissions is available.

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

We disclose our carbon footprint for both direct equity and fixed income investments (scopes 1 and 2) and report extensively on the climate impacts of our real estate investments. We have calculated the scope 3 emissions of investments, but the variations between the different calculation methods are still too large for us to be confident about the figures.

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

We have published climate targets and a roadmap for 2016–2020. As part of our corporate responsibility reporting, we monitor the realisation of the targets on an annual basis.

TABLE 15.

ILMARINEN'S INTERACTION IN ENVIRONMENTAL AND SOCIAL MATTERS WITH COMPANIES INCLUDED IN THE INVESTMENT PORTFOLIO (FS10)	2018	2017
Interaction and contacts in environmental or social issues, companies included in the investment portfolio	101	86
Number of companies in Ilmarinen's direct equity portfolio	563	567
Interaction and contacts in environmental or social issues, percentage of companies included in the investment portfolio*	18%	15%
Companies subjected to engagement measures	64	90
Companies under an engagement process at year-end (Global Compact)	12	13
Engagement processes completed during the year (Global Compact)	4	2
Engagement in connection with proposals to General Meetings	24	20
Companies on whose nomination boards we participated during the year	23	24
Engagement to promote CDP reporting**	8	37

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

**) In 2018, we did not specifically engage in the CDP framework to promote disclosures as in previous years. We promote and influence the disclosure of environmental impacts in our investees on a general level. A separate figure describing the promotion of CDP disclosures will no longer be reported.

TABLE 16.

MEETINGS WITH THE SENIOR MANAGEMENT OF FINNISH LISTED COMPANIES (KPI 7)	2018	2018
Meetings with the management of Finnish listed companies, companies included in the investment portfolio	76	48
Total number of Finnish listed companies owned by Ilmarinen	105	92
Meetings with the management of Finnish listed companies, percentage of companies owned by Ilmarinen	72%	52%

TABLE 17.

ACTIVE PARTICIPATION IN GENERAL MEETINGS	2018	2017
Number of General Meetings of companies listed in Finland in which Ilmarinen participated	93	84*
Number of General Meetings of companies listed in Finland owned by us	105	91
Rate of participation in the General Meetings of companies listed in Finland (measured in numbers)	89%	92%
Rate of participation in the General Meetings of companies listed in Finland (measured in investment assets)	99%	99%
Voting in the Annual General Meetings of foreign companies	6	5
Number of General Meetings of non-listed Finnish companies in which Ilmarinen participated	34	23
Holdings in non-listed Finnish companies during the General Meeting period	37	24
Rate of participation in the General Meetings of non-listed Finnish companies	92%	96%

*) The figure does not include possible extraordinary general meetings.

Policy outlines and decision-making

Ilmarinen's responsible investment management team is responsible for drawing up and updating the company's Responsible Investment Policy and the related practical guidelines. The management team consists of the President and CEO, the Chief Investment Officer and representatives of the Investment division, Legal Affairs and Communications. Ilmarinen's investment organisation is in charge of implementing the policy. The responsible investment management team convened four times in 2018.

The team prepares, decides on and co-ordinates Ilmarinen's key ownership policy principles, such as voting in General Meetings and positions on the largest owners' joint statements and proposals prior to General Meetings.

The investment division is responsible for operational sustainability analyses and their integration into the selection process as well as the sustainability monitoring of our investments. Ilmarinen has a full-time responsible investment manager and responsible investment analyst.

(GRI 103-2)

Active ownership

Active ownership is an integral part of investment operations. Ilmarinen is an active owner and we engage with the companies we own in a number of ways. The focal point of active ownership is Finnish ownership and direct engagement, which we implement, 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 own on, for example,

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.

In our Ownership Policy, which is included in our Responsible Investment Policy, we disclose what we expect from companies as an owner and how we play our role as an active owner. For example, 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 2018, we sent Ilmarinen's Ownership Policy to all Finnish listed companies that we own for information purposes. With this, we wanted to inform them of Ilmarinen's ownership principles related to, among other things, governance practices and General Meetings.

Participation in Nomination Committees, General Meetings and Board work

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 own.

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. As part of our Nomination Committee work, we chart each company's long-term needs, including Board member successor planning. For us, diversity is one of the hallmarks of a well-functioning Board of Directors. In 2018, we participated in the Nomination Committees of 23 companies. A list of all Nomination Committee memberships can be found on our website (in Finnish).

We attend the General Meetings of the companies in which we are a major owner or where participation is appropriate, for instance due to a theme on the agenda. We annually report on our website on our participation in the General Meetings of listed Finnish companies and the votes cast. We expect any extraordinary motions to be explained in the notice of meeting. Our responsible investment organisation prepares voting instructions for each General Meeting. In drawing up the instructions, we take into account the principles outlined in our Ownership Policy, concerning, among other things, the independence of Board members, their remuneration and the authorisations sought in the General Meeting pertaining to share issues and the purchase of own shares.

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. In 2018, we contacted 24 companies prior to their General Meetings. We held discussions concerning, among other things, the long duration of share issue

authorisations, the dilution in connection with share issues, the gender distribution of the companies' Board of Directors and Board members that are independent from the company.

Ilmarinen's Board of Directors shall approve any and all memberships of Ilmarinen employees in the governing bodies of listed companies. In addition, the Board of Directors shall approve all other memberships of the President and CEO and the members of the Executive Group in the governing bodies of corporations outside of Ilmarinen. The President and CEO shall approve all of the work-related memberships of the remaining personnel in the governing bodies of non-listed companies. The Board memberships of Ilmarinen employees are listed on our website.

Dialogue and engagement processes

In 2018, we engaged with well over 100 investees to promote responsibility or good governance. We carried out engagement activities alone, through nomination committees and as part of international engagement co-operation.

We have been involved in Nordic Engagement Cooperation since 2008. Through NEC, we engage with companies together with Norwegian company KLP, Swedish company Folksam and Danish company PFA Pension which joined the co-operation in 2017.

NEC's engagement theme for 2018 was the same as in 2017, i.e. the textile industry, with sustainable cotton production at its core. There are often shortcomings in the working conditions of those working in cotton production. Cotton farming also has

major environmental impacts. The goal of the engagement is to increase the use of sustainably produced cotton and the transparency of the raw material supply chains.

During the year, we met with representatives of the industry, such as Burberry and ABF. Our discussions with them specifically concerned the sustainable production of cotton and the responsible management of supply chains. We publish a separate annual report pertaining to the engagement work with NEC on our website.

We also hold discussions directly with the management and, if need be, the Board of Directors of the companies we own. In 2018, we regularly met with the management of the listed Finnish companies we own. We held discussions and asked for further information about, for exam-

ple, disclosure of environmental impacts, renewable energy, diversity and prevention of bribery.

If a portfolio company fails to meet our responsibility criteria, we can initiate an engagement process instead of excluding the investee. If the undesirable activity does not end, our last resort is to exit from our ownership in the company.

At the end of 2018, we had 12 on-going engagement processes, of which seven through NEC engagement collaboration, four through a service provider (GES) and one through other collaboration. In 2018, two new engagement processes were started and four were completed. Eight of these cases were related to respecting human rights. The problems were linked to, among other things, forced labour and poor

” IF A PORTFOLIO COMPANY FAILS TO MEET OUR RESPONSIBILITY CRITERIA, WE CAN INITIATE AN ENGAGEMENT PROCESS INSTEAD OF EXCLUDING THE INVESTEE.

working conditions, the rights of indigenous peoples and the limitation of the freedom of association.

One example of engagement processes that aim to prevent continual human rights breaches is the engagement with companies operating in the disputed territory of Western Sahara controlled by Morocco. For several years, Ilmarinen, alone or together with NEC and GES, has strived to engage with the companies operating in the area and exploiting its raw materials, such as phosphate, to make them comply with international norms and principles and hold a dialogue with the local people.

Climate impacts

The Intergovernmental Panel on Climate Change (IPCC) released its latest climate report on global warming on 8 October 2018. The report addresses the impacts of global warming and ways to limit it to 1.5 degrees. In addition, it assesses the links between the various climate goals and the UN's Sustainable Development Goals. The report's findings were also taken into account at Ilmarinen when reviewing our Responsible Investment Policy.

Climate change will alter how the economy and many companies operate in the coming years. Taking these changes into account is especially important for a long-term player and investor such as Ilmarinen. Changes always increase business risks, while at the same time also creating new opportunities.

The risks inherent in climate change can be realised in investment operations when the operating environment becomes challenging for companies due to global

TABLE 18.

INVESTMENT PORTFOLIO'S CARBON FOOTPRINT IN RELATION TO NET SALES (GRI 305-4)	31 DEC 2018	31 DEC 2017
Direct listed equity portfolio's carbon intensity (tCO ₂ e/EUR 1 mill. net sales)	265	215
Direct listed equity portfolio's carbon intensity in relation to aggregate benchmark (per EUR 1 mill. net sales)	-31.0%	-16.9%
Direct listed equity portfolio's carbon intensity (tCO ₂ e/EUR 1 mill. invested)	277	163
Direct listed equity portfolio's carbon intensity in relation to aggregate benchmark (per EUR 1 mill. invested)	2.0%	-18.0%
Direct listed equity portfolio's absolute emissions (tCO ₂ e)	1,660,031.0	1,164,757
Direct listed corporate bond portfolio's carbon intensity (tCO ₂ e/EUR 1 mill. net sales)	316	197.5
Direct listed corporate bond portfolio's carbon intensity (tCO ₂ e/EUR 1 mill. invested)	371	85.2
Direct listed corporate bond portfolio's absolute emissions (tCO ₂ e)	831,691	299,013

The table reports the carbon footprint of companies contained in Ilmarinen's direct equity and corporate bond portfolios. The calculation includes direct emissions (scope 1) and some indirect emissions (mainly purchased energy i.e. scope 2). (GRI 103-3)

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. This is 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.

