

Responsible investment 2024



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We safeguard sustainable pension funding

The aim is to achieve a stable contribution level taking intergenerationality into account

By law, Keva must carry out its funding duties in a manner that secures pension benefits. Keva's strategy is based on a stable contribution level that secures pension benefits across generations.

In the light of current information, the funding of Keva's pensions is sustainable in the long term at the current contribution level, and there will be no pressure to increase contributions in the near future.

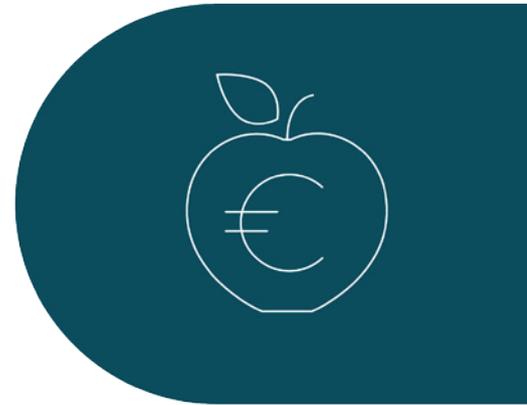
Contribution level decided on the basis of reports

Keva's Councillors decide annually on the contributions payable by Keva member organisations based on the proposal of Keva's Board of Directors. The Ministry of Finance sets the balancing payment component and thus the overall level of contributions.

The annual preparation of the payment level follows the funding and payment principles outlined by Keva's Board of Directors. The starting point for the preparation is the biennial Asset/Liability report, which presents a long-term assessment of the structure and development of the pension expenditure for which Keva is responsible, the long-term funding situation and the sustainable contribution level. The most recent report was prepared in 2023.

The Asset/Liability report is based on the latest economic and demographic data, in addition to which a wide range of assumptions are used. The assumptions are largely consistent with the long-term calculations of the Finnish Centre for Pensions.

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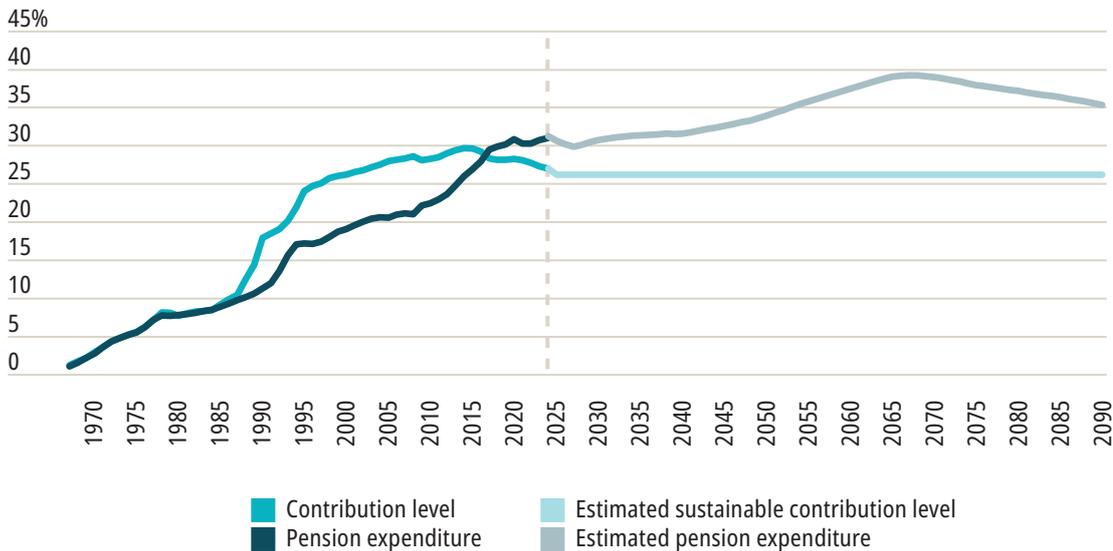


In the report, the assumptions have been adjusted to some extent to correspond to the special characteristics of Keva member organisations' pension system so that the results describe in the best possible way the pension system for which Keva is explicitly responsible. For example, mortality takes into account the higher than average life expectancy in the public sector. The Asset/Liability study also uses a sensitivity analysis to study the impact of key factors on the ratio between pension expenditure and sum of wages and salaries, contribution level and fund amount.

A contribution level report is prepared annually to support decision-making on the contribution level. It provides an estimate of a sustainable level of contributions and describes the identified financial factors that should be taken into account when deciding on the contribution level. In accordance with the funding and payment principles of Keva's Board of Directors, the total contribution level will be adjusted towards a new sustainable contribution level in accordance with the latest payment level survey by taking into account 20–30% of the need for contribution changes.

The pension contribution of Keva's member organisations consists of the wage-based

Sustainable contribution level and pension expenditure estimated in the autumn 2024 contribution level report



Together with investment returns, the contribution covers pension expenditure in the long term, and based on current information there is no pressure to increase contributions in the near future.

pension contribution paid by all members and a balancing payment paid by municipalities and wellbeing services counties. The wage-based contribution corresponds to the average TyEL contribution, and amounts to 24.4% of wages and salaries in 2025.

The part of the total contribution level that exceeds the wage-based contribution is collected through a balancing payment paid by municipalities and wellbeing services counties. In November 2024, Keva Councillors decided a total balancing payment of EUR 577 million for 2025, which is EUR 55 million lower than in 2024. The overall contribution rate will be 0.4 percentage points lower than in 2024 and equate to 26.75% of the sum of wages and salaries of Keva member organisations.

Higher investment returns by increasing risk

The pension expenditure of Keva's member organisations' pension system exceeded the

contribution income in 2017, since when some pension expenditure has been funded out of investment returns. Funding sustainability therefore requires real returns on investments, the pursuit of which requires bearing an investment risk.

Looking ahead, the significance of investment returns in funding will increase, as pension expenditure grows faster than contribution income until the 2060s. However, pension contributions will continue to be the main source of funding for pensions each year.

In summer 2023, Keva's Board of Directors decided to increase the risk level of the investment portfolio and execution of the decision continued in 2024. Increasing the risk level seeks to achieve higher long-term returns, which will contribute to securing the funding of future pensions. The higher risk level means the short-term return on investments will vary more than earlier.

Responsibility for investment operations

Risks and opportunities

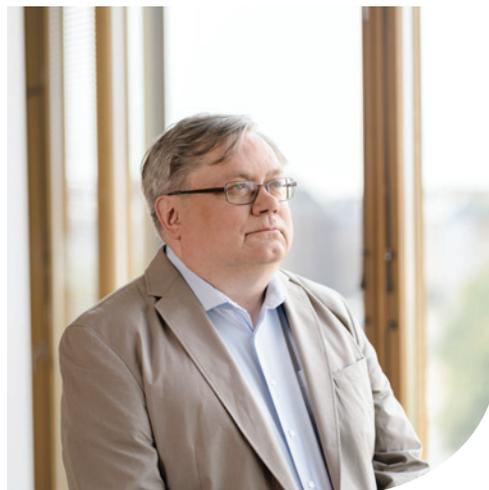
Responsibility was first included in Keva's investment strategy in 2002, since when we have systematically promoted responsibility as part of our investment operations. The means have developed along the way.

Our investment assets have been diversified globally and across different asset classes, and so are exposed to a wide range of long-term risks and opportunities brought about by the effects of climate change.

We at Keva use a forward-looking climate scenario analysis when assessing the long-term climate risks of our entire investment portfolio. Our goal is to increase understanding of climate change as a phenomenon and its impact on the returns and risks of the investment portfolio.

The climate scenario modelling we carried out last year paints a picture of a systemic challenge that may have a significant impact on Keva's investment assets. The systemic nature means that the primary measure is to try to prevent the progression of the phenomenon through engagement. It is difficult to avoid the phenomenon by diversification, at least not completely.

We engage with our investee companies both ourselves and through our extensive network of asset managers. More than 80% of Keva's investment assets are managed by external asset managers, who are selected for our portfolio after rigorous vetting. When making the selection, asset managers' approaches to investment and responsibility are closely interconnected.



Chief Investment Officer Ari Huotari

Every year, we use surveys to collect information on how and on which themes asset managers have engaged with companies on responsibility issues, among other things. At the same time, we strive to ensure the quality and coverage of the data we use in various ways.

The challenge for a global investor like Keva is to ensure that the decisions we make are based on reliable and up-to-date data. On an annual basis, a huge amount of data is accumulated through surveys carried out by service providers, as well as through our own surveys and contacts with asset managers, the utilisation of which requires a sense of relevance.

This means an emphasis on knowledge management, i.e. managing data warehouses and flows, sharing and creating information in everyday work. Its functionality is essential for truly data-driven decision-making at all levels. It is important to develop and modernise this system in various ways, and in recent years we, too, have focused intensively on this.

Developing surveys for more accurate information

The Responsible Investment team has for years been using surveys to collect information on the engagement activities of Keva's asset managers in different asset classes. Most recently up for discussion has been an amplification of the perspectives of alternative investments - private equity investments, outsourced real estate investments and infrastructure investments.

"The role of the asset manager varies in these asset classes, which is why the survey forms must be customised to make them as functional and accurate as possible," explains Kirsi Keskitalo, Head of Responsible Investment.

Manager surveys are a key way to monitor how Keva's investments are managed globally and what kind of goals have been set for the investee companies.

"Surveys help us to better understand the operations of asset managers and communicate to them about the focus areas that are important to Keva, such as taking the climate aspect into account in investments. Alternative investment asset managers typically have a great deal of influence over the investee companies."

Keva's team continuously develops and systematises climate reporting.



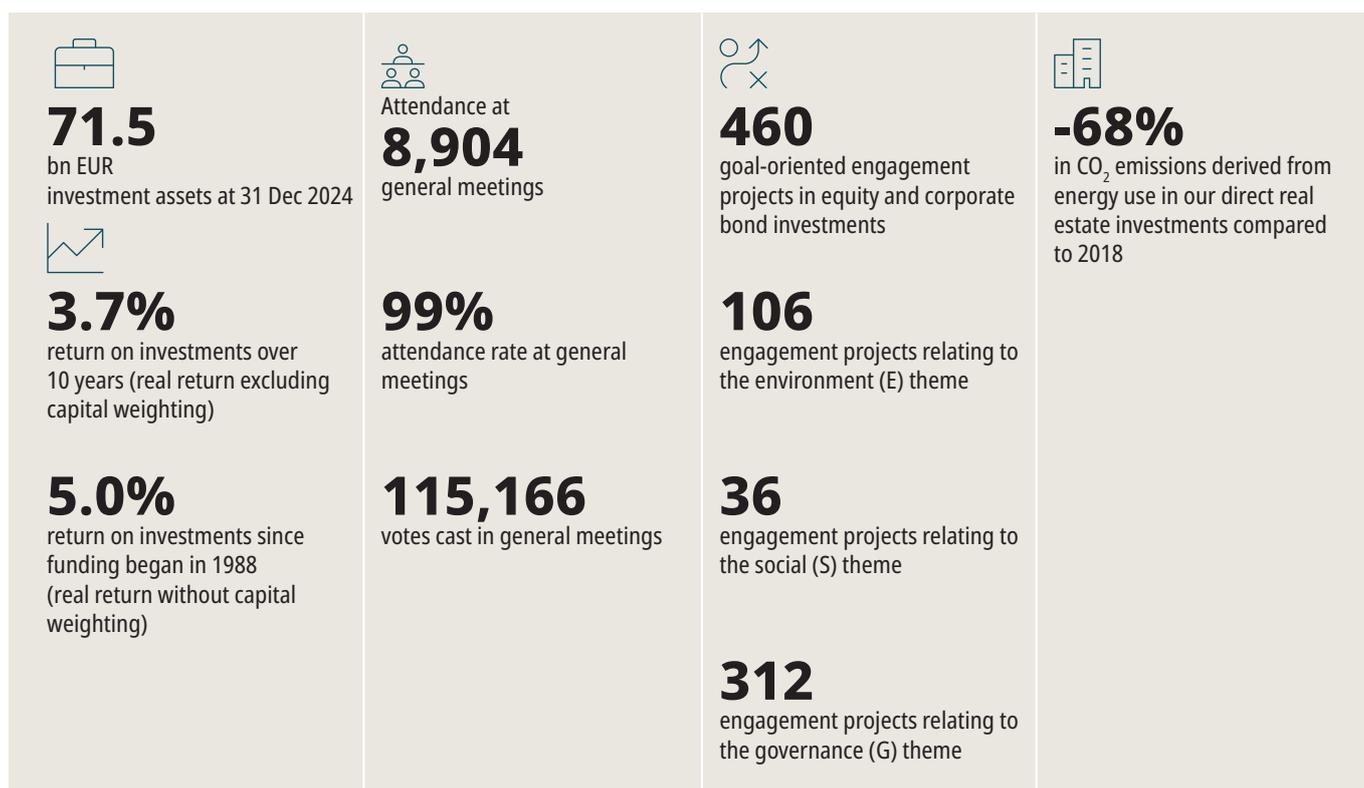
Kirsi Keskitalo, Head of Responsible Investment

Keva's team is constantly developing and systematising climate reporting. Collecting companies' emissions data has been intensified, especially with regard to alternative investments.

"This is where surveys play a key role, since reliable emissions data for these asset classes is not available anywhere else other than directly from managers. This requires a lot of work and commitment from them. There is also variation between the respondents: the most advanced asset managers are able to answer very accurately, but many are still in the early stages of collecting emissions data, which means the accuracy of the answers is developing gradually," Keskitalo says.

This is the first year the Responsible Investment report is reporting climate change risks and opportunities in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD), which Keskitalo says will clarify climate reporting and increase transparency in investment operations.

Key figures 2024



Listed equities

Keva's listed equity investment programme provides broadly diversified exposure to the global stock market. At year-end 2024, the portfolio was valued at EUR 29.6 billion, comprising a total of 43 investment strategies and around 6,800 equities. External asset managers manage a significant part of the portfolio.

Shareholders can often have a significant say in how companies are run. The most important ways to implement responsible investing are by voting in annual general meetings, targeted conversations with corporate management and ESG analysis integrated into the investment approach.

Direct equity investments

We assess corporate responsibility as part of and in the same way as we use other industry-specific assessment criteria. This is how we have integrated responsible investment into the investment process. Our sources of information include analysis and research reports provided by the ESG service provider, securities brokerage firms as well as companies' own reports and publications.

During 2024, we met with all the investee companies in the portfolio at year-end. Besides this, we also attended the capital market days of many of our investee companies and listened to corporate management not just in conjunc-

In direct equity investments, we voted in 100% of annual general meetings.

tion with interim results but also in many seminars.

We also often raise ESG issues in meetings and discussions with management. Companies are clearly increasingly aware of the importance of ESG issues for investors and these issues are now better addressed in their operations and reported on.

In 2020, we began voting in annual general meetings gradually in line with our principles of active ownership. In 2024, we voted in 100% of annual general meetings. The figures are included in the aggregated figures presented later in this report.

We apply norms-based screening both to the investee companies in our portfolio and to companies being considered for inclusion. We receive automatic notification of all companies found to be in breach of the UN Global Compact. No Global Compact breaches were detected in our direct equity portfolio in 2024.

Equity investments in our externally managed portfolio

Cooperation with external asset managers is based on a long-lasting partnership, trust and

transparency. Whereas the strategies for Keva's externally managed equity portfolio represent different investment styles and invest in different markets, they seek to unlock value and have in common analysis based on in-house research and a long-investment horizon.

