

Responsible investment 2023



Contents

Responsibility for investments	3
The future is ensured through an increase of the risk level	3
Persistently improving data quality	5
Precision is called for when interpreting the results of climate scenario work	6
Topical themes led by experts	8
Listed equities	8
Private equity investments	15
Corporate bonds	20
Hedge fund investments	25
Collaboration engagement	25
Engagement with the investor community and membership of organisations	27

Responsibility for investments

Key figures 2023

 65.7 bn EUR investment assets at 31 Dec 2023  3.8% return on investments over 10 years (real return excluding capital weighting) 4.8% return on investments since funding began in 1988 (real return without capital weighting)	 Attendance at 9,021 general meetings 99% attendance rate at general meetings 127,003 votes cast in general meetings	 617 goal-oriented engagement projects in equity and corporate bond investments 150 engagement projects relating to the environment (E) theme 100 engagement projects relating to the social (S) theme 367 engagement projects relating to the governance (G) theme	 -55% in CO₂ emissions derived from energy use in our direct real estate investments compared to 2018
--	---	--	---

The future is ensured through an increase of the risk level

At Keva, responsible investment means, above all, managing investments in a way that secures a stable contribution level and pension benefits also for future generations.

The funding of pension assets began in Keva member organisations' pension system in 1988. Pension expenditure, i.e. the amount of pensions paid out, exceeded income received as pension contributions in 2017, since when some of the pension expenditure each year has been financed by investment returns, the



CIO Ari Huotari

Keva's Board of Directors decided to increase the risk level of the investment portfolio.

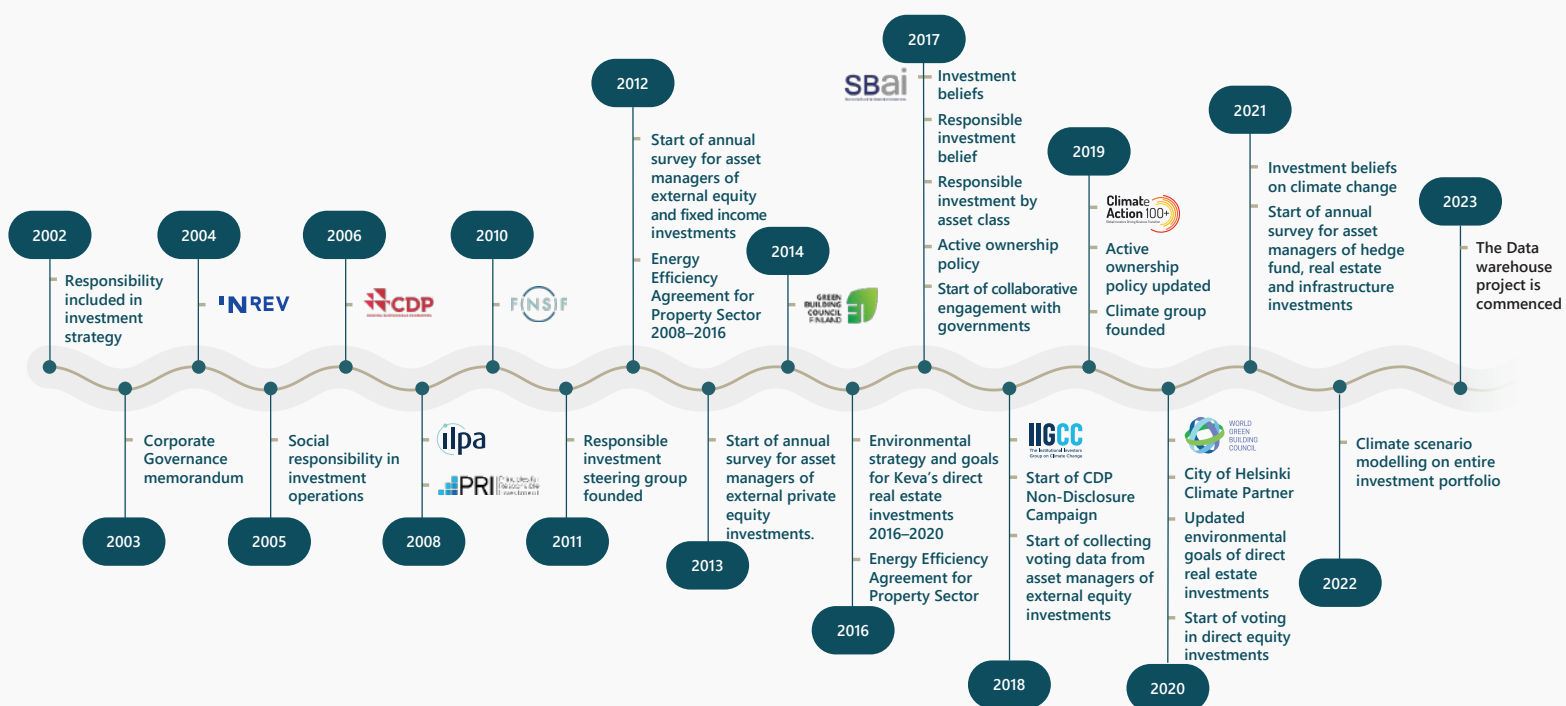
From the point of view of a pension provider's investment operations, the key risk is the long-term deficit risk, i.e. the risk of not achieving sufficient real returns. If this risk materialises, pension contributions will have to be raised. The strategic planning of Keva's investment operations has revealed that the current risk level of the investment portfolio will make it challenging to achieve sufficient real returns in the future to ensure a stable contribution level.

importance of which will become increasingly important in funding pensions going forward.

Investment returns account for around EUR 48 billion of the approximately EUR 66 billion currently in the fund.

In response to this challenge, Keva's Board of Directors decided in June 2023 to increase the risk level of the investment portfolio in pursuit of higher long-term returns. Increasing the risk level will raise the long-term return expectation but on the other hand mean that short-term returns will vary more than earlier.

Progress in responsible investment at Keva



Persistently improving data quality



Head of Responsible Investment
Kirsi Keskitalo

In 2023, we continued to focus particularly on the monitoring of asset managers and the development of data-related initiatives.

ESG data obtained from the global network of asset managers plays a key role in Keva's investment operations. Keva has been collecting data since 2012 and currently does so through around 150 asset management teams for thousands of holdings every year. Therein at the same time lies the investor's challenge: how to correctly interpret environmental, social and governance data when its availability and quality vary depending on asset class, continent, level of development of society, legislation, etc. We strive to ensure data quality and coverage by improving its acquisition – for example through surveys – and interpreting it by leveraging asset managers' expertise in local special features.

Kirsi Keskitalo, Head of Responsible Investment says that the development of responsibility

themes and indicators is monitored in close cooperation with asset managers.

– In 2023, we updated the annual survey on unlisted investments. Since the asset manager often has significant ownership of the investment in private equity, infrastructure and real estate investments, the opportunities to engage with investee companies from the perspective of responsibility are also emphasised, says Kirsi Keskitalo.

Keskitalo says that Keva paid particular attention to this in the survey. Likewise, last year also saw us develop among other things the monitoring of international norms and CO₂ emissions in unlisted investments.

– Since data availability and quality are more challenging in these asset classes than in listed investments, access to information will be built on further.

Recent years have seen attention paid to the usability of ESG data.

– Last year, we launched a data process development project with the aim of enhancing responsible investment data processing and internal reporting.

Keskitalo says that long-term development work will continue in the coming years.