The equity portfolio's emissions have been compared with an aggregate benchmark which corresponds to the combination of parent indices corresponding to the benchmarks used by Ilmarinen in its investment operations.

TABLE 19.

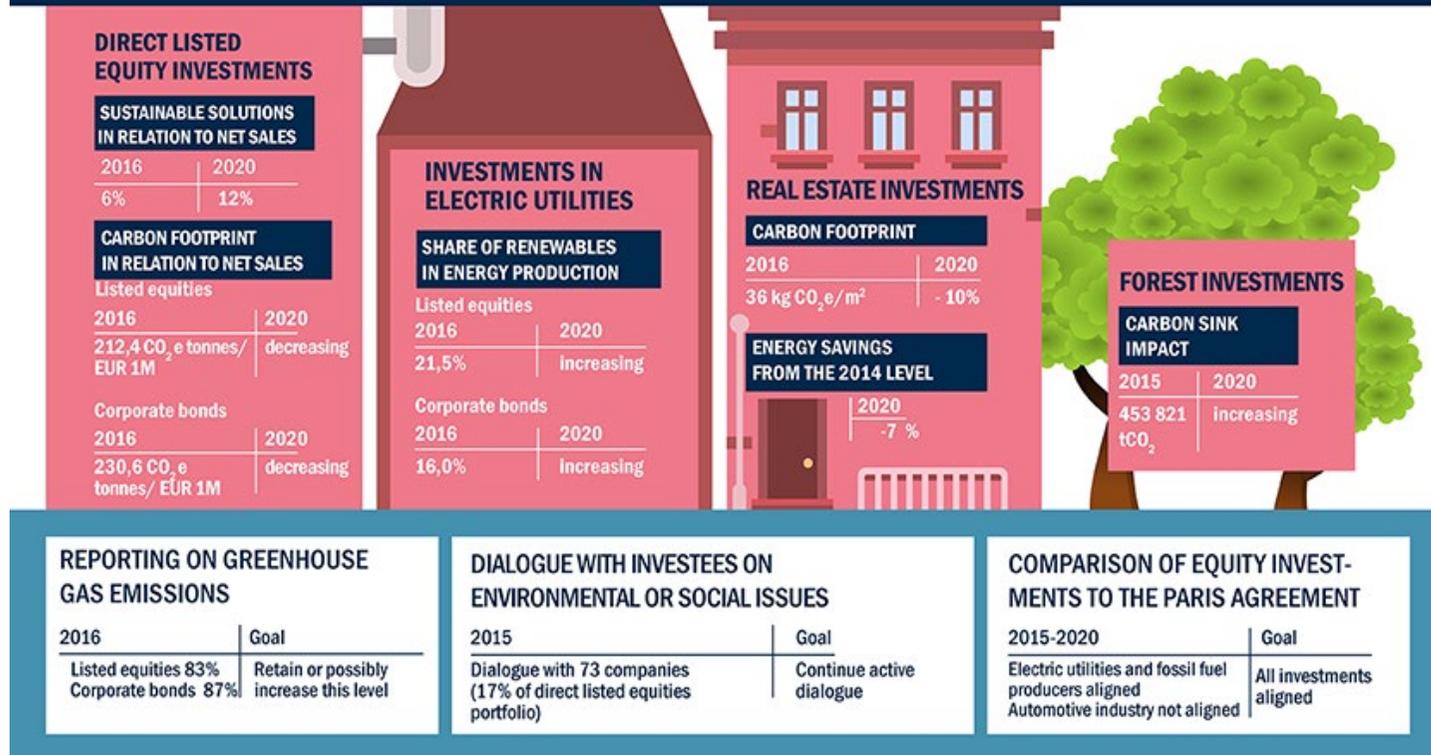
PERCENTAGE OF COMPANIES THAT HAVE REPORTED ON GREENHOUSE GAS EMISSIONS	31 DEC 2018	31 DEC 2017
Percentage of companies that have reported on greenhouse gas emissions, listed equity investments	81%	81%
- of which have reported widely*	90%	-
Percentage of companies that have reported on greenhouse gas emissions, corporate bond investments	64%	77%
- of which have reported widely*	97%	-

*) Reported since 2018

TABLE 20.

SHARE OF RENEWABLE ENERGY AND COAL OF THE ELECTRICITY PRODUCTION OF ILMARINEN'S INVESTEE POWER COMPANIES	31 DEC 2018	31 DEC 2017
Share of renewable energy of electricity production in direct equity investments	25.4%	24.4%
Share of coal of electricity production in direct equity investments	3.7%	7.9%
Share of renewable energy of electricity production in corporate bonds	22.1%	25.5%
Share of coal of electricity production in corporate bonds	17.1%	12.1%

CLIMATE POLICY ROAD MAP 2016–2020



warming. The value of investments may also fluctuate as a result of rapidly changing views in the markets on the impacts of climate risks, and as a result of legislation that creates new expenses.

The updated Responsible Investment Policy, which includes the Climate Policy, was approved by the Board of Directors in

→ Climate Policy

December 2018. Our first Climate Policy governing our investment operations was adopted in 2016. The Policy helps us to reach our investment targets and take into account the limits the climate sets on the economy. In the Climate Policy, we have set concrete targets for mitigating climate change over the next few years. The Climate Policy also guides the investee companies and asset managers to take sustainability aspects better into account.

According to our policy outline, we screen out investees for which coal related to extractive industries or energy production accounts for at least 30% of their net sales or energy production, in cases where at least 30% of the company's net sales comes from energy production, unless the company has a credible plan for reducing the use of coal. We also chart the new business opportunities offered by climate change.

In accordance with our Climate Policy, we joined the Climate Action 100+ co-operation launched in 2018. The international investor initiative aims at engaging with more than a hundred of the world's largest producers of greenhouse gas emissions. The emission data is based on data collected by Carbon Disclosure Project (CDP). In 2018, the initiative involved 310 investors with combined investment assets of more than EUR 32 trillion dollars. Investors have teamed up to engage with the 100 largest companies in various ways.

We also participate in the Ilmasto-kumppanit network created by the City of Helsinki and Finnish industry. The network of more than 60 companies and support members is committed to reducing their greenhouse gas emissions and mitigating climate change. We also participate in the activities of the Finnish Climate Leadership Coalition and were one of the signatories of the resolution co-ordinated by the Coalition, in which Nordic companies, the financial sector and organisations demand that the EU and its member states agree on new, sufficiently ambitious climate goals to reinforce the Paris agreement.

In the Asset Owners Disclosure Project's (AODP) comparison, we received the third best A rating. We placed ninth among the world's hundred largest pension investors. In addition, the AODP's Winning Climate Strategies report highlighted Ilmarinen as a shining example of taking climate issues into account in investment operations.

Climate impacts of securities investments

We review the carbon risk of our investments by calculating the carbon footprints of our equity and corporate bond portfolios. The share of coal in the investment portfolio and the carbon footprint are good indicators for bringing climate risks to the fore and making comparisons between companies operating in the same sector. However, they do not reveal the whole truth of the investments' climate impacts. Calculation methods vary and there are substantial differences between the various sectors. The fact that the results of carbon footprint measurements carried out on Ilmarinen's portfolios vary by as much as 25 per cent depending on the assessment method goes to show the wide range of the calculation methods and the challenges inherent in them. As a general rule, it is also not possible to take into account the full life cycle emissions.

The carbon footprint alone is a particularly tricky indicator for a Finnish investor. Finland's industry is energy-intensive, and large holdings in Finnish forest and energy companies make up a significant part of Ilmarinen's carbon footprint.

Our own Finnish forest reserves and those of the companies we own have the opposite impact by sequestering carbon dioxide. Forests play a major role in mitigating climate change because they function as important carbon sinks.

The carbon footprint grew from the previous year, which is partly attributable to growth in global emissions. Another clear explanation for the rise is a change made to the calculation method. In calculating the carbon footprint for 2018, industry averages were used for emissions for which no

public, verified data is available. With this, we wish to convey as realistic a picture as possible of our carbon footprint.

Comparison of investments with the two-degree target

As part of charting the climate risks of our investments, we compare our equity investments against the target of limiting the global increase in temperature to a maximum of two degrees Celsius, in line with the 2015 Paris Climate Agreement. The analysis is performed by the 2° Investing Initiative, a non-profit think tank which is part of a programme financed by the EU Commission. The analysis currently only covers three sectors in a way that allows for comparisons, forming over ten per cent of the investments in our direct equity portfolio.

In 2018, we also participated in a survey carried out by 2° Investing Initiative to review the portfolios of European pension investors. In a study carried out by the WWF, the investments in fossil fuels in Ilmarinen's equity and corporate bond portfolio were compared using the PACTA (Paris Agreement Climate Transition Assessment) methodology. This comparison is based on

the International Energy Agency's (IEA) scenario extending until 2023, which provides a 50-per-cent chance of limiting global warming to no more than 1.75°C. According to the study, Ilmarinen's equity portfolio scores better than average in all of the sectors included in the study. As for the corporate bond portfolio, the volume of investments in renewable energy should be higher in order to exceed the global average. In the other sectors included in the study (coal, oil and gas), there were fewer investments than average.