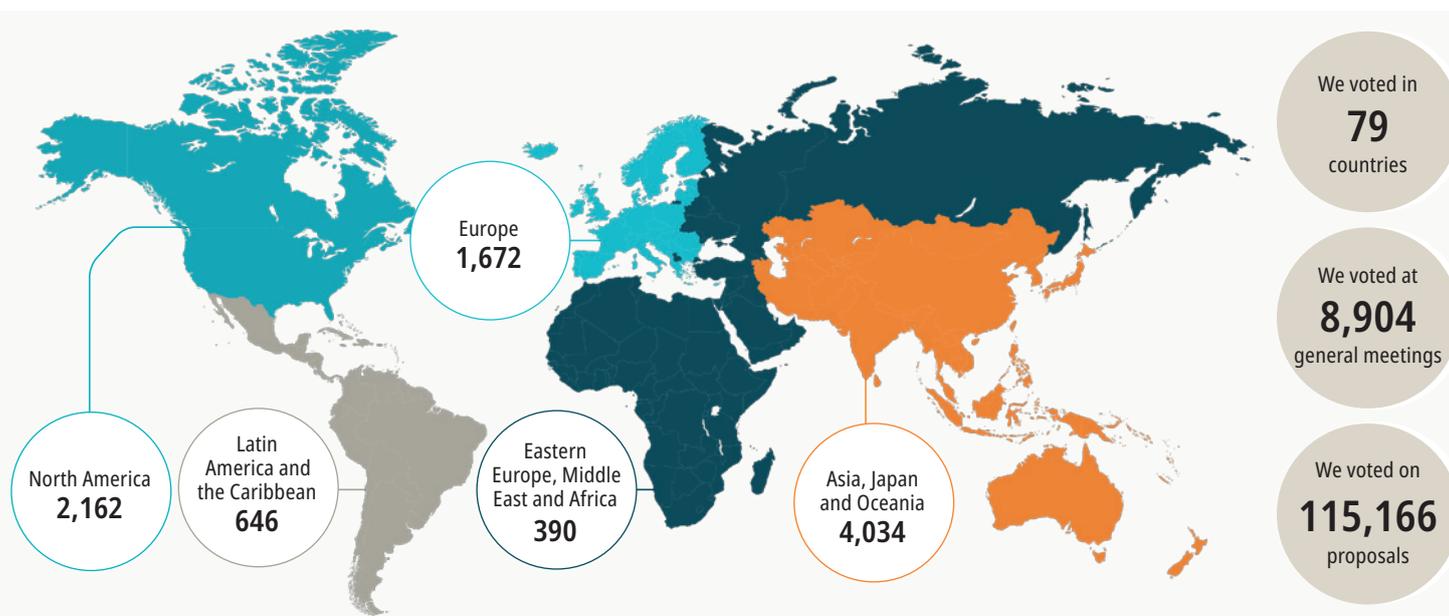
Rigorous vetting, which also includes an assessment of the asset manager's responsible investment and active ownership, is used to select our external asset managers. We also expect our investment managers to share and act in accordance with the same investment beliefs as Keva. We draw on asset managers' local expertise both in portfolio management and in the implementation of responsible investment.

At year-end 2024, our externally managed equity portfolio comprised 38 active strategies and four passive index strategies. We have regular discussion with asset managers, also on responsibility issues. In 2024, we had more than 80 meetings and calls with existing and potential asset managers.

Around 90% of the external asset managers used by Keva have drawn up a company-level responsible investment and ownership steering policy, which guides their operations. Three quarters are signatories to the UN Principles for Responsible Investment (PRI) and more than half report on the risks and opportunities related to climate change in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD).

We monitor the implementation of international norms in our externally managed investment portfolio at regular intervals.

General meetings by geographical location



General meetings by region and distribution of votes given

Region	Number of general meetings	Number of general meetings attended	Attendance rate %	Number of proposals	For %	Against %	Other* %
Africa and Middle East	411	390	95	7,215	70	11	19
Europe	1,701	1,672	98	39,815	84	15	1
North America	2,166	2,162	100	25,306	65	25	9
Asia	4,079	4,034	99	34,205	81	18	1
Latin America and the Caribbean	669	646	97	8,625	72	25	2
All	9,026	8,904	99	115,166	77	18	4

* The category includes meeting proposals where voting was neither clearly in favour nor against.

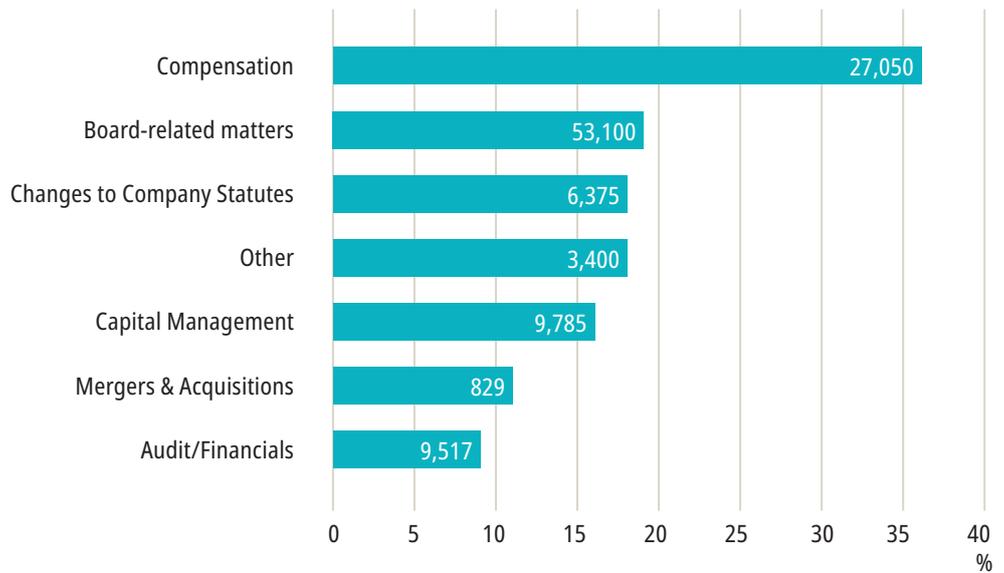
The reported information on voting is based on information provided by voting service providers and custodians. The passage of votes in general meetings includes a certain level of uncertainty. We are cooperating with service providers to improve voting processes and to ensure that our votes are registered.

Engagement

In 2024, Keva and its external asset managers voted in around 9,000 general meetings globally in almost 80 countries. This represents a participation rate of 99%. We voted in favour of

77% and against in 18% of the around 115,000 proposals put forward at these annual general meetings. The proposals we voted against usually involved the election and remuneration of the members of the Board of Directors.

Votes against management



Voting where Keva has voted against the management's proposal, percentage of all votes cast on the item at the annual general meeting concerned.

Asset managers particularly in North America often voted against management's proposal in so-called 'say on pay' advisory votes on ex-post management compensation.

In addition to voting, we engage with investee companies through active dialogue and other forms of communication in which our external asset managers play an important role. A survey among asset managers, showed

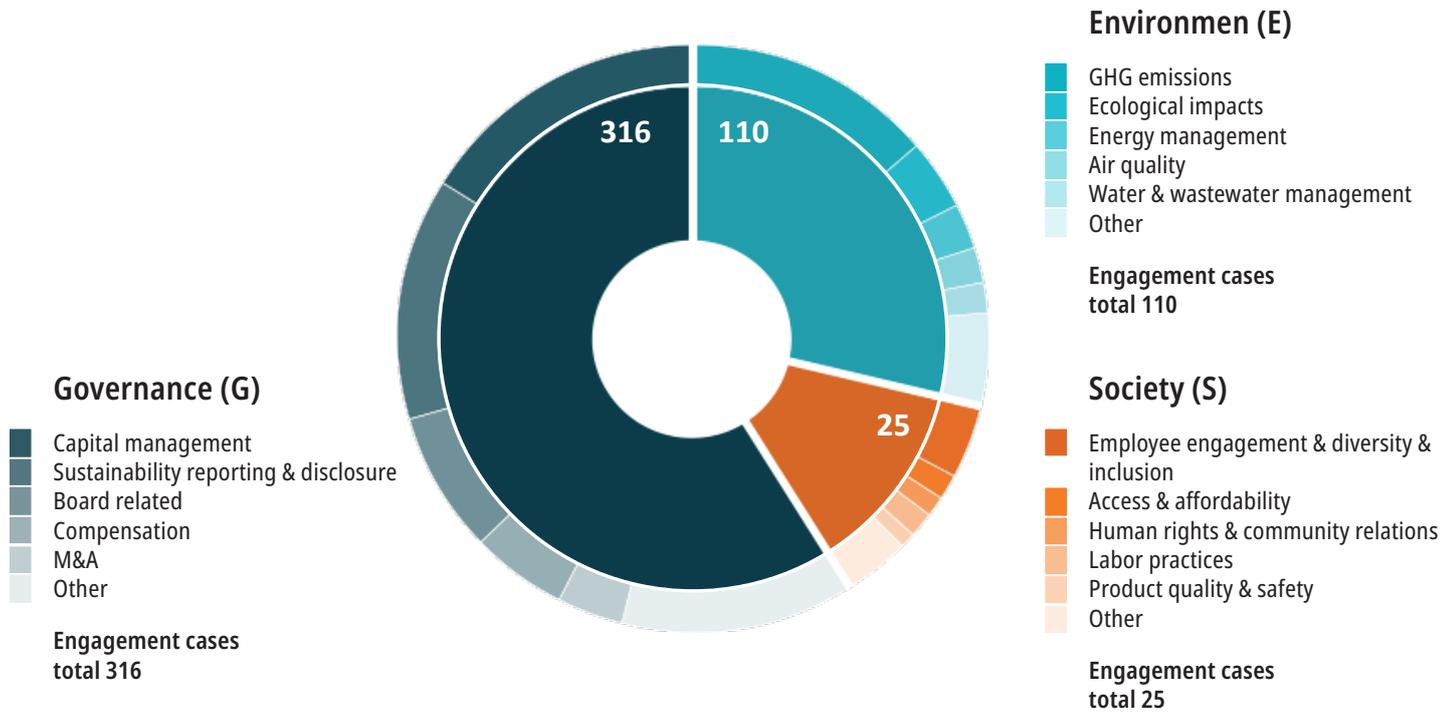
that in 2024, there were around 380 engagements aimed at change and targeting around 290 companies. One engagement project can include one or more sub-themes. The diagram below summarises the occurrences of these sub-themes.

The key engagement themes raised at the total portfolio level involved good governance (G): capital allocation, the development of sustainability reporting, questions relating to a company's Board of Directors and remuneration. In environmental issues (E), greenhouse gas emissions have been highlighted for several years now. There was a small percentage of engagements related to society (S) last year.

The results are based on Keva's annual ESG survey for internally and externally managed strategies, which were part of Keva's investment portfolio at the end of 2024. The figures apply

The key engagement themes involved good governance (G).

Main themes of engagement in equity investments 2024



This information is based on a survey of Keva’s asset managers. The figures apply to those engagements reported by the asset managers. Several themes may be present in a single engagement case.

to engagements for which the information concerned has been reported.

Even though the same themes are repeated in several portfolios and in different geographies, there are regional differences in their importance. In Europe, the focus of engagement was governance-related issues and capital allocation. In the United States, the focus was on remuneration, which was also reflected in the numbers of votes cast against management proposals in annual general meetings. In Japan, the focus was on capital allocation, whereas in emerging markets it was on the development of sustainability reporting.

Just under a third of engagements achieved their objective, but most continue, thereby emphasising long-term nature of engagement work. Whereas engagement projects generally last for less than a year, the share of engagements lasting from one to three years has increased. Direct communication with investee companies was by far the most popular type of engagement with in-house experts, such as sustainability and investor relations personnel, from the investee company often being on the opposite side of the table. Discussions with members of the Board of Directors and a company’s top management were held just as often.

Whereas engagement is typically the responsibility of investment teams, some asset managers also have a team specialising in it.

CASE: Just green transition

Our asset manager who invests in emerging markets wanted to know how an Indian energy company is ensuring social justice as the green transition changes the business. In particular, how many of the company's employees would be affected by potential job losses and how the company would try to mitigate the negative impacts.

It emerged in the discussions that the company is seeking to reskill its workforce and utilise its high technological know-how, and it does not expect the energy transition to have any impact on human resources. The company plans to convert key production facilities to focus on downstream product processing. The company believes that there will be a need for fossil fuels in the region for a long time to come, and the green transition will be implemented in an orderly manner, without workforce reductions.

CASE: Board Chair election

Our sustainability portfolio asset manager voted against the re-election of the chair of the Board of Directors at the annual general meeting of a Swiss manufacturer of heating, air conditioning and ventilation systems. The asset manager considered that the chair did not meet the independence criteria required for the role. Even though the chair was re-elected, almost 20% of shareholders voted against election, thereby sending the company a clear signal as to the importance of the independence of the chair of the Board of Directors.

Independence is key to good governance and this is emphasised in the role of the chair of the Board of Directors, which must ensure that the company acts in the best interests of all shareholders. The asset manager will continue discussions with the company's Board of Directors and, if no progress is made, it may continue to vote against the management's proposal.

CASE: Initiative the annual general meeting

Our asset manager who invests in Japan has been working to improve the reporting of a major steel company on climate-related lobbying for several years. Traditional steelmaking is highly carbon-intensive, and the transition to green steel requires policies that support the adequate availability of low-carbon alternatives.

The asset manager considers that the company has a significant role and opportunity to impact Japanese policy in this matter. However, numerous discussions and meetings with the company have not resulted in sufficient improvements. In order to enhance engagement, the asset manager, in cooperation with another shareholder, submitted a proposal to the annual general meeting, which required the company to disclose its own, direct lobbying on climate issues and membership of industrial cooperation bodies. The initiative also called on the company to assess whether its lobbying activities as a whole are in line with the carbon neutrality 2050 target it has set, and to record the necessary measures if this is not the case.

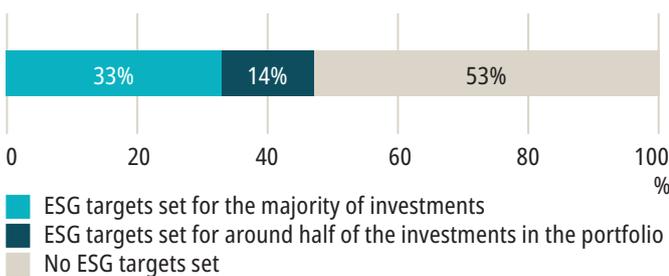
Although the initiative was not adopted, it was supported by 27.98% of the votes cast at the annual general meeting, sending a strong signal to the Board of Directors about the importance of transparent reporting to investors. The asset manager continues to engage with the company.

Private equity investments

Private equity investments are investments in unlisted companies. The return on private equity investments is to a large degree the result of active ownership. A private equity investor is often the majority shareholder in the investee company. This means that ownership steering is strong and constitutes the basis for value creation related to ownership. The company can be developed by streamlining business operations and recruiting key personnel, as well as through investment, financing and acquisitions. The development of ESG issues is a natural part of company development and value creation.

Our survey shows that our asset managers have set ESG targets for around 50% of private equity funds. Most of the ESG targets set applied to the entire portfolio, but in some cases only to some of the investees in the portfolio. The themes of the targets are broadly divided into different ESG topics, with an emphasis on good governance, such as business ethics, business sustainability and sustainability reporting.

ESG targets set by private equity managers for their investments



The percentage of funds (% of the number of funds) in which the asset manager has set ESG targets for its portfolio companies and the percentage (%) of the portfolio companies for which targets have been set. The data is based on a survey conducted by Keva among external asset managers.

We attended 144 advisory committee meetings in 2024.

We primarily make capital commitments in closed-end private equity funds that involve a long-term investor commitment. Keva’s private equity portfolio is diversified by investment strategy, industry, geography and vintage. At year-end 2024, the portfolio was valued at EUR 11.4 billion, there were 54 asset managers. More than 60% of the portfolio was allocated to 10 asset managers through multiple investment strategies. The portfolio has investments in a total of more than 1,500 companies.

Limited Partners Advisory Committees (LPAC) are the most important means of engagement for investors. The advisory committees are typically composed of the biggest fund investors and meet between two and four times a year. An advisory committee engages with both the investee companies and the asset manager’s own company, and promotes conversation around responsible investment.