– We will continue to develop data processes and monitoring. Also with regard to the monitoring of asset managers, we aim to further develop our operations by enhancing data collection and to target relevant questions to each asset class, taking into account their special features. Since monitoring asset managers' activities in terms of responsible

investment is very important to us, we are constantly developing it, Keskitalo points out.

– We will continue to work on the application of climate metrics in listed equity and corporate bond investments. We will particularly pay special attention to data quality and the ability of the metric to provide relevant information on the risks and opportunities of climate change. In addition, we aim to build visibility in the emission calculation of unlisted investments, even though these asset classes involve significant challenges related to data availability and quality. The measurement and disclosure of the emissions of investee companies are, of course, continuously increasing, Kirsi Keskitalo says.

Last year, Keskitalo's team also focused on monitoring the progress of the EU Sustainability Reporting Directive (CSRD) and the PCAF climate reporting standard, as well as the biodiversity theme.

Engagement key figures 2023

Keva engages with and bears responsibility for its portfolio holdings using different methods in different asset classes. Last year, Keva and external asset managers voted on a total of around 127,000 proposals in some 9,000 general meetings. A survey of asset managers in equity and fixed income investments shows that there were about 600 separate engagement projects aimed at change. These play an important role when Keva's portfolio holdings aim at long-term value creation from the perspective of both return and security.

The responsible investment team is responsible for the process of excluding controversial weapons. At the end of 2023, 48 equity investments and 61 corporate bond investments were excluded from Keva's investments.

Precision is called for when interpreting the results of climate scenario work



Head of Investment Strategy Tommi Moilanen

Keva's investment assets are distributed around the world, and as a result, Keva bears risks and opportunities related to climate change based on its exposure. Keva's investment beliefs on climate change state that climate change may well be a risk that an investor cannot protect against, even by diversifying or divesting individual holdings.

In order to assess climate risk and manage the risk, Keva uses several different operating methods, one of which is climate scenario analysis. Our aim is to increase understanding of climate change as a phenomenon and its impact on investment portfolio returns and risks. Climate scenario work at Keva is led by Tommi Moilanen, Head of Investment Strategy.

Progress in stages

The scenario work on the climate theme began in 2021 when a climate scenario exercise was

carried out with an external partner for part of the investment assets.

– We first carried out a climate scenario exercise at the level of aggregate investments in 2022 and repeated the exercise in autumn 2023, Tommi Moilanen says.

In the 2023 version of the climate scenario model, the scenarios were expanded and the modelling reviewed four alternative futures. These range from the scenario where warming can be limited to 1.5°C and the world is carbon neutral from 2050 onwards to a scenario where global warming continues without special measures to combat climate change and the climate warms by 4°C.

In practice, the base model has been extended with two external models in climate modelling. At the heart of the expansion is an empirical macroeconomic model that is used to describe entire economies, energy production and consumption, international trade, etc. It also simulates the productivity effects of climate change (chronic physical risk) and the transition effects of different policy choices and technological development (e.g. the cost impact of emission allowances on energy production methods; transition risks).

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). When the data from these two models is combined with the sensitivity data incorporated in the base modelling (e.g. how the equity returns of a certain country depend on changes in its GDP),

we have a clearer picture of the effects of the climate scenario on investment return.

Care in using the results

At the end of 2023, Keva-specific results were introduced for the second time. Before these are used directly, however, the project has continued – and will continue – with a more detailed breakdown of the model. In principle, the results are very intuitive in form; GDP deviations and returns by asset class from the basic trajectory in different climate scenarios.

However, a highly complex modelling process lies behind the seemingly approachable results.

Moilanen describes the results in general by stating that the approach produces an outcome in which climate change seems to have a clearly systemic component that negatively affects economic growth and thus returns.

– However, there are considerable regional and sectoral differences. In addition, drawing direct conclusions about investment assets is complicated, in addition to the complexity mentioned above, by the fact that in many places it is still unclear whether the materialisation of physical risk projected in a particular area, for example, is correctly allocated to our portfolio, he considers.

At the moment, it is felt that in order to utilise the results of the climate scenario model in more detail, they need to be studied in more detail than has been done so far.

Implementation of climate scenario modelling for the first time is described in more detail in the 2022 report, pp. 23–24.

Topical themes led by experts



Senior Advisor for Investments Anette Eriksson

Keva's climate group, which has been operating for a few years now, regularly brings together different experts from investment operations – portfolio management, investment strategy, energy technology and responsible investment. The group is tasked with strengthening climate understanding from the perspective of investing, enhancing internal learning and sharing best practices in the sector.

Headed by Senior Advisor for Investments Anette Eriksson, the group organises, among other things, discussion events at Keva, where various themes are explored under the guidance of external experts. The themes for 2023 were the electricity system and storage, as well as the minerals and materials needed for the energy transition.

– The April event considered, among other things, how ambitious climate targets, faster energy transition and the electrification of society are challenging the entire electricity system. The theme of the November event was

the raw materials and technologies required for the green transition and China's role in these, Anette Eriksson says.

According to Eriksson, the energy transition offers almost an infinite number of interesting themes.

– It is good that we have diverse representation in the group, as this means different viewpoints are included in the discussion.

Organising joint discussion events is often a long project.

– The search for speakers has proved to be more challenging than the topic of the event, but we have also been delighted: Finland has world-class experts whose names may be much better known around the world than in Finland, Eriksson says.

This year's theme is oil and gas, offering an even wider spectrum of topics for discussion than in previous years. Selection of the theme proceeds according to a familiar pattern: we start with a jointly agreed delimitation and everyone proceeds deeper into the theme according to their own special expertise and interest, raising issues that they consider essential to others for discussion. Before long, interesting topics and speakers are ready – the discussion event led by experts has been prepared with the participants in mind.

Listed equities

Keva's listed equity investment programme offers a diversified exposure to the global stock market. At year-end 2023, the portfolio was valued at EUR 26.2 billion, comprising a total of 48 investment strategies and almost

7,000 stocks. A significant part of the portfolio is managed by external investment managers. Shareholders can often have a significant say in how companies are run. The most important ways to implement responsible investing are voting in annual general meetings, targeted conversations with corporate management and ESG analysis integrated into the investment approach.

Direct equity investments

ESG is an integral part of our investment processes, and we use industry-specific assessment criteria and practices to evaluate its implementation in investee companies. Our sources of information include analysis and data provided by ESG service suppliers, securities brokerage firms and the investee companies.

In 2023, we met with 95% of the investee companies in the portfolio. One company was added to the portfolio at the end of the year and it was not possible to arrange a meeting with another company. We will meet with both in 2024. We also attended the capital market days of many of our investee companies and followed up on corporate management through company interim results and seminars.

ESG issues are regularly raised in our meetings and discussions with corporate management. Companies are increasingly aware of investor interest in ESG and are incorporating ESG practices into their operations and reporting more effectively than in the past.

In 2020, we began voting in annual general meetings gradually according to our principles of active ownership. In 2023, we voted in 95% of annual general meetings. This percentage is

presented later in this report aggregated with other voting data.

We apply norms-based screening to companies in our portfolio and to companies under consideration for inclusion. We receive automatic notification if a company is in breach of the UN Global Compact. In 2023, no Global Compact breaches were detected in our direct equity portfolio.