The study also analysed how well the portfolios will be aligned with the 1.75 degree goal in 2023. According to the analysis, Ilmarinen's equity and corporate bond portfolios were in line with the goal in seven out of ten studied sectors. The study shows that Ilmarinen should increase corporate bond investments in renewables and reduce equity investments in oil production and corporate bond investments in coal production. The study did not make a distinction between the various uses of coal, which equates the coal used for metal production with the coal used for energy production. The study also did not include hydropower

in renewable energy production, which partly explains Ilmarinen's low score in investments in renewables.

Analyses and scenarios are important as they provide information on the impacts of portfolio choices. On the other hand, the limitations of the emission calculations and scenarios and the incompleteness of the calculation methods should be kept in mind. Ilmarinen's corporate bond portfolio would have had a better relative score for coal if we had more investments in the oil and gas sectors. In the study results, investments in fossil materials were aggregated into one portfolio, whose mutual weights had an impact on the score. Despite their shortcomings and limitations, the results obtained from analysis help identify a portfolio's climate risks and develop operations.

SHARE OF SDG AND CLIMATE CHANGE SOLUTIONS OF THE NET SALES OF COMPANIES IN THE DIRECT EQUITY PORTFOLIO (KPI 20)

	31 DEC 2018	31 DEC 2017	Climate Policy target 2020
Share of SDG business of the annual net sales of direct listed equities	7.9%	7.5%	12%
Share of business related to climate change solutions of the annual net sales of direct listed equities	4.5%	4.5%	

Climate impacts of real estate investments

The built environment causes significant climate impacts, which we take into account in the building design phase and in our life-cycle approach. Etera and Ilmarinen merged on 1 January 2018, and in connection with the merger, properties also transferred to Ilmarinen. Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The figures reported this year are not comparable with the figures for 2017. (GRI 103-1)

We annually measure the carbon footprint of our new buildings during their construction and throughout their lifecycle. The carbon footprint arising during the construction of new buildings (owned by Ilmarinen, under construction in 2018) is presented in Table 22. If the buildings have parking spaces, these are also included in the calculations. As a result of our efforts, a declining trend can be observed in the carbon footprint of construction. In our life-cycle calculations, we use 50 years as the estimated useful life of a building. However, our design guidelines and execution are aimed at a useful life of 100 years.

We also measure and report the carbon footprint of our direct real estate investments. The figures in Table 23 include the greenhouse gas emissions arising from the energy consumption of the real estate portfolio. Our target is to reduce the carbon footprint of our real estate portfolio by 10 per cent by 2020 from the 2015 level, and by 20 per cent by 2025.

The life cycle carbon footprint of a building largely arises during the building's use. Energy consumption has the great-

est impact on climate. The majority of the choices affecting greenhouse gas emissions during use are made in the design phase. In connection with new construction projects, we carry out energy simulations and chart the potential and profitability of renewable energy, such as solar and geothermal heat, as the buildings' energy source.

Practical actions to reduce carbon footprint

We are involved in testing a method within the European Commission's Level(s) framework in a construction project concerning a residential building owned by us at Punanotkon katu in Helsinki. Level(s) is the European Commission's initiative to measure resource efficiency in the construction sector. In Finland, the testing focusses on the carbon footprint of construction and on resource efficiency. Level(s) aims at creating a common platform for the indicators used in different countries for measuring resource efficiency and environmental performance in the construction sector. It is a broad-based collaborative effort of sustainable construction professionals.

The Sello shopping centre co-owned by Ilmarinen was home to a unique virtual power plant project in which the building actively operates in the energy markets using demand response according to market need. If the solar power system installed in the shopping centre produces more energy than is needed for consumption, the surplus energy is stored in batteries. The virtual power plant helps Sello achieve considerable energy savings while at the same time reducing its carbon footprint.

In Helsinki's Jätkäsaari, we participated

TABLE 22.

CARBON FOOTPRINT OF NEW CONSTRUCTION (CRE 4) *	2018	2017
Carbon footprint per square metre, kg CO ₂ e/net m ² , emissions	411	417
Carbon footprint per square metre, kg CO ₂ e/useful floor area m ² , emissions	577	581
Carbon emissions from construction in relation to annual net sales tCO ₂ e/EUR 1 million	124	114

*) The figures for 2018 include 18 projects, of which six were started in 2016 and two in 2017.

TABLE 23.

CARBON FOOTPRINT OF REAL ESTATE INVESTMENTS (FINNISH DIRECT REAL ESTATE INVESTMENTS*) (CRE 3 AND KPI 10)	2018	2017
FINNISH BUILDINGS:		
Finnish real estate total CO ₂ -e /m ²	27	35
Warehouses kg CO ₂ -e /m ²	14	15
Free-time residential buildings kg CO ₂ -e /m ²	12	9
Offices kg CO ₂ -e /m ²	32	53
Institutional care buildings kg CO ₂ -e /m ²	26	24
Parking facilities kg CO ₂ -e /m ²	6	1
Other kg CO ₂ -e /m ²	23	45
Commercial buildings kg CO ₂ -e /m ²	25	31
Hotels kg CO ₂ -e /m ²	40	50
Residential buildings kg CO ₂ -e /m ²	29	42
FOREIGN BUILDINGS:		
Offices kg CO ₂ -e /m ²	68	48
ALL BUILDINGS:		
All buildings, kg CO ₂ -e /m ²	42	38

The real estate investments acquired through the OP-Eläkekassa portfolio transfer on 31 December 2018 are not included in the calculation.

*) Includes 154 Finnish buildings owned by Ilmarinen in 2018.

**) Emission coefficients have been calculated for purchased energy; national coefficients for electricity and location based coefficients for district heating and cooling.

in the construction of the Airut ecological block of flats. The carbon footprint arising during use of this block of flats, completed at the end of 2018, has been minimised. This is the first residential building owned by Ilmarinen to use solar power. The building's rooftop power plant with 64 panels and 17-kilowatt peak capacity has an estimated annual output of 15 MWh. We will continue to use ecological solar power, and are currently planning to install solar power plants at three of our future residential buildings. We also have a residential building at the design phase that makes extensive use of both geothermal energy and solar power.

In our head office in Helsinki's Ruoholahti, we have produced part of the required electricity with solar power since 2016. The calculated annual return target for the capital invested in the solar power plant installed at that time – Helsinki's largest building-specific solar power plant – has been seven per cent.

Impacts on the built environment

Ilmarinen is one of Finland's largest real estate investors. We are a major property developer and a significant buyer of real estate services. Of the properties we own, 27 per cent are in residential use and the rest are various business premises. Eight residential buildings and three commercial buildings were completed in 2018. In addition, we renovated one residential and commercial building.

We invest in resource-efficient buildings that are healthy and safe for their users and located along good public transit connections. Our property development and the

real estate services bought by us also significantly contribute to creating employment and increasing society's tax revenues.

At the start of 2018, Ilmarinen's real estate holdings expanded following the merger with Etera. The merger led to an increase in direct Finnish real estate investments, particularly outside the Helsinki area. Logistics, industrial, commercial and residential properties transferred to Ilmarinen through Etera. Through Etera, Ilmarinen also became a co-owner of Mall of Tripla, under construction at Finland's largest construction site in Pasila.

In 2018, the decision was made to transfer OP-Eläkekassa's portfolio to Ilmarinen. The real estate investments acquired through the portfolio transfer on 31 December 2018 are not included in the carbon footprint calculation for 2018. (GRI 103-1) In all real estate ownership changes, special attention has been paid to minimising the inconvenience caused to the buildings' users.

In line with our investment strategy, we continued the diversification of our real estate investments also outside of Finland. Our goal is for 40 per cent of our real estate investments to be abroad by 2020. In 2018, we made real estate investments in, for example, Germany, the Netherlands and, jointly with the New York Life insurance company, in the United States.

Real estate maintenance ja renovation

We take into account the entire life cycle of buildings in our operations. We promote the energy efficiency of buildings and reduce their detrimental impacts on the environment, such as water consumption.

We have long worked to reduce the en-

TABLE 24.

ENERGY INTENSITY OF THE PROPERTIES OWNED BY ILMARINEN (GRE1)	2018	2017
Energy consumption of flats, kWh/m ² /year	142	145
Energy consumption of office premises kWh/m ² /year	180	176
- Energy consumption of foreign office premises kWh/m ² /year	156	132

TABLE 25.

WATER INTENSITY OF THE PROPERTIES OWNED BY ILMARINEN (GRE2)	2018	2017
Water consumption of flats m ³ /m ² /year	1.09	1.08
Water consumption of office premises m ³ /m ² /year	0.21	0.22
- Water consumption of foreign office premises m ³ /m ² /year	0.47	0.39

TABLE 26.

CALCULATED EFFECT OF ENERGY SAVINGS MEASURES ON THE ENERGY CONSUMPTION OF PROPERTIES (KPI 9)	2018	2017
Calculated effect of energy savings measures on energy consumption MWh/year	2,760	2,722

The real estate investments acquired through the OP-Eläkekassa portfolio transfer on 31 December 2018 are not included in the calculation. (GRI 103-1)

ergy consumption of our properties. During the 2017–2025 term of the energy efficiency agreements managed by the Ministry of Economic Affairs and Employment, we participate in the agreement for rental flats (VAETS) and in the agreement for office buildings (TETS). Our goal is to achieve 10.5 per cent savings compared to the level reached during the previous term by the end of the agreement term.