In 2024, Keva held seats on the advisory committees of 93 funds and almost invariably holds a seat on the advisory committee in the largest fund investments. In the past year, we attended 144 advisory committee meetings, in which asset managers presented ESG development projects and discussed how ESG issues have been integrated into the investment and value creation process. Asset managers also reported on ongoing or completed ESG projects in portfolio companies as well as the results of these projects.

Other forms of engagement include regular meetings with asset managers. In 2024, these meetings almost invariably discussed various ESG issues such as environmental concerns, employee wellbeing, diversity and equality and how asset managers take these into account in their own business and in investee companies. Last year, Keva had around 70 meetings with asset managers.

Keva's largest private equity asset managers responded to an ESG survey updated in 2024 to chart asset managers' responsibility practices. All private equity funds have principles for responsible investment. In addition, 75% of our asset managers are PRI signatories.

Keva is a member of the Institutional Limited Partners Association (ILPA), which is an international umbrella organisation that advances the interests of limited partners (LPs). ILPA strives to develop and promote best practices, corporate governance and transparency.

CASE: Green hydrogen-based steel

The company, which is included in our private equity investments, aims to enable the green industrial transition through the production of green hydrogen-based steel. The company's first plant is currently under construction in Sweden and will have the capacity to produce 5 million tonnes of steel for the market by 2030. This plant will be the world's largest green hydrogen-based steel production facility, 30 times larger than the current largest hydrogen production facility in Europe. In just three years of existence, the company has achieved impressive technical, operational, and commercial advancements and is expected to start large-scale production in early 2026. Going forward, the company intends to use

green hydrogen to reduce carbon dioxide emissions in other hard-to-abate industries.

CASE: ESG in a bank's operations

Our private capital asset manager investing in Asia works closely with its portfolio companies to integrate ESG principles into their business. One of the portfolio companies, one of Vietnam's largest private banks, has made a significant contribution to the financial inclusion of emerging consumers and small businesses. The bank has received several recognitions for promoting sustainable development and green finance.

Since the start of the investment, our asset manager has supported the bank in improving its ESG programme and governance. For example, when accepting new customers, the bank conducts ESG due diligence using the Environmental Social Management System (ESMS) to understand the risks and opportunities for its customers. Implementation of the system required the training of around 500 account managers in 2024. Recent years have seen the bank develop a loan product that supports small and medium-sized enterprises owned by women in particular. In addition, the bank has provided green financing for solar power projects in Vietnam as part of the country's Sustainable Development Goals.

CASE: More sustainable agriculture

For one of our private equity asset managers, biodiversity will be one of the focus areas in the coming years and it is committed to being at the forefront of identifying and mitigating nature-related risks. In 2023, the asset manager carried out a nature-related risk assessment for its portfolio for the first time in accordance with the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) in accordance with the Locate, Evaluate, Assess and Prepare (LEAP) approach.

One of the asset manager's portfolio companies is an international company that focuses on sustainable agriculture and the promotion of plant health. The company provides innovative solutions for crop rotation management and aims to change the agricultural model towards balanced and sustainable farming. The company has production facilities around the world, including Europe, Brazil, South Africa, Mexico and the United States. The asset manager has worked with the company's management to switch to more environmentally friendly, biological pest control products. The company has succeeded in transforming its product range to be more environmentally friendly, reducing pollution and emissions from production and use, ultimately reducing soil degradation and the potential for biodiversity harm.

Corporate bonds

Direct corporate bonds

At year-end 2024, our direct corporate bond portfolio was valued at EUR 2.6 billion. The investments have been diversified between companies and financial institutions that have issued bonds on the European market. Our investments in corporate bonds are focused on the lower-risk, higher-rated spectrum. The portfolio held bonds from around 105 issuers.

ESG aspects are an integral part of our investment approach, and we use industry-specific criteria to evaluate the ESG performance of companies. Our sources of information include analysis and research reports provided by an ESG service provider, securities brokerage firms as well as companies' own reports and publications. ESG issues are part of any investor event and material, and when we meet with companies, we almost invariably discuss ESG with company management. We mostly meet with companies in conjunction with new bond issues.

Companies also actively meet with investors outside of bond issues in order to keep investors informed about potential future bond issues. During 2024, we met with around 75 companies.

We apply norms-based screening both to the investee companies in our portfolio and to companies being considered for inclusion. We receive automatic notification of all companies found to be in breach of the UN Global Compact. No Global Compact breaches were detected in our direct corporate bond portfolio in 2024.

Corporate bonds in our externally managed portfolio

The externally managed part of Keva's corporate bond portfolio invests in high-risk corporate bonds. As a rule, the credit ratings of the loans are in the so-called high yield category. The portfolio focuses on European and US companies, whose income streams are often global. A small part of the portfolio is also invested in corporate bonds from emerging countries. The entire portfolio had loans to approximately 1,400 different companies and accounted for EUR 8.5 billion of Keva's investment portfolio at year-end 2024.

The portfolio is fully managed by external asset managers. At year-end 2024, the portfolio was managed by 19 asset managers through 21 investment strategies. Most of the investment products in the portfolio cannot be purchased passively or by a short-term investment style.

Asset managers are selected for the portfolio through a detailed application process, caricatured over an eternal time horizon, but the outcome depends on the achievement of the

Asset managers are required to commit to Keva's principle-level guidelines in responsible investment.

set goals. Monitoring is based on longer-term drivers of value creation.

Asset managers are required to commit to Keva's principle-level guidelines concerning investment and responsible investment. In addition to these, 90% of asset managers have their own responsible investment policy, and more than half also have a separate active ownership policy.

Active ownership is seen in the portfolio as one of the enablers of long-term value creation. The portfolio has for years followed goal-oriented or change-oriented engagement processes initiated by asset managers in the portfolio companies. Monitoring maps the underlying causes, objectives, methods, duration and success of engagement. Investments were also made in the monitoring of influencing processes at the system level during 2024. The monitoring of engagement processes at the system level was also addressed during 2024.

Transparency is otherwise one of the key values of the portfolio. This applies both to asset manager cooperation and the ability to monitor the portfolio in depth and in real time. Internally developed, raw data-based solutions have been at the heart of the development work in recent years, and they have enabled increasingly improving transparency in the

portfolio with a more illiquid nature. Internally developed solutions based on raw data have been at the heart of developments in recent years, and have enabled increasing transparency in a portfolio of a less liquid nature

Over the past five years, the majority of asset managers' engagement processes have focused on good governance (G) and the environment (E). The most significant engagement themes typically change slowly, but one of the clearest changes over the past five years has been a decrease in engagement regarding the improvement of sustainability reporting. This is probably partly due to stricter regulatory requirements, and partly due to the goals achieved through engagement processes.

During 2024, goal-oriented engagement processes were ongoing in 76 companies. In about 80% of these, the asset manager sought change with its own resources, and in the rest through investor cooperation. As in many other years, the key themes continued to be engagement related to capital allocation and the sustainability of the business model (good governance) and greenhouse gas emissions (environment). In terms of sectors, engagement processes were evenly and extensively directed.

In more than half of the cases, the objectives of the engagement were achieved during the year, but in others, the work continues. One in ten entails a process that lasts 3–5 years. In three portfolio companies, the objective of the engagement was not achieved, which led to the divestment of the position.

From time to time, the portfolio also includes shareholdings as a result of debt restructuring. During the year, the portfolio's external asset

managers voted on 123 proposals at a total of 12 annual general meetings, which meant a participation rate of 86%.

The portfolio asset managers are part of a total of nearly thirty different investor cooperation initiatives. Three-quarters of asset managers are PRI signatories. Approximately half of the portfolio's asset managers are committed to reporting in accordance with the TCFD. The implementation of international norms is monitored in the portfolio at regular intervals.

CASE: Science based climate targets

A US asset manager investing in corporate bonds sought change in four different portfolio companies, with the aim of accelerating the adoption of science-based targets (SBTs). The CDP's climate change programme was utilised in the engagement. The asset manager's portfolio companies represented network infrastructure, semiconductors, aerospace, and financial and retail technology.

In two engagement processes, the asset manager achieved its objectives during the term of the bond through the climate change programme. In other words, portfolio companies introduced science-based targets. In the other two portfolio companies, the final engagement objective was not reached within the term of the bond.

The introduction of science-based targets often requires a multi-year horizon. The first level of target setting could be, for example, to provide a portfolio company with access to the additional resources and information made available by CDP, if the company itself is under-resourced. The next level of ambition could then be to engage the portfolio company in a transition plan until it is ready to actually implement the climate targets.

CASE: Improvements in working conditions

A US asset manager investing in corporate bonds started an engagement process in a global tea beverage portfolio company after learning of unrest and human rights violations on Kenyan tea plantations. Engagement work was carried out both directly itself and together with other investors.

The engagement process resulted in the portfolio company launching in-depth investigations on tea plantations, firing those found guilty of misconduct, initiating an intensified training programme on gender equality and the prevention of sexual harassment, and strengthening its governance and oversight structures. The objectives of the engagement process were reached during 2024, and the process increased transparency and trust in the portfolio company. The asset manager will continue to monitor the implementation of international standards, among other things.

Real estate and infrastructure investments

Direct real estate investments

Keva's direct real estate investments include direct property investments in Finland, shares of real estate companies as well as joint venture investments in the Nordic countries.

At year-end 2024, the market value of direct real estate investments was around EUR 3.2 billion. Keva's direct real estate investments consist of around 130 properties with a net lettable surface area of around 870,000 m² at year-end 2024. The properties are concentrated in the Helsinki Metropolitan Area and in other growth centres in Finland. In terms of value, the portfolio consists of business premises (39%), offices (23%), residential (22%), hotels (9%) and other properties (7%).

Keva’s premise in responsible real estate investment is to take into account not only financial criteria but also issues related to the environmental and social responsibility of real estate investments.

Minimising the climate impact of energy use in property investments is a key element in environmental responsibility. The energy consumption of Keva’s direct real estate investments still equalled one two thousandth of Finland’s total greenhouse gas emissions in 2018. Keva aims to halve the carbon dioxide emissions caused by the energy use of these properties by 2025 and to reach carbon neutrality by 2030. The carbon neutrality target is being implemented in accordance with the contents of the Green Building Council’s (GBC) Net Zero Carbon Buildings Commitment signed in 2020.

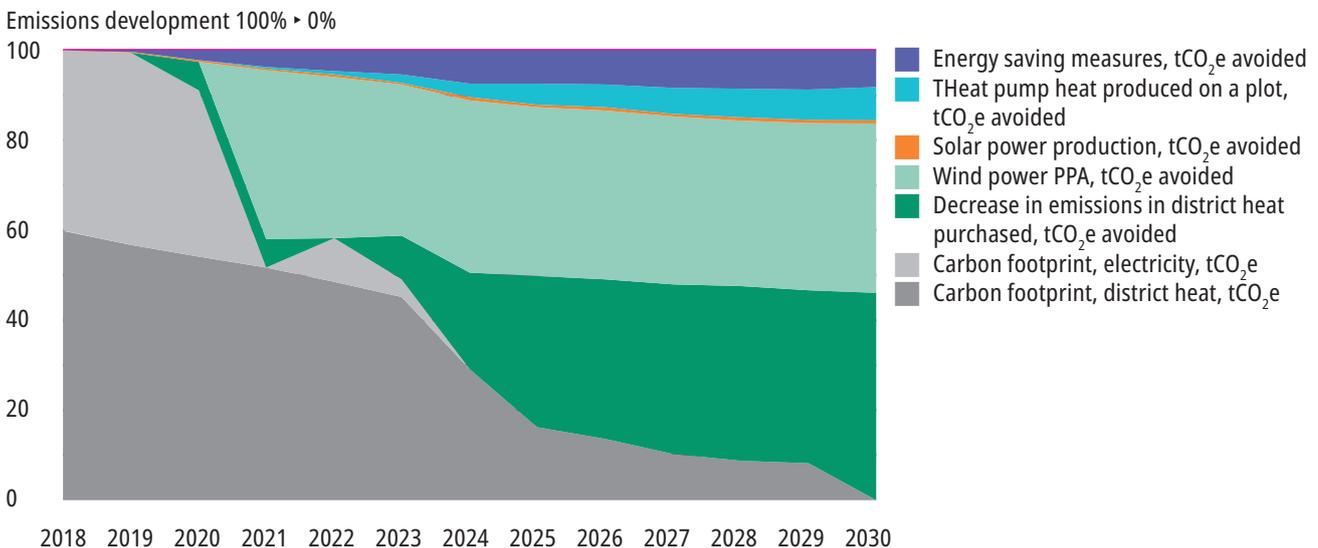
Progress towards the goal is discussed in the TCFD section of the report.

Measures towards the net-zero emissions goal

In 2024, Keva implemented around 40 individual energy-consumption enhancement or renewable energy production measures, which achieved calculated yet measured energy savings of more than 3.6%. Most of the energy savings in 2024 were achieved through renewable energy production and recycling systems. The year saw the completion of 10 heat pump systems and 2 solar power plants. Together, these accounted for more than 75% of the approx. 7,300 MWh/year energy saving measures in 2024, with the remaining savings of around 1,200 MWh/year being achieved through traditional building technology energy saving measures (approx. 25%).

Besides energy-saving and property-specific energy production measures, the significant reduction in carbon dioxide emissions is due to the procurement of renewable electrical energy, in particular, and the sharp decrease in the emission intensity of district heat after 2022.

Development of emissions from energy use and the share of savings measures in emission cuts



Recycling rate and water consumption

Water consumption monitoring in properties has been continuous for 10 years. However, portfolio-level statistics and reporting on water consumption are hampered by the unreliability of metering and data breaks. Reliable water consumption data currently covers around 75% of the surface area. The available data shows that annual water consumption at the portfolio-level was about 450,000 m³, and in reliably metered sites, specific consumption was about 550 l/m² per year. There were no major changes in specific consumption compared to the previous year.

It has been possible to significantly expand the monitoring of recycling rates for the calendar year 2024. This is the first responsibility report that can report on recycling rates with sufficient coverage and reliability. Waste and recycling rate data covers 60% of the number of properties.

The recycling rate for the entire real estate portfolio in 2024 was 48%. The recycling rate for the business premises portfolio was just over 60% and for the residential premises portfolio around 32%.

The main objective of monitoring the recycling rate is to identify the most effective target-specific measures to increase the portfolio-level recycling rate. The objective is also to expand the coverage of waste data.

CASE: Kauppakeskus Kaari shopping centre

Keva acquired ownership of the Kauppakeskus Kaari shopping centre in the Kannelmäki district of Helsinki in summer 2022, since when collectively with the owner, shopping centre management and the stores, numerous measures have been taken at Kaari to improve sustainability.

An energy recycling system built at Kaari utilises the waste heat and geothermal heat generated in the stores. In conjunction with the project, a geoenergy field of 50 geothermal wells, each about 350 metres deep, has been drilled in the backyard of the building.

The electricity used by the shopping centre and the new heating system is entirely emission-free, which significantly reduces the property's carbon footprint. The solution means that waste heat generated by the shopping centre's cooling equipment can be stored in the summer and reused for heating in the winter. This reduces carbon dioxide emissions by around 680 tonnes a year, which corresponds to the annual emissions of around 200 single-family homes or almost 400 cars. At the same time, the consumption of district heating will decrease by an estimated 40%, which will also result in a lower energy bill.

Summer 2024 saw the completion of Kaari's own solar power plant. The 1,077 solar panels of the solar power plant installed on the roof of the shopping centre produce about 350 MWh of electricity a year. This amount corresponds to the annual electricity consumption of about 30 single-family homes. The environmentally friendly electricity produced by Kaari's own solar power plant is used for the shopping centre's ventilation. The power plant produces around 3% of the shopping centre's electricity each year.

Waste management, too, has been updated. At the beginning of 2023, Kaari set a target to reach a recycling rate of 68%.