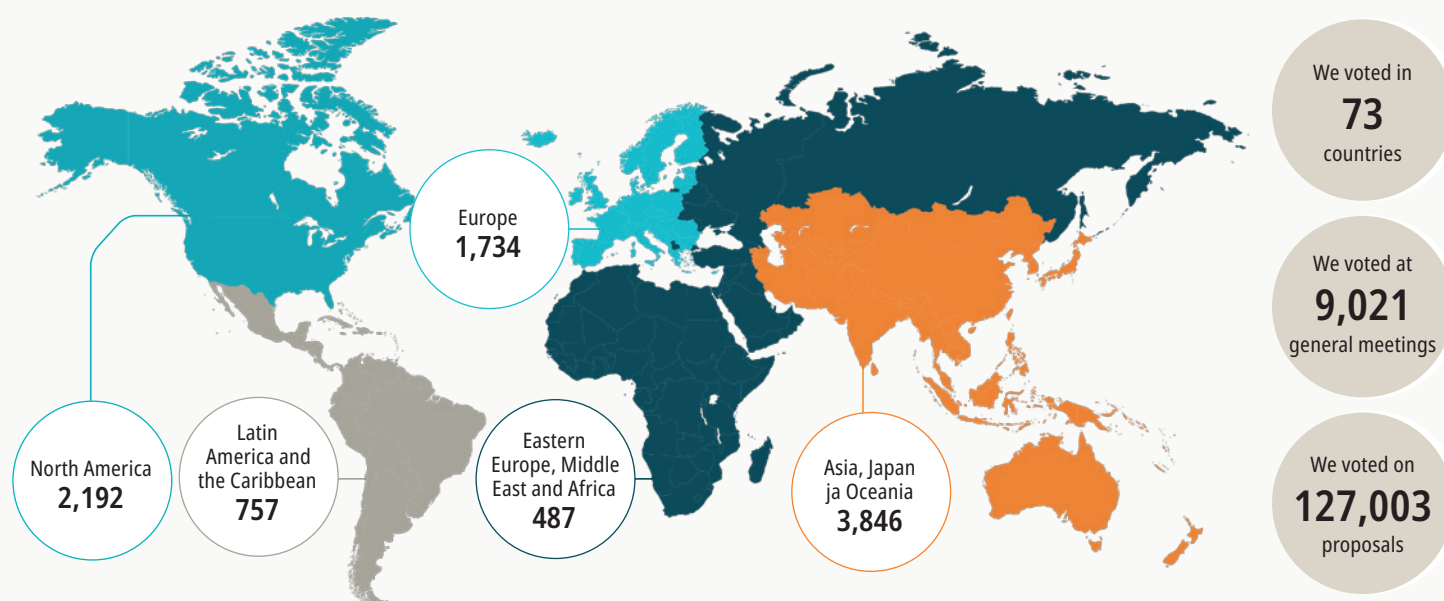
Cooperation with asset managers

Cooperation with our asset managers is based on a long-lasting partnership, trust and transparency. Keva's external investment managers represent different investment styles and regional market expertise. They, however, share a common goal of generating excess returns dependent on independent research focusing on the long-term.

Rigorous vetting 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 2023, our outsourced investment portfolio comprised 42 active strategies and five passive strategies. Some of the passive strategies follow ESG indexes in Europe and emerging markets. We connect with our investment managers on a regular basis and ESG themes are a natural part of these conversations. In 2023, we had more than 90 meetings and calls with existing and potential asset managers. We also participated in climate-themed education organised by an asset manager and Columbia University.

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	336	324	96	6,423	78	14	9
Europe	1,821	1,750	96	45,237	84	15	1
North America	2,242	2,237	100	27,760	62	24	14
Asia	3,996	3,972	99	37,552	81	18	1
Latin America and the Caribbean	754	738	98	10,031	72	26	2
All	9,149	9,021	99	127,003	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.

Almost all external asset managers of Keva have drawn up a company-level responsible investment policy. In addition, more and more asset managers, almost 80%, have specific stewardship codes. More than half of asset managers have an organisation-wide climate change target; investment risks related to climate change, on the other hand, are most generally managed by integrating them into the investment process.

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

Voting in general meetings

In 2023, Keva and its external asset managers voted in more than 9,000 general meetings globally. This represents a participation rate of 99%. Keva voted on around 127,000 proposals, of which 77% were in favour and 18% against. Most of the proposals voted against involved remuneration, especially in the United States. So-called 'say on pay' votes on executive remuneration in retrospect are common in North America, and asset managers often voted against these proposals.

Annual ESG survey and purposeful engagements

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. In 2023, our asset managers were involved in 560 engagements targeting almost 400 companies.

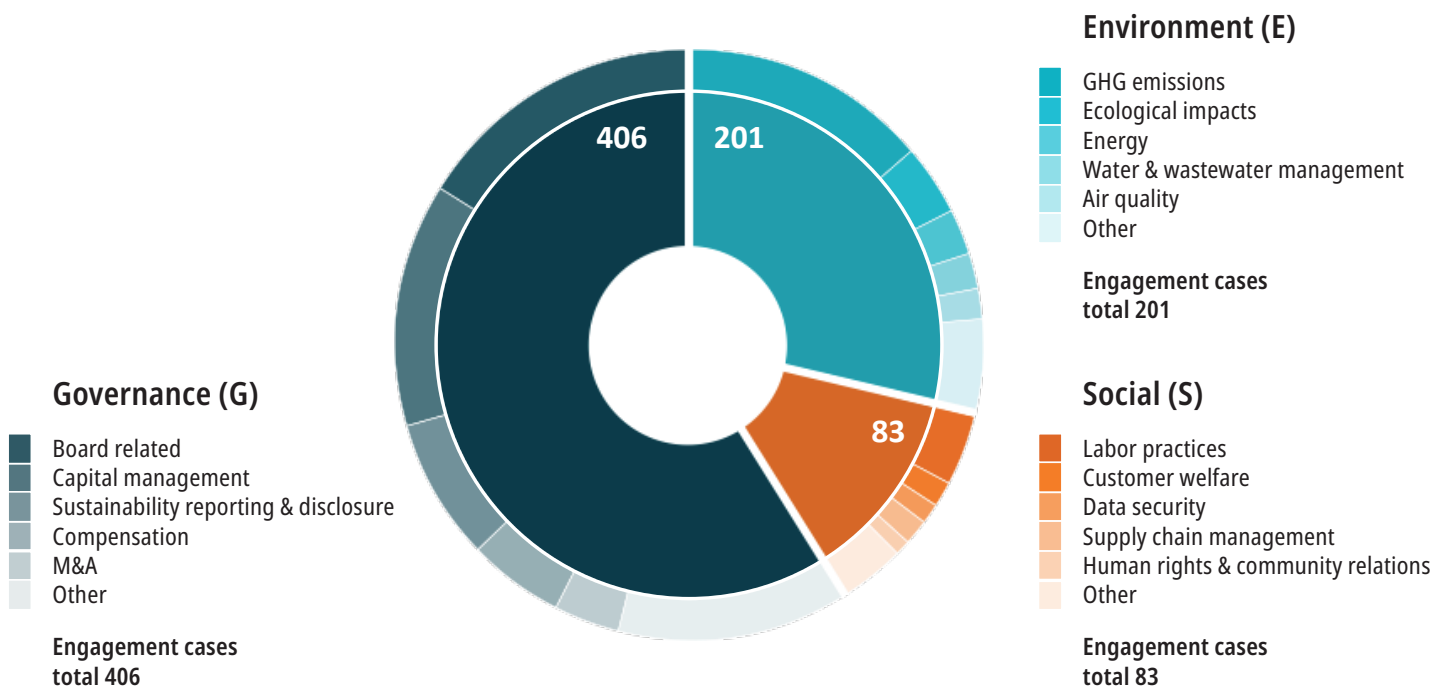
As was the case a year earlier, the key themes raised at the aggregate equity portfolio level were issues concerning the investee company's board of directors, capital allocation, sustainability reporting and disclosure, and greenhouse gas emissions. Whereas most of the engagements related to good governance (G),

the share of social (S) related engagements increased compared to the previous year.