Sustainability and taking into account accessibility, for example, are important aspects for Ilmarinen as a property developer. Accessible building starts with the idea that the spaces must cater for the needs

of people of all ages and adapt to various life situations. With the ageing population, accessibility and assistive solutions are rapidly becoming increasingly important. This is especially true for the approximately 250,000 Finns who face limitations in their daily life due to a health problem. In 2017, we started charting the accessibility of our properties together with the Finnish Association of People with Physical Disabilities (FPD). In 2018, we analysed nine new residential buildings and more than 600 flats together with the FDP's Accessibility Centre ESKE. The analysis includes, among other things, an assessment of the accessibility

of buildings and flats to ensure that the new homes are suited to everyone.

We are constantly looking for means to develop the use of our buildings. In 2018, the Epicenter office concept was launched in a building owned by Ilmarinen at Mikonkatu in the heart of Helsinki. It brings large corporations and startups under the same roof so that they can develop together.

We monitor the customer satisfaction of our office tenants through regular surveys. The surveys measure the satisfaction of the tenants regarding, for example, the functionality and adaptability of the spaces, indoor air quality, location and traffic connections. The 2018 survey also covered the buildings that transferred to us through the merger with Etera. Overall satisfaction with Ilmarinen's premises is at a good level, at 3.84 (on a scale of 1–5). Ilmarinen's goal to offer environmentally friendly, pleasant, energy-efficient and healthy business premises contributes to raising the level of satisfaction. The questions concerning landlords are related to, among other things, understanding the tenant's needs, the smoothness of services and the landlord's competence, flow of information and communication. Customers' overall satisfaction with their landlord decreased somewhat to 3.74. Overall satisfaction with premises in the buildings previously owned by Etera is at a good level, at 3.83. Satisfaction with the landlord also receives a good rating of 3.94.

Property development

We have a long-term, responsible approach to construction activities, and we build sustainably. Our design guidelines, which take

into account, among other things, the long useful life of buildings and material and energy efficiency, guide our property development. We always seek the best expertise in property development and select our co-operation partners on a case-by-case basis.

We have become aware that future and current building users have increasingly high demands regarding the environmental friendliness of properties. Environmental ratings granted by external players are one way of indicating the environmental friendliness of a property. As property developers, we require a LEED Gold or corresponding environmental label at the very least.

Ilmarinen has started up a project with the goal of attaining LEED certification for a total of 12 of its existing properties. In connection with the project, Ilmarinen's office building in Ruoholahti, Helsinki, was granted LEED Gold certification in 2018. Applying for certification is a process that lasts several months and which involves the active participation of the users of the property. The certification process involves, among other things, carrying out an energy audit on the property, improving its energy-efficiency and developing the practices of waste management, cleaning, sourcing and outdoor area maintenance.

In 2018, construction phase LEED certification was granted to two buildings. The REDI Shopping Centre owned by Ilmarinen received the highest rating, LEED Platinum. In addition, the Karuselli shopping centre in Kerava was granted the LEED Gold environmental certification.

In addition to environmental certification, we require all of our service providers to abide by their contractor's liability, apply

Finnish collective agreements also to foreign workers and adopt safe working practices.

We measure the success of construction and maintenance projects by conducting satisfaction surveys among our partners (e.g. end customers, designers, construction companies and consultants). For property development, the survey's overall score on a scale of 1–5 was 4.4 (2017: 4.3 and for maintenance 3.95 (2017: 3.8)).

We contribute to 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 also monitor occupational health and safety indicators in property development.

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. We have a policy in place according to which we accept more than one subcontractor level under the main contractor only for exceptional reasons.

The circular economy in construction

In a circular economy, production and consumption generate as little waste as possible and the environmental impacts of materials are minimised. The construction industry is one of the biggest potential winners in a circular economy when it comes to new business opportunities. This can be achieved by, for example, developing new construction techniques that enable the recycling and dismantling of structures and

the lengthening of their useful life.

Rather than an isolated concept, the circular economy is a way of thinking and an integral part of Ilmarinen's operations. Renewable and clean energy is one of the core elements of the circular economy. At Ilmarinen, we apply all of the principles of the circular economy, such as reuse and zero-waste planning, sustainability, use of renewable energy and life-cycle thinking.

In construction life-cycle thinking, it is important to consider how a building can best be used and repaired in accordance with its users' changing needs and how parts of the building that has reached the end of its life cycle can be used in other buildings. Finland's National Waste Plan sets out as an objective that by 2023, 70 per cent of construction and demolition waste should be subject to material recovery. In Ilmarinen's building design guidelines, the target recovery percentage is close to 100.

At the end of every cycle and life cycle, it is the user who decides whether the site or the material will be given a new lease on life or whether it will be destroyed. This is why awareness of the circular economy must be increased in the urban environment so that residents and companies know how they can make a difference.



**MEANINGFUL
WORK**

Customers are at the heart of Ilmarinen's strategy. Good and fair treatment of personnel is directly reflected in the customer experience. Satisfied employees play a key role in attaining our goal of being the earnings-related pension insurer that offers the best customer experience. After Ilmarinen's and Etera's merger, we have focussed on ensuring a good employee experience. That is why our goal in 2018 was to succeed in the merger – with good energy and efficient operations.

Ilmarinen's and Etera's merger

The merger of Ilmarinen and Etera on 1 January 2018 marked the year also from the personnel's perspective. The co-determination negotiations concerning the entire personnel of the post-merger company were completed on 15 January. The matters negotiated included, among other things, harmonising employee benefits and practices, eliminating overlapping functions and a new organisational model that is better aligned with the changing operating environment. Although some personnel reductions were necessary, the integration also gave rise to new jobs. We strengthened our expertise for instance in work capacity management, robotics and real estate investment.

In the merger, Etera merged into Ilmarinen, and the main idea was to primarily make use of Ilmarinen's operational models and to draw on good practices from Etera to boost operations. The objective was to create an innovative, agile service company that makes use of the opportunities offered by digitalisation by combining the strengths of both companies. The new organisation started operations on 1 March 2018. The

merger had little impact on customers; employees from different backgrounds worked together from day one to serve customers as well as possible.

According to the estimate made at the start of the co-determination negotiations, a maximum of 180 permanent jobs would be discontinued over the next two years. In 2018, 65 employment relationships were terminated and the need for personnel reductions due to the merger over the next two years is estimated at approximately 55 jobs. Future personnel reductions are related to new operational models, integration of IT systems and the introduction of the national Incomes Register. In upcoming years, some 50 persons will have the option to retire, which has lowered the need for personnel reductions.

In addition to continual and open communications, Ilmarinen provided several coaching sessions, info briefings and training sessions for both supervisors and employees on issues related to the merger. The employees subject to the actual threat of redundancy were offered various support packages depending on their years of service and job coaching to facilitate their relocation in the labour market. Occupational health care also participated in supporting employees. After the co-determination process, coaching was organised for employees to help them deal with the emotions resulting from the change and to facilitate team-building. In addition, the entire personnel were provided with training on the new harmonised ways of operating, and all supervisors completed a mandatory coaching programme on the basics of supervisory work at Ilmarinen.

Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The comparison figures do not include the impacts of Ilmarinen's and Etera's merger or portfolio transfers, which means that they are not fully comparable with the 2018 figures. (GRI 103-1)

Experience of the work community on a good level in the midst of changes

A well-functioning work community requires an inclusive corporate culture, good leadership and the ability to lead oneself. We measure these with an annual work atmosphere survey. The changes brought about by the integration did not impact the overall score of September's work atmosphere survey, which was almost at the same level (3.75) as in the previous year (3.8) on a scale of 1 to 5. The employees with a background at Etera had slightly more critical opinions than those with a background at

Ilmarinen.

Supervisors received a good score in the survey: 4.02. Based on the survey results, the most important success is the increased sense of achievement and learning at work. Strengths also included personnel's belief in Ilmarinen's success (4.07). Work enthusiasm has also remained on a high level (4.03) despite the changes.

Listening to and engaging our employees more than before stood out as the biggest improvement opportunity in the survey. Based on this, we will engage our employees in our strategy work 2019.

All in all, the employees value Ilmarinen as an employer. Our personnel have enjoyed working at Ilmarinen in the long term: the average employment relationship at Ilmarinen lasts almost 15 years. We also pay attention to the experience of youth taking their first steps in working life; we once again participated in the Responsible Summer Job campaign

TABLE 27.

EMPLOYEE SATISFACTION, SURVEY RESULT (SCALE OF 1–5) (KPI 11)	2018	2017
Employee satisfaction survey	3.8	3.8

TABLE 28.

NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER (GRI 401-1)	2018	2017
New employment relationships	48	41
Ended employment relationships	84	65
Turnover of permanent employees	8%	6%
New employment relationships/permanent	24	8
Ended employment relationships/permanent	58	30
Number of summer employees	30	32
Employment relationships that began with Ilmarinen's and Etera's merger	233	-
Employment relationships that ended with Ilmarinen's and Etera's merger	65	-

We will succeed together

Ilmarinen's services help improve the work capacity of our customer companies' employees. Good work capacity improves productivity. Productivity, in turn, brings success. We want to set an example of how work and the work community can support people's level of energy.