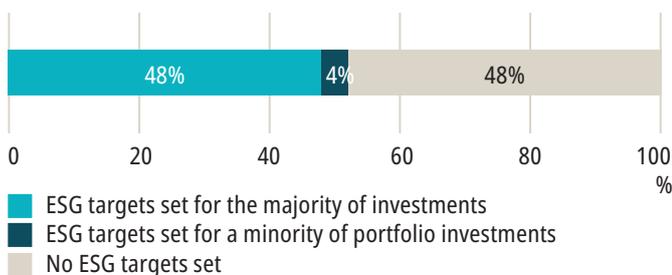
Parking at the shopping centre has also been modernised, with the addition of fast charging services for e-cars and a shared car system. This improves the sustainability of mobility and reduces environmental loading.

Investments in real estate funds

Investments in real estate investment funds in Keva’s portfolio are diversified geographically, chronologically, by investment style and by property style. Most of the investment properties in the portfolio are located outside of Finland, mostly in Europe and the United States. At year-end 2024, the total assets managed were valued at around EUR 1.6 billion and the portfolio consisted of investments in around 650 individual properties.

The real estate investment funds in Keva’s portfolio almost invariably own the entire property, which means that asset managers can engage directly with the properties. Our survey shows that our asset managers have set ESG targets for around 50% of real estate funds. These ESG targets almost invariably apply to all investments in the portfolio. In terms of ESG, Keva’s asset managers focus in particular on environmental issues such as greenhouse gas emissions, waste management and use of water

ESG targets set by real estate funds for their investments



The percentage of funds (% of the number of funds) in which the asset manager has set ESG targets for its portfolio companies and the percentage (%) of the portfolio companies for which targets have been set. The data is based on a survey conducted by Keva among external asset managers.

resources, but also on social issues such as occupational safety and diversity. ESG perspectives are integrated into investment analysis.

Keva’s investments in real estate funds are primarily in closed-end funds, where the investor commits for many years. During the life of the fund, limited partner advisory committees are the most important means of engagement. Advisory committees are typically composed of the biggest fund investors and meet between two and four times a year. An advisory committee makes it possible to engage not only with the property itself, but also with the asset manager’s own company and the responsibility of investment in general.

Last year, Keva had a seat on the advisory committee of 33 funds and attended around 70 committee meetings. Other forms of engagement include regular meetings with asset managers at which also responsibility themes are also discussed. Keva had 50 such meetings in 2024.

Keva’s real estate investment fund asset managers responded to the responsibility survey, updated in 2024, which mapped their responsible investment practices. All Keva’s real estate funds have responsible investment principles. In addition, almost all our asset managers are PRI signatories.

Keva is a member of the European Association for Investors in Non-Listed Real Estate Vehicles (INREV), which serves as a common forum for fund investors and strives to develop practices and standards in the industry in a variety of ways, including in terms of responsibility.

Infrastructure investments

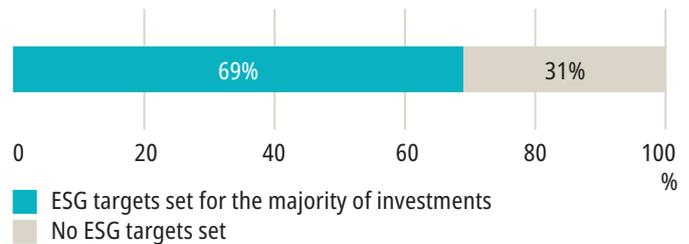
Infrastructure typically refers to structures and facilities that enable the effective functioning of society and includes energy production and distribution, transport infrastructure as well as social and digital infrastructure. Infrastructure plays an integral role in the transition to a more carbon-neutral society.

We invest in infrastructure mainly through funds, but also by making direct investments in unlisted infrastructure projects and companies. ESG aspects are integrated into our investment analysis both in direct and fund investments. The portfolio is under construction. The aim is to diversify the infrastructure portfolio geographically, chronologically, by investment style and across infrastructure sectors.

At year-end 2024, the total amount of assets invested in infrastructure was EUR 2.3 billion, with a total of 114 companies in the portfolio.

Infrastructure funds are always closed-end funds, where the investor commits for many years. During the life of the fund, limited partner advisory committees are the most important means of engagement. Advisory committees are typically composed of the biggest fund investors and meet between two and four times a year. An advisory committee makes it possible to engage not only with the investee, but also with the asset manager and the responsibility of investment in general. Last year, Keva had a seat on the advisory committee of 15 funds and we attended 25 committee meetings. Other forms of engagement includes meetings several times a year with asset managers at which also ESG aspects were raised.

ESG targets set by infrastructure investment funds for their investments



The percentage of funds (% of the number of funds) in which the asset manager has set ESG targets for its portfolio companies and the percentage (%) of the portfolio companies for which targets have been set. The data is based on a survey conducted by Keva among external asset managers.

An ESG survey carried out by Keva in 2024 showed that our asset managers had set ESG targets for around 70% of infrastructure funds. These targets applied to all investments in the portfolio. The main themes in the targets were greenhouse gas emissions and sustainability reporting.

All Keva's infrastructure funds have responsible investment principles. Additionally, three quarters of asset managers are PRI signatories.

CASE: Waste into energy with net-zero emissions

Our infrastructure investments include the UK's largest energy-from-waste company. Over the past three years, the asset manager has worked closely with the company's management team and ESG executives to develop a net-zero roadmap. The plan includes short-, medium- and long-term carbon targets and key actions to reach them. Preparation of the plan included regular meetings and support from external experts. The topic

was regularly discussed at the company's board meetings, where the asset manager was represented. Together, several options were explored and the most feasible solution was decided upon.

In 2024, the company announced a net-zero transition plan that aims to reach net-zero emissions by 2033 and remove up to 1.2 million tonnes of carbon per year from the atmosphere by 2039. The company has already made progress in implementing the plan, for example by launching the UK's first carbon capture trial for converting waste into energy, which captures around 1 tonne of CO₂ a day. The purpose of the pilot is to show how the technology can be applied at a large scale to remove CO₂ from the atmosphere. The pilot collects real-world operational data on performance, such as the CO₂ recovery rate and performance of different amine solvents.

Hedge fund investments

Hedge fund investments are primarily aimed at diversification benefits and absolute returns that are independent of the market. The funds make use of instruments of different asset classes and derivatives. The practical possibilities of hedge funds to engage with investee companies are determined based on the asset class owned; for example, with listed equity investments, voting can take place at general meetings. However, the short-term nature of the investments may limit the opportunities to engage.

Keva's hedge fund portfolio is highly diversified both by geography and style. In 2024, the assets were managed by 21 asset managers through 38 funds. At year-end 2024, there were EUR 5 billion in total assets managed in the portfolio. We use a rating provided by an

Almost all Keva's hedge funds have principles for responsible investment.

external independent research firm for hedge funds. The rating also takes into account ESG issues. Almost all Keva's hedge funds have principles for responsible investment. Additionally, two thirds of our asset managers are PRI signatories.

We strive to promote responsibility in hedge funds. Key forms of engagement include regular meetings with asset managers and advisory committee seats, both of which provide an effective channel to engage with the activities of asset managers, including in responsibility issues. In 2024, Keva had a seat on the advisory committee of 23 funds and attended 24 committee meetings.

Keva is a member of the Standards Board for Alternative Investments (SBAI), which focuses, among other things, on promoting good governance, transparency and processes. The SBAI also provides a good channel for dialogue with other investors. Most of Keva's hedge fund asset managers are SBAI members and act in accordance with SBAI guidelines and recommendations.

Climate change risks and opportunities in accordance with TCFD

Keva's investment operations aim to support the funding of the liabilities of the pension system of Keva's member organisations through real returns. The pension liabilities covered by the fund extend for decades to come. The Act on Keva lays down that as a long-horizon investor, Keva must ensure the return and security of its investments.

Investment returns are generated in the long term as a result of economic growth. As a global owner and long-term capital allocator, Keva is dependent on the sustainability of economic growth. The need for future returns requires an understanding of the phenomena behind economic growth.

Climate change is a key example of this: it is a major challenge of our time, with wide-ranging dimensions which also affect long-term economic growth.

Keva's management of the risks and opportunities related to climate change is based on the belief that climate change is a challenging and multidimensional phenomenon that has the potential to have a significant impact on investment returns. Due to the wide-ranging impacts related to climate change and its mitigation, it is possible that investors are unable to hedge against risks by diversifying or selling individual holdings. This highlights the importance of engagement. These beliefs guide Keva's operations in managing the risks and opportunities of climate change.

Governance

Keva's Board of Directors decides how Keva's assets are invested. In addition, the Board decides on the principles of responsible investment and ownership steering, as well as on the annual investment plan, which include responsible investment. The Board of Directors also decides on Keva's risk assessment, which includes a special part factoring in climate change, including the utilisation of climate scenarios. Keva's Board of Directors has adopted Keva's Investment beliefs on climate change.

The Board of Directors receives reports on the development of the responsible investment strategy and processes twice a year. In addition, the Board of Directors is informed of the minutes of the Steering Group for Responsible Investment, key voting figures and observations made in the monitoring of international norms.

The Board of Directors' Audit and Risk Management Committee comprises at least three Board members. The Committee monitors and considers internal control plans – i.e. risk management, compliance and internal audit and reports (including financial statements, other financial reporting and investment reporting) with regard to investment operations.

The investment operations management team decides the operating principles to be complied with in investment operations and gives the Chief Investment Officer the authority to implement them. The investment operations management team is responsible for organising operations in accordance with the principles of responsible investment, including climate issues.

Keva's CEO chairs the team. The Chief Investment Officer has overall responsibility for the matters and proposals prepared for the investment operations management team and, through it, for the Board of Directors. The CIO decides on responsible investment (incl. climate) memberships, commitments and collaboration engagement initiatives, as well as on the utilisation of climate scenario work.

The responsible investment steering group guides the practical development of responsible investment at Keva. The group makes development proposals to the units and the CIO and presents reports and projects related to responsible investment to the CIO for decision-making. The steering group comprises a representative from each unit of Keva's investment function. Keva's Head of Responsible Investment convenes the steering group.

Until 31 December 2024, Keva's operations were supervised by the Ministry of Finance and, with regard to investment operations and financial planning, by the Financial Supervisory Authority (FIN-FSA). Since 1 January 2025, Keva has been supervised by the Financial Supervisory Authority. Keva's administration is described in more detail in the Annual Report.

Climate scenario modelling helps us assess the long-term climate risks of our investment portfolio.

Strategy

As an internationally diversified investor, Keva is always part of the global economy and therefore bears risks and opportunities related to its exposure to climate change. Scientific analysis shows that uncontrolled climate change poses significant risks to long-term global economic growth and, consequently, to the success of Keva's investment operations. Keva strongly supports the Paris Agreement's goal of limiting the rise in the global average temperature to well below 2°C compared to pre-industrial levels and to pursue efforts to limit the temperature increase to below 1.5°C.

Keva is of the opinion that the impacts of climate change will bring both investment opportunities and investment risks related to the business conditions of companies and sectors in the long term. Keva's investments are geographically diversified across different asset classes and industries. Investments include, among others, listed and unlisted equities, corporate bonds, government bonds, real estate and infrastructure assets.

The economic impact of climate change can affect investee companies in many ways, and the company or industry can also be affected by both positive and negative impacts at the same time. In addition to changes in costs, revenue and balance sheet valuation, a company's price and availability of loan financing may be affected. Regulation has a particularly significant impact on companies' business conditions.

Climate scenario modelling

We use a forward-looking climate scenario analysis to assess climate risks for our entire investment portfolio over the long term. The climate scenario model used by Keva is a tech-

nical extension of the ALM simulation model used in the modelling of reference portfolios. The starting point is forward-looking macroeconomic baseline modelling for a given point in time, without a climate scenario component.

Climate scenario modelling seeks to determine how the baseline scenario (in terms of economic growth, inflation and returns on investment classes) would change when specific assumptions are made about measures to combat climate change and their economic impacts are modelled more accurately.

Based on the modelling, the likely range of global warming in the long term is 2–3°C compared to pre-industrial levels. Investors should factor this into their assessments. The basic macroeconomic modelling underlying the climate modelling used by Keva has therefore been examined from this perspective. A review has shown that the interpretation of the baseline modelling could be modified to be ‘Climate Aware’, including the most likely development trajectory.

Going forward, the content of baseline modelling may be further modified from this perspective in conjunction with the annual update. This also contributes to the important and thorny question of what is already priced into the financial markets in terms of climate risks. Changes in the baseline model and its positioning in relation to climate scenarios change the

interpretation of the results, because the results are of the type “changes to baseline modelling”.

There are five scenarios in the 2024 version of the climate scenario model. In other words, the modelling now reviews five alternative futures:

- **Net Zero**, where enough measures are taken to limit warming to 1.5°C and the world will be carbon neutral by 2050 and beyond.
- **Net Zero Financial Crisis**, which is otherwise the same as Net Zero, but the impacts on the financial markets do not gradually, but suddenly arise and thus more strongly than the impact of economic growth alone would require.
- **Delayed Net Zero**, this scenario is somewhere between the Delayed Net Zero and Limited Operation scenarios. The scenario ends with a warming of about 2°C.
- **Limited Action**, this scenario most closely resembles the current real-world situation. In this scenario, emissions will not increase unlimitedly, but nor will they decrease at the rate required by Net Zero. This means that warming will be nowhere near 1.5°C, but will end up close to 3°C. The physical effects are therefore already very significant in this scenario.
- **High Warming**, which continues without specific measures to combat climate change and the climate warms by almost 4°C.

¹ Whereas baseline modelling itself has not, to date, changed in practice, after studies it has been possible to interpret it as comprising trajectories at a general level that are in line with the most likely warming range, taking into account estimates of what kind of trajectories are the estimated consensus of market participants. However, the results of actual climate scenarios may differ significantly from baseline modelling even within the 2–3°C degree warming range. This is because of significantly more detailed modelling and, in

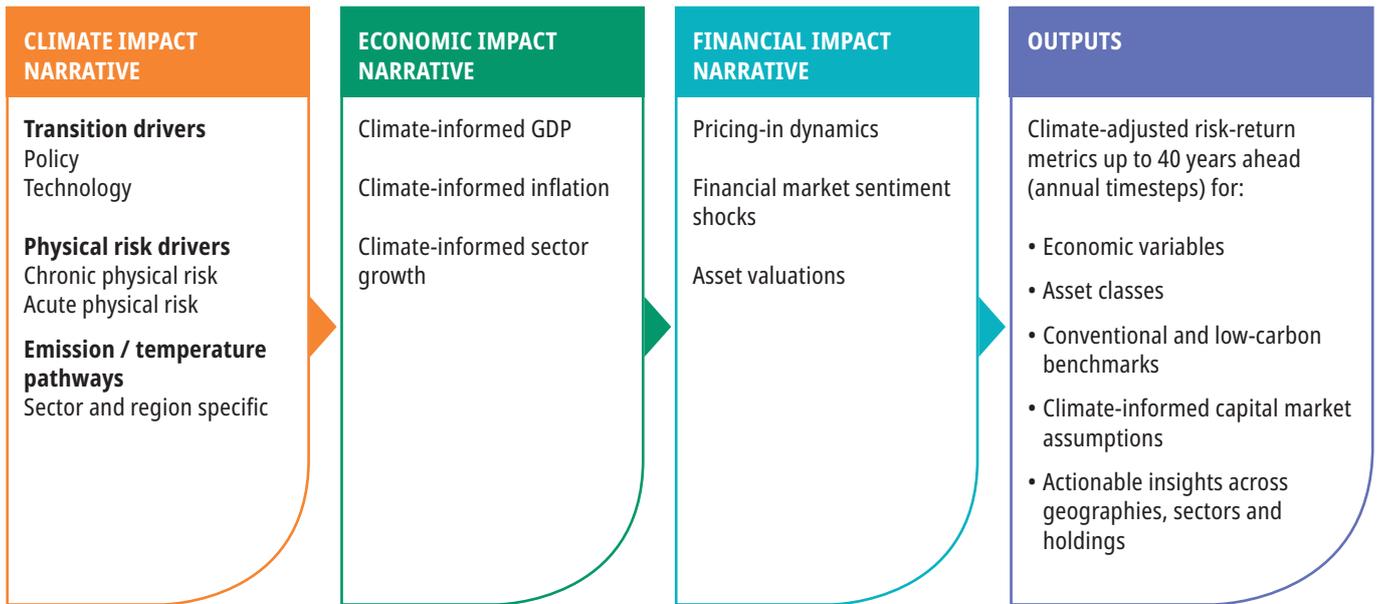
addition, a more conservative treatment of physical risk, especially in terms of physical risk, than, for example, in the NGFS scenarios (The Network of Central Banks and Supervisors for Greening the Financial System), which are used for central bank-led banks. A more accurate interpretation is that baseline modelling is Climate Aware so that the transition risks are in line with the Limited Action scenario and the physical risks with the NGFS scenarios are also within the 2–3°C warming range.