The results are based on Keva's annual ESG survey for internal and external strategies, which were part of Keva's investment portfolio at the end of 2023. The figures apply to reported engagements. The survey focus was particularly in engagement projects committed to bringing about positive change.

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, in emerging

Main themes of engagement in equity investments 2023



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.

Direct discussions with companies is by far the most popular engagement method.

markets, the United States and in the global sustainability portfolio the key theme was greenhouse gas emissions, whereas in Japan the focus was on capital allocation.

Whereas engagement projects generally last for less than a year, the number of engagements lasting from one to three years has increased since last year. Direct communication with investee companies was by far the most popular type of engagement with top management or in-house experts, such as responsibility and investor relations personnel, from the investee company often being on the opposite side of the table. Nor is conversation with board members a rarity.

A large number of our engagement projects are still ongoing, indicating the long-term

nature of engagement. Just under a third of engagements reached their goals and only a small number failed. Whereas engagement and voting are typically the responsibility of the investment teams, some larger asset managers share the work with a specialised ESG team.

Climate change and carbon intensity

We are committed to developing the analysis of climate change, tools, indicators, and understanding of the opportunities and risks of climate change for our investments. Around half of Keva's equity managers report in line with the Task Force on Climate-Related Financial Disclosures (TCFD). Likewise, almost half of them have set climate targets. Climate change metrics are used in many ways.

We currently use Weighted Average Carbon Intensity (WACI) as the carbon metric. The calculations take into account the company's own emissions and the emissions from purchased energy (Scope 1 and 2 emissions). The metric describes the portfolio's exposure to carbon-intensive investments using information from the latest financial statements, but provides no information about future developments. It can be said that WACI provides a rough measurement of the risk posed to the

CASE

Our asset manager, who invests in European companies, met with the CEO and CFO of a pest control company to discuss the importance of employee reward and job satisfaction to reaching the company's goals.

The company is expanding its operations significantly through acquisition, and in the asset manager's view, a well-functioning and consistent remuneration system plays a critical role in the success of the acquisition. The company is committed to

a sufficiently long pilot period in harmonising remuneration policy. Our asset manager will monitor the success of this and prepare their own analysis to present to the company.

CASE

The asset manager of our sustainability portfolio started discussions with a US-based medical technology company about aiming for zero emissions already in 2021. Since then, the company has taken concrete steps towards a net-zero emis-

sions target: it has committed to reaching carbon neutrality by 2030 and to working towards a zero-emissions path.

Most recently, the company has announced clear science-based targets to reduce Scope 1 and 2 emissions by 42% and Scope 3 emissions by 52% compared

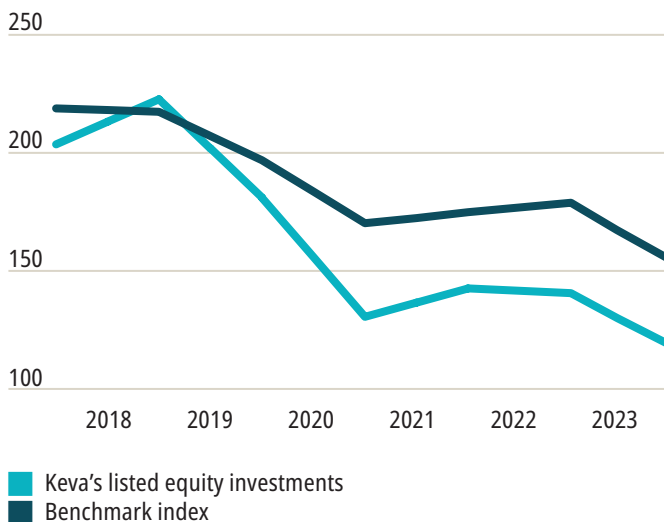
to 2021 levels. Discussions with the company have revealed that these targets are likely to be reached before 2030. At the moment, the asset manager is focusing its engagement efforts on the zero emissions commitment.

portfolio at a particular point in time by carbon pricing and other regulatory risks.

In 2018–2023, the portfolio-weighted carbon intensity of all of our listed equity investments decreased by 41% and at year-end 2023 was 23% lower than the benchmark index.

The strategy change in our direct equity investments has had a significant effect on this development over the past six years of monitoring and reduced investments in resource-intensive sectors in the portfolio. Additionally, the development has been affected by the decrease in the weighted carbon intensity

Development of the portfolio-weighted carbon intensity in Keva's listed equity investments 2018–2023 compared to the benchmark index



tCO₂/revenue MUSD, scope 1+2

Carbon intensity of listed equity investments:

During the monitoring period (2018–2023), the portfolio-weighted carbon intensity of all our listed equity investments decreased by 41% and at year-end 2023 was 23% lower than the benchmark index.

Benchmark index: The benchmark index comprises the following indexes: MSCI Europe IMI, MSCI USA IMI, MSCI Emerging Markets IMI, MSCI Japan IMI and MSCI ACWI IMI.

The formula for calculating weighted carbon intensity is:

$$\sum_i \text{Investment } i \text{ portfolio weight} * \frac{\text{Investment } i \text{ emissions}}{\text{Investment } i \text{ net sales}}$$

MSCI data is used to calculate the carbon footprint of listed equity investments. The calculation is based on EUR 26,215 million in investment assets, with 97% data coverage. Of the data, 81% is reported by the investee companies themselves. In addition to the direct emissions of investments, it is also important to consider the indirect emissions (Scope 3) of subcontractors and products. However, there are still major challenges in the reporting of this data. Keva is monitoring the development of Scope 3 data.

CASE

Our asset manager investing in emerging markets continued discussions with a Brazilian clothing retail chain in line with its engagement plan to monitor the company's progress towards the targets set. After internal discussions, the company decided to follow the asset manager's recommendation to respond to a CDP enquiry

about water use, due to the significance of water consumption and the limited information published so far.

As part of its new sustainability strategy, the company pledged to reduce water consumption by 2030. It also carried out a study on the risks and opportunities of water shortages, which has played a critical role in the

implementation of improvement measures. At the second meeting of the year, the company also informed our asset manager of its intention to set a concrete target for reducing water consumption. The target will be published in the next sustainability report, and the measures will also extend to the supply chain.

of the portfolio, especially in high-emission sectors. In recent years, the lower carbon intensity than the Keva portfolio benchmark index has been the result of both sector allocation and company selections within sectors.

When examining the development of the portfolio's carbon intensity over time, it is important to consider how changes in country and sector weightings, share prices and the coverage of companies' reporting cause variation in measurement intervals. For example, in 2023, the decrease in carbon intensity was not so much due to a decrease in emissions from investee companies, but rather an increase in the market values of companies in the low-emission IT sector and, on the other hand, an increase in the turnover of companies in high-emission sectors. These characteristics mean that the development of the portfolio's carbon intensity should be monitored over the long term.

When measuring climate impacts, we strive to take into account calculation and reporting standards such as TCFD and PCAF (Partnership for Carbon Accounting Financials).