The name of our strategic theme for 2018 was "We will succeed in the merger – with positive energy". As the name implies, the development programme focussed on supporting Etera's merger with Ilmarinen from personnel's perspective.

Investments in preventive occupational health care pay off. One of the indicators we keep track of is the health percentage of our employees, i.e. the proportion of persons who have not been absent from work due to illness during the reporting year. In 2018, this percentage was more than 40 per cent of our employees. The number of absences due to illness per employee was 5.5 days (2017: 4.7).

Our activation coach got Ilmarinen's employees moving also in 2018 through, among other things, exercise during breaks and personal fitness programmes. We encouraged active commuting among our employees by participating again in the Kilometrikisa campaign. We pedalled 850 kilometres per cyclist on average. This translates to a reduction of more than 17,000 kg in carbon dioxide emissions caused by commuting and free-time traffic. Through the Finnish Red Cross's 'Chain reaction' fundraising campaign that is part of Kilometrikisa, the kilometres cycled raised our donation to the Finnish Red Cross to approximately EUR 4,700.

Our employees also had the option to participate in a smart mobility experiment where they could try out environmentally friendly transport modes, such as an e-bike or a folding bike suited to train travel. We also participated in the Dream Workday event with our new Huoltamo break room where our employees can recover, measure their blood pressure and use different relaxation programmes during the workday.

We increased our personnel's environmental awareness and promoted sustainable development by participating in the Finnish Nature Day celebrations (a nature photo competition for personnel), Energy Awareness Week (energy efficiency tips) and Earth Hour (lights-off event to mitigate climate change).

Continuous competence development

Continuous learning is important in a changing working life. We favour a learning development model whereby around 70 per cent of learning consists of learning on the job, 20 per cent consists of model learning and 10 per cent consists of more traditional training. We arrange and tailor proper training courses based on observed needs. With their supervisor's approval and on their own initiative, employees can also participate in training courses offered by external service providers that cater for the needs of their job.

The theme for internal coaching in 2018 was supporting successful integration. We focussed on ensuring fair and consistent supervisory work, induction of new colleagues and building top-performing teams. By supporting the creation of effective teams, we wanted to increase mutual trust and

TABLE 29.

AVERAGE RETIREMENT AGE OF ILMARINEN EMPLOYEES	2018	2017
Average retirement age*	62.6	63.9

*) Including disability pensions.

TABLE 30.

AVERAGE HOURS OF TRAINING DURING THE REPORTING YEAR PER EMPLOYEE (GRI 404-1)	2018	2017
Average training hours, entire personnel	17	17
Average training hours, women	18	20
Average training hours, men	16	13
Average training hours, Executive Group	19	3
Average training hours, middle management	24	18
Average training hours, group supervisors	31	28
Average training hours, salaried employees and specialists	16	17

TABLE 31.

EMPLOYEES' HEALTH	2018	2017
Employees' health percentage*	42%	48%

*) Employees with no absences from work due to illness during a year.

accelerate team-building among Ilmarinen's and Etera's employees.

To support the induction of employees coming from Etera, Ilmarinen's mentors helped their mentees learn the ropes. We provided supervisors with guidance on holding challenging discussions and with training in supervisory skills to ensure consistent supervisory work. Throughout the year, we also gave our employees training in, for instance, data protection, social media, cyber security, interaction with the media, the use of O365 systems, robotics and first aid skills.

In 2019, coaching will focus on three different aspects of management: self-management, management as a supervisor and management without a supervisor mandate.

All new employees participate in an on-boarding programme where they learn about Ilmarinen's role as part of the earnings-related pension system, products and services, management, corporate responsibility, communications and other themes that are important to our business. In 2018, the on-boarding programme received a good score, 4.5 (on a scale of 1–5). All new employees are also given a thorough induction to their job, and in addition to the on-boarding sessions, we offer new supervisors induction training tailored to their needs. Supervisors who take on a supervisory role for the first time also receive support from an external coach, if needed. In addition, all Ilmarinen employees have the possibility to receive internal mentoring.

Promoting diversity

The equality and equal opportunities plan adopted in 2017 outlines our principles concerning the implementation of equality and equal opportunities in terms of age, gender, family status, origin and nationality, language, religion, opinion, political activity, trade union activity, health and sexual orientation. The Regional State Administrative Agency reviewed the coverage of the plan in 2018 and did not find any objections.

Diversity at Ilmarinen means that in addition to gender equality, employees with partial work capacity, sexual minorities, employees of different ages or with different cultural backgrounds are taken into account in leadership and personnel planning. We believe that the different competencies and capabilities, backgrounds and characteristics of employees are strengths that reinforce the company's innovativeness and earnings power.

In 2018, we participated in the "Monday Belongs to Everyone" campaign launched by the Non-Discrimination Ombudsman and the Human Rights Centre to increase and enhance the chances of persons with disabilities to participate in working life. Ilmarinen's own premises are, for the most part, accessible, and the furniture can be individually adjusted according to need. Employees have access to the services of an occupational physiotherapist in ergonomics matters.

Gender equality is already at a fairly good level at Ilmarinen. In 2018, 40% of the members of Ilmarinen's Executive Group were women. Women held 62 per cent of the middle management positions and on the group supervisor level, the proportion of

women was as high as 71 per cent in 2018.

Ilmarinen believes that employees of different ages create an effective work community. This line of thought was further supported by a survey conducted jointly by Ilmarinen and the rest of the earnings-related pension sector, which revealed that the characteristics of those under 30 and over 50 complement one another in the labour market and at the workplace. By hiring people of all ages, organisations can draw on the best possible combination of competence and talent.

The nationality or ethnic origin of the person plays no role in Ilmarinen's recruitment. However, mastering the Finnish language is required in the majority of our positions. For other positions (e.g. in investment operations) we can hire people whose native language is English.

The tables illustrate the number and distribution of Ilmarinen employees in terms of the employment relationship, employment contract, gender, age and organisation level. At the end of 2018, Ilmarinen had a total of 687 permanent and fixed-term employees and their average age was 47.9 years

Robotics is an opportunity

At Ilmarinen, employees and robots belong to the same organisation. For us, the key questions related to robotics are not technical. They have nothing to do with the technology that we select as the basis of our software robotics or in whose machine room our robots are located. The key questions are related to the future of work – how well our organisation identifies the opportunities offered by robotics and artificial intelligence and utilises them in its development

TABLE 32.

NUMBER OF ILMARINEN EMPLOYEES BY EMPLOYMENT TYPE, EMPLOYMENT CONTRACT AND GENDER (GRI 102-8)	2018	2018%	2017	2017%
	NUMBER OF EMPLOYEES			
Permanent employment contracts, total	649	94%	520	92%
Permanent employment contracts, women	423	65%	335	64%
Permanent employment contracts, men	226	35%	185	36%
Permanent full-time employment contracts, total	613	94%	488	94%
Permanent full-time employment contracts, women	398	65%	309	63%
Permanent full-time employment contracts, men	215	35%	179	37%
Permanent part-time employment contracts, total	36	6%	32	6%
Permanent part-time employment contracts, women	25	69%	26	81%
Permanent part-time employment contracts, men	11	31%	6	19%
Fixed-term employment contracts, total	38	6%	47	8%
Fixed-term employment contracts, women	21	55%	28	60%
Fixed-term employment contracts, men	17	45%	19	40%

TABLE 33.

DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES (GRI 405-1)					
DIVERSITY OF GOVERNANCE BODIES AND EMPLOYEES	Total (number)	WOMEN'S SHARE	%	MEN'S SHARE	%
Entire personnel	687	444	65%	243	35%
Salaried employees and specialists	604	392	65%	212	35%
Group supervisors	33	23	70%	10	30%
Middle management	40	25	63%	15	38%
Executive Group	10	4	40%	6	60%
Board of Directors	18	5	28%	13	72%
Supervisory Board	32	11	34%	21	66%

AGE DISTRIBUTION OF ILMARINEN EMPLOYEES AND GOVERNING BODIES	Under 30 years (%)	30–50 years (%)	Over 50 years (%)
Personnel	6%	48%	47%
Board of Directors	0%	39%	61%
Supervisory Board	0%	22%	78%

TABLE 34.

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY (GRI 405-2 / KPI 12)	2018	2017
Women's average pay in relation to men's pay, Executive Group (excluding the President and CEO)	95%	80%
Women's average pay in relation to men's pay, all other employees	79%	78%

TABLE 35.

EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS (GRI 102-41)	2018	2017
Personnel covered by collective bargaining agreements*	637	520
Percentage of personnel covered by collective bargaining agreements*	92.7%	91.7%

*) Situation as per 31 Dec 2018 – employees covered by a collective bargaining agreement.

and how our work will change during this journey. When robotics is perceived as more than just an IT-driven project, the discussion is channeled from technical issues to strategic questions, which must also be considered from the perspective of sustainability. We see robot colleagues as a tool to ensure smoother workflow.

Ilmarinen has been systematically developing and using robotics for a few years. We created a vision for robotics: services for personnel and more time for customers. We organised several workshops and training sessions and focussed on planning and executing internal communications on the topic. The approach has increased understanding of what a robot can do and has created an ideal platform for the ideation of new tasks for robots across the organisation. We established a new virtual Digital Colleagues department at Ilmarinen and created a common management model for promoting robotics in our organisation.