Basic characteristics of climate scenarios and their placement in the coordinate system of transition and physical risks

NET-ZERO	NET-ZERO FINANCIAL CRISIS	DELAYED NET-ZERO	LIMITED ACTION	HIGH WARMING
<p>WHY? Assess the risks and opportunities under a highly ambitious- but orderly transition with climate adaptation.</p> <p>WHAT?</p> <ul style="list-style-type: none"> • Highly ambitious low-carbon policy and rapid technology transition • Adaptation and low physical risks of climate change • Financial markets do not price-in future risks 	<p>WHY? Shows the resilience of portfolios to sudden repricing, triggering market dislocation centered on high-emitting stocks.</p> <p>WHAT?</p> <ul style="list-style-type: none"> • Highly ambitious low-carbon policy and rapid technology transition • Adaptation and low physical risks of climate change • Sudden divestments in 2025 to align with the Paris Agreement goals have disruptive effects on financial markets with sudden repricing followed by stranded assets and a sentiment shock 	<p>WHY? Reflects a future where technological breakthroughs and a step-up in policy action limits exposure to severe physical risks.</p> <p>WHAT?</p> <ul style="list-style-type: none"> • Ambitious policy commitments combined with considerable improvements in the feasibility and competitiveness of low-carbon technology • Physical risks are limited over the short to medium term • Financial markets price-in transition and physical risk during the late 2020s 	<p>WHY? Highlights how falling short of meeting emissions targets and pledges would drive high exposure to physical risks.</p> <p>WHAT?</p> <ul style="list-style-type: none"> • Emissions targets and commitments are not fully met • High chronic and acute physical risks • Financial markets price-in physical risks gradually over the 2020s and 2030s 	<p>WHY? Considers a future without any further action to limit climate change, triggering multiple climate tipping points and very severe physical risks.</p> <p>WHAT?</p> <ul style="list-style-type: none"> • No new climate policies are enacted • Very severe chronic and acute physical risks • Financial markets price-in physical risks gradually over the 2020s and the 2030s
1.5 °C	1.5 °C	2.0 °C	2.6 °C	3.7 °C



Diagram of the climate modelling used by Keval



The baseline model in climate modelling has been expanded with two external models. The first extension is an empirical macroeconomic model that describes, among other things, the functioning of economies, energy production and consumption, and international trade. This model is used to assess the productivity effects of climate change (chronic physical risk) and the effects of different policy choices and technological development (transition risks), such as the impact of the price of emission allowances on energy production methods.

The other extension is an actuarial model, which is used to model the effects of extreme weather phenomena in a form that can be priced effectively (acute physical risk). The figure above positions the climate scenarios in relation to the different dimensions of climate risk. The impacts on return in the climate scenario are obtained when the data from these two models is combined with the sensi-

tivity data generated in the baseline modelling (e.g. how a given country's equity returns depend on changes in its GDP development).

Risk management

Procedures for risk assessment and management

Keval uses several different procedures to assess climate risk and manage the risk:

- We utilise climate scenario modelling at the level of all investment assets. The aim is to increase understanding of climate change as a phenomenon and its impact on the returns and risks of the investment portfolio.
- We monitor the development of climate metrics available on the financial markets and assess their ability to identify climate change-related risks in our investments. Read more on these in the section 'Metrics and Targets'.

- We increase the investment organisation's shared understanding of the challenges and opportunities related to climate change from an investor's perspective with the help of Keva's climate group. The group is made up of investment experts in portfolio management, investment strategy, energy technology and responsible investment. The climate group's theme for 2024 was oil and gas. The group held a discussion event headed by experts in the field on the topic: What is the future of fossil fuels? Representatives from our asset managers' investment teams from several different asset classes were involved in discussion at the event.
- We limit the transition risk of direct real estate investments by aiming for carbon-neutral energy use by 2030. Read more on this in the section 'Metrics and Targets'.
- We contribute to reducing emissions and take responsibility for our portfolio holdings using different methods in different asset classes. The document Keva's investment beliefs on climate change describes these principles and approaches.
- We monitor the operations of our asset managers with annual surveys on their responsible investment practices (e.g. climate indicators, targets and reporting) as well as their voting behaviour and engagement activities. Since around 80% of Keva's investments are managed by external asset managers, it is particularly important to carefully monitor their activities.

Keva uses several different procedures to assess climate risk and manage the risk.

- We work with other investors in selected projects to combat climate change. **In the CDP Non-Disclosure Campaign project** Keva asks companies to report on their environmental impacts in terms of climate, water usage and the use of forest resources. As a supporter of the **Climate Action 100+ project**, Keva encourages 168 major companies worldwide to reduce their emissions in line with the goals of the Paris Agreement. As a member of **IIGCC**, Keva participates in Europe's largest investor community focused on climate change mitigation, which aims to develop long-term risk management, policies and investment practices to combat climate change. Participation in the **2024 Global Investor Statement to Governments on the Climate Crisis** complements Keva's engagement with companies, as actions by states create an operating environment for companies' opportunities to curb climate change.

Risk identification and assessment

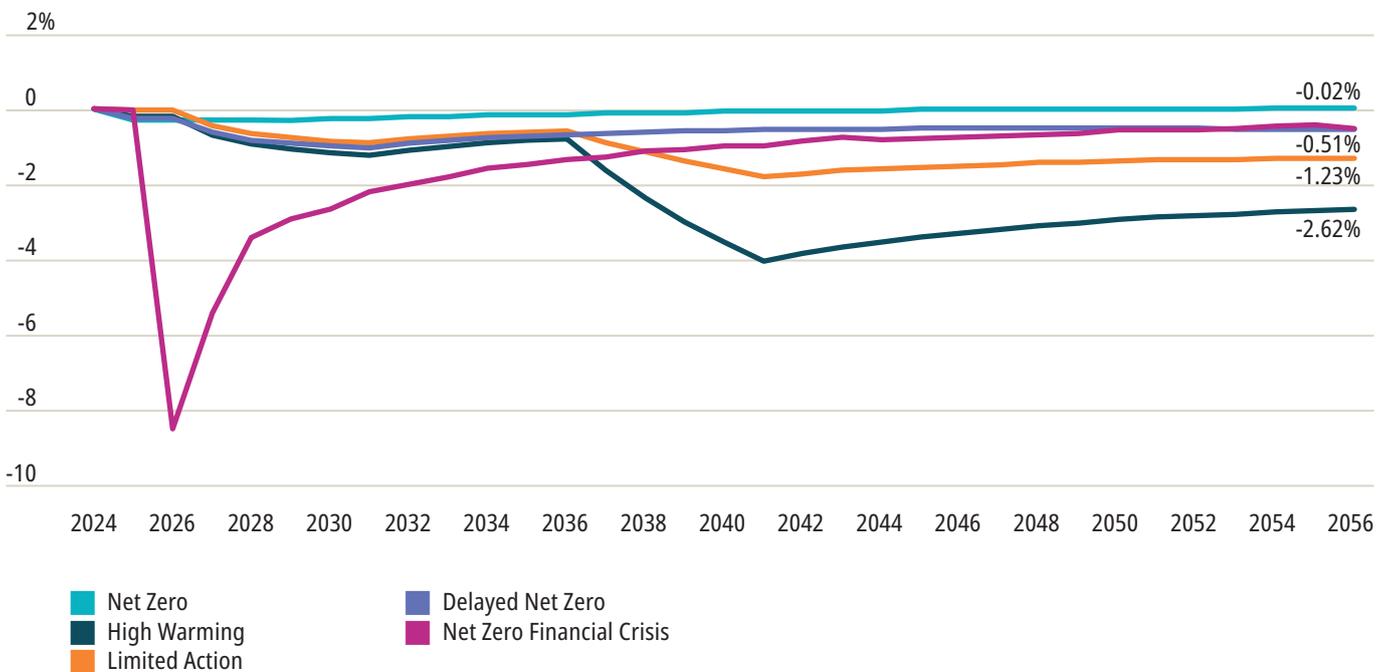
Climate scenario modelling

In 2024, we received the results based on the latest modelling of climate scenario modelling. These also include Keva-specific results, in which the scenarios have been combined with Keva’s investment data. In principle, the results are intuitive in form and present the deviations in GDP and return by asset class in different climate scenarios. However, behind the seemingly approachable results is a complex modelling process. The following is a review of the key results.

Modelling results

Combining the content of each scenario with the content², of Keva’s investment assets (described at a rough level), gives results on the climate risks of the entire investment portfolio in terms of cumulative investment returns. Viewed in this way, the impacts are moderately negative in the most likely scenarios and very strongly negative in the High Warming scenario. The figure above presents the results at the level of investment portfolio. When interpreting the results, it should be noted that this assumes that the current allocation is maintained with annual rebalancing and that the analysis has been simplified, for example, with regard to derivatives.

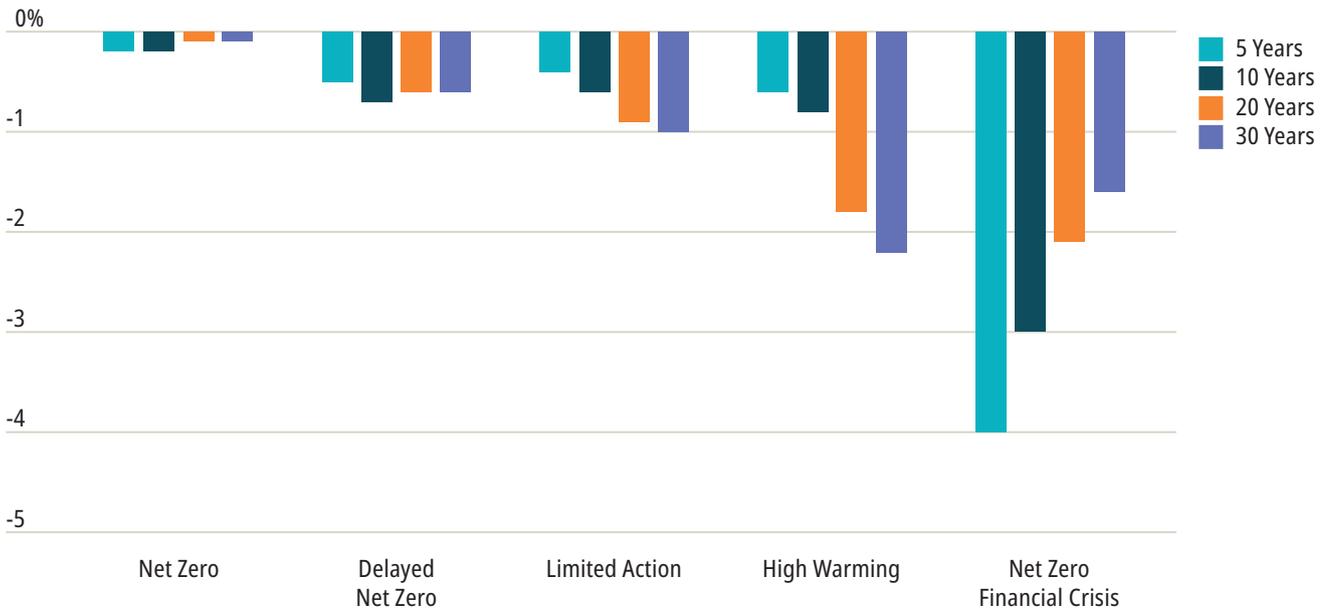
Effects of climate scenarios on the cumulative return on investment assets p.a.



² In the analysis, Keva’s investment assets are basically described at the same level as in ALM simulations otherwise, with certain extensions and limitations. For example, ALM simulations do not deal with individual equity or fixed income instruments, but with coarser entities similar to index components. The most important expansion for

equity and credit risk investments is regional/sectoral division instead of just regional division, and the specification of regional allocations with regional allocations of turnover instead of the companies’ domiciles. The most important limitation is the exclusion of currency risk, especially currency derivatives and hedge funds, from the analysis.

Return impact of climate scenarios on equities, p.a. on different horizons



As equity-type risk constitutes most of the risks of Keva’s investment assets, it is important to examine them in more detail (the figure above, shows the equities as a whole). The results show that climate change seems to have a clearly systemic component that has a negative impact on economic growth and returns. The scenarios are in a hierarchical relationship with each other – more warming, greater impact – but for Net Zero, the financial crisis scenario stands out from the others.

When interpreting the results for the net zero financial crisis scenario, it should be noted that the significant negative outcome is based only on the narrative (i.e. not the actual

climate modelling), in which the Net Zero Path is reached through a disruptive process that involves a very negative sentiment shock affect-

The results show that climate change seems to have a clearly systemic component that has a negative impact on economic growth and returns.

ing the market. Even though this is of course possible, the specific form and timing of the shock are entirely based on assumptions³. The scenario mainly describes that, at the moment, the Net Zero Path seems unlikely, and something dramatic must happen in order for the policy measures required by that scenario to be implemented.

There are great differences between regions and sectors. Many emerging countries, such as India, appear to be very vulnerable to climate risks, especially in terms of GDP growth. On the other hand, at the level of impacts on returns, developed and emerging countries look quite similar at an overall level. This is partly because China accounts for major part of the emerging country universe and a relative winner in terms of transition risks in modelling. In addition, due to the high valuation level, US equities are vulnerable to the slowdown in growth implied by climate scenarios.

However, it is obvious that weaker institutions in emerging countries make it more difficult for them to adapt to a warming climate, so this key result cannot be considered entirely intuitive. In addition, drawing conclusions about investment portfolio is also complicated by the lack of clarity as to whether the realisation of physical or transition risk is correctly allocated to our portfolio. This is partly due to the choices made in the modelling, but mainly due to incomplete

Drawing conclusions about investment assets is also complicated by the lack of clarity as to whether the realisation of physical or transition risk is correctly allocated to our portfolio.