The frequency and quality of greenhouse gas emissions reporting varies from one company to another. Emission data is usually reported in annual reports at the beginning of the next financial year. When analysing emissions data for 2023, the most up-to-date figures come from companies' annual reports for 2022 published during 2023, and 56% of emissions in this calculation are based on this data. However, 41% is based on companies' emissions data for 2021. Portfolio-level carbon intensity calculations combine companies' historical emissions data with investment assets at year-end 2023 and this may affect the footprint figures at the portfolio level.

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 plays a critical role in value creation. 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.

We primarily make capital commitments in closed-end private equity funds that involve a long-term investor commitment. Keva's private

CASE

As part of our private equity investments there is a globally operating company from Austria who is seeking solutions to reduce carbon dioxide emissions through product innovations and the circular economy. The company recognises that its fuel-flexible and hydrogen-ready gas engines and compression solutions play an important role in providing energy solutions that can help its customers to facilitate the transition to a low-carbon economy. The company aims to leverage technology, innovative design, analytics and digital solutions to facilitate this transition.

The company's goal is to reuse more than 90% of the materials it uses by 2030. The company is also increasingly integrating ESG priorities into its requirements and relationships with material suppliers. Since 2018, the company has had sustain-

ability guidelines for procurement, which allows the company to identify areas of higher risk and conduct in-depth, on-site inspections. Higher risk areas are identified using the Corruption Perceptions Index (CPI). Any direct material supplier operating in a country with at least 50 points will undergo a thorough on-site audit before starting its deliveries. This specific ESG audit is carried out every three years and includes 75 questions on the following topics: environment, health and safety, labour, information security and intellectual property rights.

Since 2019, the company has also included the Ten Principles of the UN Global Compact in its supplier criteria. These principles concern human rights, labour, the environment and anti-corruption. A potential supplier must commit to these by contract or be a member

of the UN Global Compact in order to become a supplier of the company. The company also provides training material on sustainability-related guidelines.

The company has continuously increased governance mechanisms for sustainability issues. It established a circular economy working group, whose members include heads of technology, product development and procurement. Promoting more environmentally friendly practices across the company's value chain requires efforts in component design, procurement and in cooperation with suppliers. The company ensures sustainability issues in its supply chain by arranging meetings and sustainability workshops with its network of subcontractors and, for example, measures waste production at every stage of the value chain in order to reduce waste volumes.

The development of responsibility issues is a natural part of the development and value creation process of a company.

equity portfolio is diversified by investment strategy, industry, geography and vintage. At year-end 2023, the portfolio was valued at EUR 10.1 billion, and there were 51 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, and promotes conversation around responsible investment.

In 2023, Keva held seats on the advisory committees of 90 funds and aims to hold a seat on the advisory committee in the largest fund investments. In the past year, we attended 128 advisory committee meetings, in which asset managers presented ESG development projects and discussed the integration of ESG issues 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.

CASE

The Dutch company is a global specialty chemicals and raw material distribution solutions company that helps its customers to transition to a low-carbon energy economy through its innovative products.

One of the solutions produced by the company is bio-butanol, which is produced through a fermentation process from sustainable biomass. This process produces high-quality bio-butanol, which produces up

to 85% less carbon emissions than alternative, oil-based sources. Bio-butanol is used in coatings, adhesives and inks, or can be used as a solvent and intermediate in the manufacture of chemical products. It can also be used in the manufacture of high-performance biofuels.

The company also offers two other solutions: bio-acetone and bioethanol. These offer more environmentally friendly alternatives to products such as paints, coatings, adhesives,

inks, cosmetics, personal care products, household and industrial cleaners, pharmaceuticals, research chemicals and other specialty products.

The company's bio-based solutions have a very low carbon footprint, offering the company's customers a more sustainable alternative to fossil-based raw materials, and they have the potential to change the dependence of many industries on petrochemicals.

CASE

The real estate services company provides energy management solutions for properties in North America. As real estate accounts for approximately 35% of energy consumption and greenhouse gas emissions in North America, the company has a unique opportunity to influence change as a key player in the value chain.*

The company's service initially focused on improving the efficiency of bill payments for properties. For a typical property

management company, invoice management can be complex and challenging. A property management company can own 400 properties, each of which has hundreds of meters, which in turn means hundreds of bills.

When processing its customers' billing information related to energy, water and waste, the company found itself in a perfect position to assist customers in their efforts to manage their net-zero, greenhouse gas and other targets. The company expanded its services into sustainability

solutions and acquired ESG data management solutions to help customers manage energy consumption, emissions and costs. The company's services enable customers to analyse and report on resource consumption, helping them make informed decisions to promote sustainability.

**Based on 2022 climate-related reports from global groups including McKinsey, S&P Global, the World Economic Forum, the United Nations Environment Finance Initiative, and others.*

Other forms of engagement include regular meetings with asset managers. In 2023, these meetings focused predominantly on ESG issues such as environmental concerns, employee wellbeing, diversity and equality. The meetings also examined how investee companies and asset managers take into account environmental and sustainability issues. In the past year, Keva arranged about 70 meetings with asset managers.

Keva's largest private equity asset managers responded to an ESG survey updated in 2023 to chart asset managers' responsibility practices. The results of the survey showed that all private

equity funds that responded to the survey have principles for responsible investment. In addition, more than 80% of our asset managers are signatories to the UN Principles for Responsible Investment (PRI). Most of the funds measure the CO2 emissions of their investments and almost half report climate risks in line with the TCFD.

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.

Investments in real estate funds

The 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 2023, the portfolio was valued at around EUR 1.3 billion and consisted of investments in around 600 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 asset managers focus on the energy and water consumption of the properties along with safety. As part of their commitment to responsible investment, asset managers also focus on carbon footprint monitoring, the environmental classification of the buildings and construction projects (BREEAM and LEED), and Global Real Estate Sustainability Benchmark GRESB reporting at the fund level. ESG aspects have been integrated into the investment analysis.

Keva's investments in real estate funds are primarily in closed-end funds, where the investor commits for multiple years. During the life of the fund, limited partner advisory committees are the most important means of engagement. The advisory committees are typically composed of the biggest fund investors and meet between two and four times a year. The advisory committee engages both with the property investments and asset manager, and promotes the general discussion of ESG issues.

Last year, Keva had a seat in the advisory committee of 35 funds and attended around 60 committee meetings. Other forms of engagement include regular meetings with

Taking into account ESG perspectives is integrated into investment analysis.

asset managers at which ESG aspects are also covered. Keva had 50 such meetings in 2023.

In 2023, Keva's real estate investment fund managers took part in our updated ESG survey, which surveyed their responsible investment practices. The results of the survey showed that all real estate funds have responsible investment practices. In addition, more than 90% of our asset managers are also signatories to the UN Principles for Responsible Investment (PRI). Almost all funds measure the CO2 emissions of their investments and almost half report on climate risks in line with the TCFD.

Keva is a member of the European Association for Investors in Non-Listed Real Estate Vehicles (INREV), which is Europe's leading platform for sharing knowledge in the non-listed real estate sector. INREV is committed to improving transparency, professionalism and accountability across the sector.

Infrastructure investments

Infrastructure refers to structures and facilities that enable the effective functioning of society and include 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.

CASE

The company is the UK's largest energy-from-waste company. The company converts recyclable waste from residential and industrial sources into heat and partly renewable baseload power for the UK electricity grid. The company has an annual waste treatment capacity of more than 2.3 million tonnes and a total combined power generation capacity of 247 MW, enough to cover the needs of more than 500,000 UK households.