We have used software robotics in, among other things, the maintenance of customer data, the vocational rehabilitation process, background work in pension matters and to support customer communications. The customer does not always even know that the smooth service experience is provided by a robot. The use of artificial intelligence to support software robotics has also been charted. On our website, a chatbot that uses artificial intelligence and learns provides customer service in questions related to the Incomes Register.

It is paramount for us to ensure data protection and information security also in robotics. But what is more important than technology is how robotics will change working life. Robots will perform the most boring, repetitive routine tasks for all of us. Software robotics allows humans to concentrate on creative work, customer encounters and interpretations. A machine learns, but a human understands.

Robotics and automation can also bring cost savings, but this is not the main driver. For example, recruiters should consider whether part of the existing tasks could be automated to free up time for what matters. On the other hand, robotics and digitalisation are constantly creating new competence requirements and also entirely new jobs that were unheard of yesterday. What does a robot coach, for example, sound like?

We do not know yet what the working life of the future will look like. The only thing that is certain is that it will not be the same as today. And the change will take place rapidly. We at Ilmarinen believe that the best way to prepare for the working life of the future is to ensure that our own competence moves with the times.

Fairness of remuneration and incentives

Ilmarinen's Board of Directors decides on the company's remuneration and incentive policy and systems. The remuneration principles are described in the Declaration of Remuneration and Incentives, which is published on our website.

In accordance with the policy outlined by the company's Board of Directors, Ilmarinen's remuneration is competitive, fair and equal, steering and supportive. Remuneration is guided by the collective bargaining agreement for the insurance sector. With the exception of middle management and Executive Group members, it covers all Ilmarinen employees, i.e. around 93 percent of all personnel.

The objective of the remuneration and incentive systems is to encourage employees

and management to commit to Ilmarinen and to motivate them to reach the company's strategic goals and live up to its values. Remuneration is based on how demanding a position is and on personal performance and competence. This contributes to the fairness of the remuneration – seen from the perspective of equality between men and women, among other things. Our goal is to narrow the pay gap between men and women. The past year supported this goal. As a general rule, differences in pay are attributable to differences in the demands of the positions.

We monitor the development of remuneration and incentives against peer groups annually. The results are reviewed by the Executive Group and the Board of Directors. Ilmarinen's Board of Directors annually assesses the performance of the incentive systems, and an in-depth analysis of the incentives is carried out at least once during each strategy period.

TABLE 36.

Remuneration of senior management, members of the Board of Directors and the Supervisory Board

We annually report the fees paid to the members of Ilmarinen's governing bodies and remuneration and incentives and supplementary pension benefits paid to the senior management in the Report on Remuneration published on our website.

Ilmarinen's Annual General Meeting decided in 2018 to raise the fees of the members of the Supervisory Board by five per cent. The Chairman of Ilmarinen's Supervisory Board is paid an annual fee of EUR 5,250, the Deputy Chairman is paid a fee of EUR 3,990, and other Board members are paid EUR 2,625. The meeting fees remained unchanged at EUR 500 and absences from meetings reduce the annual fee by EUR 750 per absence. The raise is based on the expansion of the company's operations due to Ilmarinen's and Etera's merger. The fees were last raised in 2006. The Supervisory Board met twice in 2018.

The Supervisory Board decides on the remunerations paid to Ilmarinen's Board of Directors (Table 36). The Supervisory Board decided in its meeting on 14 November 2018 to raise the remunerations paid to the Board of Directors by three per cent. As of 1 January 2019, the annual remunerations are: Chairman of the Board of Directors, EUR 44,290; Deputy Chairman of the Board of Directors, EUR 29,355; Chairman of the Audit and Risk Management Committee, EUR 23,690; members of the Board of Directors, EUR 18,025; and Deputy members, EUR 14,420. The meeting fees remain unchanged: the meeting fee for the Board of Directors and the Nomination and Compen-

sation Committee is EUR 500 and the meeting fee for the Audit and Risk Management Committee is EUR 750.

Jouko Pölönen, who started as Ilmarinen's President and CEO in August 2018, received a total of EUR 210,815 in annual remuneration, consisting of the monthly salary including fringe benefits, annual bonus and the long-term bonus for senior management. More information about the remuneration of senior management and the governing bodies can be found in the report on remuneration 2018 available on our website.

REMUNERATIONS PAID TO ILMARINEN'S BOARD OF DIRECTORS (EUR)	AS OF 1 JAN 2019	UNTIL 31 DEC 2018
Chairman of the Board of Directors	44,290	43,000
Deputy Chairman	29,355	28,500
Chairman of the Audit and Risk Management Committee	23,690	23,000
Member, Board of Directors	18,025	17,500
Deputy member, Board of Directors	14,420	14,000
Meeting fee for Board of Directors	500	500
Meeting fee for the Nomination and Compensation Committee	500	500
Meeting fee for the Audit and Risk Management Committee	750	750



**WE CREATED A VISION FOR ROBOTICS:
SERVICES FOR PERSONNEL AND MORE TIME FOR
CUSTOMERS.**



REPORTING POLICY

Sustainability and its management at Ilmarinen

Ilmarinen's President and CEO and Executive Group are responsible for our key sustainability policies. The Chief Communications Officer prepares sustainability issues for the President and CEO and the Executive Group. Ilmarinen's Board of Directors approves our high-level policies, such as the Responsible Investment Policy updated in 2018. We also disclose material sustainability issues as part of the Board of Directors' Report on Operations.

The core sustainability team helps to identify and find solutions to material responsibility aspects. The team annually updates the KPIs and reports on corporate sustainability. The main responsibility for the reporting lies with the Sustainability Manager. The promotion of the corporate sustainability targets and implementation of measures fall under the responsibility of the divisions. The core team comprised the Sustainability Manager, the Chief Communications Officer, Ilmarinen's responsible investment specialists and the financial controller. (GRI 103-2)

At Ilmarinen, responsibility is an integral part of operations and acting responsibly is part of everyone's job profile. Sustainability is also included in the on-boarding programme for new employees.

Finland's pension system as a whole is well-functioning, reliable and open. The Finnish pension system placed third in the international Mercer Global Pension Index comparison published in October. Finland rose for the first time to the top three and was selected for the fifth time in a row as the world's most reliable and transparent

system.

Ilmarinen's efforts to promote responsible investment received global recognition in 2018. Our Sustainability Report came second in the competition organised by the international publication Responsible Investor, which included 2,500 responsible investment reports from around the world. (GRI 103-3)

Principles and networking to support responsible operations

We comply with applicable laws and regulations in our operations. Ilmarinen is politically and religiously independent. We abide by the principles set out in the UN's Universal Declaration of Human Rights, which include, among other things, freedom of opinion and religion, equality and non-discrimination. We follow the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work.

We have also joined a number of voluntary commitments. We signed the UN's Principles for Responsible Investment (PRI) as early as in 2006. We annually report to PRI on our responsible investment operations. In 2015, we signed the Montreal Carbon Pledge, which deals with the reporting of the carbon footprint, and the Paris Pledge, which aims to limit global warming. We support the Carbon Disclosure Project's (CDP) reporting framework for reporting on impacts on the climate, waters and forests. (GRI 102-12, 102-13)

We have drawn up several policies to steer our operations. These include a sourcing policy, obligations for combating the grey economy and a communications policy. Our investment operations are guided

by our Responsible Investment Policy which was updated in 2018. The Responsible Investment Policy also includes an environmental policy, a human rights policy and an ownership policy. We publish our policies on our website.

We participate as members in the activities of, for example, the Responsible Investment Forum Finsif, the FIBS Corporate Responsibility Network, the Climate Leadership Coalition (CLC) and the City of Helsinki's and businesses' Climate Partners network.

→ Ilmarinen's policies

Reporting policy

Etera Mutual Pension Insurance Company and Ilmarinen merged on 1 January 2018. In accordance with the merger plan, Etera's insurance portfolio and other assets, liabilities and rights transferred to Ilmarinen. As a result of the merger, Ilmarinen became Finland's largest earnings-related pension company in terms of the number of customers. Following the merger, the total number of persons insured with Ilmarinen and receiving pension from Ilmarinen increased to close

to 1.2 million, the company's market share rose to 37 per cent and pension assets to more than EUR 46 billion.

During 2018, three portfolio transfers took place, the most important of which was the transfer of OP-Eläkekassa's portfolio to Ilmarinen. In the OP-Eläkekassa portfolio transfer on 31 December 2018, EUR 1.3 billion in assets and liabilities were transferred to Ilmarinen. Following the portfolio transfer, 12,000 insured persons transferred to Ilmarinen.