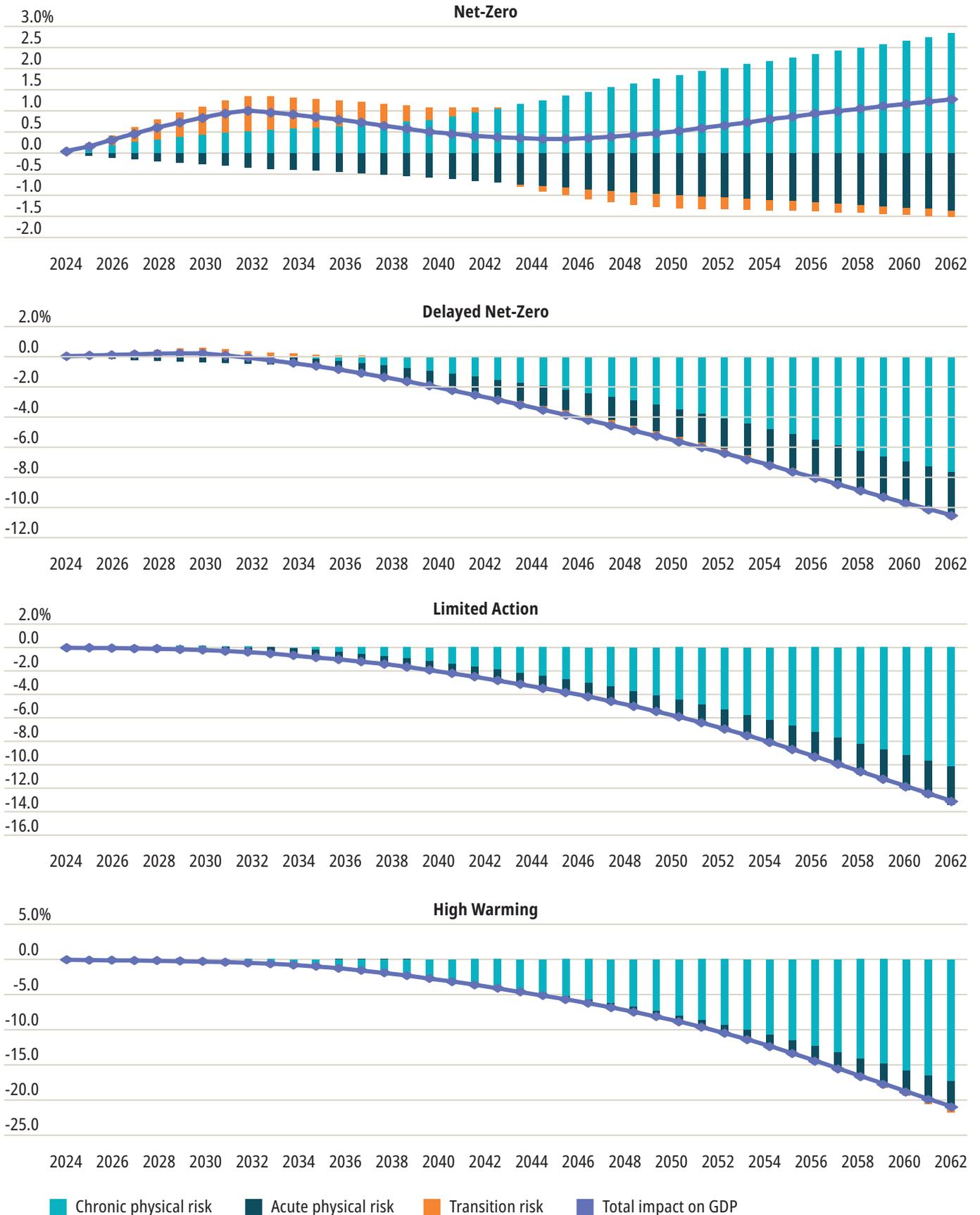
data on where the companies' operations are physically located and, on the other hand, where their results are generated.

Return-based results are the most interesting from the investor's point of view, but in order to form them, in addition to macroeconomic effects, it is necessary to take into account 1) how much of the scenarios is already priced in and 2) when the market starts pricing in the development of each scenario. Question 1 has been partly answered by assuming that the baseline modelling is consistent with 2–3°C warming under certain assumptions. This means that the differences between the scenarios and the baseline need to be interpreted in relation to this. Question 2 is even more difficult and is in practice entirely assumption-based in the climate scenarios.

³ Calibration has relied on research literature on the market's tendency to overreact to changes in fundamentals. The literature includes Breuss (2010) Financial Market Crisis as a Phenomenon of Stock Market Overshooting: A Theoretical Analysis. Australian Economic

Quarterly, 1/2010 and Angeletos, G-M., Huo, Z. & Sastry K. (2020, June) Imperfect Macroeconomic Expectations: Evidence and Theory. NBER Working Paper 27308

Global cumulative GDP growth impact broken down into different sources of climate risk per scenario



An examination of macroeconomic results, especially GDP growth, can provide a slightly clearer picture of the effects of the scenarios than return-based results.

The effects of GDP growth are transmitted especially to equity returns, but at this level there is no need to take a position on the difficult question above of market pricing in terms of climate risks. The figures above show the effects of climate scenarios on global GDP growth relative to the baseline model as a cumulative level change. The results are also broken down into different sources of climate risk.

The results show that in higher warming scenarios, physical risk begins to dominate. Within the physical risk, the majority of the impact comes from chronic physical risk, i.e. the general productivity effects of warming, rather than natural disasters (acute physical risk).

In the latest model version, the sensitivity analysis has been expanded in terms of how different parameter selections affect the modelling results. The most significant factors are Equilibrium Climate Sensitivity (ECS) and the damage function used in the modelling of chronic physical risk.

The damage function describes how productivity and economic growth behave in the face of global warming. Scientists have suggested that climate sensitivity could be up to 50% higher than the IPCC's baseline assumption (3°C per doubling of CO₂)⁴. The modelling results are sensitive to this, and a higher climate sensitivity would significantly change the results for the worse. On the other hand, the damage function used in the model leads to quite large effects, at least compared to the central bank-led NGFS climate scenarios⁵. This choice highlights the importance of chronic physical risk in higher warming scenarios. The damage function used is justified by the fact that the modelling does not directly take into account tipping points, such as the melting of glaciers, which can accelerate global warming. Full consideration of tipping points could require an even more conservative damage function⁶.

In summary, it can be stated that the climate scenario modelling paints a picture of a systemic challenge that may have a significant impact on Keva's investments. The systemic nature means that the primary measure is to try to prevent the progression of the phenomenon through engagement; It is difficult to avoid this phenomenon by diversification, at least not completely. Incomplete data makes it challenging to apply the results exactly, for example, at the level of individual companies.

⁴ For example, Hansen et al. Global Warming in the Pipeline, Oxford Open Climate Change, 2023.

⁵ Burke, M., & Tanutama, V. (2019, April). Climatic Constraints on Aggregate Economic Output. NBER Working Paper 25779.

⁶ Trust, S., Joshi, S., Lenton, T. & Oliver, J. (2023) The Emperor's New Climate Scenarios. Institute and Faculty of Actuaries. The article extensively discusses climate scenario modelling and states that it typically leads to unintuitively minor impacts. In particular, the lack of tipping points is in the background.

Physical climate risks

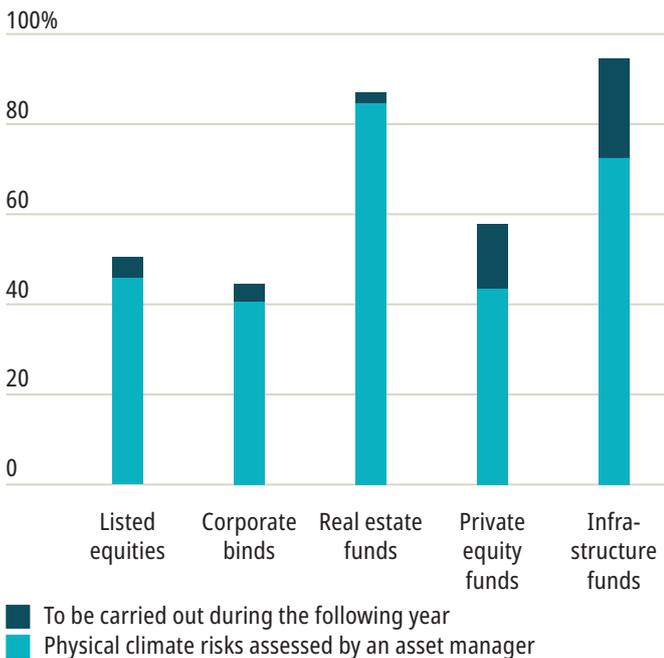
Factoring in physical climate risks is emphasised in real asset classes, such as real estate. Climate risk assessments have been carried out in Keva’s direct real estate portfolio using the EU taxonomy assessment framework.

Climate risks were divided into four impact areas (temperature, windiness, water and movement of solids) and acute and chronically progressive within them. In Finnish conditions, acute water-related flood situations in a changing climate were identified as material risks to be assessed in more detail. They have been assessed using the Finnish Environment Institute’s (SYKE) accurate river and sea flood risk maps in Finland. Following the observations

made from them, more detailed site-specific risk assessments have been commissioned, usually including the Munich RE climate risk assessment. On the basis of these assessments, it can be stated that the significance of physical climate risks for Keva’s real estate investments in the Finnish climate is low and manageable.

Our external asset managers also assess physical climate risks and integrate them into their investment strategy, especially in real estate and infrastructure investments. In listed equity investments, our asset managers in emerging markets take physical climate risks into account more generally than in other geographical areas. Integration of physical climate risks into the investment strategy is somewhat more common in Europe than in North America both in listed equity and corporate bond investments.

Assessment of physical climate risks as part of asset managers’ investment strategy



Percentage of asset managers (% of investment assets, total EUR 49.7 billion) who have carried out a physical climate risk assessment for their portfolio and integrated it into their investment strategy. The data is based on a survey conducted by Keva among external asset managers.

Metrics and Targets

Keva is committed to developing its own climate analysis, tools, indicators and understanding of climate change risks and opportunities for portfolio holdings. The measurement and assessment of the emissions of investees and Keva’s ability to report on them externally depend on the availability of high-quality data.

Data coverage and quality

We use various information sources, including companies’ own reporting, third-party ESG service providers and our asset managers, as data sources. We take a cautious approach to the use of estimates and aim to utilise data of the highest possible quality in reporting.

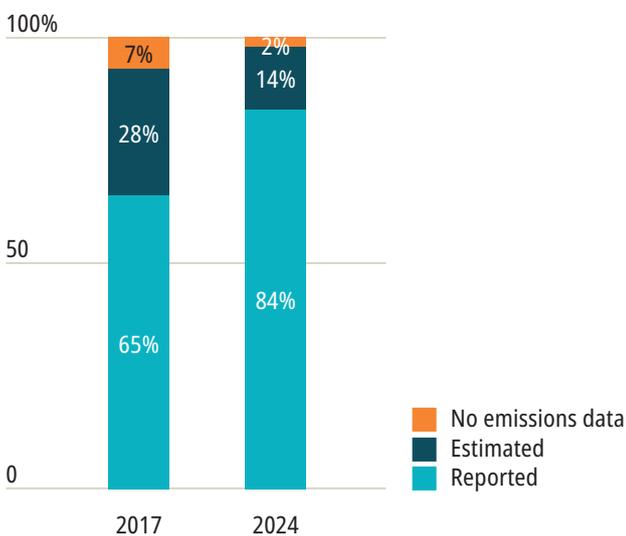
We use an ESG service provider as the data source for the portfolio’s emission indicators in listed equity investments and corporate bond investments. In direct real estate investments, we use measured property-specific energy

consumption data and the public district heating network-specific district heating emissions database of Finnish Energy and Local Power <https://www.klpaastolaskuri.fi/en> as data sources. Both are monitored and reported in the EnerKey information system.

The emissions from electricity are zero and backed up with guarantees of origin for 100% renewable electricity. Some district heating has also been verified as zero-emission with district heating guarantee certificates of origin. In other asset classes, we aim to promote the availability of data, for example, through annual surveys of our asset managers.

The graph below shows that 98% of all Keva's listed equity investments are already included in the coverage of emissions data. Data quality has also improved, so that now 84% of the emissions data measured by the value of Keva's equity portfolio comes from companies' own reporting.

Development of emission data coverage and quality, listed equity investments

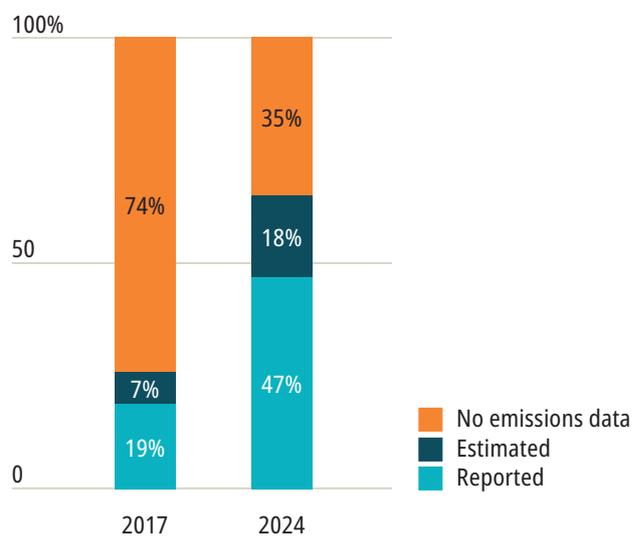


Investment assets EUR 29.4bn. Data source: MSCI ESG Research, Keva.

The situation is worse for corporate bonds: less than half of the companies reported emissions data measured by the value of the portfolio, but nevertheless development has been positive. Supplemented with the service provider's estimates, emissions data is available for 65% of the value of the portfolio for corporate bonds. In corporate bond investments, emissions data is more readily available on exchange-traded companies and corporate bonds that are included in commonly used bond indices. Outside of these, data is scarce and often based on estimates made by the service provider.

The emission data of investees is usually from previous years, and its timing and quality vary. Companies usually publish their emissions data in conjunction with the annual report at the beginning of the following year. When analysing emissions data for 2024, the most up-to-date figures come from 2023 annual reports, which were published during 2024. In the calculations in this report, 63% of the emission data

Development of emission data coverage and quality, corporate bond investments

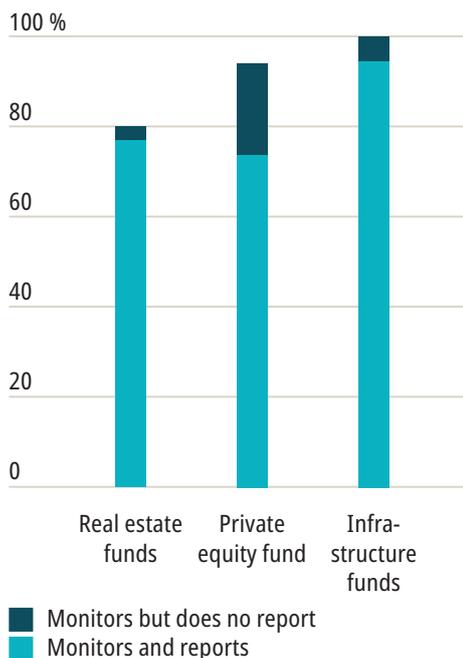


Investment assets EUR 9.9bn. Data source: MSCI ESG Research, Keva.

for equities is from 2023 and 34% from 2022 in terms of the value of the portfolio. The corresponding figures for corporate loans are 29% and 33%. Portfolio-level carbon intensity calculations combine companies' historical emissions data with investment assets at year-end 2024 and may also affect the readings of portfolio-level indicators.

Data from different sources must be comparable with each other. In real estate, private equity and infrastructure fund investments, the quality of emissions data does not yet enable their reporting. Based on the information we have collected from our external asset managers, it can be seen that our asset managers in these asset classes already quite frequently monitor the emissions of investments.

Emission monitoring carried out by asset managers, unlisted investments



Percentage of asset managers (% of investment assets, totalling EUR 13.3 billion) that monitors and reports the emissions of their investments in Keva's real estate, private equity and infrastructure funds. The data is based on a survey conducted by Keva among external asset managers.

Portfolio carbon footprint indicators

The carbon footprint of an investment portfolio measures the greenhouse gas emissions associated with investments at a certain point in time. When calculating the carbon footprint of our investments, we use methods that are in line with the TCFD and PCAF⁷ recommendations. We calculate and report the portfolio's financed emissions, which measure our share of the investments' emissions in relation to their enterprise value. In addition, we monitor the portfolio's weighted average carbon intensity, which measures the emissions of each investee in relation to its revenue and weights them according to the portfolio's allocations.

We have reported the weighted average carbon intensity of the equity portfolio and the benchmark index since 2020, based on reported and estimated data on Scope 1 and 2 emissions. These are emissions that arise from the direct operations of the investee companies and emissions related to energy consumption. We monitor the development of the quality and coverage of Scope 3 emissions data related to the value chain of the companies, but it is not yet at the level required for reporting.