The company's operations save a total of approximately 500,000 tonnes of CO₂e per year in the UK's waste management and power generation sector (equivalent to 1.4% of emissions from

the waste sector). The emission reduction is 280 kg CO₂e per tonne of treated waste compared to sending waste to landfill.

The company's annual carbon dioxide emissions are approximately 1 million tonnes CO₂e, mainly due to emissions from incinerated waste. By 2033, the company aims to address these emissions from its own operations through carbon capture and storage and potentially become carbon negative in the future.

It is important for the company that its business does not harm the environment and it has commissioned biodiversity assessments at all its sites. These

assessments confirmed that there are valuable ecosystems and structures in and around the company's sites that they need to protect. The ecological and biodiversity improvement plans resulting from these assessments include:

- *Annual habitat condition assessments conducted by independent ecologists*
- *Daily checks on habitat condition*
- *External noise monitoring surveys in the vicinity of installations*
- *Service contracts with landscaping companies to ensure land use management.*

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 2023, our infrastructure portfolio was valued at EUR 1.9 billion, with investments in 110 companies.

Infrastructure funds are primarily closed-end funds, where the investor commits for multiple

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. Advisory committees engage both with the property investments and asset manager, and promote the general discussion of ESG issues. Last year, Keva had a seat in the advisory committee of 11 funds and attended 22 committee meetings. Other forms of engagement includes meetings several times a year with asset managers at which ESG aspects were also raised.

An ESG survey carried out by Keva in 2023 showed that all Keva's infrastructure funds have responsible investment practices. In addition, a large share of our asset managers are also signatories to the UN Principles for Responsible Investment (PRI).

The survey responses show that all funds measure the CO2 emissions of their investments and also report on climate risks in line with the TCFD.

Corporate bonds

In 2023, our direct corporate bond portfolio was valued at EUR 2.8 billion. Our investments in corporate bonds are focused on the lower-risk, higher-rated spectrum. These investments cover bonds that are issued by companies and financial institutions in the European market. At year-end 2023, the portfolio held bonds from 100 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 principal sources of information include analysis and data provided by ESG service suppliers, securities brokerage firms and the investee companies. ESG issues are today a natural part of any investor presentation and publication. When we meet with companies, we discuss ESG aspects with the company's management almost without exception. Most meetings are arranged in conjunction with new bond issues. Companies also meet with investors outside of bond issues in order to keep investors informed about potential future bond issues. During 2023, we met with around 70 companies.

Recent years have seen "green bonds" gain popularity in the corporate bond market. An



external accreditation body has defined the uses of financing obtained with green bonds to ensure environmental compliance. Green loans are already a significant part of the market and, consequently, also a part of Keva's direct corporate bond portfolio.

Recent years have also seen an increase in the popularity of "social bonds", which are used to finance projects with a positive societal impact. We invest in green bonds or social bonds only if the company as a whole meets our investment criteria. Issuers of these bonds are subject to the same stringent investment criteria as we use for any other company. At year-end 2023, our investments in green and social bonds totalled EUR 450 million.

We apply norms-based UN Global Compact screening to companies in our portfolio and to ones under consideration for inclusion. We are notified of any breaches automatically. No breaches of the UN Global Compact were

Asset managers are required to share Keva's investment beliefs.

detected in our direct corporate bond investments at year-end 2023. There was one breach detected in the portfolio in 2022 and this was found to have been resolved in 2023. However, the investment was divested from our portfolio during 2023.

Corporate bonds in our externally managed portfolio

Corporate bonds in our externally managed portfolio are focused on the lower-rated spectrum bonds. The corporate bond portfolio is managed exclusively by external asset managers, who are selected for our portfolio through rigorous vetting. They are required to share and act according to the same investment beliefs as Keva. Cooperation with external asset managers is based on long-term partnership, trust and transparency.

At year-end 2023, our high yield corporate bond exposure was managed by 17 external asset managers through 19 different investment strategies. These assets totalled around EUR 6 billion and our portfolio held around 1,200 individual companies. The portfolio focuses on European and US companies, although the source of their revenue streams is often global. A small part of the portfolio is invested in corporate bonds in developing countries.

With debt financing, asset managers engage with portfolio companies in ways other than voting. Effective engagement is not always determined by investor size alone as leverage can also be relative or situational. This may be the case, for example, when the company is under financial stress, or when a company is smaller in size and therefore subject to less market attention.

For years, we have been monitoring the goal-oriented engagement processes, which our external asset managers have initiated with portfolio companies.

Regular monitoring identifies the underlying causes, objectives, method, duration and success of engagement. The monitoring process was developed during 2023 to also include engagement with companies that were ultimately not selected for the portfolio. In addition, the timing of engagement in the bond's lifecycle was added to the monitoring process, i.e. whether engagement takes place when funding is granted, during the loan term or at the end of the loan term, when the majority of companies usually apply for refunding.

During the year, there were 57 goal-oriented engagement processes underway. This figure excludes usual information acquisition and company analysis related to everyday portfolio management. Most engagement during the year was carried out directly, without intermediaries or other investors. During the year, these engagements resulted in positions being sold, increased or maintained.

Greenhouse gas emissions (environment), human rights (social) and capital allocation (governance) were highlighted under the main

themes. In terms of numbers, most engagement efforts during the year were directed at governance and these had the highest success rate in relative terms.

Some of the engagement processes are more diffuse, but the combination of environmental responsibility and business model resilience was seen in several cases during the year. In these cases, the engagement processes involve changes at the very strategic level of the business, so that the company can remain competitive in the green transition or retain its permit to operate in a changing regulatory environment.

Examples of such engagements during the year included the transformation of a waste treatment company from a mere recycler to an energy-from-waste operator, the expansion of the energy company's operations into the field

of carbon capture and storage (CCS), and the transformation of a commercial bank's business model into one driven by sustainable finance.

In addition to monitoring engagement processes, we also monitor the implementation of international norms in our externally managed investment portfolio at regular intervals.

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 2023, the market value of our real estate portfolio was around EUR 3.4 billion. Keva's direct real estate investments consist of around 130 properties with a net lettable surface area of around 917,000 m² at year-end 2023. The properties are concentrated in the

CASE

The Kulma-Sarvis business park in Hatanpää, Tampere was one of the largest environmental investments made in Keva's investment property portfolio in 2023.

The project included building a geoenergy field at the property for the seasonal storage of waste heat and utilisation of ground-source heat. In addition, heat recovery units were increased and improved in the property, fans were replaced and an automated system enabling energy-

efficient control was updated.

The measures seek to achieve energy savings of more than 90% in district heat consumption, which will contribute to reducing greenhouse gas emissions from heating and in turn promote the realisation of the climate targets of the City of Tampere and Keva's real estate portfolio.

Keva makes use of energy management in monitoring and developing energy efficiency: an external expert is fully responsible for the property's energy

management. When we actively monitor properties, we can select the best measures to maintain and improve their energy efficiency.

The energy and water consumption of almost all properties owned by Keva is monitored in real time, allowing deviations to be quickly detected and corrected. Most of the business properties have remote monitoring of building automation, which makes it possible to adjust the energy consumption of the properties as needed.

Helsinki Metropolitan Area and in other growth centres in Finland. In terms of value, the portfolio consists of business premises (39%), offices (25%), residential (22%), hotels (9%) and other properties (5%).