Unless otherwise indicated, only Ilmarinen's figures have been used in the Sustainability Report as comparison figures for the previous years. The comparison figures do not include the impacts of the merger or portfolio transfers, which means that they are not fully comparable with the 2018 figures. All material aspects are described in this Sustainability Report together with any key figures and indicators. The report has, for the most part, been created from the standpoint of Ilmarinen Mutual Pension Insurance Company (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 connec-



THE FINNISH PENSION SYSTEM PLACED THIRD IN THE INTERNATIONAL MERCER GLOBAL PENSION INDEX COMPARISON PUBLISHED IN OCTOBER

tion with the key figure. (GRI 102-46)

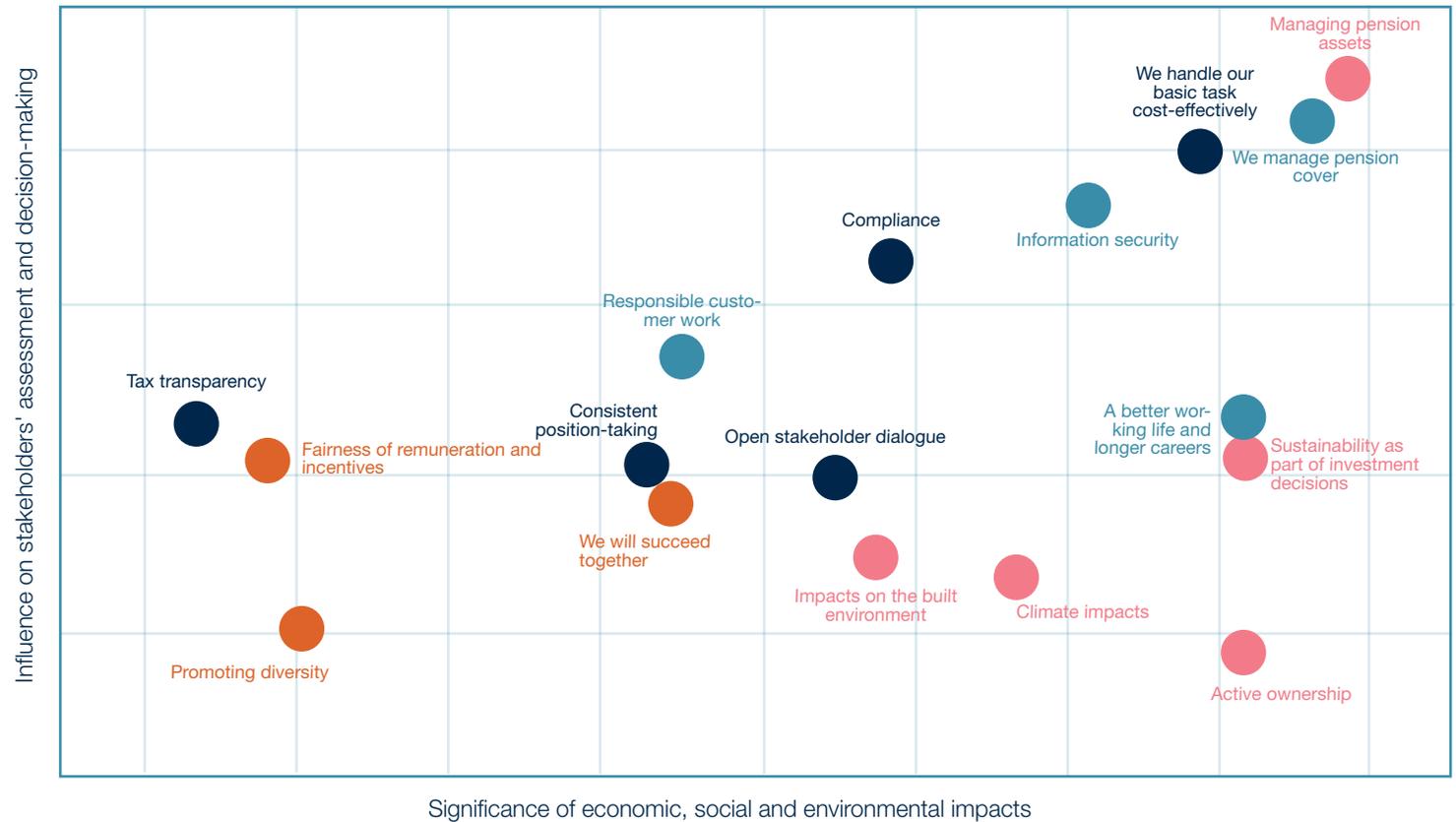
Our Sustainability Report follows the GRI Standards of the Global Reporting Initiative (GRI). We have assessed the materiality of the sustainability aspects based on their importance to our stakeholders and the extent of their impact as part of our operations. This forms Ilmarinen's sustainability materiality matrix.

In 2018, we updated the materiality matrix in internal workshops. We reviewed the material factors that had been identified previously for Ilmarinen's sustainability from economic, social and environmental viewpoints. As a result, Ilmarinen's material sustainability topics remained unchanged, but there were minor changes in the mutual relations between the material topics. In 2019, we will update the impacts of our operations on our stakeholders. (GRI 102-47, 103-3)

Ilmarinen's consolidated financial statements cover the parent company and all subsidiaries in which the parent company, directly or indirectly, controls more than half of the voting rights. With the exception of the subsidiary that provides IT services for Ilmarinen, the company's subsidiaries are real estate companies. The list of subsidiaries is included in the consolidated financial statements. (GRI 102-45)

The key figures for financial responsibility are based on Ilmarinen's financial reports, accounting and confirmed 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

Ilmarinen's materiality matrix (GRI 102-47)



Matrix updates material topics chosen in 2016.

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

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 figures for environmental sustainability in real estate business operations are reported in terms of domestic direct real estate investments and they have been obtained from service providers. The properties that Ilmarinen acquired through Etera are also included in the figures for 2018. However, the real estate investments acquired through the OP-Eläkekassa portfolio transfer on 31 December 2018 are not included in the figures for 2018.

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.

We have reported on Ilmarinen's financial, social and environmental sustainability since 2007. This is the fourth 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. In investment disclosures, we have used the sector-specific guidelines related to the discontinued G4 guidelines, which are recommended also when using GRI Standards reporting. (GRI 102-54) (GRI 103-1) The report is published in Finnish, Swedish and English and it is only available online. The report has been verified by EY's Climate Change & Sustainability Services (GRI 102-56).

Changes in reporting

(GRI 102-49)

Investments

1. **FS 10** In 2018, the portfolio managers did not make a distinction between E and S meetings; instead, all meetings fall under the ESG heading. The portfolio managers were asked to estimate how many meetings on average involved the review of topics falling under E and/or S headings. The figure calculated for the 2018 report is based on these estimates. In line with the precautionary principles, the estimates reported are at the lower side of the given range.

2. **FS 11** The calculation method was renewed: listed investments are now analysed in terms of how large a percentage of them are covered by GES's (currently Sustainability) review. This is more holistic way to measure topic.

3. **KPI 8** Indicator 1 "Investments in sustainable development/EUR 1 million" is no longer used in 2018. Indicator does not give a full picture of the overall sustainability of Ilmarinen's investments. The indicator 2. "Investments in climate change solutions (direct equity investments in listed companies of whose business 50% or more is related to sustainability solutions/EUR 1 million)" is also no longer used, because MSCI has changed its calculation method. The figure calculated by us is not comparable with last year's figure.

4. **GRI 305-4** The calculation for 2018 reporting was carried out by Engaged Tracking (ET) – a different company than in 2017 and 2016. Portfolio data was submitted to ET as in last year. ET received Ilmarinen's composite benchmark weights without the

index contents. ET has calculated the carbon footprint and issued its own report on it. As a result of the change of data supplier, the figures for the different years are not fully comparable due to differences in the methods of calculation.

5. **M4** The calculation method has been changed to better reflect the actual situation and a new indicator "Percentage of Comprehensive reporters of all reporters" has been added.

6. **M8** The indicator "Rate of participation in the General Meetings of companies listed in Finland measured in investment assets" has been added.

Sourcing

1. **GRI 102-9** The indicator "Number of contract suppliers" is no longer used because the right figure is currently not available due to the integration of the IT systems.

Easy and reliable pension cover

1. **KPI 4** Purchased services have also been included in the NPS concerning the effectiveness of work capacity services.



ILMARINEN'S **GRI-INDEX**

GENERAL DISCLOSURES

Organisation profile

102-1	Name of the organization	Ilmarinen Mutual Pension Company
102-2	Activities, brands, products, and services	Sustainability report 2018, p. 7.
102-3	Location of headquarters	Porkkalankatu 1, 00180 Helsinki, Suomi
102-4	Location of operations	Sustainability report 2018, p. 6.
102-5	Ownership and legal form	Sustainability report 2018, p. 6.
102-6	Markets served	Sustainability report 2018, p. 6.
102-7	Scale of organisation	Sustainability report 2018, p. 6.
102-8	Information on employees and other workers	Sustainability report 2018, p. 41.
102-9	Supply chain	Sustainability report 2018, p. 23.
102-10	Significant changes to the organization and its supply chain	Sustainability report 2018, p. 6.
102-11	Precaution Principle or approach	Sustainability report 2018, s 22.
102-12	External initiatives	Sustainability report 2018, p. 28, 45.
102-13	Membership of associations	Sustainability report 2018, p. 20, 45.

Strategy

102-14	Statement from senior decision-maker	Sustainability report 2018, p. 3-4.
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Ethics and integrity

102-16	Values, principles, standards, and norms of behaviour	Sustainability report 2018, p. 6, 22.
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Governance

102-18	Governance structure	Financial Statement 2018.
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Stakeholder engagement

102-40	List of stakeholder groups	Sustainability report 2018, p. 17.
102-41	Collective bargaining agreements	Sustainability report 2018, p. 42.
102-42	Identifying and selecting stakeholders	Sustainability report 2018, p. 17.
102-43	Approach to stakeholder engagement	Sustainability report 2018, p. 17.
102-44	Key topics and concerns raised	Sustainability report 2018, p. 18.