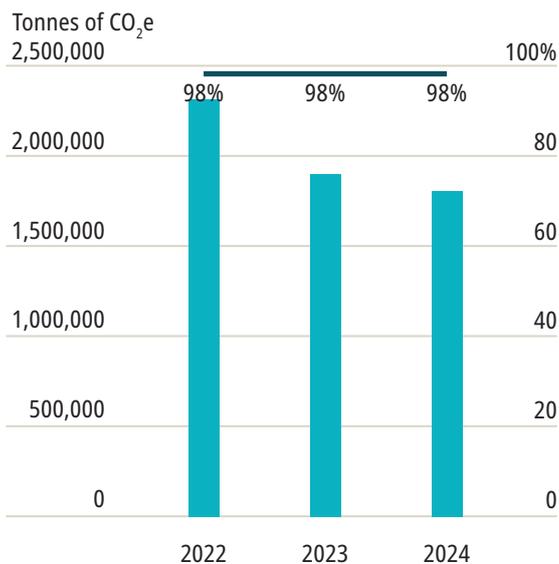
For direct real estate investments, we collect and report Scope 1 and 2 emissions data from properties under direct control or those that we maintain ourselves. We are unable to measure emission data for all triple net rented properties, as the tenant is not obliged to report the volume of energy consumption for which they are responsible (direct agreement between the energy company and the tenant) to the landlord. For some tenants, energy information is a business secret.

⁷ Partnership for Carbon Accounting Financials: [About PCAF](#)

Financed emissions

Financed emissions are a Partnership for Carbon Accounting Financials (PCAF) indicator that seeks to describe the emissions attributable to investors by weighting the investor-financed share of total emissions of the investee companies and allocating all a company’s emissions to its financiers according

Development of financed emissions, listed equity investments



- Data coverage, % of investment assets
- Emissions, tonnes of CO₂e

The amount of financed emissions (tonnes of CO₂e, Scope 1 and 2) and the coverage of emissions data in listed equity investments (investment assets EUR 29.4 billion). According to the service provider’s methodology, the intensities of the company’s equity and debt investment instruments are always calculated according to the latest published enterprise value. These intensities will be used later in the calculation of emissions. This solution aims to solve the challenge of allocating emissions due to fluctuations in a company’s market values. Data quality: 90% of the data is reported by companies and 10% is rated by the service provider, on a PCAF scale of 2.1. The calculation does not include investments for which the determination of market values and emission data is not currently reliable. Data source: MSCI ESG Research, Keva.

$$\text{Financed emissions (tCO}_2\text{e)} = \sum_i^n \frac{\text{position value}_i}{\text{enterprise value}_i} * \text{company's emission}_i$$

Enterprise value = EVIC Value of equity + value of liabilities taking into account cash

to its capital structure. Financed emissions are calculated by dividing the value of the investment by the value of the investee company and multiplying this by the Scope 1 and 2 emissions of the company.

In 2024, Keva’s financed emissions from listed equity investments amounted to 1,800,000 tCO₂e (tonnes of CO₂ equivalent) and from corporate bond investments to 746,000 tCO₂e. Financed emissions have decreased by 22% in equities and by 15% in corporate bonds since 2022. The calculation is limited to 2022 because the data required for the calculation of the financed emissions is only available from the service provider from that year onwards.

It is important to understand that the calculated financed emissions of the portfolio increase as the size of the portfolio and the coverage of the emissions data increases, if all other factors remain unchanged. This should be taken into account when interpreting the figures, especially in the case of corporate bonds, where data coverage has improved. Financed emissions may change due to changes in portfolio size, portfolio country and sector weightings, positions bought and sold, emissions data coverage, and changes in capital structure.

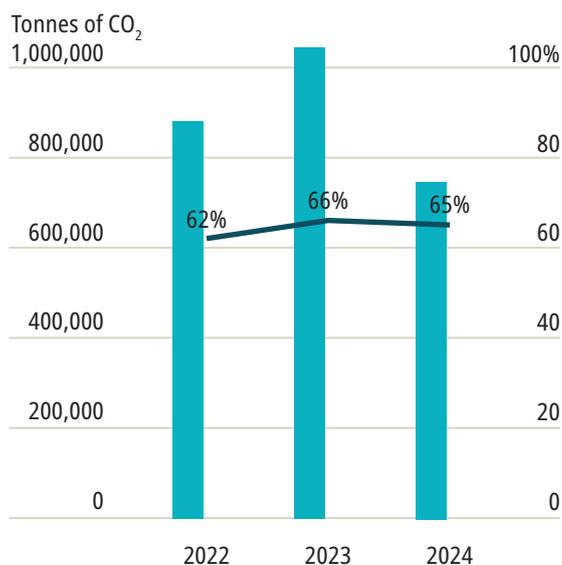
According to Keva’s attribution analysis, the financed emissions of Keva’s equity investments have decreased, especially due to the decrease in emissions in the portfolio, which has remained unchanged. New and divested investments have had approximately the same impact on emissions, and changes in the emissions data coverage have been minor. In corporate bonds, the biggest factor affecting emissions reduction has been the investments sold/matured in the portfolio. The emissions of the portfolio, which remained unchanged, have

increased moderately during the period under review.

We have also calculated the financed emissions of direct real estate investments in accordance with the PCAF guidelines. The financed emissions are calculated by multiplying the emissions related to the energy consumption of each property by our ownership in the property.

The financed emissions of the direct real estate portfolio in 2024 were 12,539 tonnes. The calculation covers approximately 89% of the value of the direct real estate portfolio at the end of the year. In 2023, the financed emissions amounted to 19,730 tonnes, and the calculation covered 91% of the value of the direct real estate portfolio.

Development of financed emissions, corporate bonds



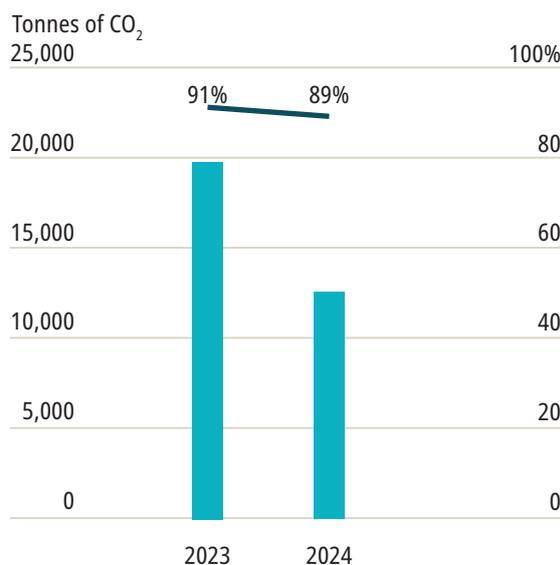
- Data coverage, % of investment assets
- Emissions, tonnes of CO₂e

Emissions, tonnes of CO₂e, Scope 1 and 2) and the coverage of emissions data in corporate bond investments (investment assets EUR 9.9 billion). Data quality: 47% of emissions data is reported by companies and 53% is estimated by the service provider, on a PCAF scale of 2.5. The calculation does not include investments for which the determination of market values and emission data is not reliable at the moment. According to the service provider's methodology, the intensities of the company's equity and debt investment instruments are always calculated according to the latest published enterprise value. These intensities will be used later in the calculation of emissions. This solution aims to solve the challenge of allocating emissions due to fluctuations in the company's market values. Data source: MSCI ESG Research, Keva.

$$\text{Financed emissions (tCO}_2\text{e)} = \sum_i^n \frac{\text{position value}_i}{\text{enterprise value}_i} * \text{company's emission}_i$$

Enterprise value = EVIC Value of equity + value of liabilities taking into account cash

Development of financed emissions, direct real estate investments



- Data coverage, % of investment assets
- Emissions, tonnes of CO₂e

The amount of financed emissions (tonnes of CO₂e, Scope 1 and 2) and the coverage of emissions data in direct real estate investments (EUR 3.2 billion). The financed emissions are calculated by multiplying the emissions related to the energy consumption of each property by our share of ownership in the property. Emissions have been calculated using measured consumption and emission factors. Properties for which emission data is not available (e.g. unbuilt plots, parking lots) and sites where Keva does not receive emission data from the tenant are excluded from the calculation.

Financed emissions (tCO₂e) =

$$\sum_i^n \frac{\text{number of shares owned by Keva}_i}{\text{number of all shares in the real estate}_i} * \text{real estate emissions}_i$$

Weighted average carbon intensity (WACI)

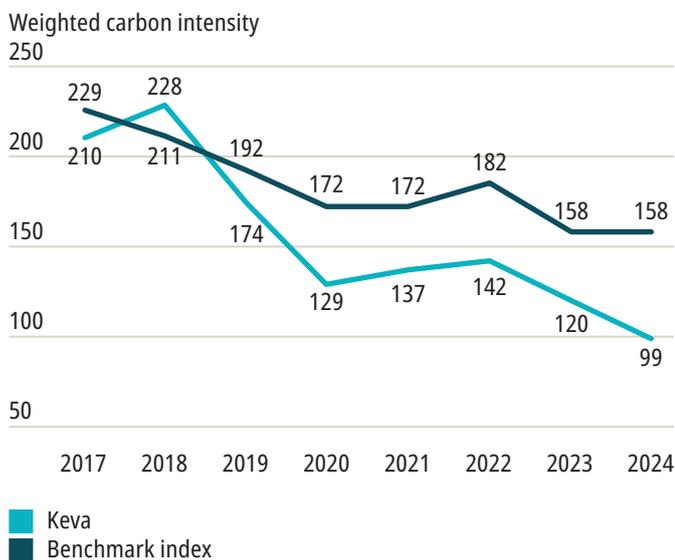
The portfolio’s weighted average carbon intensity seeks to describe the portfolio’s exposure to carbon-intensive investments. It can be thought that the figure measures the risk to the portfolio at a given point in time caused by emissions trading and other regulation. When examining the development of the portfolio’s weighted average carbon intensity over time, it should be noted that changes in country and sector weights, market prices of securities and company revenue result in variation between measurement periods. Computationally, the indicator

reading is also affected by changes in the coverage of companies’ emissions reporting.

The weighted average carbon intensity of the equity and corporate bond portfolio is calculated by dividing each company’s Scope 1 and 2 emissions by the company’s revenue and weighting the resulting carbon intensities by each company’s share of the portfolio value.

The weighted average carbon intensity of Keva’s equity investments was 99 tCO₂e/USD million in 2024, which was 37% lower than the bench-

Development of weighted average carbon intensity (WACI), listed equity investments

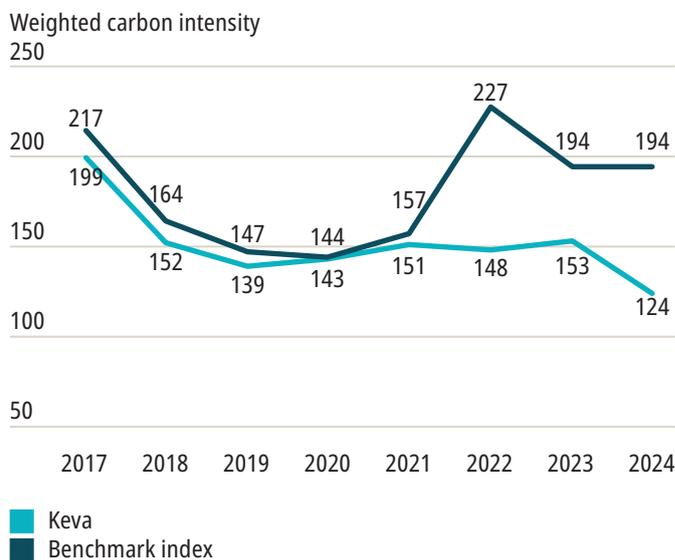


Development of the portfolio’s weighted average carbon intensity (tonnes of Scope 1 and 2 CO₂e emissions/USD million/revenue, Scope 1 and 2) and the difference in equity investments listed in the benchmark index (investment assets EUR 29.4 billion). During the monitoring period (2018–2024), the weighted average carbon intensity of Keva’s listed equity investments has decreased by 53% and was 37% below the benchmark index at the end of 2024. Benchmark index: The benchmark index comprises the following indices: MSCI Europe IMI, MSCI USA IMI, MSCI Emerging Markets IMI, MSCI Japan IMI ja MSCI ACWI IMI. Data source: MSCI ESG Research, Keva.

The formula for weighted average carbon intensity is:

$$\sum_{i=1}^n \text{portfolio weight of company}_i * \frac{\text{total emissions of company}_i}{\text{revenue of company}_i}$$

Development of weighted average carbon intensity (WACI), corporate bond investments



Development of the portfolio weighted average carbon intensity (tonnes of Scope 1 and 2 CO₂e emissions/USD million/revenue, Scope 1 and 2) and the difference in the benchmark index in corporate bond investments (investment assets EUR 9.9 billion). During the monitoring period (2018–2024), the weighted average carbon intensity of Keva’s corporate bond investments has decreased by 38% and was 36% below the benchmark index at the end of 2024. The benchmark index consists of the following indices: Bloomberg Euro-Aggregate: Corporates Index, J.P. Morgan CEMBI Broad Diversified Core Index, HYG, IHYG. Data source: MSCI ESG Research, Keva.

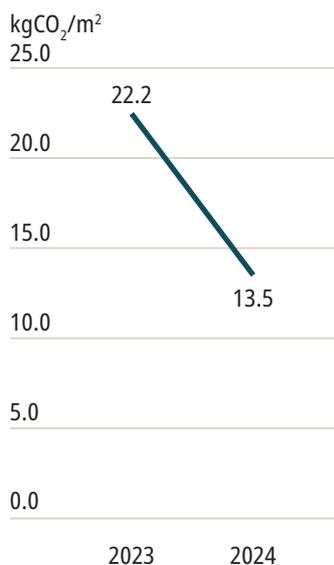
mark index and 53% lower than in 2017. Over the same period, the portfolio-weighted average carbon intensity of Keva’s corporate bonds decreased by 38% to 124 tonnes tCO₂e /USD million at the end of 2024. This is 36% lower than the benchmark index.

The difference in the weighted average carbon intensity of the portfolio relative to the benchmark index may be due to differences in weighting towards carbon-intensive sectors and company choices within the sectors. Keva’s equity portfolio is focused on lower emission sectors. Our choice of companies within the sectors has also led to lower figures in each sector compared to the benchmark index. In Keva’s corporate bonds, the sector-specific weighted average carbon intensity has been lower than that of the benchmark index in all sectors except one.

Over the course of the eight-year monitoring period, the most significant change in sector-specific weighted average carbon intensity has been the downward trend in the energy sector, which is reflected in both Keva’s equity and corporate bond investments. In equity investments, the carbon intensity of the materials industry has also decreased. In addition, the weighted average carbon intensities of equities and corporate bonds have decreased in all geographical areas, especially in equities in high-emission emerging markets. In corporate bonds, the decrease in carbon intensity has been significant in the high yield portfolio in both Europe and North America, while the carbon intensity of the investment grade portfolio has remained low throughout the review period.

The weighted average carbon intensity of the real estate portfolio is calculated by dividing the emissions related to the energy consumption of each property by its floor area and weighting

Development of weighted average carbon intensity (WACI), direct real estate investments



Development of the portfolio weighted average carbon intensity (kg CO₂e/m², Scope1 and 2) in corporate bond investments (investment assets EUR 3.2 billion). The weighted carbon intensity of Keva’s direct real estate investments decreased by 42% during the year. The weighted average carbon intensity is calculated by dividing the emissions of the properties by their apartment areas and weighting these site-specific figures with their fair values. Properties for which emission data is not available (e.g. unbuilt plots, parking lots) and sites where Keva does not receive emission data from the tenant are excluded from the calculation.

$$WACI = \sum_{i=1}^n \text{portfolio weight of real estate}_i * \frac{\text{emissions from real estate}_i}{\text{net floor area of the real estate}_i}$$

the resulting carbon intensities by each property’s share of the portfolio value.

The weighted average carbon intensity of Keva’s direct real estate portfolio was 13.5 kg CO₂/m² in 2024. In 2024, the calculation covered 89% of the value of the portfolio. In 2023, the corresponding figure was 22.2% and the coverage was 91%.