Keva's responsible real estate investment policy takes into account economic criteria as well as the environmental and societal impact 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 our direct real estate investments still equalled one two thousandth of Finland's total greenhouse gas emissions in 2018. We aim to halve the carbon dioxide emissions caused by the energy use of these properties by 2025 and to achieve carbon neutrality by 2030. Our carbon neutrality target will be implemented in accordance with the contents of the Green Building Council's (GBC) Net Zero Carbon Buildings Commitment signed in 2020.

The goal of carbon neutrality in energy use requires a large number of practical measures. Our action programme has three main priorities:

- to improve the energy efficiency of our properties by 20% by 2030
- to increase the share of renewable energy produced on site at the properties to 10% of the total energy consumption by 2030)
- active measures to promote low-carbon emissions of energy purchased externally.

In 2023, Keva implemented around 40 individual energy-use enhancement or renewable



energy production measures, which achieved calculated yet measured energy savings of more than 2.2%. Most of the energy savings in 2023 were achieved through renewable energy production and recycling systems: the year saw the completion of 6 heat pump systems and 3 solar power plants. Together, these accounted for more than 75% of the 4,600 MWh/year energy saving measures in 2023, with the remaining savings of around 1,000 MWh/year being achieved through traditional energy saving measures (approx. 30).

In 2019-2023, active measures have improved the energy efficiency of our properties by more than 15,600 MWh/year or by roughly 8%. The share of our own property-specific energy production in final consumption is rising to 2.4%. Whereas there is still a long way to go to reach the interim targets for 2025 (12% energy savings and 4% renewable self-production), the required investments are already known and planned.

Energy efficiency measures were also reflected in the energy consumption verified through consumption monitoring. All in all, weather-adjusted energy consumption decreased considerably in Keva's property stock, by 13% compared to a year ago. Since 2.2 percentage points worth of active energy saving measures were identified, the large reduction in energy consumption also reflects other changes. Keva participated in the Down a Degree campaign in the winter of 2022-2023 with its property stock and this has a significant impact.

The full impact of the changes in control method and indoor temperature cannot be fully calculated and included in the list of active (and permanent) energy saving measures. This is a major explanatory factor for the difference between calculated and measured energy savings. Another major explanatory factor is also related to the energy crisis during the winter of 2022-2023, when individual tenants with high electricity consumption switched to their own electricity procurement. This consumption of electrical energy (approx. 4 percentage points) was removed from Keva's reporting. Water consumption in comparable properties decreased only slightly, by less than 1%, reflecting the behavioural change after the coronavirus period, i.e. the return to offices.

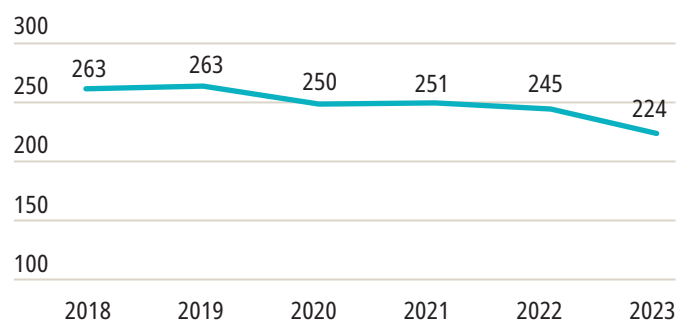
The measured changes in energy and water consumption in 2023 reflect very broadly the active changes in energy use, the energy saving measures of the Down a Degree campaign and changes in individual tenants' electricity procurement.

In line with international reporting guidelines, our real estate investments monitor carbon dioxide emissions based on measured – not

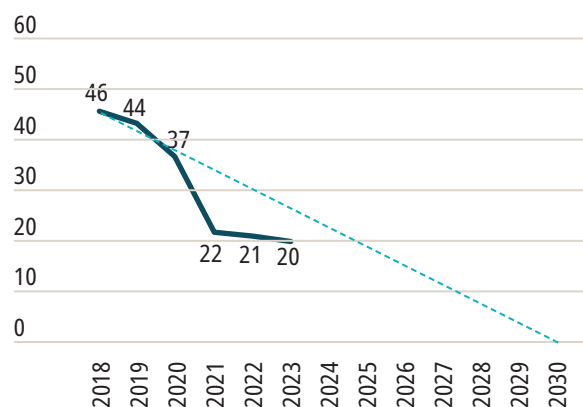
weather-adjusted – energy consumption. Comparable carbon dioxide emissions caused by the energy use of investment properties decreased by 8% compared to a year earlier.

The monitored specific emissions continued to decrease in line with our emission trajectory (image X). Specific emissions ($\text{kgCO}_2\text{e/m}^2$) decreased in the business premises portfolio and increased in the residential portfolio.

Trend in energy use and CO₂ emissions in internal real estate investments 2018-2023. The indicators have been presented as numerical characteristics relative to the net floor area of the investment properties.



■ Energy consumption per net floor area, kWh/floor m², year



■ Carbon dioxide emissions per net floor area, kgCO₂e/m², year

Residential properties are affected by the increased emission intensity of district heat production. Although district heat use saw a sharp decrease, the increase in specific emissions from district heat production in Finland (as a result of the energy crisis) led to higher total emissions in the use of heat energy. In business premises, emissions also decreased in absolute terms, partly because the energy savings measures in the Down a Degree campaign were easier to implement by controlling the ventilation and conditions of the premises. We will continue to reduce the purchase volumes of district heat by investments in heat pumps using our 100% renewable electrical energy.

Carbon dioxide emissions have already decreased by more than 55% compared to the beginning of our environmental programme, i.e. the reference year 2018. In addition to the energy saving and property-specific energy production measures detailed above, the significant reductions in carbon dioxide emissions are due in particular to the purchase of renewable electricity.

Hedge fund investments

Hedge fund investments are predominantly used for diversification of the portfolio and absolute returns. Different asset classes and instruments are used to make investments. Engagement is determined by asset class, e.g. for listed equities the funds can vote in 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 2023, the portfolio consisted of 35 fund investments managed

by 19 asset managers. At year-end 2023, the portfolio was valued at EUR 4.5 billion. We use an independent service provider's classification for our hedge fund investments. The classification also takes into account ESG factors. Based on an ESG survey carried out by Keva in 2023, almost all Keva's hedge funds have principles for responsible investments. In addition, more than 70% of our hedge fund asset managers are signatories to the UN Principles for Responsible Investment (PRI).

We try to promote responsibility in hedge funds. Key forms of engagement include regular meetings with asset managers and advisory committee seats, both of which enable us to engage with managers on a wide range of responsibility issues. In 2023, Keva had a seat on the advisory committee of 22 funds and attended 34 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 best practices. 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.

Collaboration engagement

Membership in different investor networks provides Keva with information about responsible investment. Engagement with companies and governments in collaboration with other investors is also more effective than working alone. Collaboration objectives include the promotion of transparency, the mitigation of climate change and the advocacy of long-term thinking among investors and companies.