Reporting practice

102-45	Entities included in the consolidated financial statements	Sustainability report 2018, p. 46.
102-46	Defining report content and topic boundaries	Sustainability report 2018, p. 25, 45.
102-47	List of material topics	Sustainability report 2018, p. 46.
102-48	Restatements of information	-
102-49	Changes in reporting	Sustainability report 2018, p. 47.
102-50	Reporting period	1.1.-31.12.2018
102-51	Date of most recent report	Last Sustainability report was published 21.3.2018.
102-52	Reporting cycle	Once a year.
102-53	Contact point for question regarding the reports	info@ilmarinen.fi
102-54	Claims of reporting in accordance with GRI Standards	Sustainability report 2018, p. 47.

DISCLOSURE
REPORTING

102-55	GRI content index	Sustainability report 2018, p. 49–52.
102-56	External assurance	Sustainability report 2018, p. 53.
MANAGEMENT APPROACH		
General requirements for reporting the management approach		
103-1	Explanation of the material topic and its Boundary	Sustainability report 2018. s. 9, 25, 35, 36, 39, 47.
103-2	The management approach and its components	Sustainability report 2018. s. 9, 11, 23, 27, 30, 45.
103-3	Evaluation of the management approach	Sustainability report 2018. s. 17, 18, 32, 45, 46.
ECONOMIC PERFORMANCE		
201-1	Direct economic value generated and distributed	Sustainability report 2018, p. 7, 20.
INDIRECT ECONOMIC IMPACTS		
203-2	Significant indirect economic impacts	Sustainability report 2018, p. 26.
ANTI-CORRUPTION		
205-2	Communication and training about anti-corruption policies and procedures	Sustainability report 2018, p. 22.
ENVIRONMENTAL SUSTAINABILITY		
Energy		
CRE 1 (G4)	Building energy	Sustainability report 2018, p. 36. Excluded the energy consumption of inhabitants.
Water		
CRE 2 (G4)	Building water intensity	Sustainability report 2018, p. 36.
EMISSIONS		
305-4	GHG emissions intensity	Sustainability report 2018, p. 32, 47.
CRE 3 (G4)	Greenhouse gas emissions intensity from buildings	Sustainability report 2018, p. 35.
CRE 4 (G4)	Greenhouse gas emissions intensity from new construction and redevelopment activity	Sustainability report 2018, p. 35..
ENVIRONMENTAL COMPLIANCE		
307-1	Non-compliance with environmental laws and regulations	Sustainability report 2018, p. 23.
EMPLOYMENT		
401-1	New employee hires and employee turnover	Sustainability report 2018, p. 39.
TRAINING AND EDUCATION		
404-1	Average hours of training per year per employee	Sustainability report 2018, p. 40.
DIVERSITY AND EQUAL OPPORTUNITY		
405-1	Diversity of governance bodies and employees	Sustainability report 2018, p. 41.
405-2	Ratio of basic salary and remuneration of women to men	Sustainability report 2018, p. 42.

DISCLOSURE**REPORTING****PUBLIC POLICY**

415-1	Political contributions	Sustainability report 2018, p. 18.
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SOCIOECONOMIC COMPLIANCE

419-1	Non-compliance with laws and regulations in the social and economic area	Sustainability report 2018, p. 23.
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CUSTOMER PRIVACY

418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Sustainability report 2018, p. 14.
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ACTIVE OWNERSHIP

FS 10 (G4)	Percentage and number of companies held in the institution's portfolio with which the reporting organization has interacted on environmental or social issues	Sustainability report 2018, p. 30.
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FS 11 (G4)	Percentage of assets subject to positive and negative environmental or social screening	Sustainability report 2018, p. 27
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ILMARINEN'S MATERIAL SUSTAINABILITY TOPICS

ILMARINEN SUSTAINABILITY KEY PERFORMANCE INDICATOR

KPI 1	Ilmarinen's ratio of operating expenses to expense loading components	Sustainability report 2018, p. 16.
KPI 2	Speed of pension decisions	Sustainability report 2018, p. 10.
KPI 3	Disability pension decisions upheld by the appeals court	Sustainability report 2018, p. 10.
KPI 4	Benefit of work-capacity management co-operation projects as experienced by customers	Sustainability report 2018, p. 11, 47.
KPI 5	Effectiveness of rehabilitation (percentage of rehabilitees available to the labour market at the end of the rehabilitation)	Sustainability report 2018, p. 12.
KPI 6	Total return on investments	Sustainability report 2018, p. 25.
KPI 7	Meetings with companies' senior management (Finnish listed companies where we have direct investments)	Sustainability report 2018, p. 30.
KPI 8	Share of business related to sustainable development solutions of the annual net sales of direct listed equity investments	Sustainability report 2018, p. 34.
KPI 9	Calculated energy savings in the properties owned by Ilmarinen achieved through energy consumption reduction measures	Sustainability report 2018, p. 36.
KPI 10	Carbon footprint of real estate	For more information: CRE 3 (G4), Sustainability report 2018, p. 35.
KPI 11	Employee survey, overall average	Sustainability report 2018, p. 39.
KPI 12	Women's average pay in relation to men's pay (Executive Group excl. President and CEO/rest of the personnel)	For more information: GRI 405-2, Sustainability report 2018, p. 42.
KPI 13	Participation of employees in Code of Conduct training	Sustainability report 2018, p. 22.
KPI 14	The company's operations are in line with the requirements of the EU's General Data Protection Regulation	Sustainability report 2018, p. 13–14.
KPI 15	Journalists' satisfaction with media co-operation in the PR Barometer survey	Sustainability report 2018, p. 17.

OTHER INDICATORS

M1	Share of renewable energy and coal of the electricity production of Ilmarinen's investee power companies	Sustainability report 2018, p. 32.
M2	Carbon sink impact of forest investments	Is reported in two year periods. Last reported: Sustainability report 2017, p. 26.
M3	Investment portfolio's carbon footprint in relation to net sales	For more information: CRE GRI 305-4, Sustainability report 2018, p. 32.
M4	Percentage of companies that have reported on greenhouse gas emissions	Sustainability report 2018, p. 32.
M5	Comparison of investments with the two-degree target	Sustainability report 2018, p. 33–34.
M6	Disability pension application decisions upheld	Sustainability report 2018, p. 10.
M7	Ilmarinen's employees' health	Sustainability report 2018, p. 40.
M9	Active participation in General Meetings	Sustainability report 2018, p. 30.
M10	Customer retention	Sustainability report 2018, p. 9.
M11	Preliminary rehabilitation decisions	Sustainability report 2018, p. 12.
M12	Solvency ratio	Sustainability report 2018, p. 25.

Independent Assurance Report

Translated from the original Report in Finnish language

To the Management of Ilmarinen Mutual Pension Insurance Company

At the request of the Management of Ilmarinen Mutual Pension Insurance Company (hereafter Ilmarinen) we have performed a limited assurance engagement on the information presented for the reporting period 1.1.–31.12.2018 in Ilmarinen's Corporate Responsibility Report 2018 (hereafter corporate responsibility information).

Management's responsibility

The Management of Ilmarinen is responsible for the preparation and presentation of the corporate responsibility information in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards and Ilmarinen's internal reporting guidelines (hereafter the reporting principles).

Assurance Provider's responsibility

It is our responsibility to present an independent conclusion on the corporate responsibility information based on our work performed. We do not accept nor assume responsibility to anyone else except to Ilmarinen for our work, for the assurance report and for the conclusions that we have reached.

We have conducted the assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 'Assurance Engagements Other than Audits or Reviews of Historical Financial Information'. The ISAE 3000 standard requires compliance with ethical requirements as well as planning and performing the assurance engagement to obtain limited assurance on whether the corporate responsibility information has been prepared, in all material respects, in accordance with the reporting principles.

Assurance Provider's independence and quality assurance

We comply with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the IESBA (International Ethics Standards Board for Accountants). We apply ISQC 1 (International Standard on Quality Control) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Limitations of the Engagement

In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. The procedures selected depend on the Assurance Provider's judgment, including an assessment of the risks that the corporate responsibility information would not, in all material respects, comply with the reporting principles. We have planned and performed our engagement to obtain sufficient appropriate evidence on which to base our conclusion.

We have performed, among others, the following procedures:

- a. An update of our knowledge and understanding of Ilmarinen's material sustainability reporting topics, organisation and activities,
- b. An assessment of suitability and application of the reporting principles regarding the stakeholders' needs for information,
- c. Interviews with senior management to understand Ilmarinen's corporate responsibility leadership,
- d. Interviews with personnel responsible for gathering and consolidation of the corporate responsibility information to understand the systems, processes and controls related to gathering and consolidating the information,
- e. Reviewing corporate responsibility data from internal and external sources and checking the data to reporting information on a sample basis,
- f. Performing recalculation of information and reviewing the underlying data which is the basis of narrative disclosures related to the data.

Our assurance report should be read in conjunction with the inherent limitations of accuracy and completeness for corporate responsibility information. This independent assurance report should not be used on its own as a basis for interpreting Ilmarinen's performance in relation to its principles of corporate responsibility.

Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that the corporate responsibility information has not been prepared, in all material respects, in accordance with the reporting principles, or that the Information is not reliable, in all material respects, based on the reporting principles.

Helsinki 25. March 2019

Ernst & Young Oy

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