Forward-looking indicators

The emission indicators for the investment portfolio are based on historical data and do

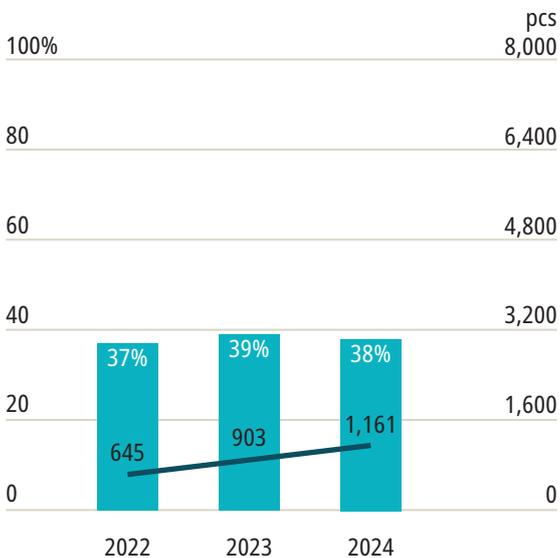
not tell about the future. However, it is important for investors to try to understand the development direction of companies, and this can be done by utilising the emission targets set by the investee companies. In particular, Keva monitors Science Based Targets (SBTs) and other net-zero targets extending to 2050 at the latest.

Companies' net zero targets demonstrate that they have a strategy to reduce their emissions. We track the number of companies in our port-

folio that have net zero targets for Scope 1 and 2 emissions and calculate the share of net zero targets for Keva's financed emissions.

At year-end 2024, 38% of the Scope 1 and 2 emissions financed by Keva equities were covered by net zero targets for 2050 or earlier, and this percentage has remained stable since 2022. 19% of the emissions financed by corporate bonds were covered by net zero targets, which is 8 percentage points more than in 2022.

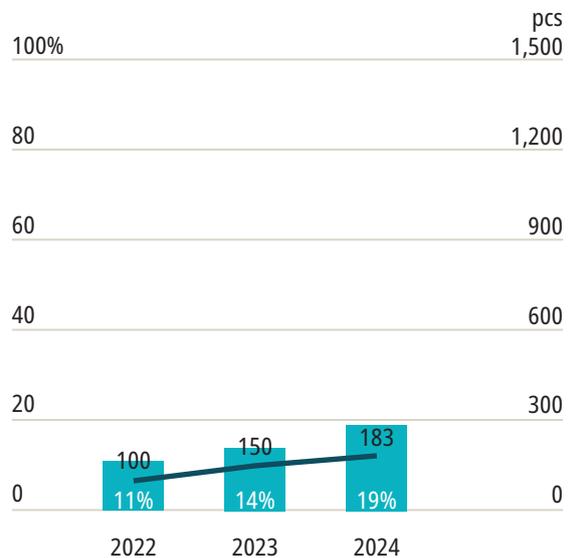
Coverage of net zero targets of Keva's financed emissions, listed equity investments



- Number of companies in the portfolio that have set a net-zero target
- Percentage of companies that have set a net-zero target in financed emissions

The figure shows the number of equity investment companies in Keva's portfolio whose declared climate targets are either approved by the Science Based Targets Initiative or such that they will achieve nearly net zero emissions (-95% Scope 1 and 2 and -67% Scope 3) by 2050 at the latest. The bars depicting the percentages have been calculated as the percentage of companies that have set such climate targets in Keva's financed emissions (Scope 1 and 2). Data on climate targets and financed emissions comes from the service provider. The data covers 98% of Keva's listed equity investments (EUR 29.4 billion). Data source: MSCI ESG Research, Keva.

Coverage of net zero targets of Keva's financed emissions, corporate bond investments



- Number of companies in the portfolio that have set a net-zero target
- Percentage of companies that have set a net-zero target in financed emissions

The figure shows the number of corporate bond investment companies in Keva's portfolio whose declared climate targets are either approved by the Science Based Targets Initiative or such that they will achieve nearly net zero emissions (-95% Scope 1 and 2 and -67% Scope 3) by 2050 at the latest. The bars depicting the percentages have been calculated as the percentage of companies that have set such climate targets in Keva's financed emissions (Scope 1 and 2). Data on climate targets and financed emissions comes from the service provider. The data covers 65% of Keva's corporate bond investments (EUR 9.9 billion). Data source: MSCI ESG Research, Keva.

There are major differences between geographical areas and investee companies in the corporate bond portfolio: in the European investment grade portfolio with lower credit risk, 76% of the financed emissions are below the net zero target, while in the North American high yield portfolio, the figure is 16%. In equity investments, the coverage of net zero emissions is highest in Europe (64%) and lowest in emerging countries (20%).

A total of 1,161 companies in Keva's equity investments and 183 companies in corporate bonds have set net zero targets. The figures have risen by 80% in two years, as in 2022 the corresponding figures were 645 for equity investments and 100 for corporate bonds.

Engagement indicators

We follow the active ownership practices of our asset managers and are involved in various collective projects.

In 2024, Keva and its asset managers **voted** in favour in 55% of 189 shareholder proposals on environmental issues.

Voting is complemented by goal-orientated **engagement projects** that can last for years. In 2024, Keva's asset managers had 460 ongoing engagement projects in equity and corporate bond investments, targeting 368 companies. Of the engagement projects, 106 were those in which the main focus area was on environmental topics. The largest number of environmental engagement cases were in the United States and China, targeting a wide range of sectors and especially greenhouse gas emissions.

We are involved in several **collective engagement** projects

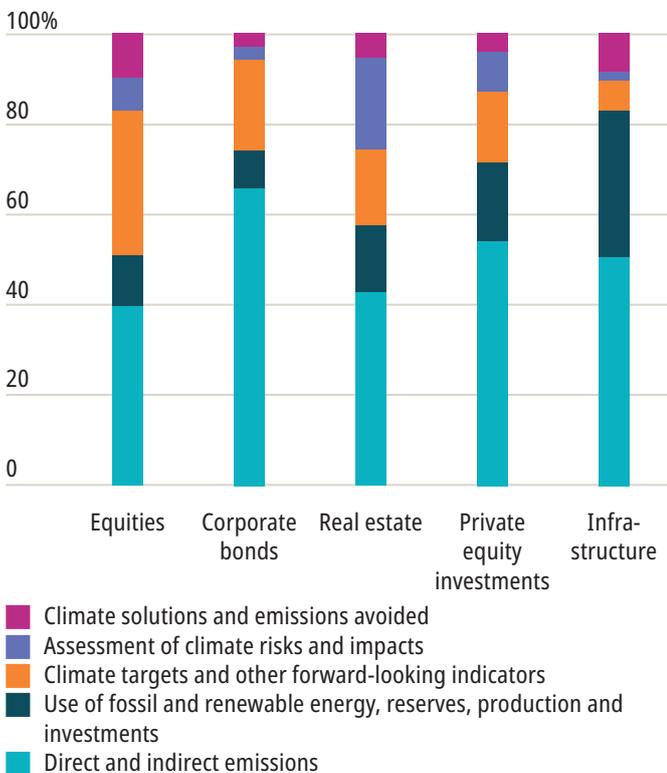
- **CDP Non-Disclosure Campaign:** The 2024 campaign was supported by 276 investors representing EUR 19 trillion in investment assets. The reporting request was targeted at 1,998 companies, of which 396 companies started reporting their environmental impacts after investor interaction. Companies were 2.5 times more likely to report when investors requested reporting through CDP's campaign.
- **Climate Action 100+:** In 2024, the project involved more than 600 investors and 168 investee companies, of which 80% have set a net zero target (Scope 1 and 2) by 2050 at the latest. For 90% of the companies, climate risks are the responsibility and supervision of the Board. 65% of the investee companies have been able to reduce their emission intensity and 80% have publicly committed to reporting on climate impacts in accordance with international reporting standards (TCFD, ISSB).
In 2024, progress was seen in companies' reporting, allocation of capital to low-carbon solutions, and planning for a just transition. However, comprehensive transition planning remains limited, highlighting the need for clearer, more precise and feasible pathways to realistically address climate risks and opportunities.
- **2024 Global Investor Statement to Governments on the Climate Crisis.** In 2024, the statement was signed by 651 investors representing investment assets of approximately EUR 31 trillion. Investors made significantly more demands on governments than in previous years. In addition to the climate,

nature, such as forests, waterways and biodiversity, were now also taken into account in the requirements. The letter pointed out the importance of directing financial flows towards climate solutions and adaptation in emerging countries. In addition, reporting requirements were emphasised with regard to nature issues and climate risks.

Climate change metrics used by our asset managers

We monitor the climate change metrics used by our asset managers through our annual survey.

Climate change metrics that asset managers say they use



The graph shows the order of prevalence of different climate indicators in different asset classes. The shares are calculated as the relative shares of each indicator category of the indicators used in that asset class. The data is based on a survey conducted by Keva among outsourced asset managers.

Our asset managers report that they use the emissions-related metrics the most in all asset classes. After these, the use of climate targets and other forward-looking targets is common in equities, whereas a focus on fossil and renewable energy is more widespread, especially in infrastructure investments. The use of indicators related to the assessment of the impacts of climate risks, such as physical damage risks and climate scenarios, is more common in real estate investments than in other asset classes.

Targets and metrics of the environmental strategy for direct real estate investments

In direct real estate investments, Keva is mainly the sole or majority owner, and thus has a direct possibility to influence emissions from the real economy. Keva aims to halve the carbon dioxide emissions caused by the energy use of properties by 2025 and to zero them by 2030.

Reaching the carbon neutrality target for energy use is monitored through three indicators:

1. Improving the energy efficiency of properties: Improving energy efficiency by 20% as a result of active measures by 2030.
2. Improving the energy efficiency of properties (2 parallel metrics): Increasing energy efficiency by 20% by 2030 as a result of active measures and developing energy consumption per floor area (kWh/htm², year).
3. Share of own property-specific energy production: 10% of the total consumption of properties by 2030.

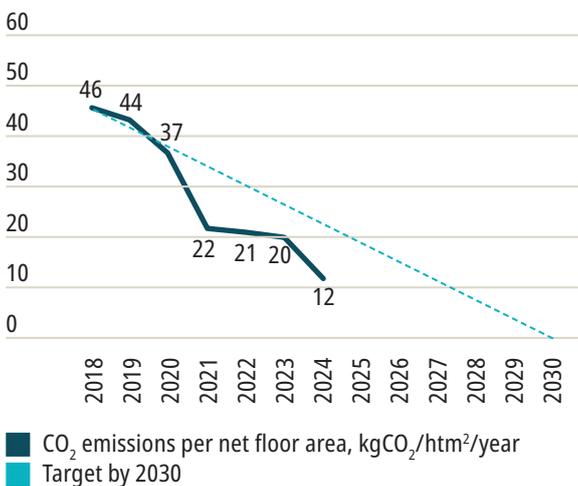
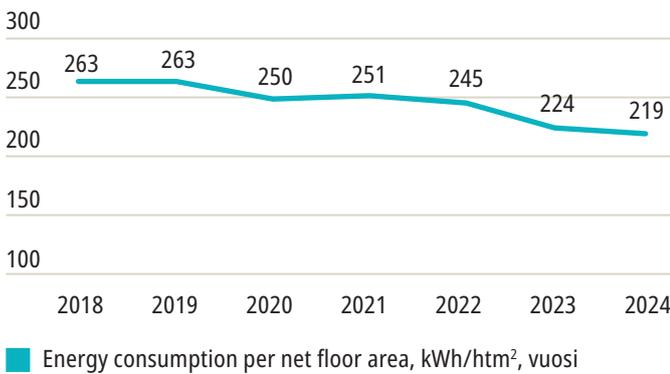
The monitoring of carbon dioxide emissions from real estate investments is always based on measured – not weather-adjusted – energy consumption in accordance with international reporting guidelines.

We have progressed at a pace in line with our goals on all three indicators. The measured

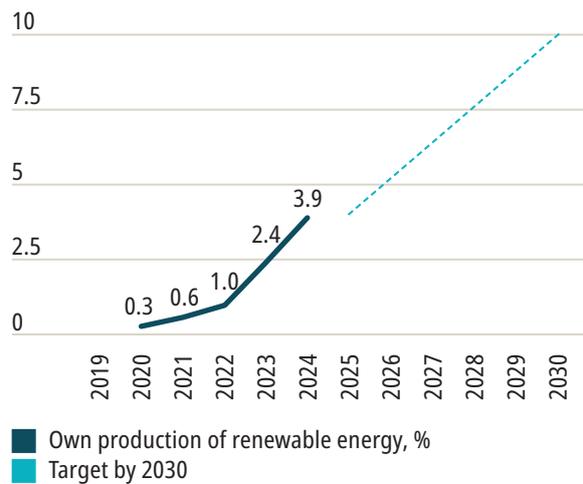
specific energy consumption has decreased by more than 40 kWh/htm² units since 2018.

Between 2019 and 2024, the energy efficiency of properties has improved by more than 23,000 MWh/year, i.e. by almost 12%, through active measures. The share of own property-specific energy production of final consumption

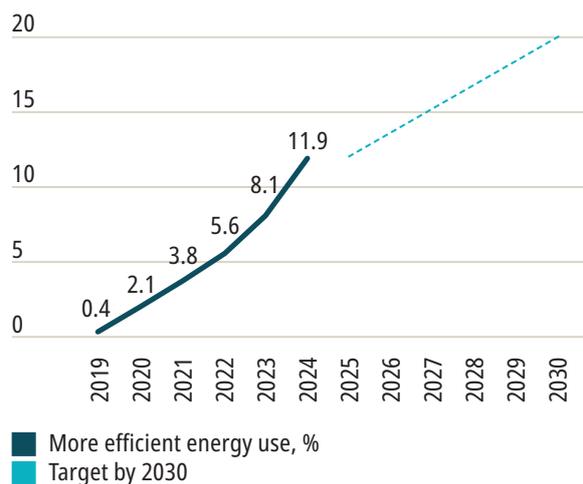
Development of energy use and CO₂e emissions of direct real estate investments 2018–2024. The indicators are shown as characteristics relative to the floor area of investment properties



Share of renewable energy production of energy consumption at properties in 2019–2024



Active cumulative energy saving measures in direct real estate investments 2019–2024



rose to 3.9%. The interim targets for 2025 (12% energy savings and 4% renewable self-production) have almost been reached, one year ahead of schedule.

The monitored greenhouse gas emissions continued on a downward trajectory in line with the targets (Figure X). Specific emissions (kgCO₂/m²) decreased across the entire portfolio. Comparable carbon dioxide emissions from the energy use of investment properties decreased by 43% year-on-year and by more than 68% compared to the start of our environmental programme, i.e. the base year 2018.

In addition to energy-saving and property-specific energy production measures, the significant reduction in carbon dioxide emissions is due to the procurement of renewable electrical energy, in particular, and the sharp decrease in the emission intensity of district heat after 2022. We will continue to reduce the purchase volumes of district heat through heat pump investments, utilising our 100% renewable electrical energy.

Engagement with the investor community and membership of organisations

[UN Principles of Responsible Investment, PRI](#)

- signatory since 2008

[Finland's Sustainable Investment Forum, Finsif](#)

- founding member; Keva is represented in the scholarship working group

[Green Building Council Finland, GBC](#)

- member since 2014; Keva is represented in both the carbon-neutral construction and building use committees and expert groups

[ILPA \(Institutional Limited Partners Association\)](#)

- member since 2008

[INREV \(European Association for Investors in Non-Listed Real Estate Vehicles\)](#)

- member since 2004

[SBai, \(Standards Board for Alternative Investments\)](#)

- member since 2017

Keva's public pledges for responsible investment

[UN Principles for Responsible Investment, PRI](#)

[Property and Building Sector Energy Efficiency Agreement 2017–2025](#)

[Climate Partners, a collaboration network between the City of Helsinki and businesses](#)

[World Green Building Council's \(GBC\) Net Zero Carbon Buildings Commitment](#)

[RAKLI's Green homes initiative](#)

PUBLIC SECTOR PENSIONS



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