CDP

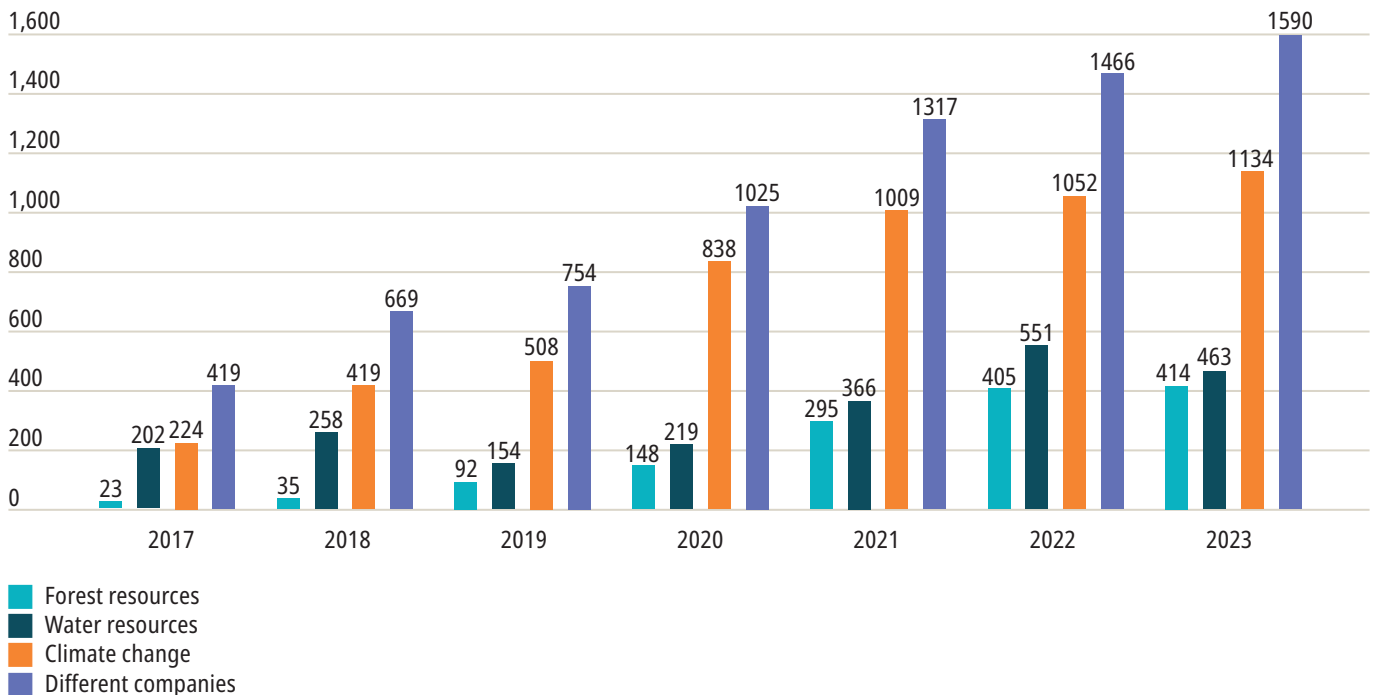
CDP is a global non-profit organisation that focuses on reporting environmental data and increasing company disclosure about the impact of businesses on climate change, water usage and the use of forest resources on behalf of investors. The CDP reporting platform offers investors comparable environmental data disclosed by companies that report to CDP. Reporting on environmental impacts promotes the companies' own understanding of business risks and opportunities while helping investors to better understand the investee companies. In 2023, more than 23,000 companies, representing around 66% of the world's stock

market, reported their environmental impacts to CDP. Keva has been a signatory to CDP since 2006 (the climate change initiative since 2006, the water resources initiative since 2011 and the forest resources initiative since 2014) and uses CDP's environmental impact data to assess responsibility of investee companies. In 2023, 77% of the companies in Keva's equity portfolio and 31% in the corporate bond portfolio reported their environmental impacts to CDP.

CDP Non-Disclosure Campaign 2023

As in earlier years, Keva took part in [the CDP's Non-Disclosure Campaign](#) in 2023. As a signatory to CDP's Non-Disclosure Campaign,

Continued steady growth in the number of companies targeted in the CDP Non-Disclosure Campaign



Highlights in the 2023 campaign:

- 10% more investors and 8% more targeted companies involved than in 2022.
- Of the 1,590 companies receiving a request, 317 began reporting to CDP (221 climate change, 58 forest resources and 66 water resources).
- Companies are 2.2 times more likely to report to CDP than without a request from investors to report, more than 6.8 times more likely in respect of forest resources.

Keva along with other co-signatories calls for improved disclosure from companies.

A total of 288 investors representing investment assets totalling USD 29,000 billion were involved in CDP in 2023. A total of 1,590 companies were requested to provide disclosure reporting.

Since this year, the signatories to the project were unable to choose the target companies for inclusion in the reporting request, Keva was involved in the whole campaign. Companies inside and outside Keva's portfolio were included.

Climate Action 100+

Keva continued to support the [Climate Action 100+](#) project. In 2023, the project included a total of 700 investors, responsible for more than USD 68,000 billion in assets under management. The project targeted 170 companies globally which play an important role in achieving the goal set by the Paris Agreement. In the early stages of the campaign, only five companies had a zero-emissions target for 2050, and now 77% of the target companies have already set a net-zero target.

The campaign, originally planned to last five years, was followed by the launch of a second phase to last until 2030 in June. In the second phase, the aim is for companies to put into practice their transition plans to mitigate climate change.

In the initiative, the target companies' climate targets are compared using the Net Zero Company Benchmark, which was updated during the year. Minor changes were also made to the list of focus companies in order to engage with the most significant emitters. A

new net zero standard was published for the oil and gas and mining sectors.

IIGCC

[IIGCC](#) is Europe's largest consortium of investors against climate change and develops, among other things, long-term risk management, operating policies and investment practices for mitigating climate change. IIGCC's community of more than 400 investors is responsible for around USD 65,000 billion in assets under management. As a member of IIGCC, Keva seeks to engage with companies and regulators to reach climate goals.

Engagement with the investor community and membership of organisations

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

- signatory since 2008. Keva's representative has been a member of the PRI Reporting & Assessment Advisory Committee (RAAC) since 2018.

[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 as well as in the communications network expert group.

[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

Governance of responsible investment at Keva

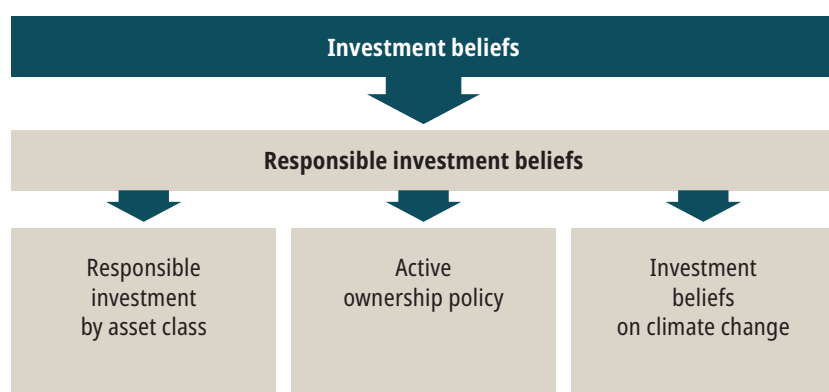
Keva's Board of Directors decides Keva's long-term responsible investment policy, which is determined by key steering documents: Investment beliefs and Responsible investment beliefs.

The Board of Directors is notified of the development of responsible investment strategy and processes twice a year.

The steering group for responsible investment oversees the development of responsible investment practices at Keva. The steering group includes members from each of Keva's investment units. The Head of Responsible Investment chairs the steering group for responsible investment.

The group makes development proposals to investment units and to the Chief Investment Officer, disseminates information internally, is responsible for Keva's annual PRI reporting and prepares and presents questions relating to responsible investing to the Chief Investment Officer for decisions.

Keva's steering documents for investment policy



PUBLIC SECTOR PENSIONS



www.keva.fi

Phone +358 20 614 21